ARUNAI ENGINEERING COLLEGE

(Affiliated to Anna University)
Velu Nagar,Thiruvannamalai-606 603
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DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING

BACHELOR OF ENGINEERING

ACADEMIC YEAR 2021-22

FIFTH SEMESTER

CS8582-OBJECT ORIENTED ANAYLSIS & DESIGN LABORATORY

REGULATION 2017

INDEX

PROGRAMME EDUCATIONAL OBJECTIVES (PEOs)

PEO1 : Graduates will have successful career in Computer Science and related industries or pursue higher education and research or evolve as entrepreneurs.

PEO2 : Graduates will have the ability and attitude to adapt to emerging technological changes.

PEO3 : Graduates will excel as socially committed engineers with high ethical values, leadership qualities and empathy for the needs of society.

PROGRAMME OUTCOMES (POs)

After going through the four years of study, Computer Science and Engineering Graduates will exhibit ability to:

PO#	Graduate Attribute	Programme Outcome
1	Engineering knowledge	Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization for the solution of complex engineering problems.
2	Problem analysis	Identify, formulate, research literature, and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.
3	Design/development of solutions	Design solutions for complex engineering problems and design system components or processes that meet the specified needs with appropriate consideration for public health and safety, and cultural, societal, and environmental considerations.
4	Conduct investigations of complex problems	Use research-based knowledge and research methods including design of experiments, analysis and interpretation of data, and synthesis of the information to provide valid conclusions

5	Modern tool usage	Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools, including prediction and modeling to complex engineering activities, with an understanding of the limitations.
6	The engineer and society	Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal, and cultural issues and the consequent responsibilities relevant to the professional engineering practice
7	Environment and sustainability	Understand the impact of the professional engineering solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.
8	Ethics	Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice
9	Individual and team work	Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings
10	Communication	Communicate effectively on complex engineering activities with the engineering community and with the society at large, such as, being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions
11	Project management and finance	Demonstrate knowledge and understanding of the engineering and management principles and apply these to one's own work, as a member and leader in a team, to manage projects and in multidisciplinary environments
12	Life-long learning	Recognize the need for, and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological change

PROGRAM SPECIFIC OUTCOMES (PSOs)

By the completion of Computer Science and Engineering program the student will have

following Program specific outcomes

PSO1 : To analyze, design and develop computing solutions by applying foundational concepts of Computer Science and Engineering.

PSO2 : To apply software engineering principles and practices for developing quality software for scientific and business applications.

PSO3 : To adapt to emerging Information and Communication Technologies (ICT) to innovate ideas and solutions to existing/novel problems

CS8582 OBJECT ORIENTED ANALYSIS AND DESIGN LABORATORY **L T P C**
0 0 4 2

OBJECTIVES:

- To capture the requirements specification for an intended software system
- To draw the UML diagrams for the given specification
- To map the design properly to code
- To test the software system thoroughly for all scenarios
- To improve the design by applying appropriate design patterns.

Draw standard UML diagrams using an UML modeling tool for a given case study and map design to code and implement a 3 layered architecture. Test the developed code and validate whether the SRS is satisfied.

1. Identify a software system that needs to be developed.
2. Document the Software Requirements Specification (SRS) for the identified system.
3. Identify use cases and develop the Use Case model.
4. Identify the conceptual classes and develop a Domain Model and also derive a Class Diagram from that.
5. Using the identified scenarios, find the interaction between objects and represent them using UML Sequence and Collaboration Diagrams
6. Draw relevant State Chart and Activity Diagrams for the same system.
7. Implement the system as per the detailed design
8. Test the software system for all the scenarios identified as per the usecase diagram
9. Improve the reusability and maintainability of the software system by applying appropriate design patterns.
10. Implement the modified system and test it for various scenarios

SUGGESTED DOMAINS FOR MINI-PROJECT:

1. Passport automation system.
2. Book bank
3. Exam registration
4. Stock maintenance system.
5. Online course reservation system Airline/Railway reservation system
6. Software personnel management system
7. Credit card processing
8. e-book management system
9. Recruitment system
10. Foreign trading system
11. Conference management system
12. BPO management system
13. Library management system
14. Student information system

TOTAL: 60 PERIODS

OUTCOMES:

Upon completion of this course, the students will be able to:

- Perform OO analysis and design for a given problem specification.
- Identify and map basic software requirements in UML mapping.
- Improve the software quality using design patterns and to explain the rationale behind applying specific design patterns
- Test the compliance of the software with the SRS.
- Construct projects using UML diagrams

HARDWARE REQUIREMENTS

Standard PC 30 Nos

SOFTWARE REQUIREMENTS

1. Windows 7 or higher
2. ArgoUML that supports UML 1.4 and higher
3. Selenium, JUnit or Apache JMeter

Course Code &Name : CS8582-Object Oriented Analysis and Design Laboratory
REGULATION: R2017 **YEAR/SEM:** III/V

COURSE OUTCOMES

CS8582.1	Perform OO analysis and design for a given problem specification.
CS8582.2	Identify and map basic software requirements in UML mapping.
CS8582.3	Improve the software quality using design patterns and to explain the rationale behind applying specific design patterns
CS8582.4	Test the compliance of the software with the SRS.
CS8582.5	Construct projects using UML diagrams

CORRELATION LEVELS

Substantial/ High	3
Moderate/ Medium	2
Slight/ Low	1
No correlation	0

CO – PSO CORRELATION LEVEL MATRIX

COs	PSOs			
	PSO1	PSO2	PSO3	PSO4
CS8582.1	3	2	1	0
CS8582.2	3	2	1	0
CS8582.3	3	2	0	0
CS8582.4	3	1	2	0
CS8582.5	3	2	2	3
CS8582	3	2	2	3

CO-PO CORRELATION LEVEL MATRIX

COs	POs											
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
CS8582.1	3	3	3	2	2	1	0	0	0	0	0	1
CS8582.2	3	3	3	2	0	1	1	0	0	0	0	0
CS8582.3	3	3	3	2	0	0	0	0	0	0	0	0
CS8582.4	3	3	2	1	0	2	1	0	0	0	0	2
CS8582.5	3	3	3	2	2	2	1	2	3	3	3	2
CS8582	3	3	3	2	2	1	1	2	3	3	3	2

EVALUATION PROCEDURE FOR EACH EXPERIMENTS

S.No	Description	Mark
1.	Aim & Pre-Lab discussion	20
2.	Observation	20
3.	Conduction and Execution	30
4.	Output & Result	10
5.	Viva	20
Total		**100**

INTERNAL ASSESSMENT FOR LABORATORY

S.No	Description	Mark
1.	Observation	05
2.	Performance	05
2.	Viva	05
3.	Record	05
Total		**20**

Ex.No. 1 **PASSPORT AUTOMATION SYSTEM**

Date:

SOFTWARE REQUIREMENTS SPECIFICATION

1.0 INTRODUCTION

Passport Automation System is an interface between the Applicant and the Authority responsible for the Issue of Passport. It aims at improving the efficiency in the Issue of Passport and reduces the complexities involved in it to the maximum possible extent.

1.1 PURPOSE

If the entire process of 'Issue of Passport' is done in a manual manner then it would take several months for the passport to reach the applicant. Considering the fact that the number of applicants for passport is increasing every year, an Automated System becomes essential to meet the demand. So this system uses several programming and database techniques to elucidate the work involved in this process. As this is a matter of National Security, the system has been carefully verified and validated in order to satisfy it.

1.2 SCOPE

• The System provides an online interface to the user where they can fill in their personal details

• The authority concerned with the issue of passport can use this system to reduce his workload and process the application in a speedy manner.

• Provide a communication platform between the applicant and the administrator.

• Transfer of data between the Passport Issuing Authority and the Local Police for verification of applicant's information.

1.3 DEFINITIONS, ACRONYMS AND THE ABBREVIATIONS

• Administrator - Refers to the super user who is the Central Authority who has been vested with the privilege to manage the entire system. It can be any higher official in the Regional Passport Office of Ministry of External Affairs.

• Applicant - One who wishes to obtain the Passport.

• PAS - Refers to this Passport Automation System.

1.4 OVERVIEW

SRS includes two sections overall description and specific requirements - Overall description will describe major role of the system components and inter-connections. Specific requirements will describe roles & functions of the actors.

1.5 PRODUCT PERSPECTIVE

The PAS acts as an interface between the 'applicant' and the 'administrator'. This system tries to make the interface as simple as possible and at the same time not risking the security of data stored in. This minimizes the time duration in which the user receives the passport.

2.0 SOFTWARE INTERFACE

• **Front End Client** - The applicant and Administrator online interface is built using Microsoft Visual Basic 6.0.

• **Back End** – MS Access database.

2.1 HARDWARE INTERFACE

The server is directly connected to the client systems. The client systems have access to the database in the server.

2.2 SYSTEM FUNCTIONS

• Secure Registration of information by the Applicants.

• Message box for Passport Application Status Display by the Administrator.

• Administrator can generate reports from the information and is the only authorized personnel to add the eligible application information to the database.

2.3 USER CHARACTERISTICS

• Applicant - They are the people who desires to obtain the passport and submit the information to the database.

• Administrator - He has the certain privileges to add the passport status and to approve the issue of passport. He may contain a group of persons under him to verify the documents and give suggestion whether or not to approve the dispatch of passport.

• Police - He is the person who upon receiving intimation from the PAS, perform a personal verification of the applicant and see if he has any criminal case against him before or at present. He has been vetoed with the power to decline an application by suggesting it to the Administrator if he finds any discrepancy with the applicant. He communicates via this PAS.

2.4 CONSTRAINTS

• The applicants require a computer to submit their information.

• Although the security is given high importance, there is always a chance of intrusion in the web world which requires constant monitoring.

• The user has to be careful while submitting the information. Much care is required.

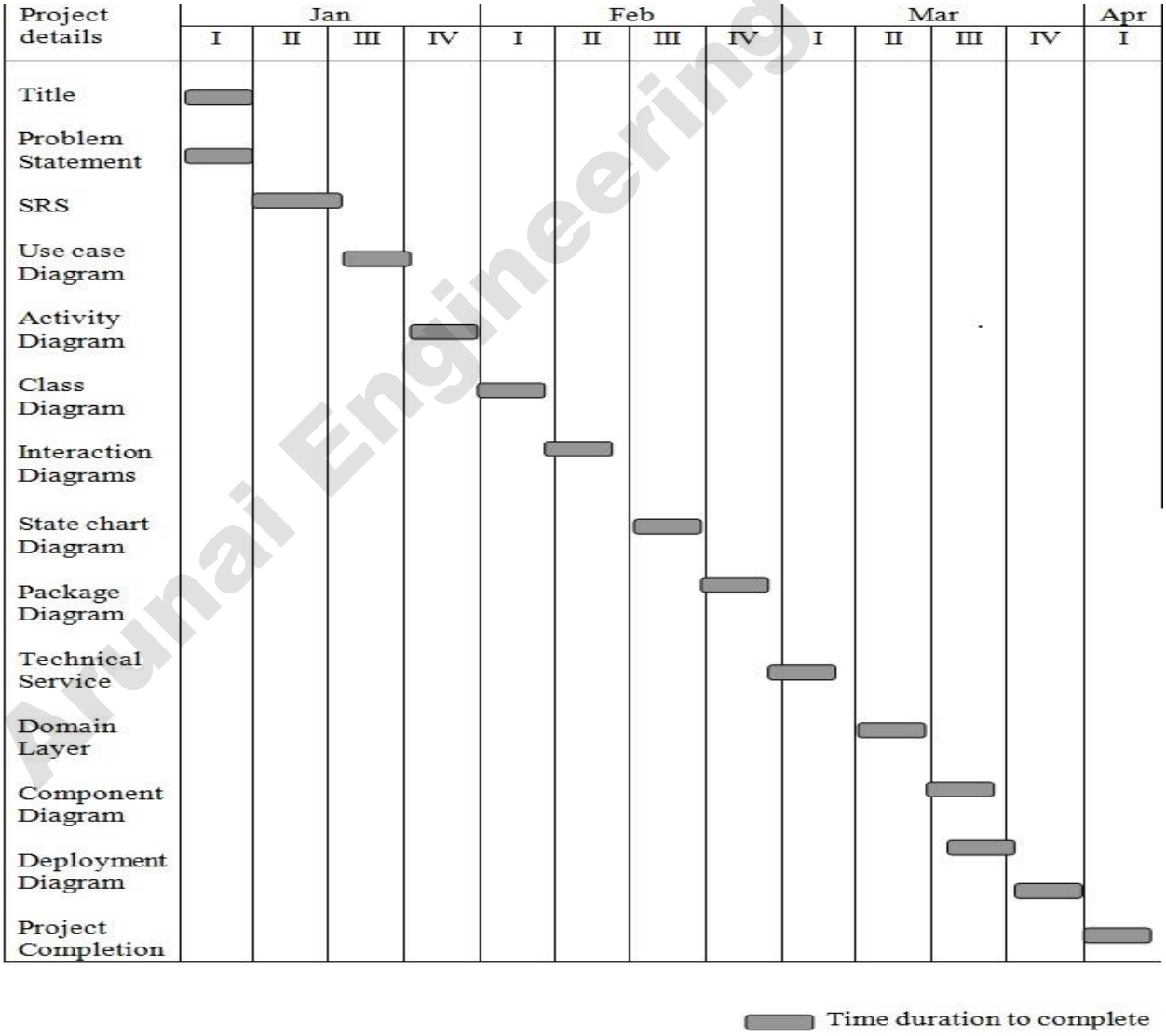
2.5 ASSUMPTIONS AND DEPENDENCIES

• The Applicants and Administrator must have basic knowledge of computers and English Language.

• The applicants may be required to scan the documents and send.

Gantt chart:

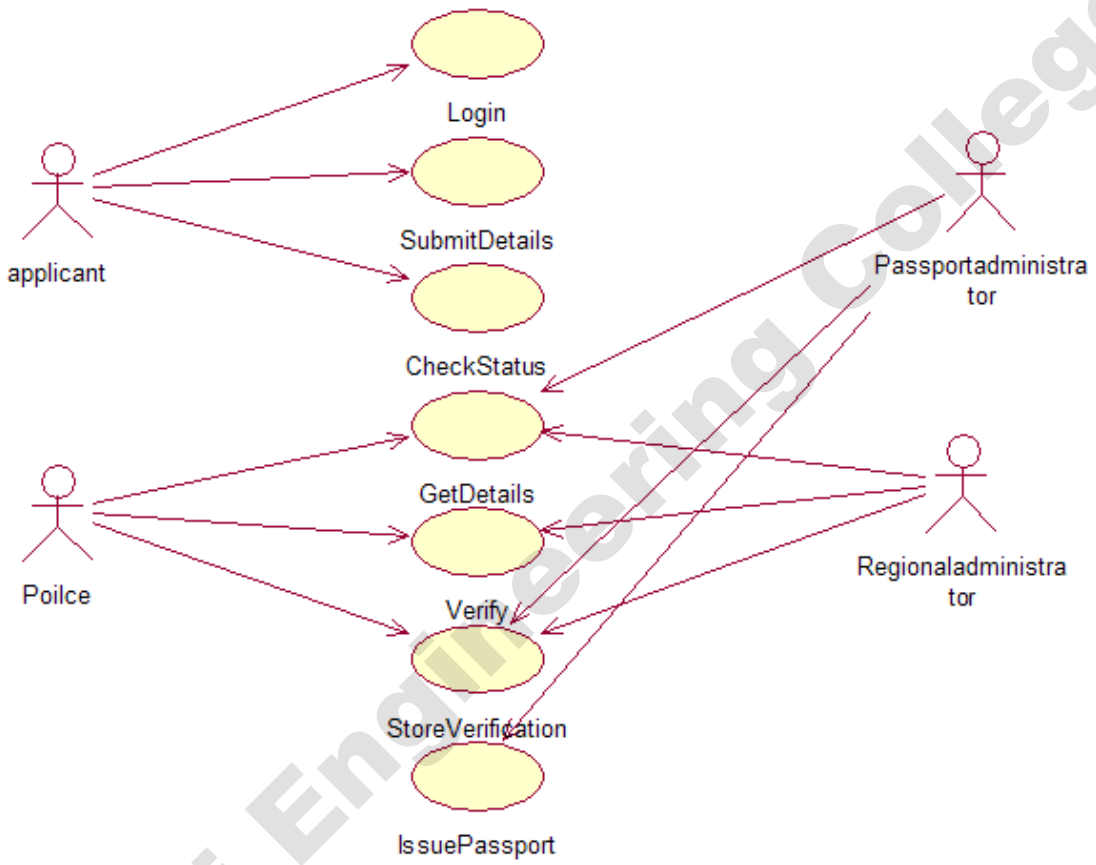
It describes the time schedule for the planning to complete the core product and after complete of core product, what is the time taken for the project action of core project.



UML DIAGRAMS

USE CASE DIAGRAM

Use case is shown as an ellipse containing the name of usecase .An actor is shown as a stick figure with the name below it.Use case diagram is a graph of actors.

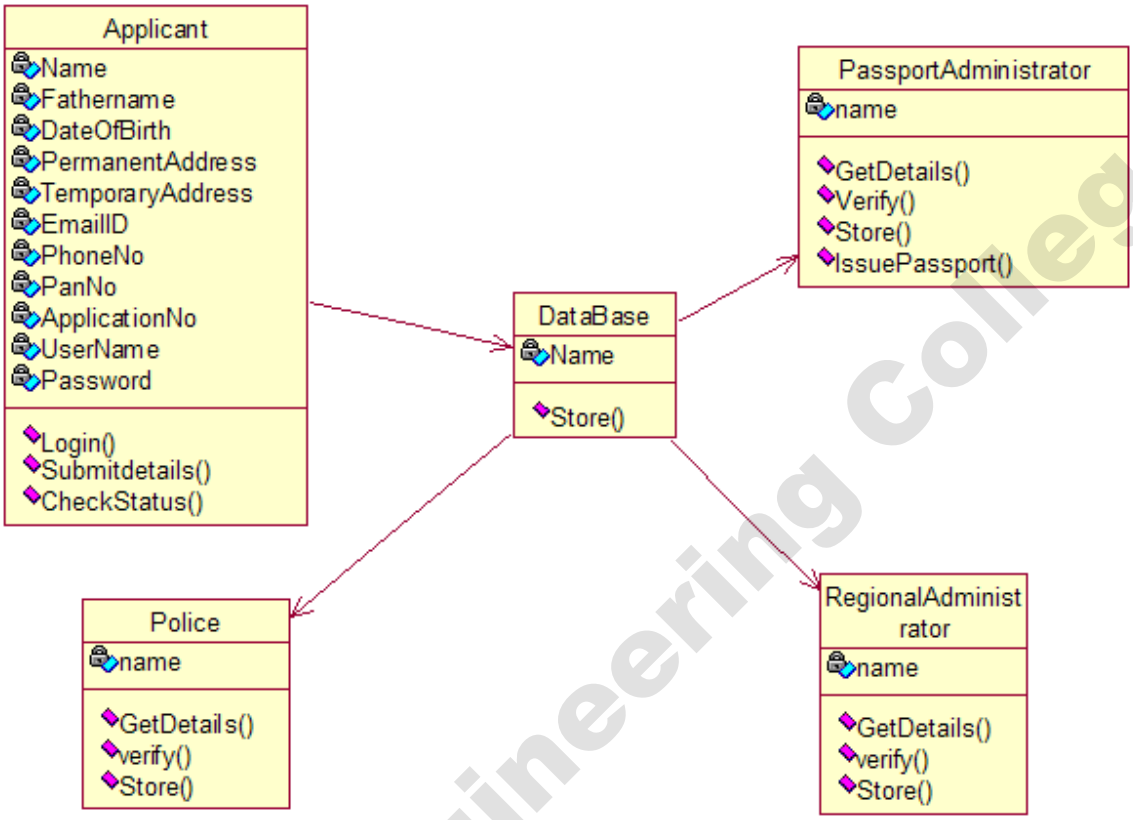


DOCUMENTATION OF USECASE DIAGRAM

- The actors in use case diagram are Applicant, regional administrator, database, passport Administrator, Police.
- The use cases are Login, givedetails, logout, collectdetails, verification, issue.
- The actors uses the use case are denoted by the arrow

CLASS DIAGRAM

A class is drawn as rectangle box with three compartments or components separated by horizontal lines. The top compartment holds the class name and middle compartment holds the attribute and bottom compartment holds list of operations.



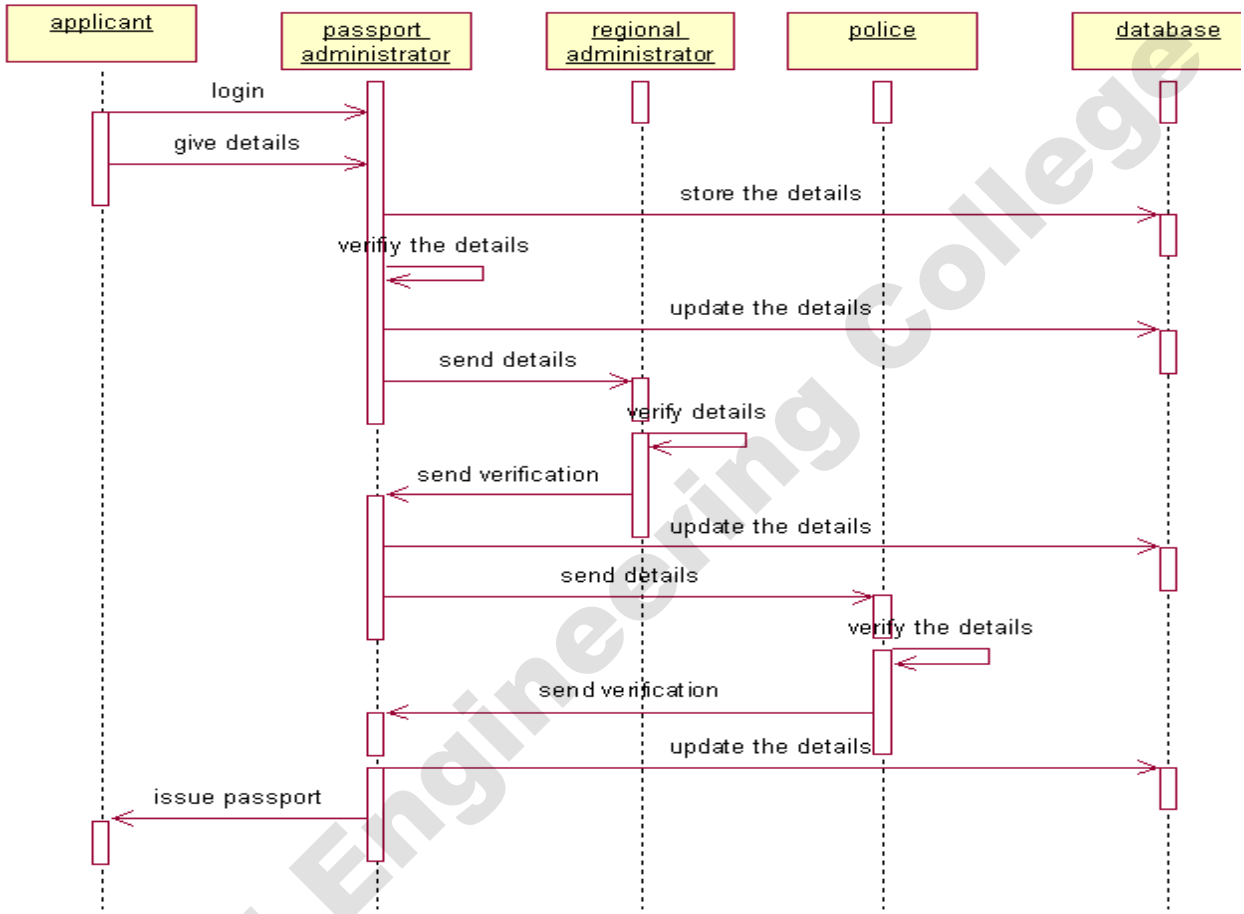
DOCUMENTATION OF CLASS DIAGRAM

- The classes are Applicant, database, regional administrator, passport administrator, and police.
- The applicant has attribute such as name and password and operations are login, givedetails and logout.
- The database has attribute such as name and operation is store.
- The regional administrator has attribute such as name and operation are get details, verify details and send.
- The passport administrator has attribute such as name and operation are get details, verify details and issue.
- The police has attribute such as name and operation are get details, verify details and send.

SEQUENCE DIAGRAM

A sequence diagram shows an interaction arranged in time sequence,

It shows object participating in interaction by their lifeline by the message they exchange arranged in time sequence.Vertical dimension represent time and horizontal dimension represent object.



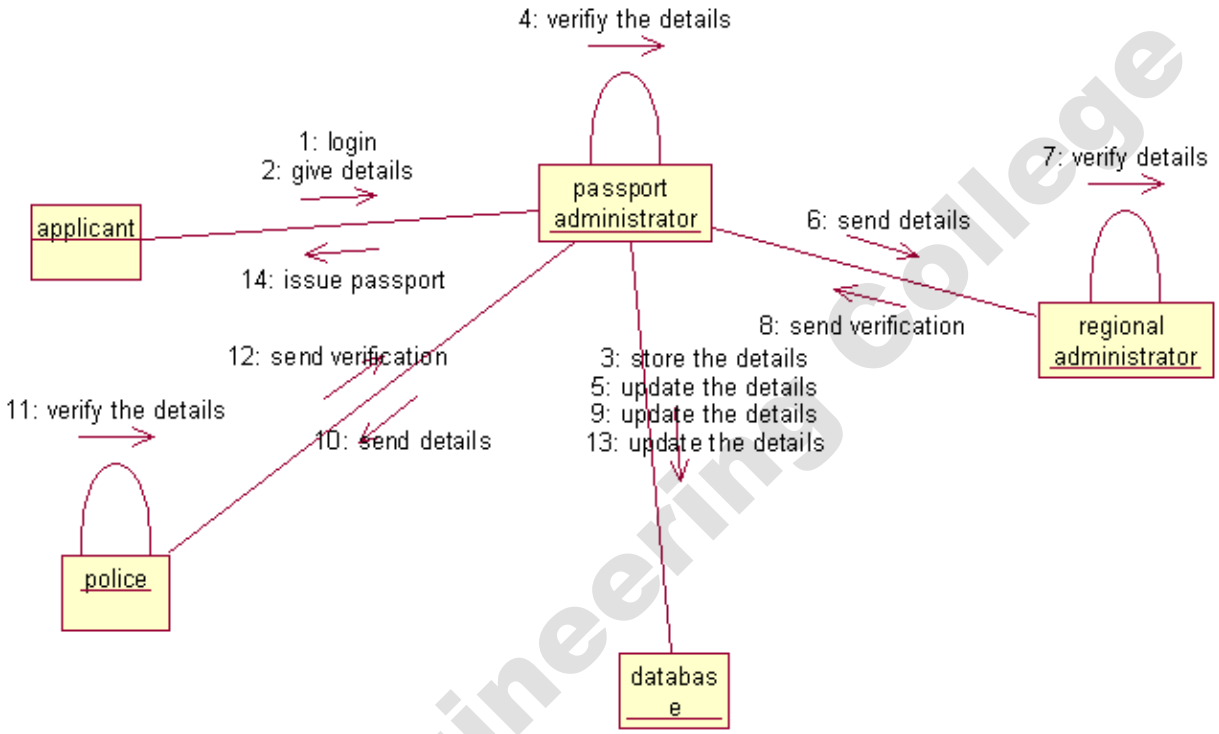
DOCUMENTATION OF SEQUENCE DIAGRAM.

- The applicant login the database and give his details and database store the details.
- The passport administrator get the details from the database and do verification and the forward to regional administrator.
- The regional administrator get details form passport administrator and perform verification and send report to passport administrator.
- The police get the details form passport administrator and perform verification and send report to passport administrator

COLLABORATION DIAGRAM

A collaboration diagram is similar to sequence diagram but the message in number format.

In a collaboration diagram sequence diagram is indicated by the numbering the message

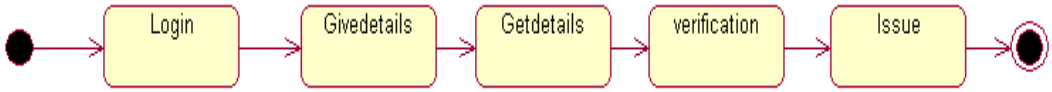


DOCUMENTATION OF COLLABORATION DIAGRAM

- The applicant, passport administrator, regional administrator, police and database functions are show in sequence number
- The applicant first login the passport automation system and submit his details the passport administrator, regional administrator and police verification are denoted.

.STATE CHART DIAGRAM

The state chart diagram contains the states in the rectangle boxes and starts in indicated by the dot and finish is indicated by dot encircled.The purpose of state chart diagram is to understand the algorithm in the performing method.



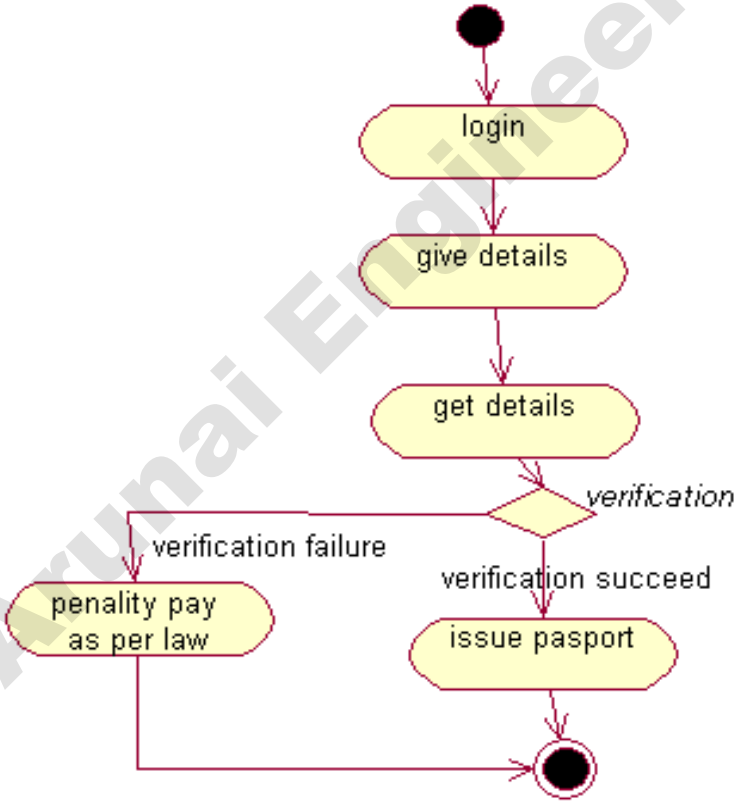
DOCUMENTATION OF STATE CHART DIAGRAM

- The states of the passport automation system are denoted in the state chart diagram
- Login state represent authentication for login the passport automation system.
- In this state, it checks whether the applicant has provided all the details that is required.
- Police,regional administrator and passport administrator get necessary details and verification of the applicant are denoted from the Getdetail state and verification state

ACTIVITY DIAGRAM

An activity diagram is a variation or special case of a state machine in which the states or activity representing the performance of operation and transitions are triggered by the completion of operation.

The purpose is to provide view of close and what is going on inside a use case or among several classes.An activity is shown as rounded box containing the name of operation.

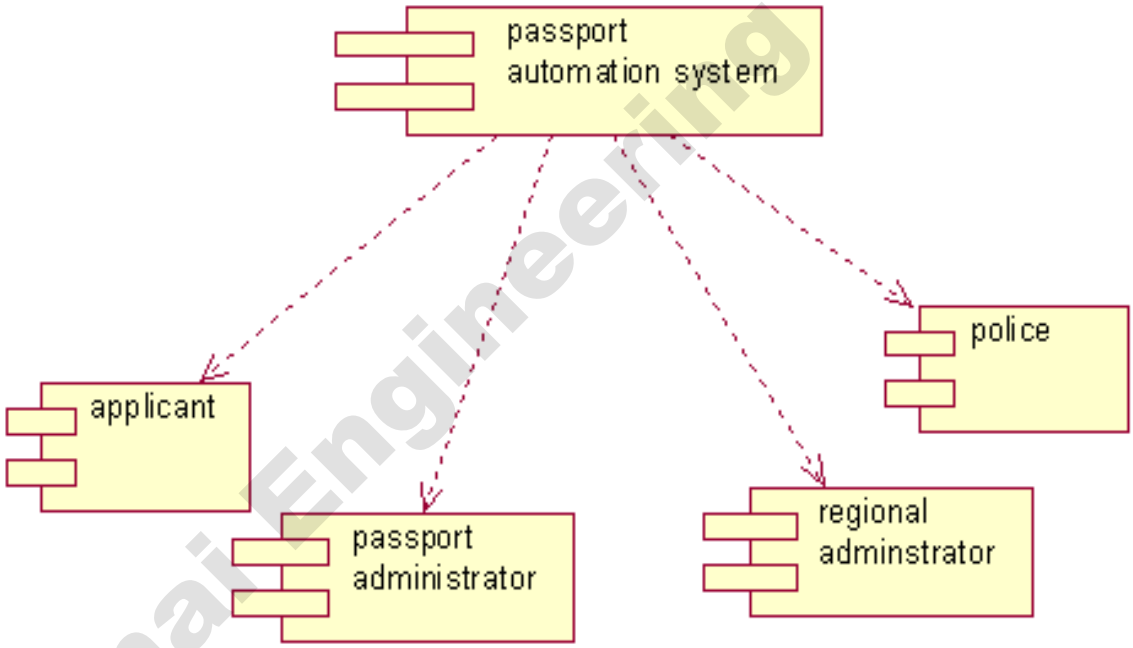


DOCUMENTATION OF ACTIVITY DIAGRAM

- In this diagram, the activities taken place are login, give details, get details, verification and issuing of passport.
- Initially, the user has to login into the website through their id and password.
- After, signing in successfully the user have to give the necessary details
- The given details are then verified, if the verification is successful then passport is issued else penalty as per law.

COMPONENT DIAGRAM

The component diagram is represented by figure dependency and it is a graph of design of figure dependency.

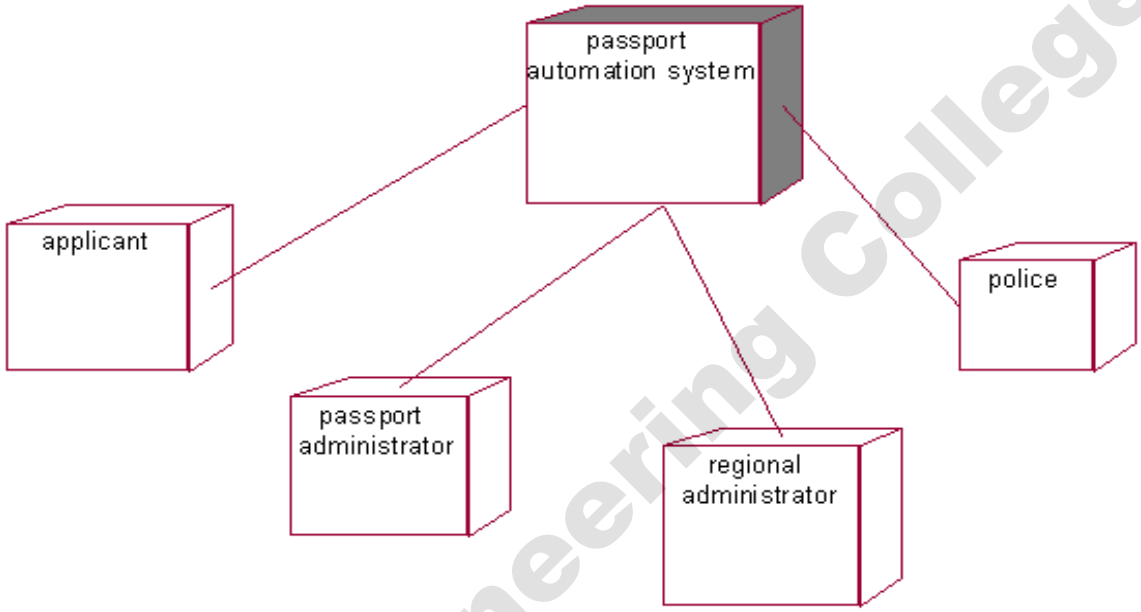


DOCUMENTATION OF COMPONENT DIAGRAM

- The modules in the component diagram are applicant, passport administrator, regional administrator, police and passport automation system.
- The applicant passport administrator regional administrator and police are dependent on the passport automation system are shown by the dotted arrow

DEPLOYMENT DIAGRAM

It is a graph of nodes connected by communication association. It is represented by a three dimensional box

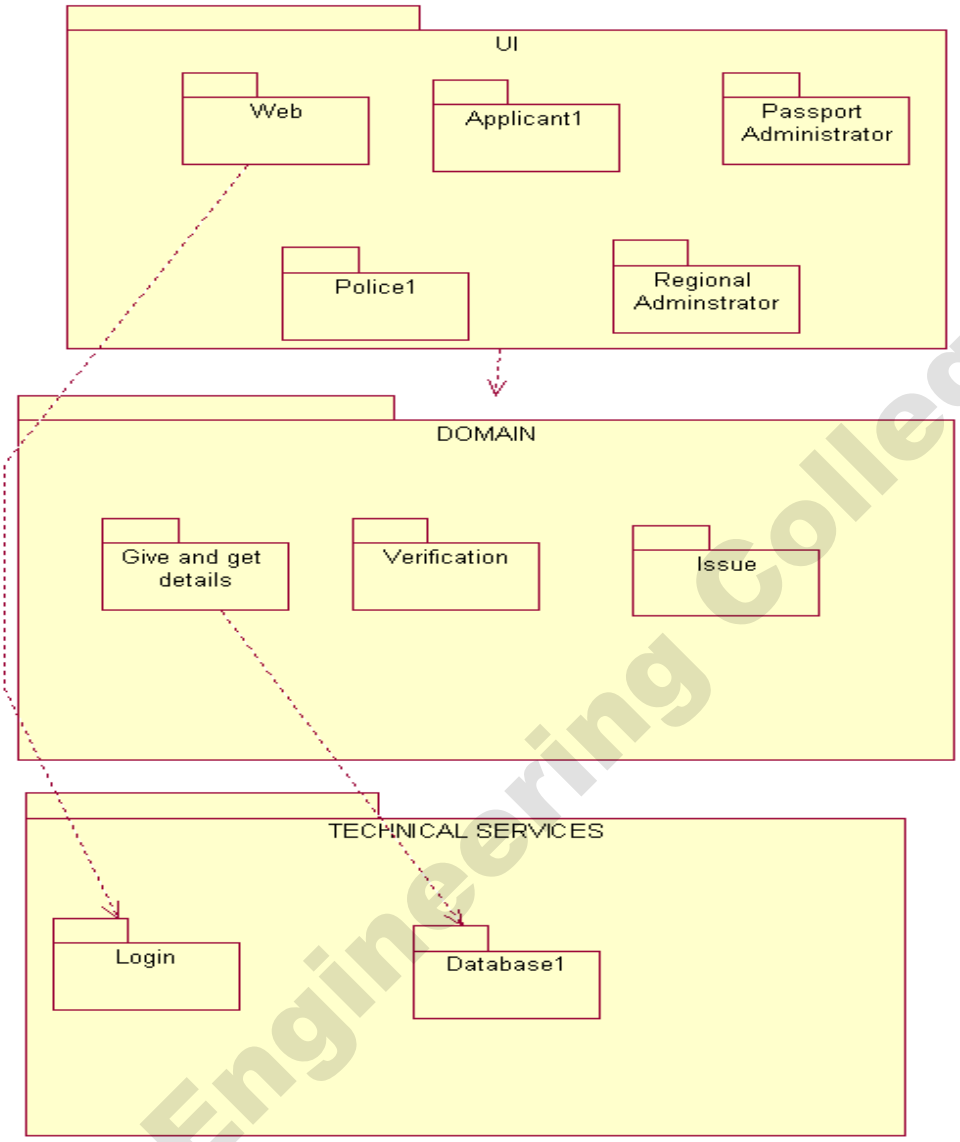


DOCUMENTATION OF DEPLOYMENT DIAGRAM

- The modules in the deployment diagram are applicant, passport administrator, regional administrator, police and passport automation system.
- The applicant passport administrator regional administrator and police are dependent on the passport automation system are shown by the arrow

PACKAGE DIAGRAM

A package diagram is represented as a folder shown as a large rectangle with a top attached to its upper left corner. A package may contain both sub ordinate package and ordinary model elements. All uml models and diagrams are organized into package



DOCUMENTATION OF PACKAGE DIAGRAM

- The three layer in the passport automation system are user interface layer, domain layer, technical service layer
- The user interface layer represents the user interface components such as web, applicant, passport administrator, police, regional administrator.
- The domain layer has major actions such as give and get details, verification and issues.
- Technical service layer, authenticated user only can access the technical services.

Ex.No. 2 **BOOK BANK SYSTEM**
Date:

SOFTWARE REQUIREMENTS SPECIFICATION

The main purpose of creating the document about the software is to know about the list of the requirements that is required in the software project, part of the project to be developer.

It specifies the requirements to develop a processing software part that complete the set of requirements.

The students need the book for study about the subject, so student need to join the Book Bank. The Book Bank offers the student to take the required book for particular days and return it safely to the Book Bank after finish his course

1.GLOSSARY

Generally a glossary is performed to define the entire domain used in the problem. It defines about the storage item that are familiar to the user membership card, it provide these definite. The data dictionary provide all the definition and information about the attribute we are using the particular project to the user.

2.DEFINITION

The glossary contains the working definition for the key concept in the Book Bank system.

3. MEMBERSHIP CARD ISSUE

The Membership card is issued to the student when he joins the Book Bank.

4. PROFESSION

The person who issues the book to the Student.

5. SCOPE

In this specification, we define about the system requirement that is apart from the functionality.

6. FUNCTIONALITY

Many member of the process line to check for its occurrence and transaction, we all have to carry over at sometime

7. USABILITY

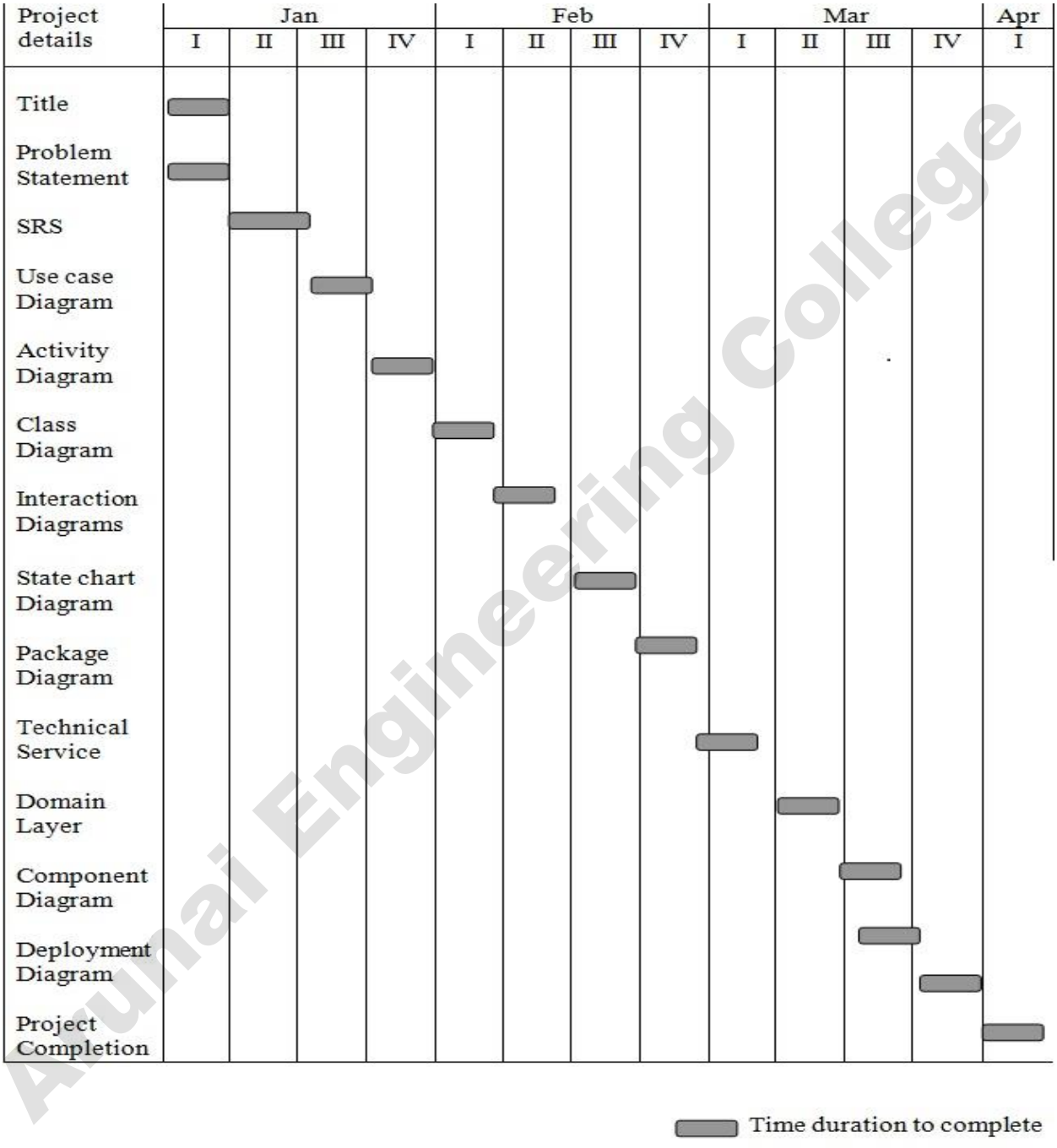
The user interface to make the transaction should be effectively.

8. PERFORMANCE

It is the capability about which it can perform function for many users at the same time effectively without any error occurrence.

Gantt chart:

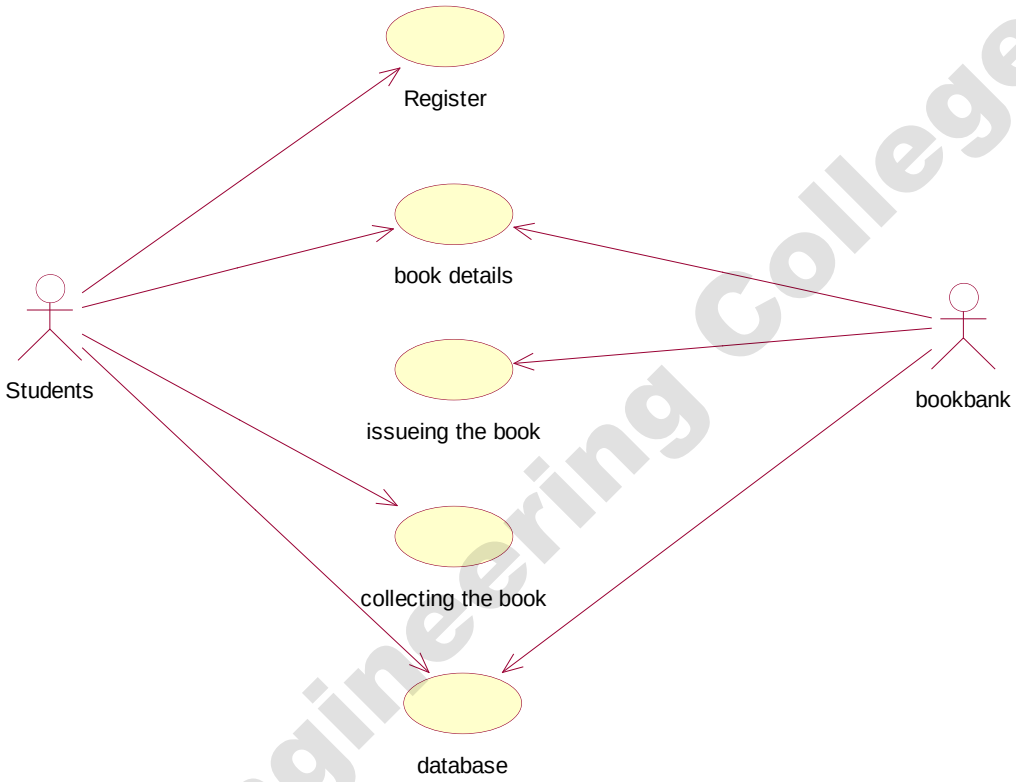
It describes the time schedule for the planning to complete the core product and after complete of core product, what is the time taken for the project action of core project.



UML DIAGRAMS

1. USE CASE DIAGRAM

Use case is a sequence of transfer in a system whose task is to yield results of measurable value to individual action of the system. Use case is a set of sceneries of lied together by a common user goal. A sceneries is a sequence of step describing an interaction between a user and a system



DOCUMENTATION OF USE CASE DIAGRAM

The use case diagram in the Book Bank illustrates the following sequence of steps. It is all for followed by the student and banker who are in charge of Book Bank.

Enquiry

The student wants to join the Book Bank for study about his subject. So he must enquire about the Book Bank rules and information about the Book Bank.

Fill the form for join

The Student fills the form and gets the Membership card

Book details

Then the student enquire about the Book details and fill the form for the require Book.

Issuing the Book

The Banker issue the Book which is mention in the form by the student.

Collecting the Book

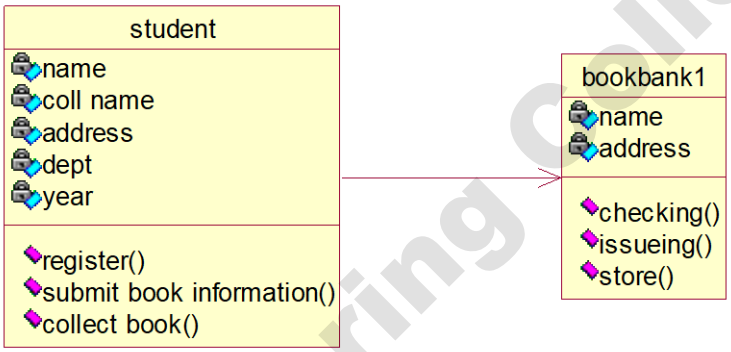
The student gets the Book and student about his subject by using this Book and returns it on the particular date.

Database

The Book Bank database was updated for each book issuing.

2. CLASS DIAGRAM

The class diagram describes the types of objects in the system and various kinds if static relationship that exist among them.



DOCUMENTATION OF CLASS DIAGRAM

The various classes involved in the system are registered

- The student enquire and join the Book bank
- Then student did he action of enquire , join , and collect
- The Book Bank did the action of checking , issuing , storing
- The student fill the form by fill his name, college name, course
- The bank issue the membership card to him, and he use this as a identity card
- The book bank have the attributes of its name and address
- It issue the book to student and get it back in the particular date

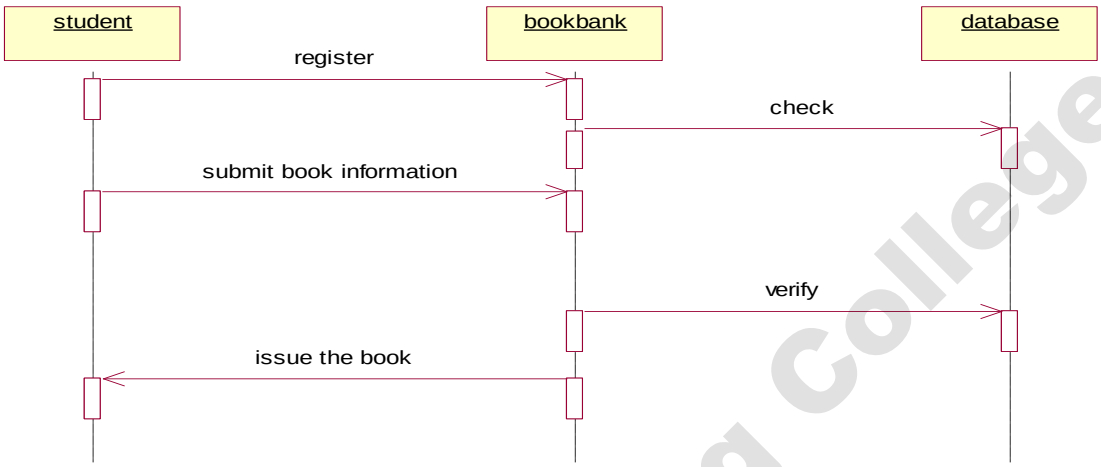
3. INTERACTION DIAGRAM

Interaction diagram are diagram that describes how groups of objects collaborate to get the job done.

Interaction diagram capture the behavior of a single use case showing the pattern of interaction among object.'

3.1. SEQUENCE DIAGRAM

A sequence diagram is one that includes the object of the project and tells the left line and also various act performed behavior object.



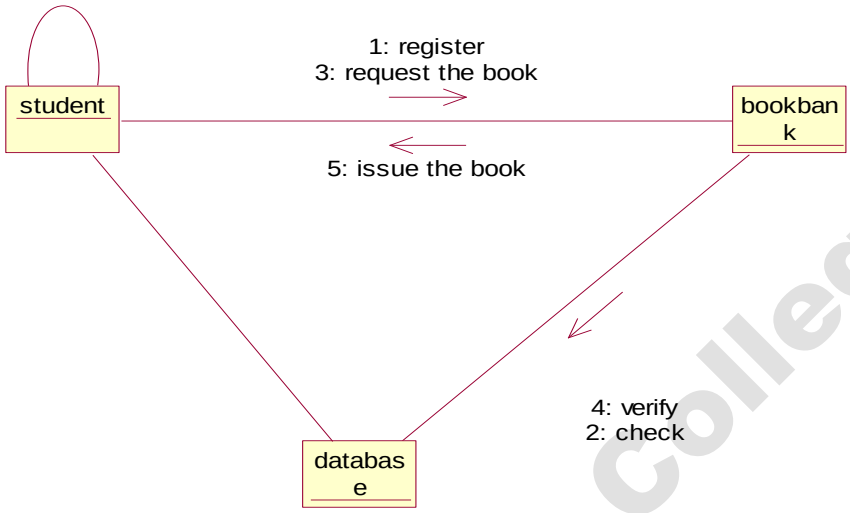
DOCUMENTATION OF SEQUENCE DIAGRAM

The single use case in the Book Bank process is taken and various operations followed in use case.

- In this sequence ,the student enquire the Book Bank detail from the Banker and known about the Bank
- Then the student fill the form for join the book bank and require the book from the Book Bank
- The Banker check the book which is request the student is available or not
- If the book is available, the Banker issue the Book to the student
- Then the Book bank database is update when the book is returned

3.2. COLLABORATION DIAGRAM

It is same as the sequence diagram that involve the project with only difference, that we give sequence number to each process



DOCUMENTATION OF COLLABORATION DIAGRAM

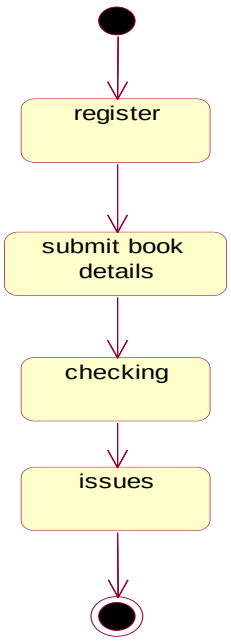
The sequence steps is

- Enquire the information about the book bank and join the bank
- Request the book from the banker
- The banker check the availability
- Then issue the available book to the student
- The database was updated

4. STATE CHART DIAGRAM

It is a technology to describe the behavior of the system. It describes all of the possible state that a particular object object gets into the object oriented technique.

State diagram are drawn for a single class to show the left time behavior of a single object.



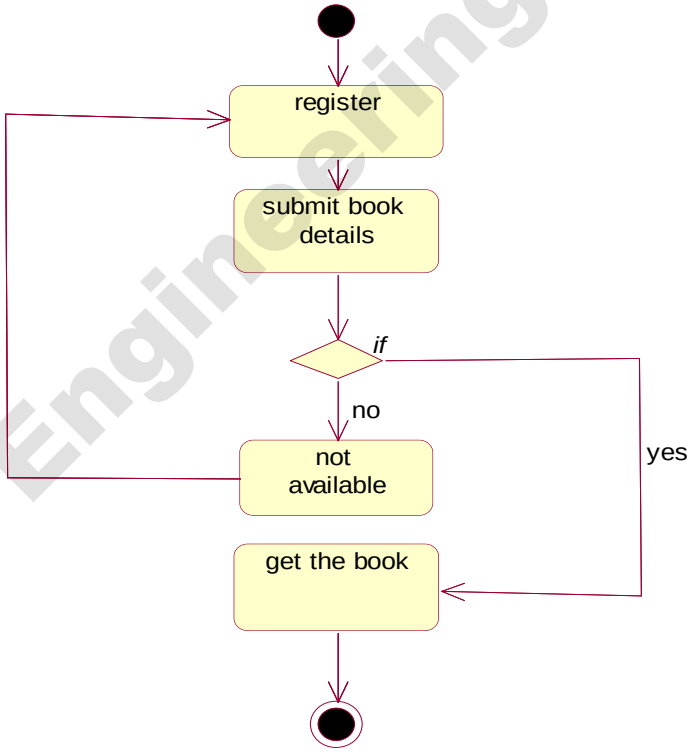
DOCUMENTATION OF STATECHART DIAGRAM

The state diagram describes the behavior of the system.

- The main purpose is to get the book from the book bank
- After getting the book the student study that and return it to the bank
- In between the student enquire and join the book bank and get the membership card
- Then he use this card and get the book from the book bank

5.ACTIVITY DIAGRAM

It involves all the activities of particular project and the various step using join and far be. The activity diagram describes the operations that are carried out by analysis system. It involves the activities and there are various steps using joins and forks.

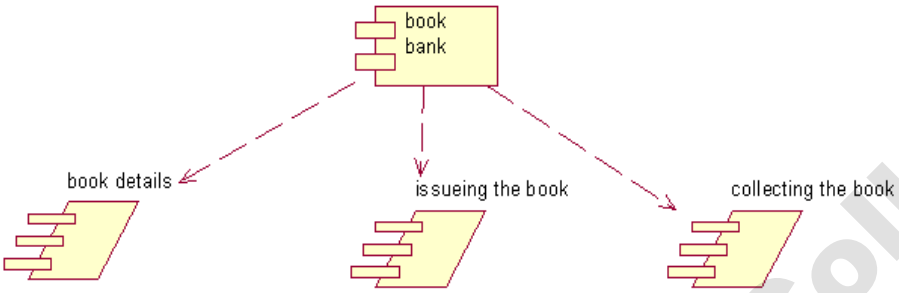


DOCUMENTATION OF ACTIVITY DIAGRAM

The student enquires about the book bank. Then he fills the form for join. Then he gets the book from the book bank. Safely return it in the particular date

6. COMPONENT DIAGRAM

The component diagram is represented by figure dependency and it is a graph of design of figure dependency.

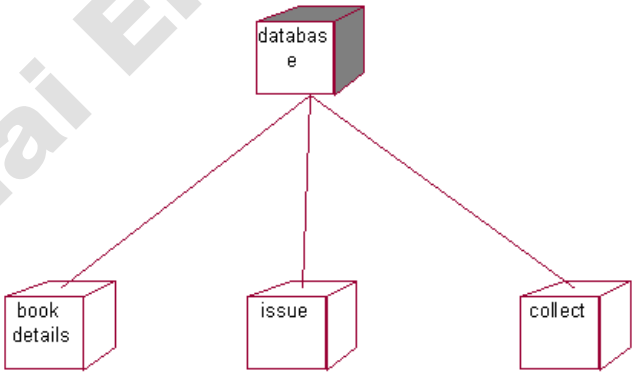


DOCUMENTATION OF COMPONENT DIAGRAM

This is component diagram represents the dependences that are present in the Book Bank system.

7. DEPLOYMENT DIAGRAM:

It is a graph of nodes connected by communication association. It is represented by a three dimensional box

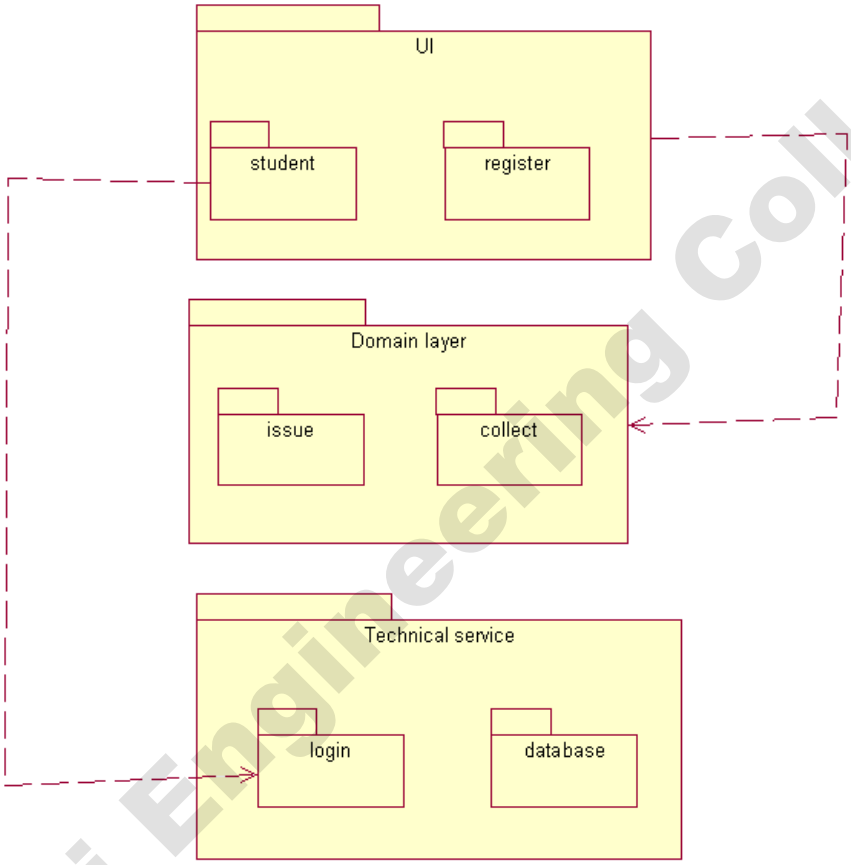


DOCUMENTATION OF DEPLOYMENT DIAGRAM

This diagram represent deployment diagram of the Book Bank system. In this the process of register, enquiry, issuing the book, collect the book, database update are done

8. PACKAGE DIAGRAM

A package diagram is represented as a folder shown as a large rectangle with a top attached to its upper left corner. A package may contain both sub ordinate package and ordinary model elements. All uml models and diagrams are organized into package



DOCUMENTATION OF PACKAGE DIAGRAM

The Package diagram has the functions like use case diagram. But it is have three layers of user interface layer, domain layer and the technical layer. In user interface layer book bank and student classes are there. Domain layer have the functions of the student and book bank. Technical layer have the technical of the above function.

Ex.No.3 ONLINE EXAM REGISTRATION SYSTEM
Date:

SRS(SOFTWARE REQUIREMENT SPECIFICATION)DOCUMENT:

1.Objective:

To implement Online Exam Registration. To ensure validity and security in the Online Exam Registration.

2.Project overview:

This project assesses students be conducting online objective tests. The tests would be height customizable. This project will enable educational institutes to conduct test and have automated checking of answers based on the response be the candidates. The project allows faculties to create their own tests. It would enable educational institutes to perform tests, quiz and create feedback forms. It asks faculty to create his/her set of questions. Faculty then creates groups so that only associated students can appear for the test. The result of the response would be available to the faculty of the question set. Further the result would also be mailed to the student. This project would be helpful for creating practice tests, so for educational institutes and as a feedback form.

3.purpose

Responses by the candidates will be checked automatically and instant. Online examination will reduce the hectic job of assessing the answers given by the Candidates. Being an integrated Online Examination System it will reduce paper work. Can generate various reports almost instant when and where required.

4.Scope

This project would be very useful for educational institutes where regular evaluation of students is required. Further it can also be useful for another one who requires feedback based on objective type responses.

5.Non-Functional Requirements

System should be able handle multiple users.

Database updating should follow transaction processing to avoid data inconsistent.

6.Security

Administrator has the highest author to edit/delete/create database Faculty have the author it to add students. Students can only view their test records. Faculty can view all the test records of ever student. Critical information like passwords should be transferred in encrypted

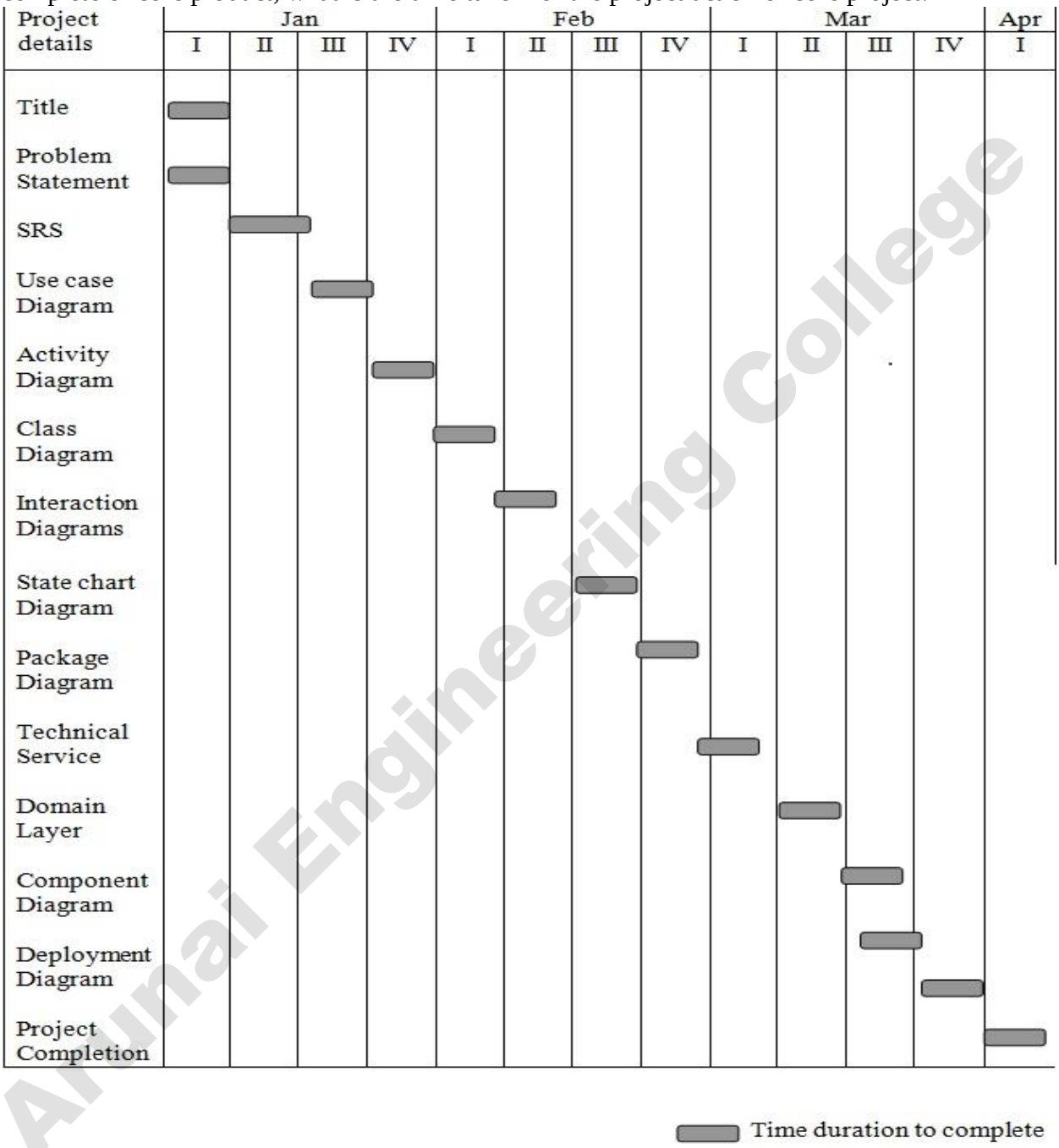
7. Reliability

Data validation and verification needs to be done at ever stage of activity.

Validating user input

Gantt chart:

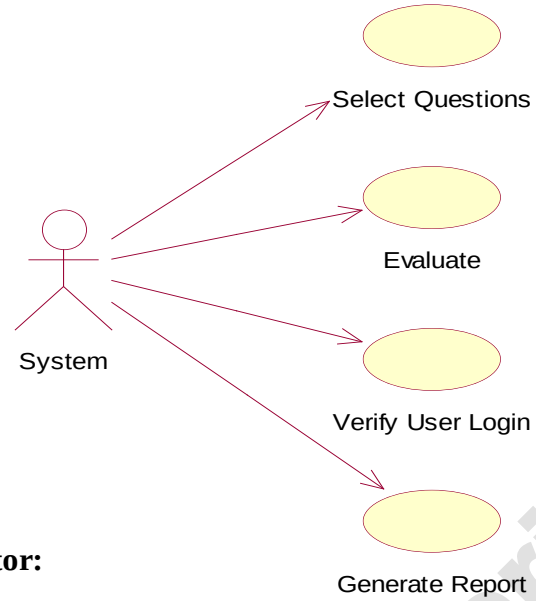
It describes the time schedule for the planning to complete the core product and after complete of core product, what is the time taken for the project action of core project.



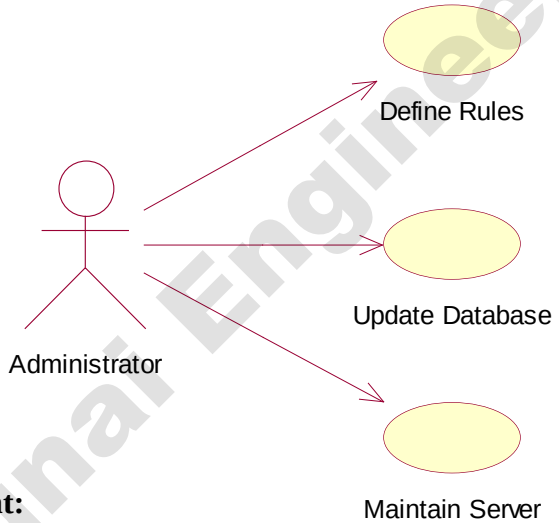
Use – Case Diagrams:

UML provides use case diagram notation to illustrate the names of use case and author relationship between them. Use case diagram and case relationship are secondary in use case work use case text document.

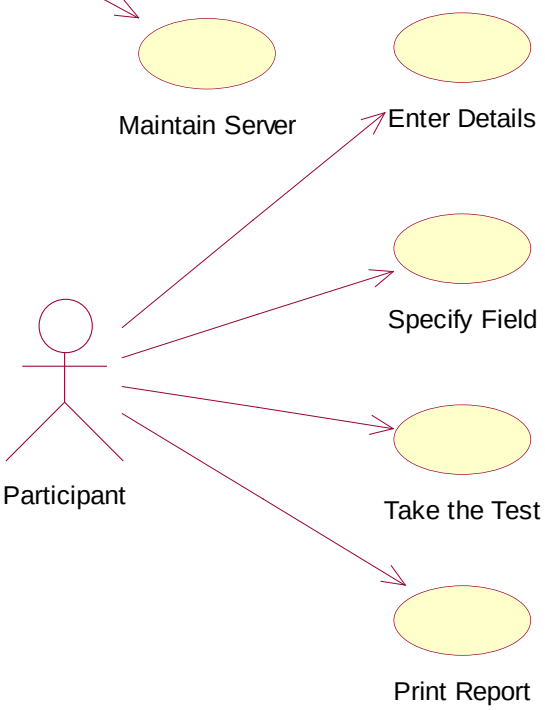
System:



Administrator:

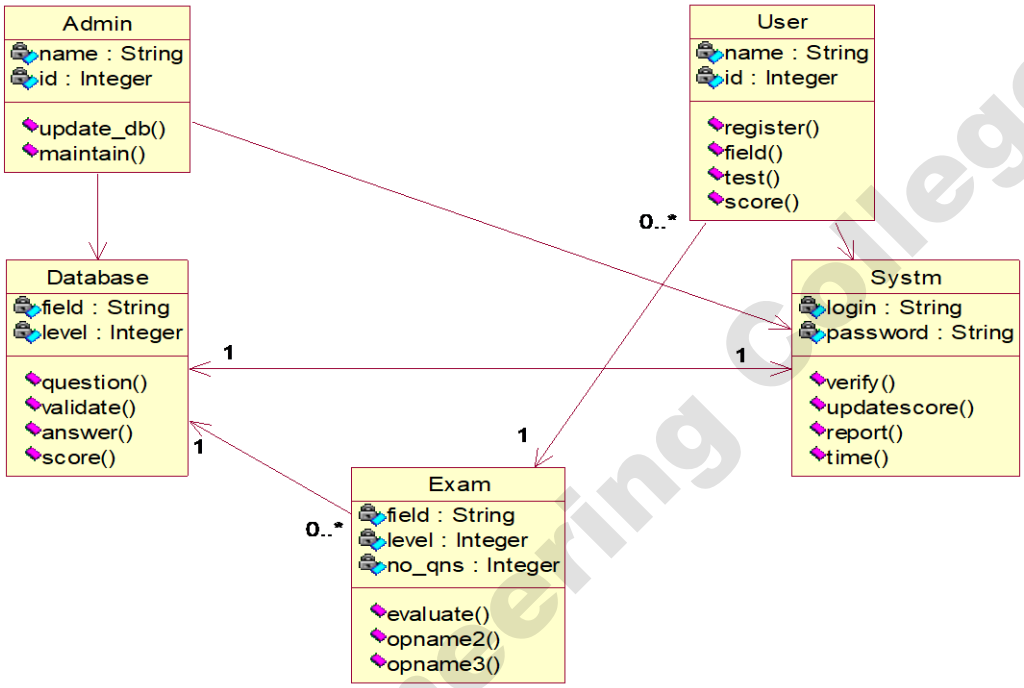


Participant:



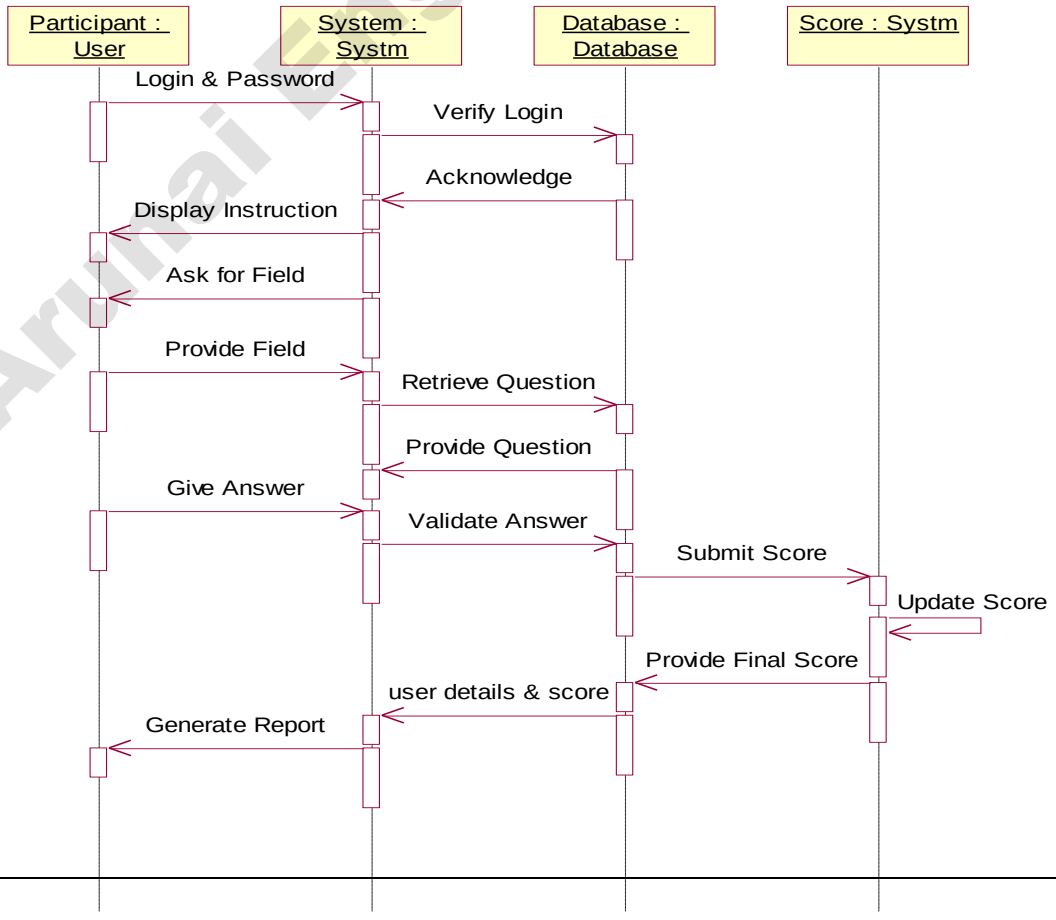
Class Diagram:

The UML Class diagram is to illustrate class interfaces as their actions .They are used for static object modeling, we have already introduced.



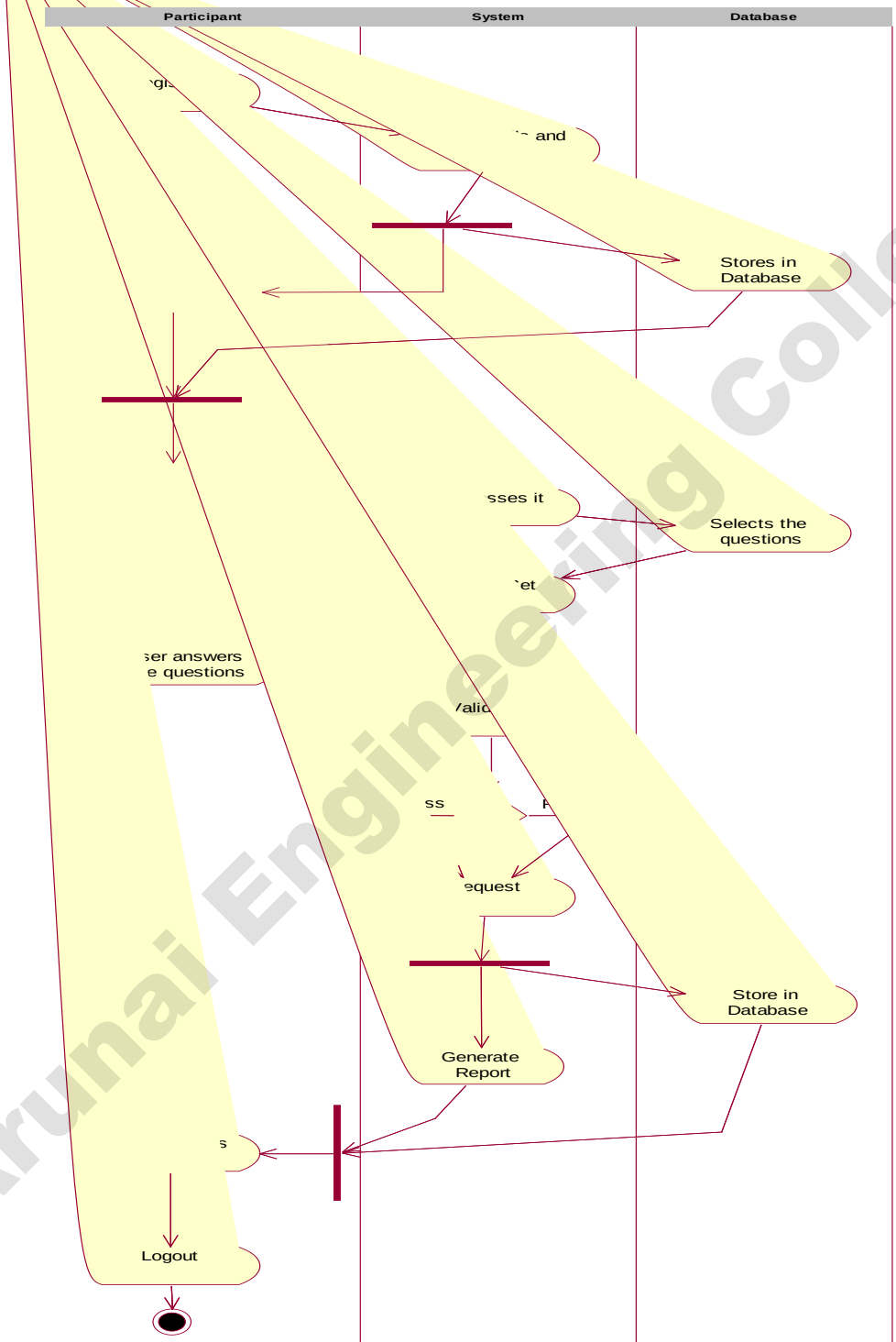
Sequence Diagram:

A Sequence diagram illustrate a kind of format in which each object interacts via message. It is generalize between two or more specialized

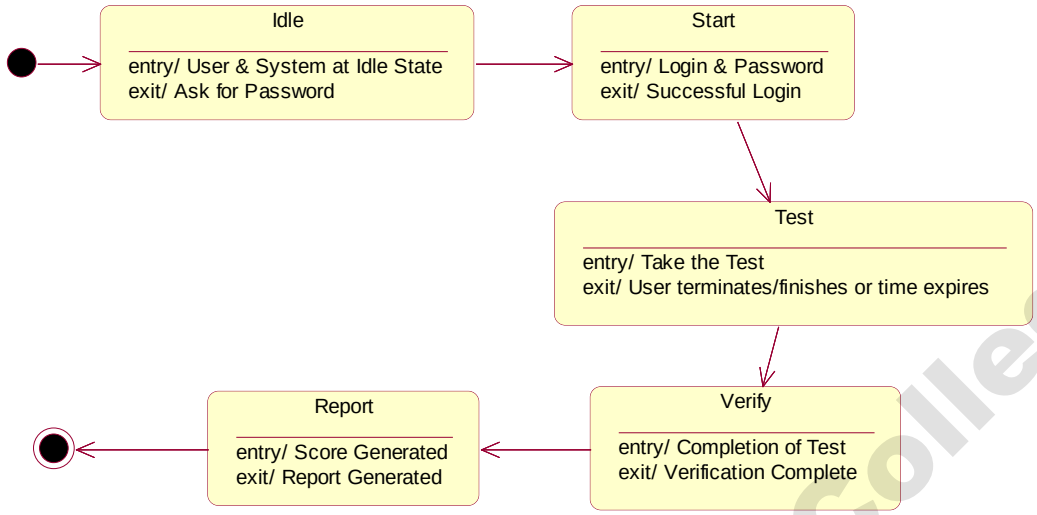


Activity Diagram

The activity diagram notation is an action, partition, fork join and object node. Most of the notation is self explanatory, two subtle points. Once an action finished, there is an automatic outgoing transaction. The diagram can show both control flow and data flow.

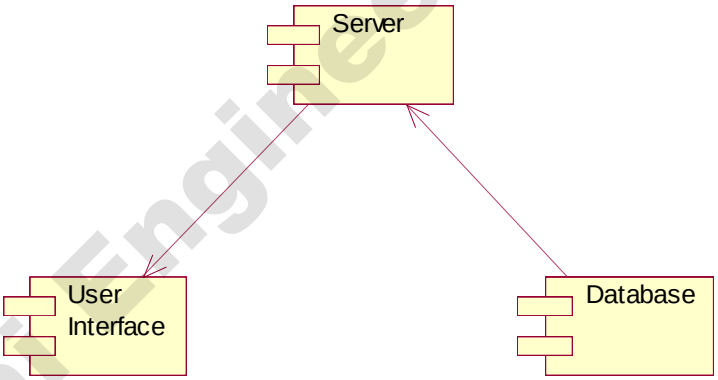


State Chart Diagram

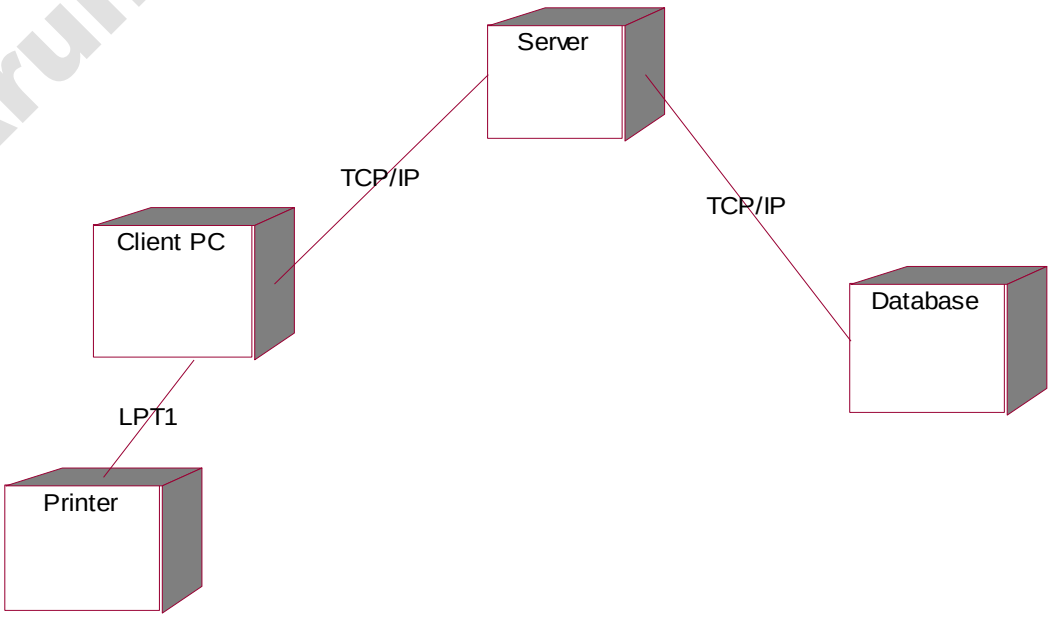


Component Diagram:

Components are slightly fuzzy concept in this UML,because both class and components can be used to model the something..



Deployment Diagram:



Ex.No 4 **STOCK MAINTENANCE SYSTEM**
Date:

SRS (SOFTWARE REQUIREMENT SPECIFICATION) DOCUMENT :

1.Objective:

To provide a complete version of a stock maintenance system and to manage the entire stock maintenance process of a company.

2.Scope of the Project:

To ensure the portability and therefore compatibility. To ensure our system moves with time i.e it allows for maintenance, upgrades and periodic backups by developed and authorized personal. To program the system using the appropriate design, application, platform and programming languages.

3.**Project Description**:

Stock manager is having the rights and controls to login into the software by entering his username and valid password. They analyze what goods are needed ,what are the expired ones and the old ones. Then he clears the old goods by selling it with offer. Then he will eliminate the expired goods from the go downs. Then he prepares the list of goods which are needed for the customer provision shop. Then he calls the company for quotation. After receiving the quotations from the company, the stock manager choose the best quotation. Then the manager purchase the needed goods from the corresponding company. After delivery of all the goods by the company manager and the sales manager settles all his payments with tax. Then the stock manager sells the goods to many customers and updates all the details in the database. By processing these steps the stock manager manages the stock available in the go down.

4.REQUIREMENTS:

(a).FUNCTIONAL REQUIREMENTS:

1.Login: Login is achieved by the stock manager.

2.Analysis of Goods: Finding the expired goods Finding the older ones and selling with offer prices

3.Preparing the List: List of goods or items which are needed are prepared by the stock manager.

4.Getting the Quotations: Stock manager gets the quotation from the company manager.

5.chhosing the best one: Stock manager chooses the best quotations.

6.Purchasing the goods: Stock manager purchase the good from the company manager.

7.Delivery & Payment: Delivery of goods by the required company and payment settled by the stock manager.

8.Update: It is performed by the stock manager in the database.

(b).NON- FUNCTIONAL REQUIREMENTS:

Nonfunctional requirements define the needs in terms if performance, logical database requirements, design constraints, standard compliance, reliability, availability,

security, maintainability and portability.

(c).HARDWERE REQUIREMENTS:

1. Processor - Intel Pentium IV-2.0 GHZ.
2. Hardware - 40 GB.
3. RAM - 512mb
4. DVD RAM - 1 nos.

(d).SOFTWARE REQUIREMENTS:

1. OS - windows XP/vista.
2. Front end Tool - Rational Rose Enterprise suite.
3. Back end Tool - Oracle 10i.

6. DOMAIN MODEL:

A domain model is a visual representation of conceptual classes or real situations object in a domain. In object oriented analysis, the domain model is the most important. It illustrates the concept in the domain. It acts as a source of inspiration for designing some software objects. The relationship between the stock manager and customer is purchase of the goods through discount & offer sales. The relationship between the stock manager and the company manager is to give & get the quotations for the purchase of goods.

7. PARTIAL LAYERED ARCHITECTURE:

Sequence diagram is an interaction overview diagram. It provides a big picture Overview of how a set of interaction are related in terms of logic and process flow. This Partial layer architecture shows the interface of the sequence diagram, here the administrator shows the interface by displaying actor symbol.

8.LOGICAL ARCHITECTURE:

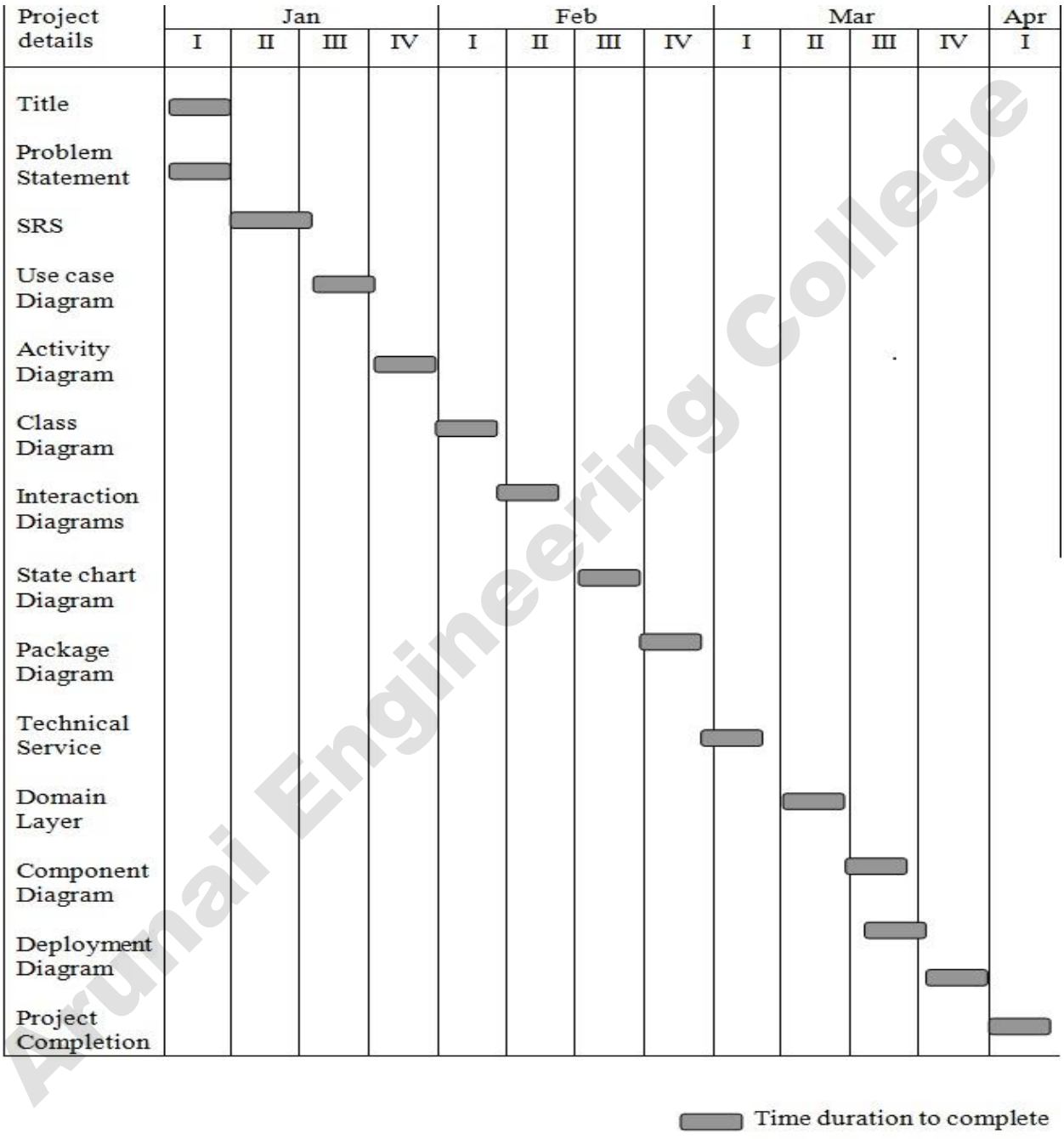
The Logical architecture is large scale organization of software class into packages, sub system layer. It is called as the logical architecture because there is no direction about how these elements are deployed on different operating system.

9.RISK ACTIVITY:

- It is difficult to sell the old or expired products.
- It is also difficult to find the expired ones.
- If we buy an expensive product and after sometime there might occur a price fall. In this case, the stock manager has to face the loss.

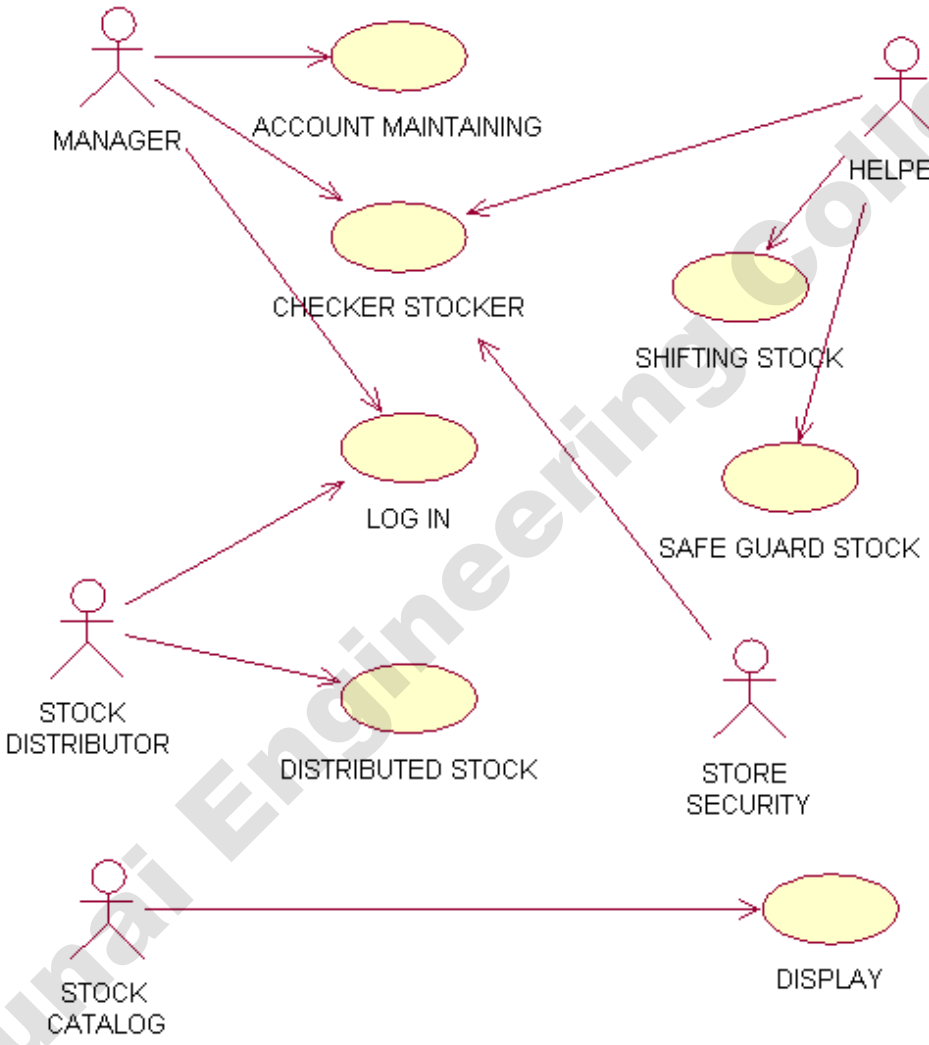
GANTT CHART:

It is a type of bar chart that describes the project schedule. It illustrates the start and end dates of terminal element and some more element of the project.



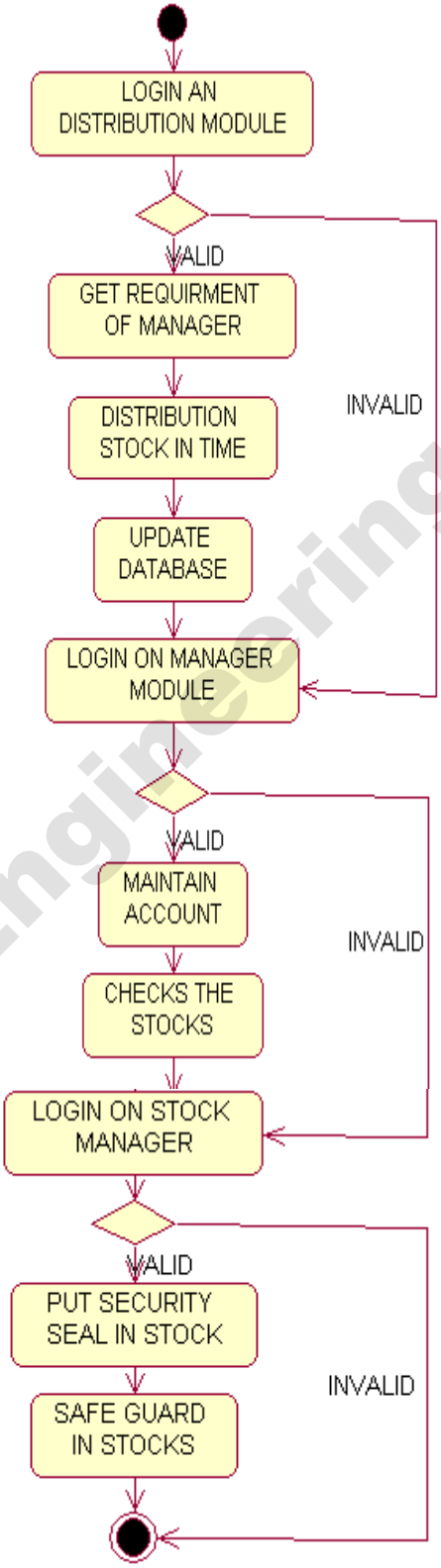
USE CASE DIAGRAM:

A use case diagram is a graph of a set of case enclosed by a system boundary communication association between the actors and the use case and generalization among the use cases.



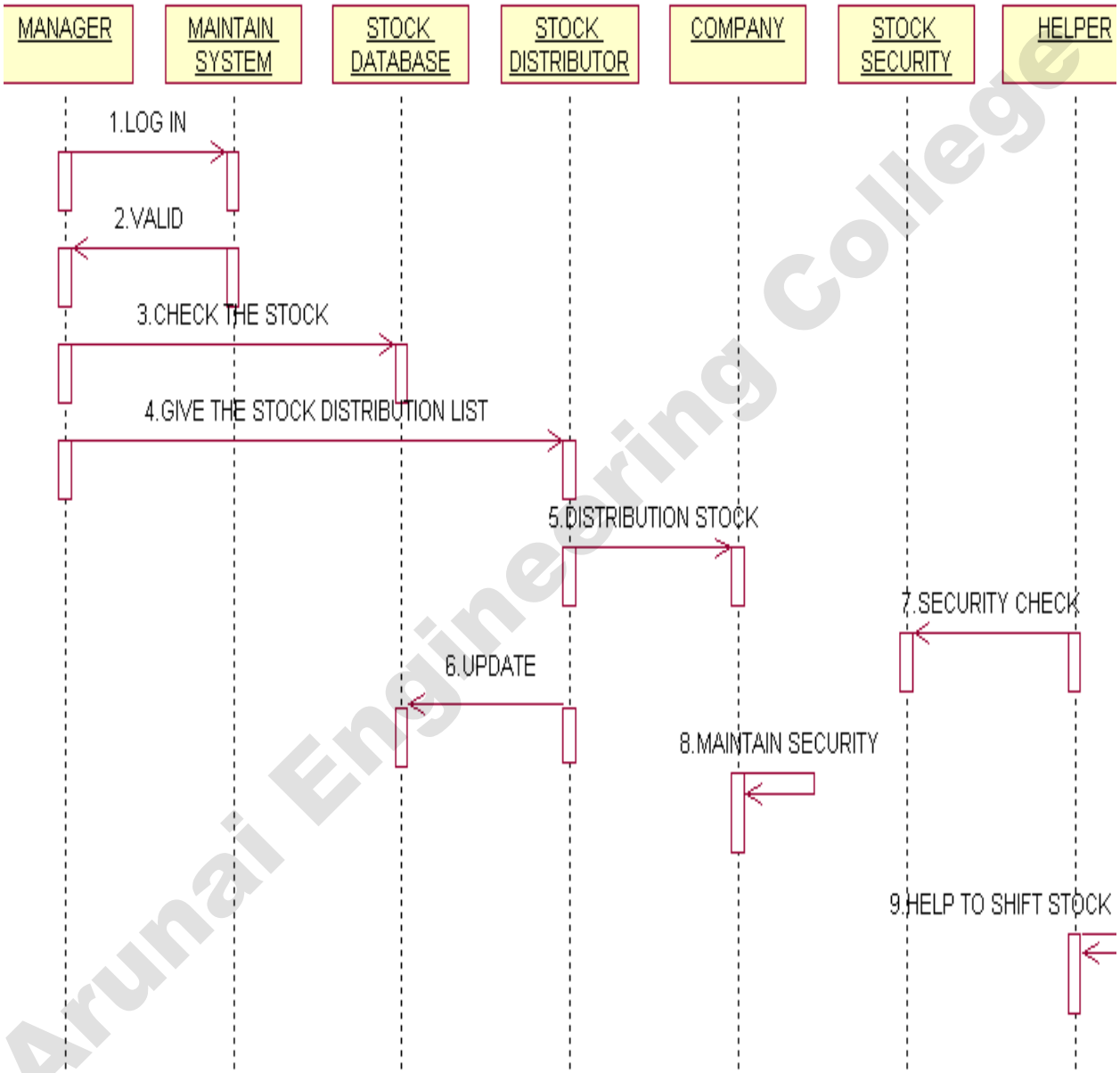
ACTIVITY DIAGRAM:

An activity diagram is a variation or special case of a state machine in which the states are activities representing the performance of operation and transitions are triggered by the completions of the operations.



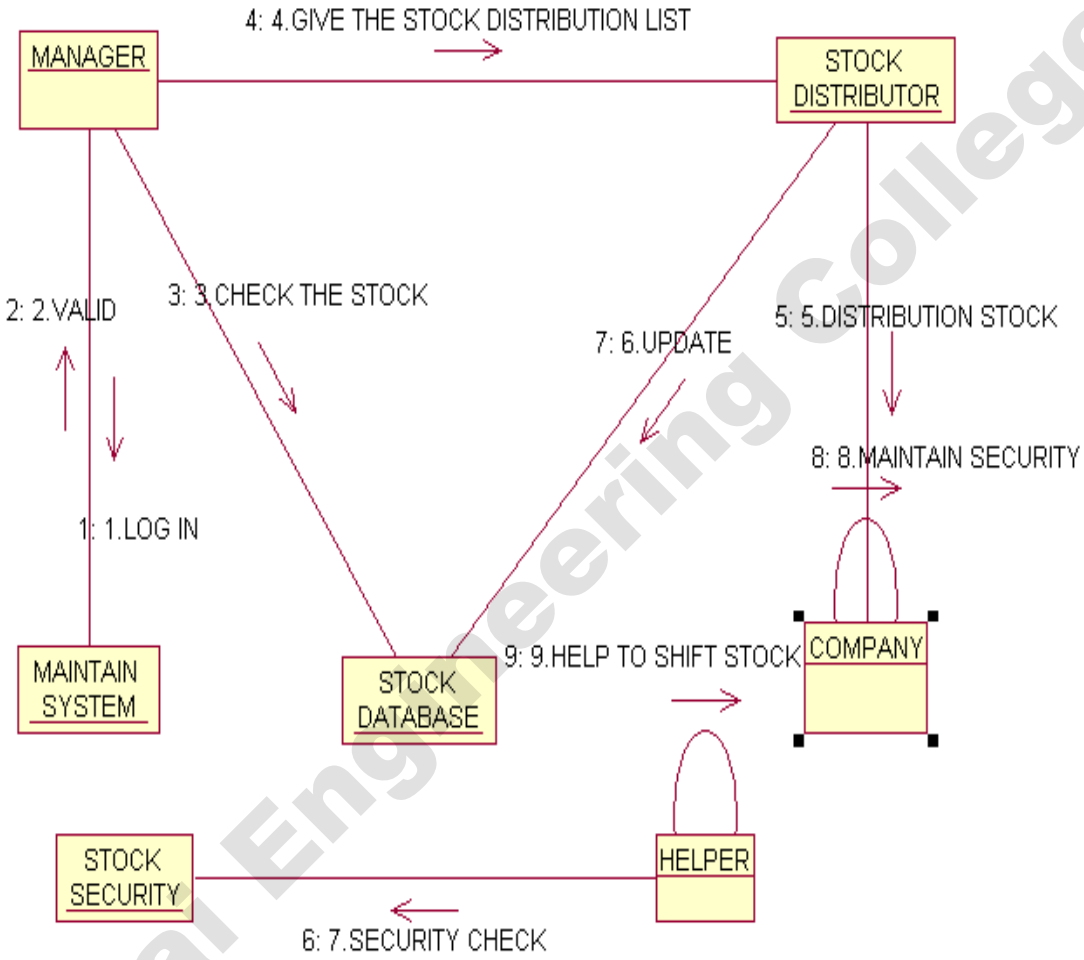
SEQUENCE DIAGRAM:

A sequence diagram is an easy and initiative way of describing the behavior of a system by viewing the interaction between the system and its environment.



COLLABORATION DIAGRAM:

A collaboration diagram also represents a collaboration which is a set of objects related in a particular context and interaction which is a set of messages exchanged among the objects with in the collaboration to achieve derived outcome.

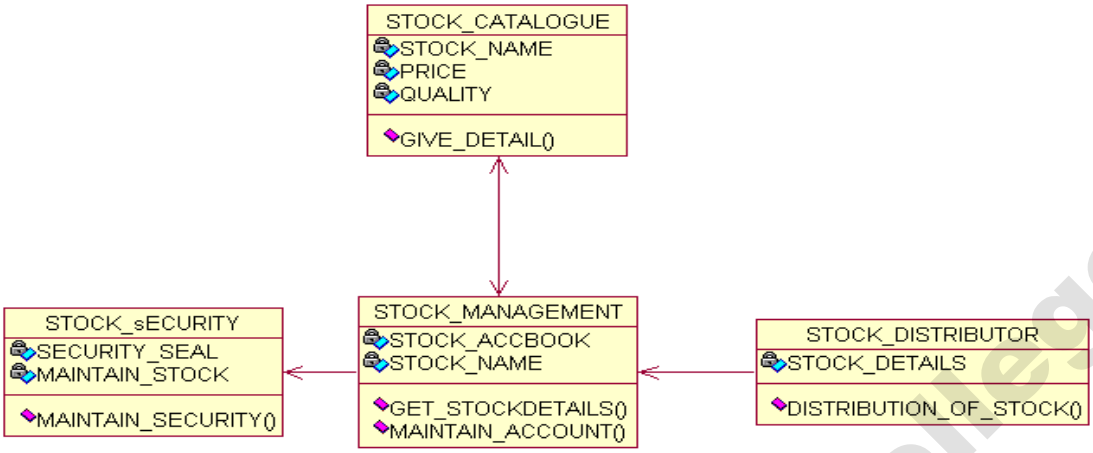


CLASS DIAGRAM:

The Class diagram also referred to as object modeling is the main static analysis diagram.

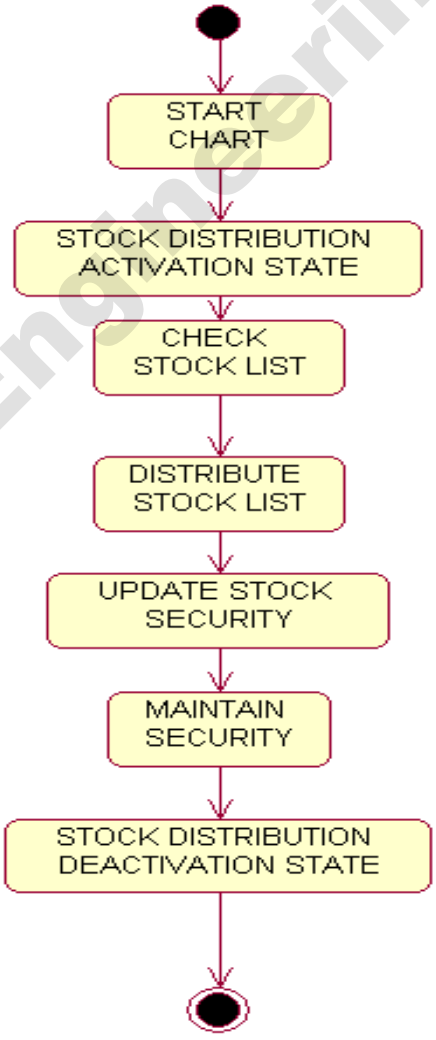
These diagram shows the static structure of the model.

- Association
- Subtypes



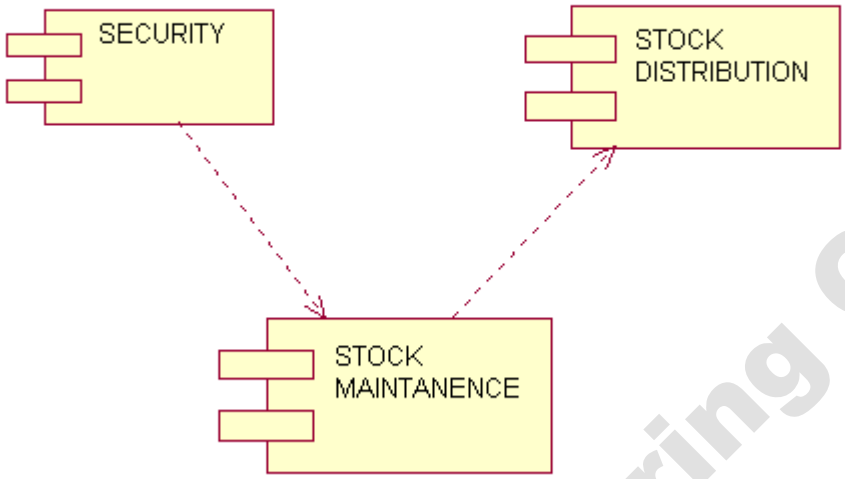
STATE DIAGRAM:

A state chart diagram also called as state diagram shows the sequence of state that an object goes through during its life in response to outside stimulate and message.



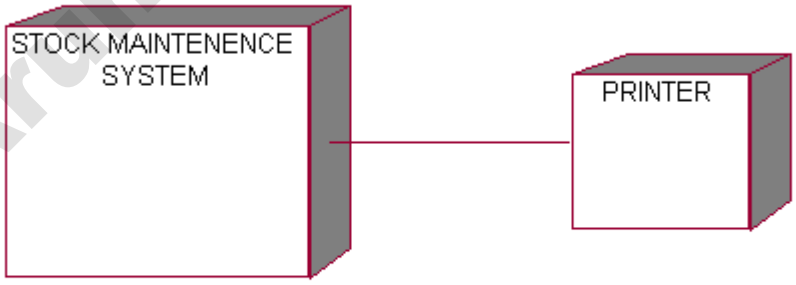
COMPONENT DIAGRAM:

Component diagram model the physical components in a design there high level physical components may or may not be equivalent to the many smaller components.



DEPLOYMENT DIAGRAM:

A deployment diagram shows the physical relationship among software and hardware components in the delivered system.



Ex.No.5 ONLINE COURSE RESERVATION SYSTEM

Date:

Software Requirement Specification :

1. Objective:

To develop the online course reservation system using UML language. It is is an interface between the student and the counsellor for reservation of the course. It aims ar improving the efficiency in the reservation of course and reduce the complexities involved in it to the maximum possible extent.

2. Scope:

The system provides an online interface to the student where they can fill in their details about the course and submit the necessary documents. The authority concerned with the reserving of course can use this system to reduce his workload and process the application in a speedy manner.

3. Project description:

My project title is online course reservation system. In this project it explain information about each course, such as professor, department, and prerequisites will be included to help students make informed decisions. The new on-line registration system will allow students to select four course offerings for the coming semester. In addition, each student will indicate two alternative choices in case a course offering becomes filled or canceled. No course offering will have more than ten students.

4.Functional requirements:

It is defined as how they should react in the particular input and how the system should react in the particular situations and what the system do not do.

- **Analysis:**

In this place, the project requirement is analyzed and availability of requirement is seen.

- **Design:**

Counselor makes the design of the project.

5.Non-Functional requirements:

- This system can load at the speed of 2.4GHz-3.6GHz.
- Memory 4GB RAM
- Transferring data speed 50 Mbps in time.
- It is high portability, reliability, accepting failure rates and user friendly.

- **Hardware requirements:**

Processor: Pentium –IV
Hard drive: 320 GB
RAM: 4GB
DVD-Drive: 1

- **Software requirements:**

Operating system: Windows XP
Front-end: Rational Rose Enterprise Edition
Back-end: Oracle 9i

6.Module description:

In this project consists of 5 modules enquiry, qualification, course details, course duration and guidelines for courses.

7.Domain model:

A domain is a visual representation of conceptual classes or real situation object in a domain.

*In object-oriented analysis, the domain model is the most important.

*It illustrates the concept in the domain.

*It acts as a source of inspiration for designing some software objects.

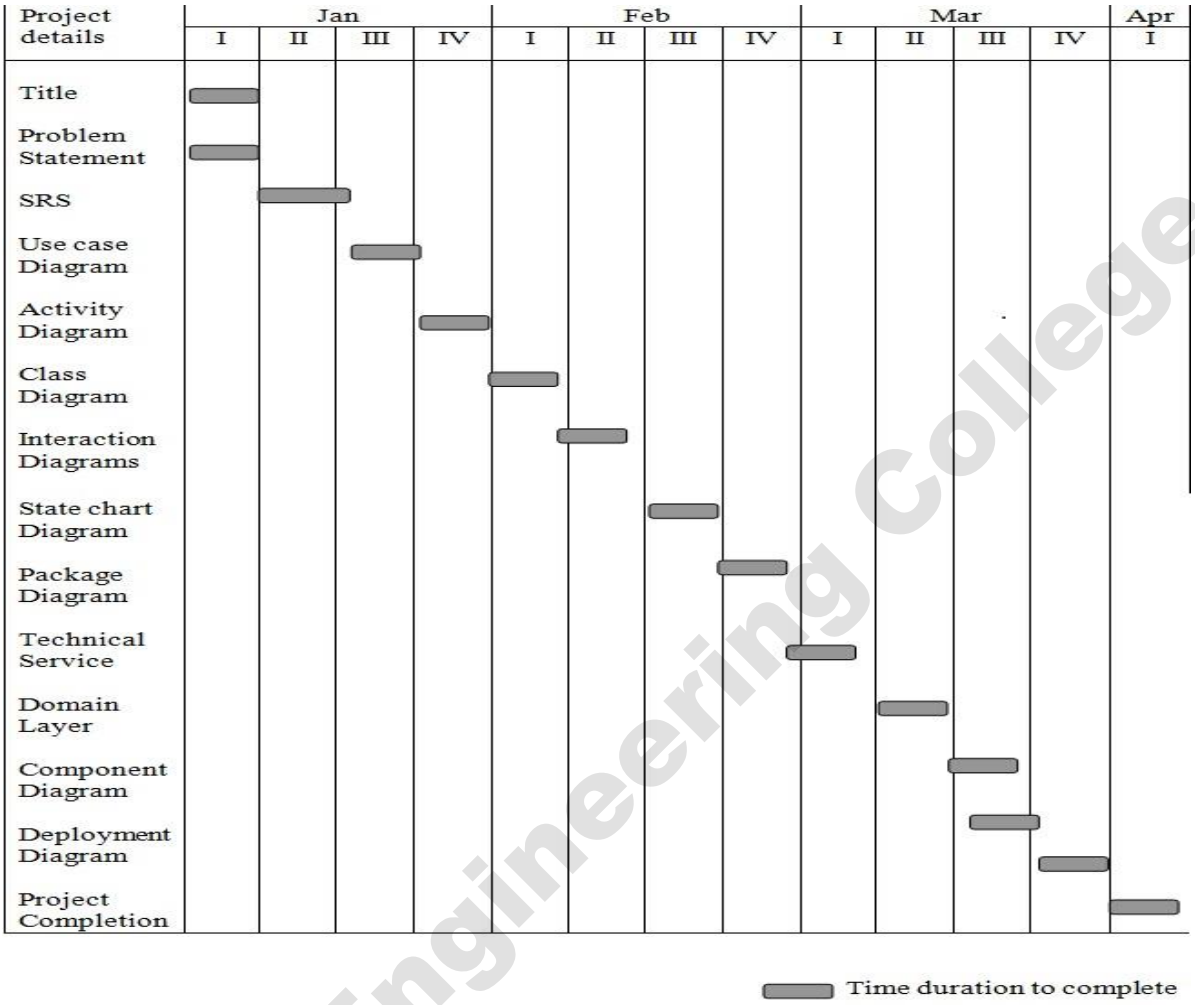
In our project, when we are entered into the corresponding web page, we can perform the operation such as enquiry, qualification, course details, course duration and guidelines for courses.

8. Logical architecture:

The logical architecture is the large-scale organization of software classes into packages, sub classes and layers. This is called logical architecture.

Gantt Chart:

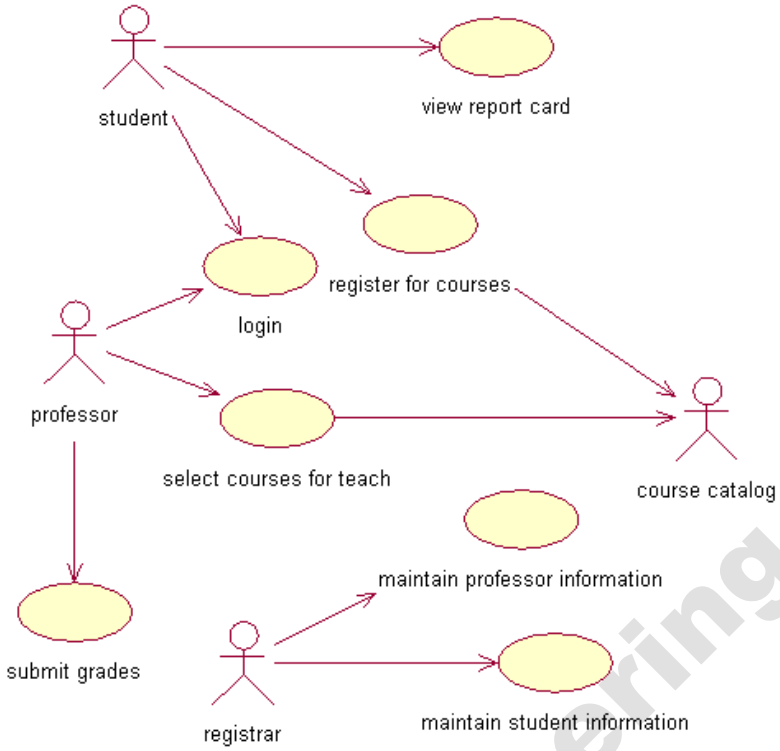
It describes the time schedule for the planning to complete the core product and after complete of core product, what is the time taken for the project action of core project.



Use case diagram:

The UML provides the use case diagram notation to illustrate the name of the use case actors and relationship between them.

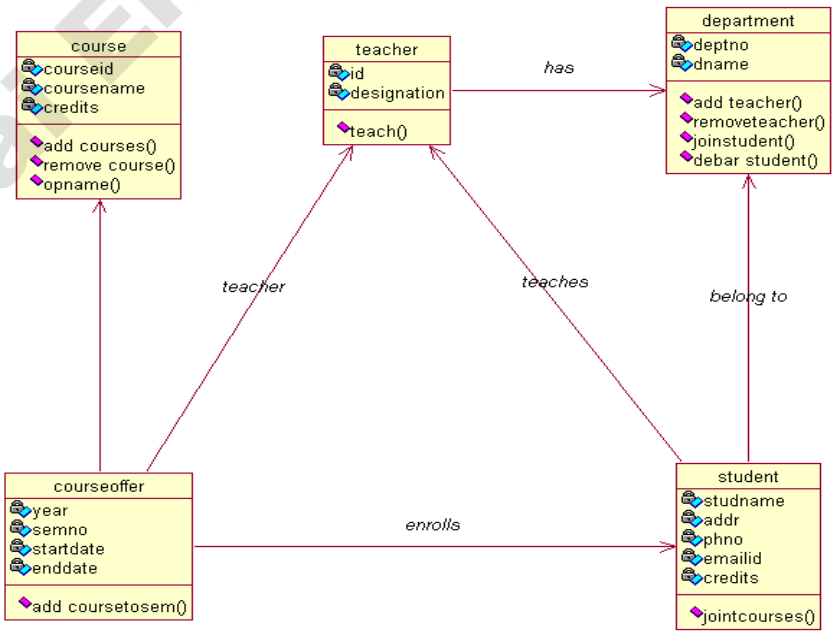
USE CASE DIAGRAM



Class diagram:

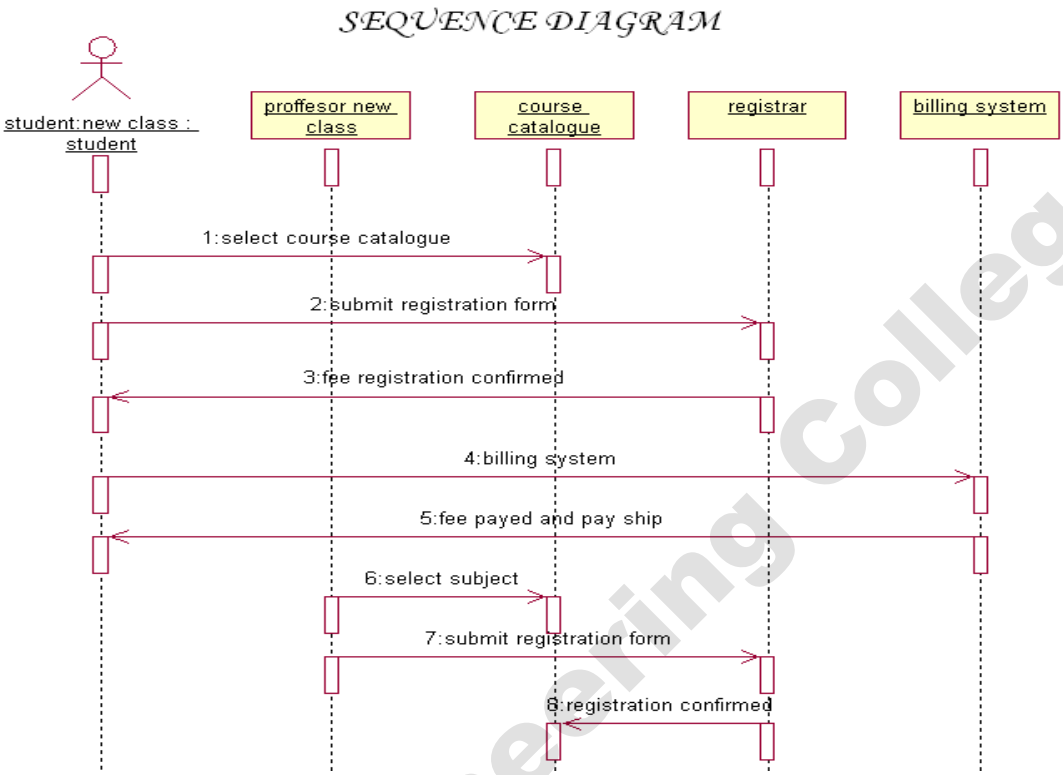
The UML include the class diagram, to illustrate and their association. They are used for static object modeling.

CLASS DIAGRAM



Sequence diagram:

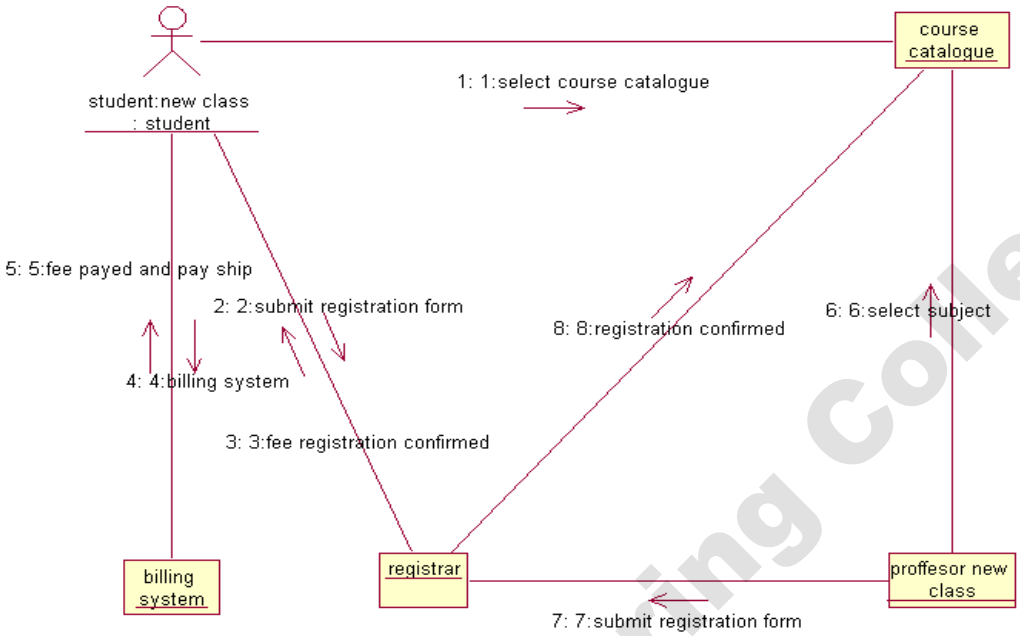
A sequence diagram illustrates in a kind of format in which each object interact via messages. It is generalization between two or more specification diagram.



Collaboration diagram:

It illustrates that object interaction in a graph or network format in which object can be placed any where on the diagram.

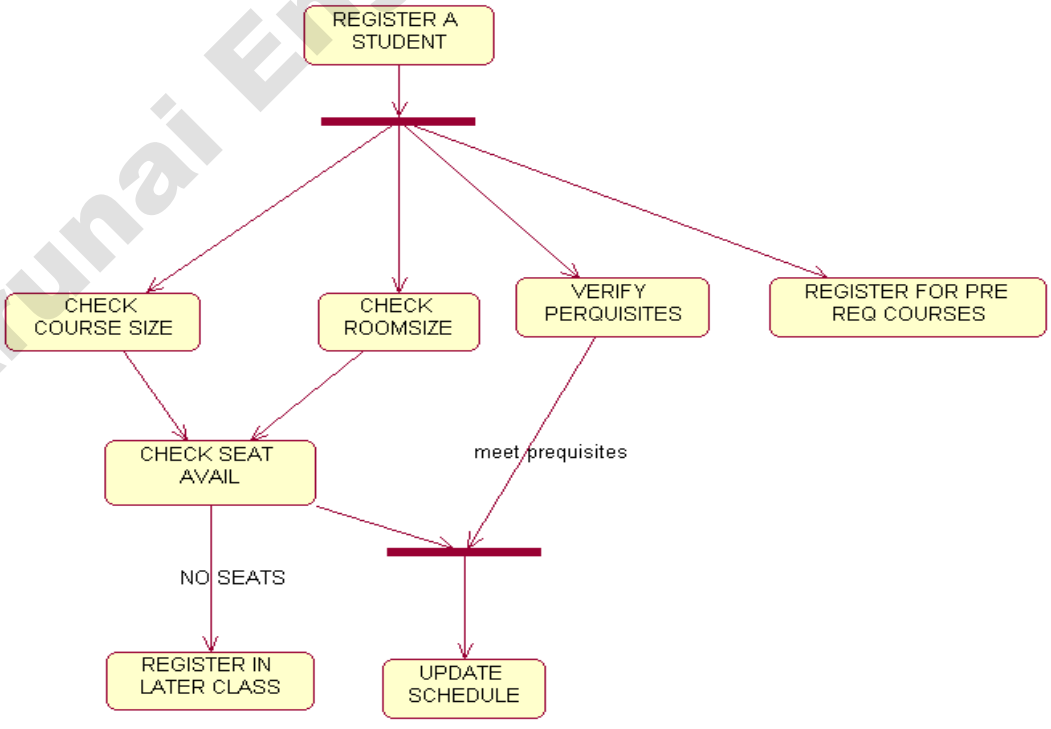
COLLABORATION DIAGRAM



State chart diagram:

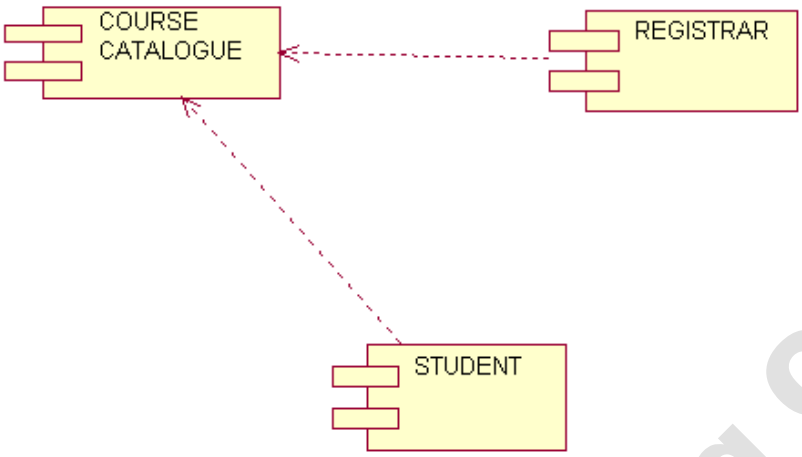
It illustrates the in trusting events and state of an object and behaviors of an object is reaction to an event. Transaction shows as allows labeled with theirs event. It is included with initial pseudo state and final end state.

STATE DIAGRAM



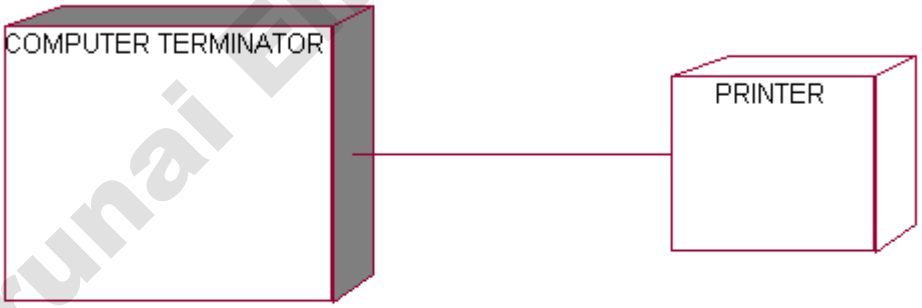
Component diagram:

A component represent a modular part of a system, that encapsulates it contents and whose manifestation is replaced with in its environment. A component define its behaviors in terms of provide and required interfaces.



Deployment diagram:

A deployment shows the assignment of concrete artifacts to computational nodes. It shows the deployment of software elements to the physical architecture, and the communication. Deployment diagrams are useful to communicate the physical and deployment architecture.



Ex.No. 6 AIRLINE/RAILWAY RESERVATION SYSTEM
Date:

SRS (SOFTWARE REQUIREMENT SPECIFICATION) DOCUMENT :

1. OBJECTIVE:

- To implement E-Ticketing for Airline/Railway Reservation System.
- To provide online ticket reservation
- To ensure validity and security in the online e-ticketing system for Railway

2.SCOPE OF THE PROJECT:

The e-ticketing project is a software tool created to help and access the passenger gather required information about the various train for various places.

Focus is laid solely on the train display, schedule, categories, and payment as allotments.

3. PROJECT DESCRIPTION:

USER PERSONAL AND CHARACTERISTICS:

The target client for our software are passengers who lively are interested in reserving tickets through online. They can log into our website and browse the ticket availability which they have aspiration to travel. The passenger must register themselves online, which is free. The booking or reservation of the ticket is online; the detailed description about their train ticket and necessary terms and condition norms would be emailed to the passenger registered email address which he/she may provide during the time of registration.

4. REQUIREMENTS:

(a).FUNCTIONAL REQUIREMENTS:

A functional requirement defines a function of a software system on its component. A function is described as a set of input, the behavior and output.

- A main menu including a brief help section.
- Login
- Viewing book details.
- Displaying details.
- Maintain and update book details.
- Logout.

(b).NON- FUNCTIONAL REQUIREMENTS:

Nonfunctional requirements define the needs in terms if performance, logical database requirements, design constraints, standard compliance, reliability, availability, security, maintainability and portability.

(c).HARDWERE REQUIREMENTS:

1. Processor - Intel Pentium IV-2.0 GHZ.
2. Hardware - 40 GB.
3. RAM - 512mb
4. DVD RAMS - 1 no.

(d).SOFTWARE REQUIREMENTS:

1. OS - windows XP/vista.
2. Front end Tool - Rational Rose Enterprise suite.
3. Back end Tool - Oracle 10i.

5. MODULE DISCRIPTION:

In this project we have defined different modules to enable the Book Bank system in successful manner.

I. REGISTER:

The register module contains the application form or registration form which contains following details.

- Name, Address, Contact number, E-mail id, Password etc.

ii. LOGIN:

The Login module contains the form which contain membership name and member password. It includes Username and Password.

iii. SEARCH BOOK:

The search book module contain list of books, from this list we search for the book which we need. This also contains another field called as categories where can select the category of the book.

iv. DISPLAY DETAILS:

Display the details about the student's particulars, the payments, the books, rental and schedule times for books etc.

v. MAINTAIN BOOK DETAILS:

The administrator maintains the details of books.

vi. LOGOUT:

To sign off from the webpage or your account log off.

6. DOMAIN MODEL:

A domain model is a visual representation of conceptual classes or real situations object in a domain.

- In object oriented analysis; the domain model is the most important.
- It illustrates the concept in the domain.
- It acts as a source of inspiration for designing some software objects.

7. PARTIAL LAYERED ARCHITECTURE:

Sequence diagram is an interaction overview diagram. It provides a big picture overview of how a set of interaction are related in terms of logic and process flow.

This Partial layer architecture shows the interface of the sequence diagram; here the administrator shows the interface by displaying actor symbol.

8. LOGICAL ARCHITECTURE:

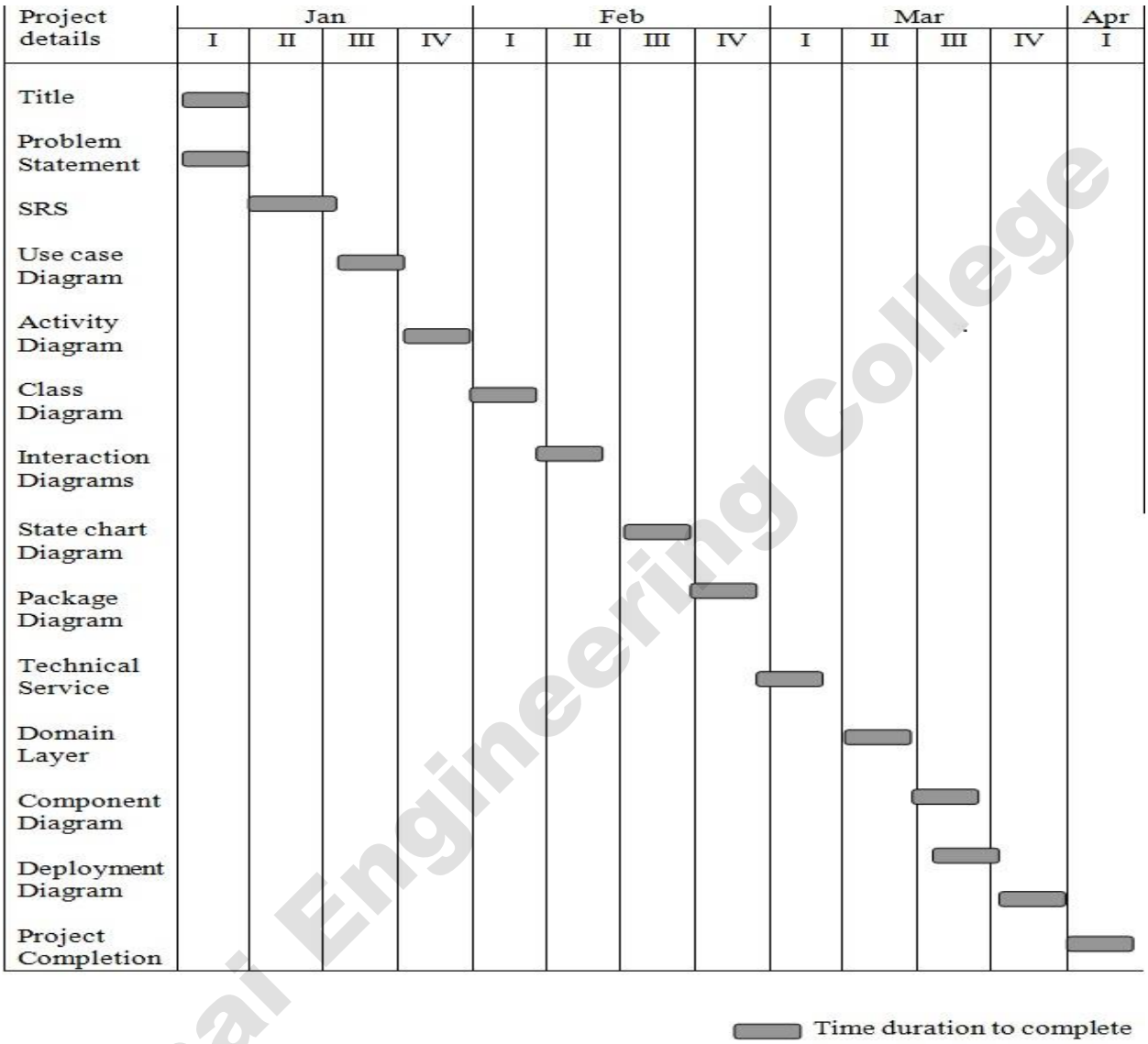
The Logical architecture is large scale organization of software class into packages, sub system layer; It is called logical architecture because there is no direction about how these elements are display on different operating system.

9. RISK ACTIVITY:

- Personal short falls.
- Unrealistic schedules and budgets.
- Developing the wrong functions and programs.
- Developing the wrong user interface.
- Continuing stream of requirements changes.
- Short falls in externally furnished component.
- Real time performance short falls.
- Straining computer science capabilities.

GANTT CHART:

It describes the time schedule for the planning to complete the corresponding and after completion of core product, what the time is taken for the project action of core product.



UML USECASE DIAGRAM:

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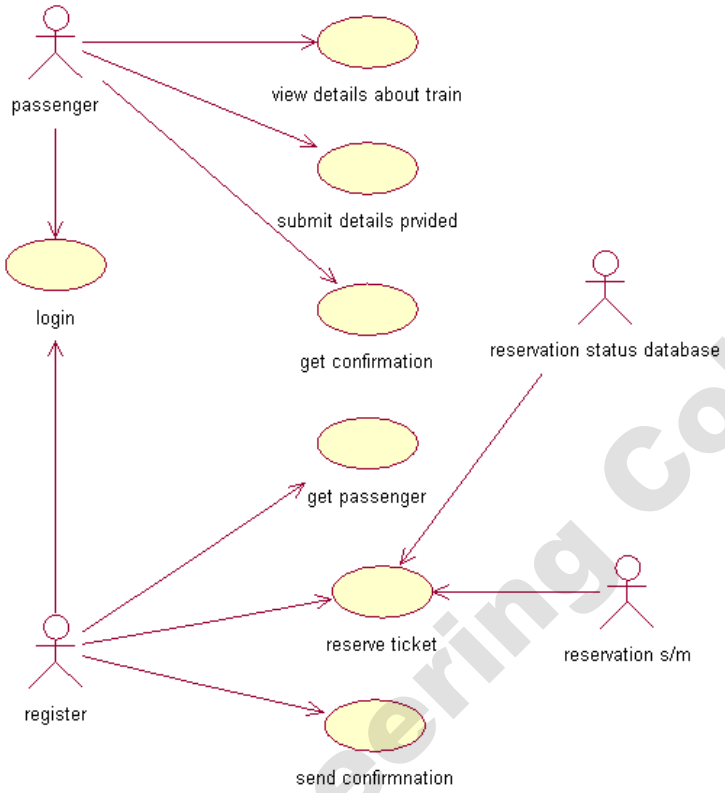

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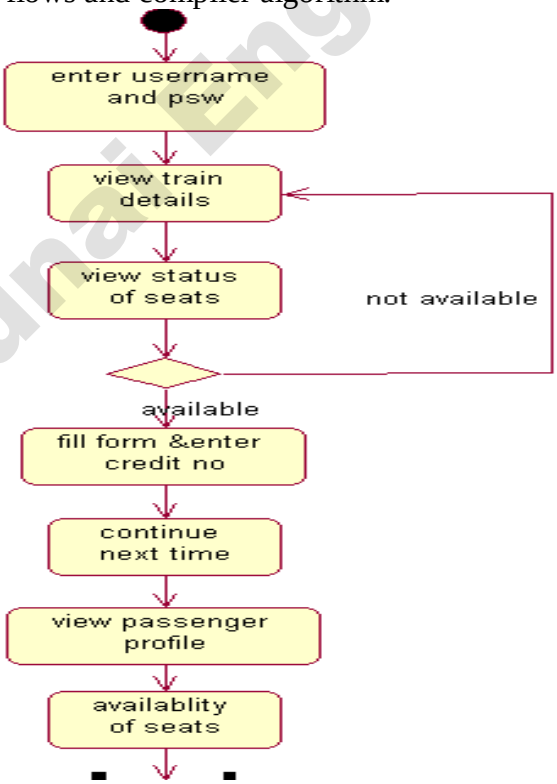

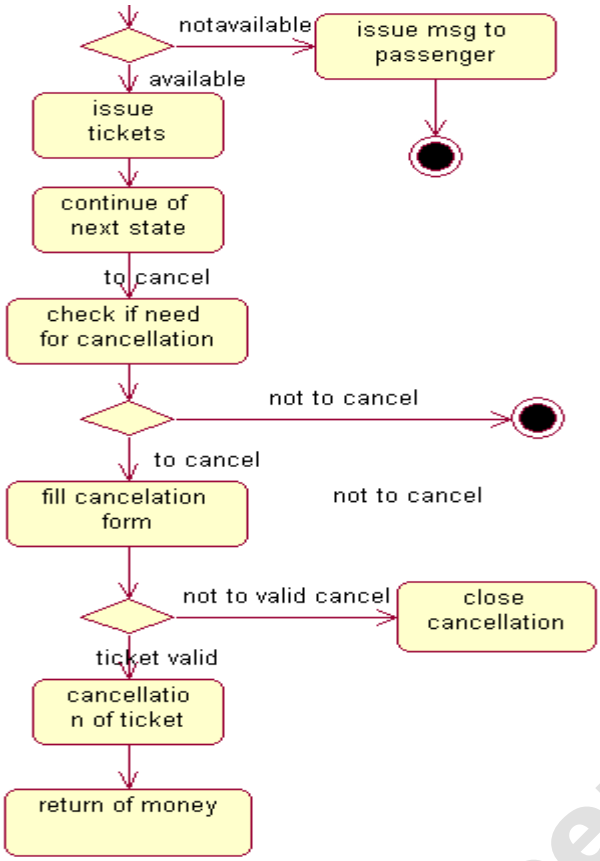

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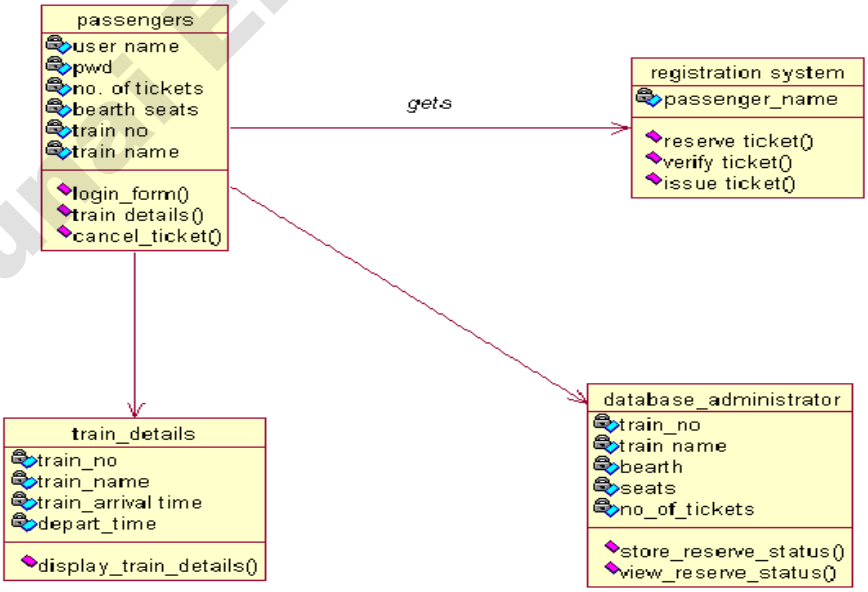
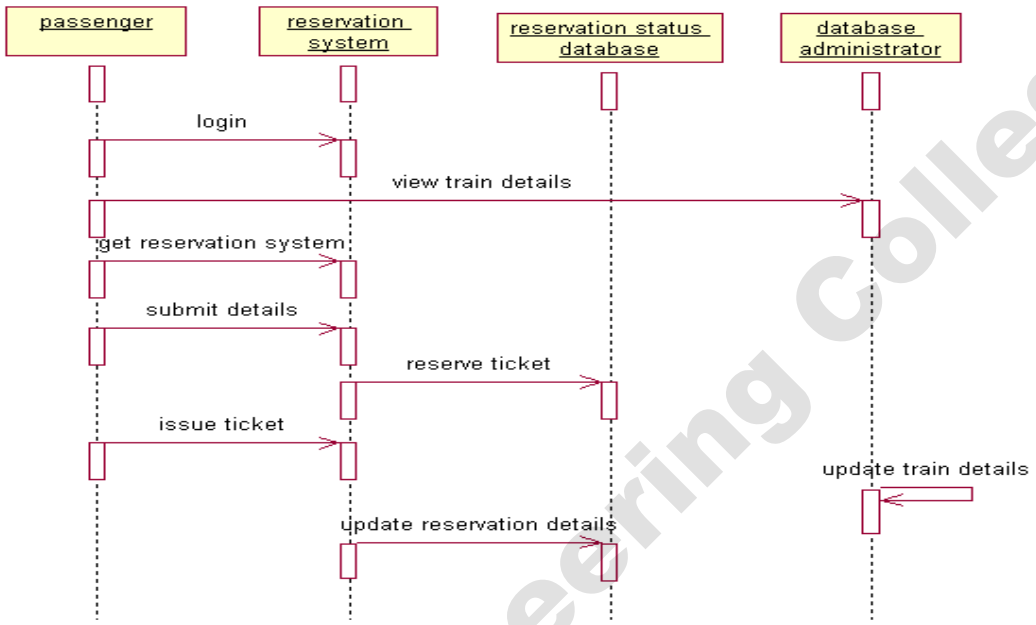


UML INTERACTION DIAGRAMS:

UML SEQUENCE DIAGRAM:

A sequence diagram illustrates a kind of format in which each object interacts via message. It is generalize between two or more specialized diagram.

TICKET RESERVATION



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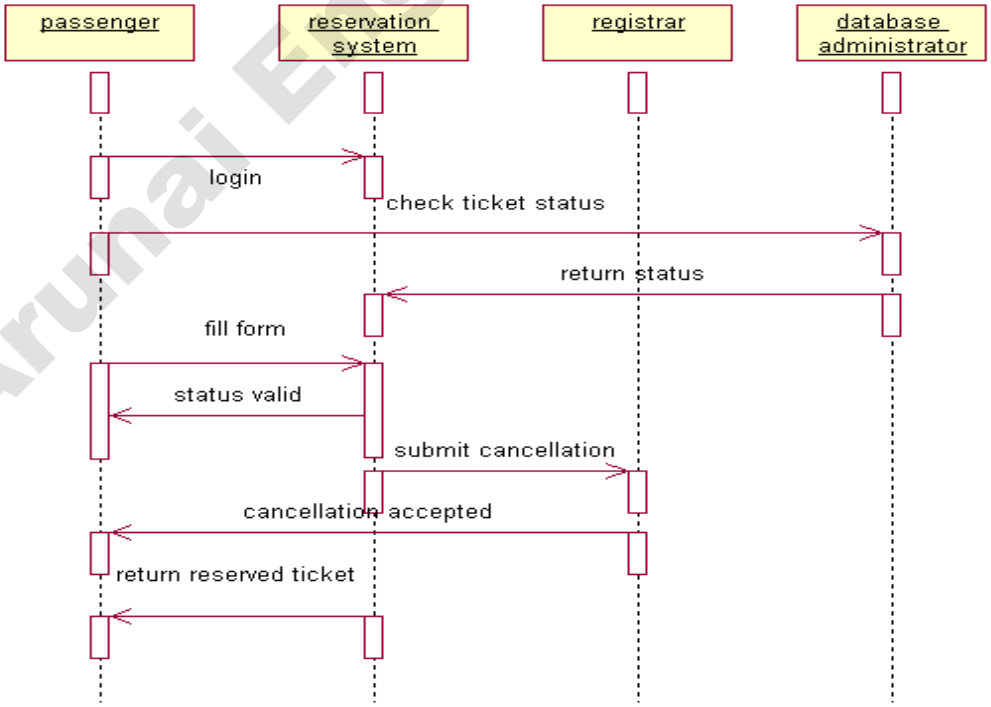
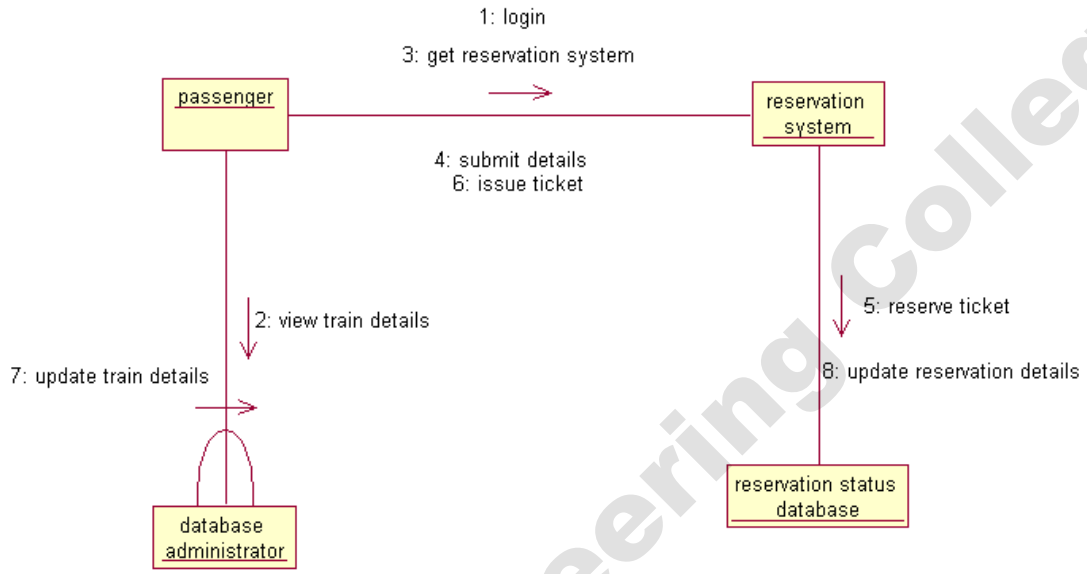


UML COLLABORATION DIAGRAM:

Collaboration diagram illustrate that object interact on a graph or network format in which object can be placed where the diagram. In collaboration diagram the object can be placed in anywhere on the diagram. The collaboration comes from sequence diagram

TICKET RESERVATION



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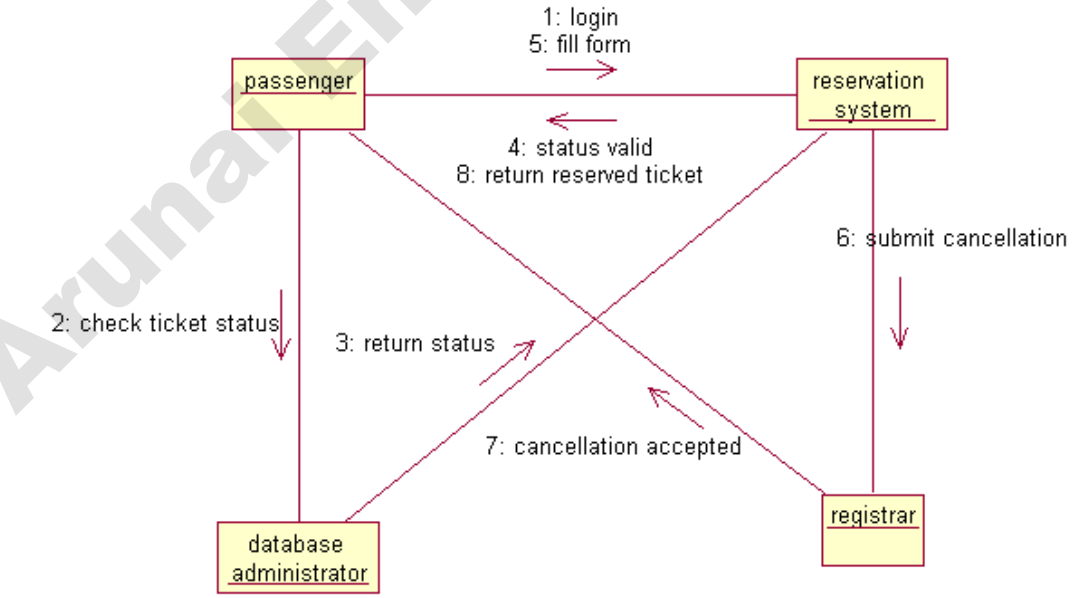

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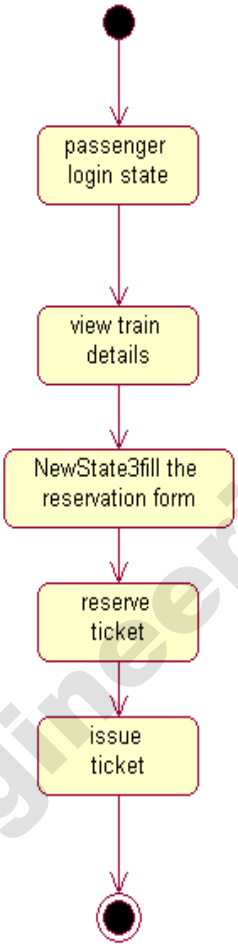

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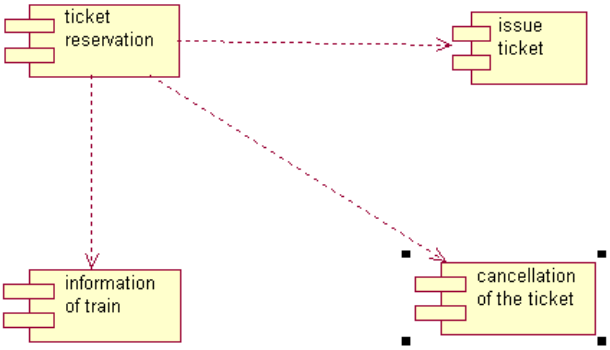

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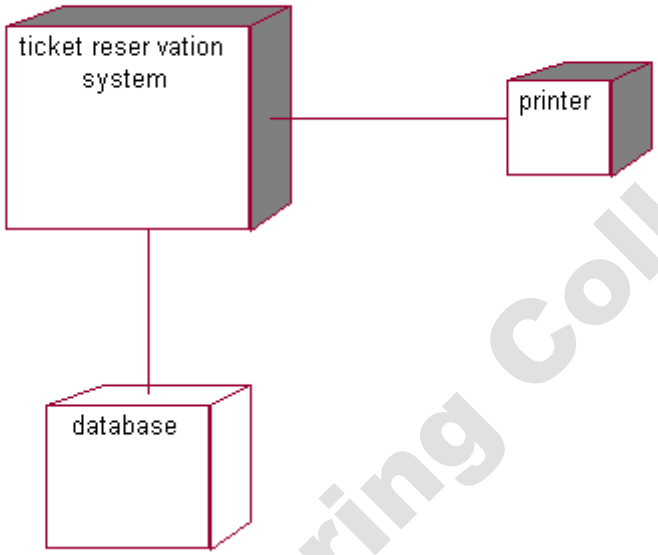


Ex.No.7 SOFTWARE PERSONNEL MANAGEMENT SYSTEM
Date:

SRS (SOFTWARE REQUIREMENT SPECIFICATION) DOCUMENT :
OBJECTIVE:
To implement a software for software personnel management system

SCOPE OF THE PROJECT:
Software system that will allow the human resource department to manage its employee in a better way. When needed, it will take just a few second to find out the background of an employee and his/her contribution to the organization, it will also facilitate keeping all the records of employee, such as their data of leaving. So all the information about an employee will be available in a few seconds, it will also make it very easy to generate statistical data or custom data, line finding a certain set of employee, overall it will make human resource management an easier job that the human resource department.

PRODUCT DESCRIPTION:
Human Resource management system project involves new and/or system upgrades of software of send to capture information relating to the hiring termination payment and management of employee. He uses system to plan and analyze all components and performance of metrics driven human resource functions, including recruitment, attendance, compensation, benefits and education. Human resources management systems should align for maximum operating efficiency with financial accounting operations customer relationship management, security and business lines as organization.

Requirements
A requirement is defined as a condition or capability needed by a user to solve a problem or achieve an objective.

a) FUNCTIONAL REQUIREMENTS:
A functional requirement describes an interaction between its environments.
Functional requirements describes the system function in details, its input and output , exception etc.,. The functional requirement are as follows:
ANALYSIS : In this phase, the project requirement is analyzed and the availability of the requirement is seen.
DESIGN: The design of a project is made by the project manager.
IMPEMENTATION: The construction of project is done and coding is developed.
TESTING: Testing activities are made several types of testing is carried on.

MAINTENANCE: In this the software maintenance and the ways to avoid the drawback of the software is made.
DEPLOYMENT:IT is the process of installing and kick starting of the program.

b)NON-FUNCTIONAL REQUIREMENT:
Non-functional requirement are requirements which are not directly concerned with the specific functions delivered by the system. They relate to emergent system properties such as reliability, response time and store occupancy. They relate to the system as whole rather than to
individual system features which means that they are more critical than individual functional requirements. The non-functional requirement are as follows:

SPEED: This software designed as a high speed software.
SIZE: The size of this software is about 100MB.
PORTABILITY: This software can be easily portable.
RELIABILITY: The rate of failure of this software is very low.

c) HARDWARE REQUIREMENT:

Processor: Pentium IV
Harddisk:40GB
Ram:512MB
DVD drive:1

d) SOFTWARE REQUIREMENT:

Operating System: Windows XP
Front end tool: Rational Rose Enterprise suit
Back end tool: Oracle 10

MODULE DESCRIPTION:

The Modules of human resource management is described as follows

PAYROLL MODULE:

The payroll module greatly reduces the workload of the HR department by automating the payroll process, allowing HR to ensure the payroll functions are completed on time and without errors. Once the attendance data is fed into the system, the payroll module automatically calculates payment amounts and various deductions such as income tax before generating pay checks and employee tax reports.

RECRUITMENT MODULE:

Recruitment and selection refers to the chain and sequence of activities pertaining to recruitment and selection of employable candidates and job seekers for an organization. The human resources department of large organization, business government offices and multilateral organization are generally vested with the responsibilities of employee recruitment and selection.

TRAINING MODULE:

Training and development is one of the areas in which this is performed. Consisting of educating and grooming talent when performed successfully, training and development can lead to a happy and productive group of workers. A training and development department typically consist of the head of training and development , a training manager, a training specialist and a training coordinator.

DOMAIN MODULE:

The domain module is the representation of a real situation conceptual class not software objects. The term does not mean set of diagrams describing software class, the domain layer of software architecture or software object with responsibilities.
Human resource management(HRM) is the understanding and application of the policy and procedure that directly affect the people working within the project team and working group. These policies include recruitment retention, reward personnel development training and

career development. It include the activities of human resources planning, recruitment, selection orientation, training performance appraisal, compensation and safety.

PARTIALLY LAYERED ARCHITECTURE:

The HR update the salary, the employee in turn views the salary details allotted, HR is responsible for training the employee and updates the training details simultaneously. These details updates the time period of the training. The employee gives this performance and salary increment is reviewed by Hr and given accordingly.

LOGICAL ARCHITECTURE:

The logical Architecture is large scale organization of the software class into package subsystem and layers. It is called logical Architecture because their is no decision about how these elements are deployed across different operating system processor or across physical computers in network.

RISK ACTIVITIES:

Risk management is concerned with identifying risks and drawing up plans to minimize their effects on a project. A risk is a probability that some adverse circumstance occur

· Project risk affect schedule or resources

· Project risks affect the quality or performance of or procuring the software

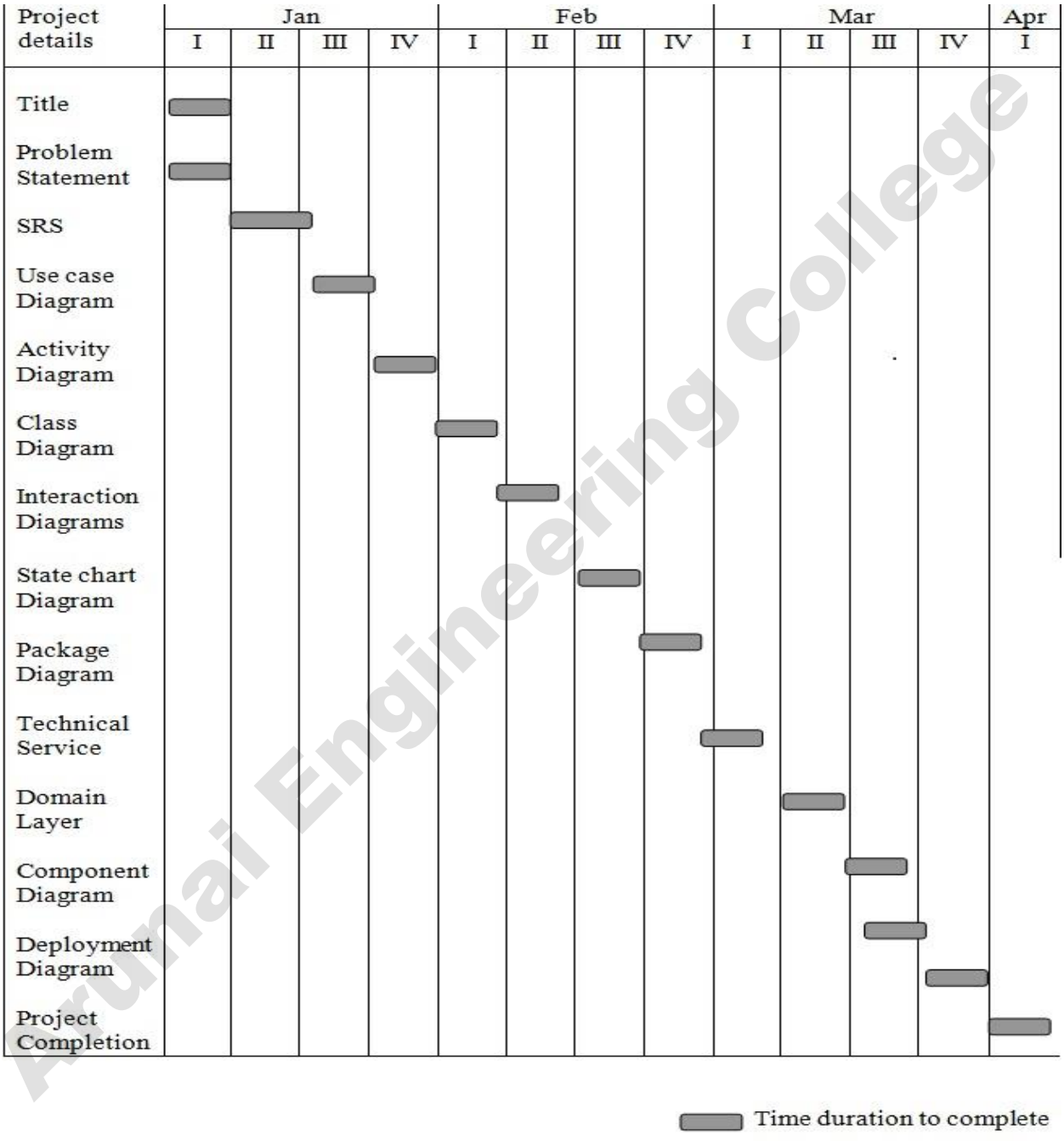
Several stages:

- Risk Identification
- Risk Analysis
- Risk Planning
- Risk Monitoring

Human resource activities lead to four important implications for risk management.

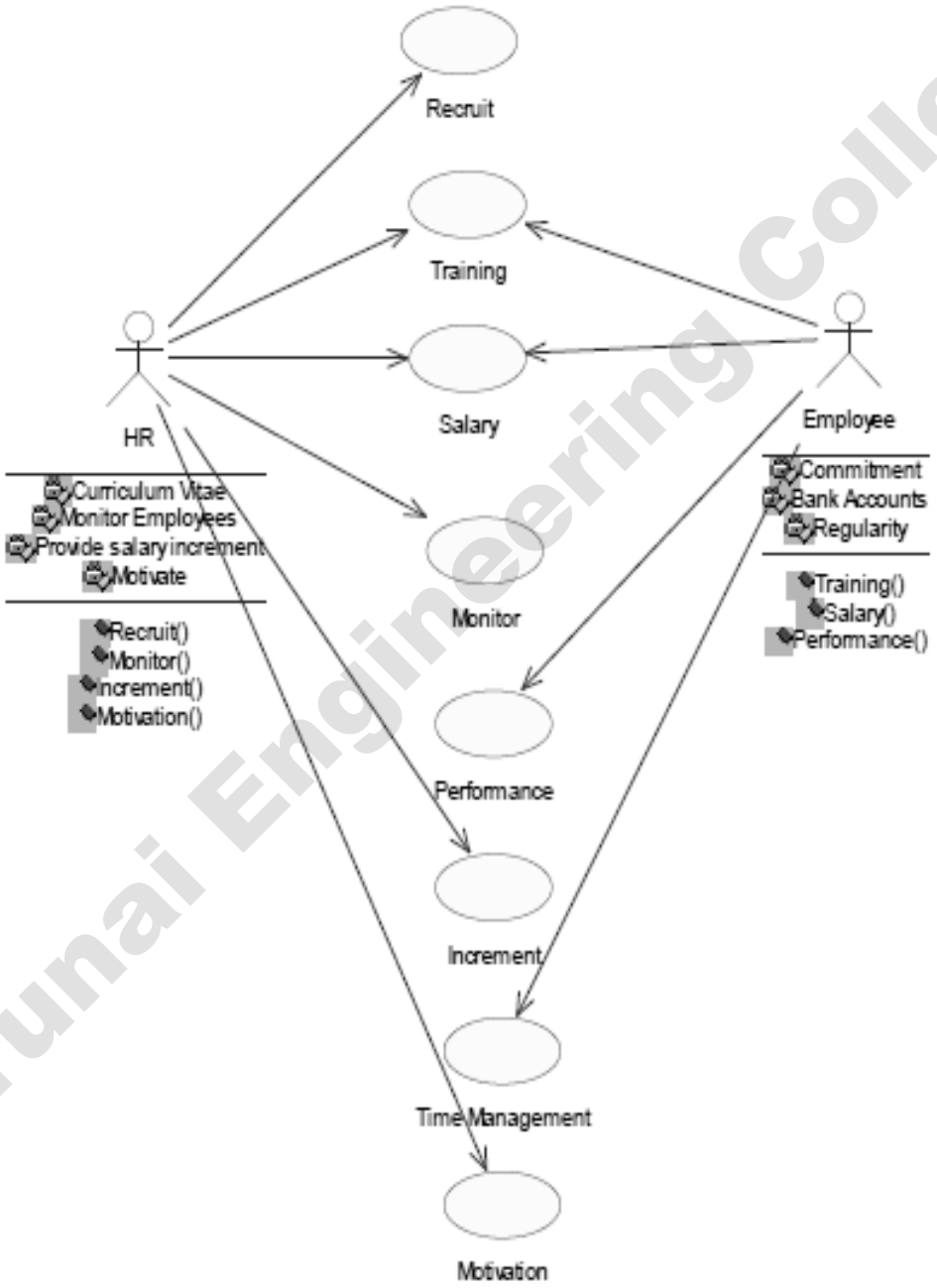
GANTT CHART:

A Gantt chart is type of bar chart that illustrate a project schedule .Gantt chart illustrates the start and finish dates of terminal element and summary element of the project.



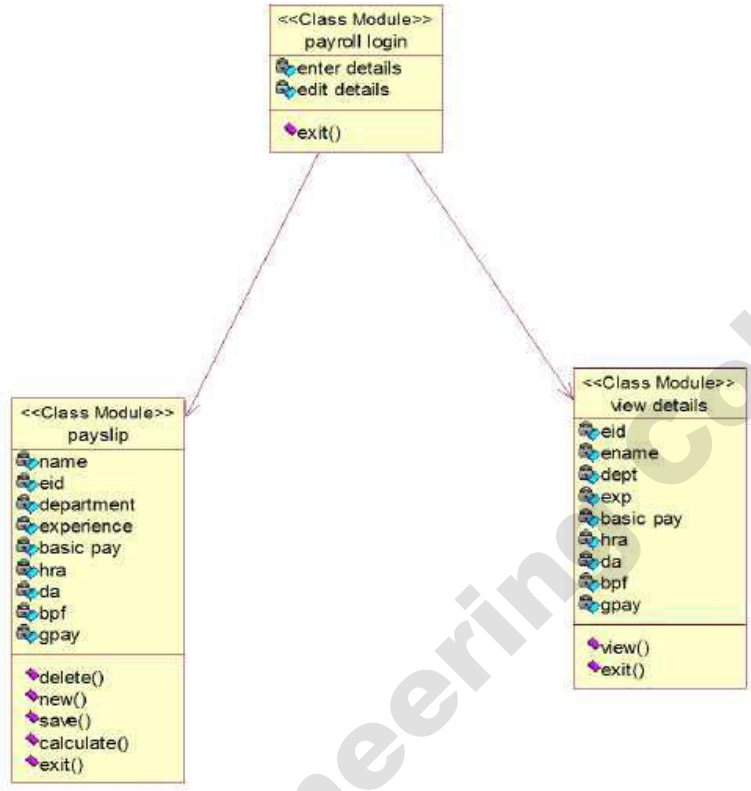
UML USECASE DIAGRAM:

The HR of an organization involves recruitment training, monitoring and motivation of an employee. The HR also involves gives salary as observed in the payroll sheet. The employee undergoes training, receives the salary , gives the expected performance and manages time in order to complete a given task within the required period.



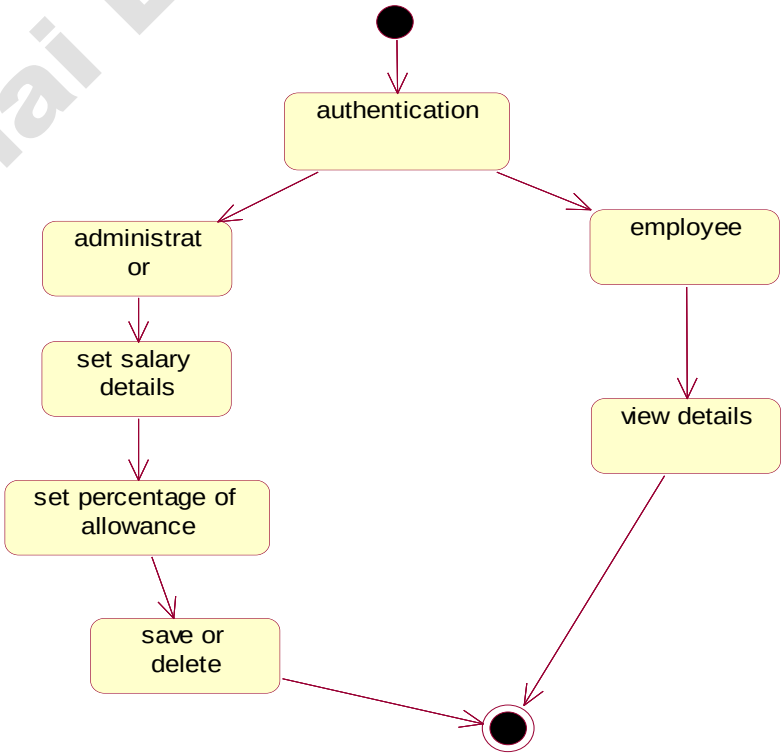
UML CLASS DIAGRAM:

The employee of an class consist of attributes such as training, salary, performance and time management of his regular activities.



UML ACTIVITY DIAGRAM:

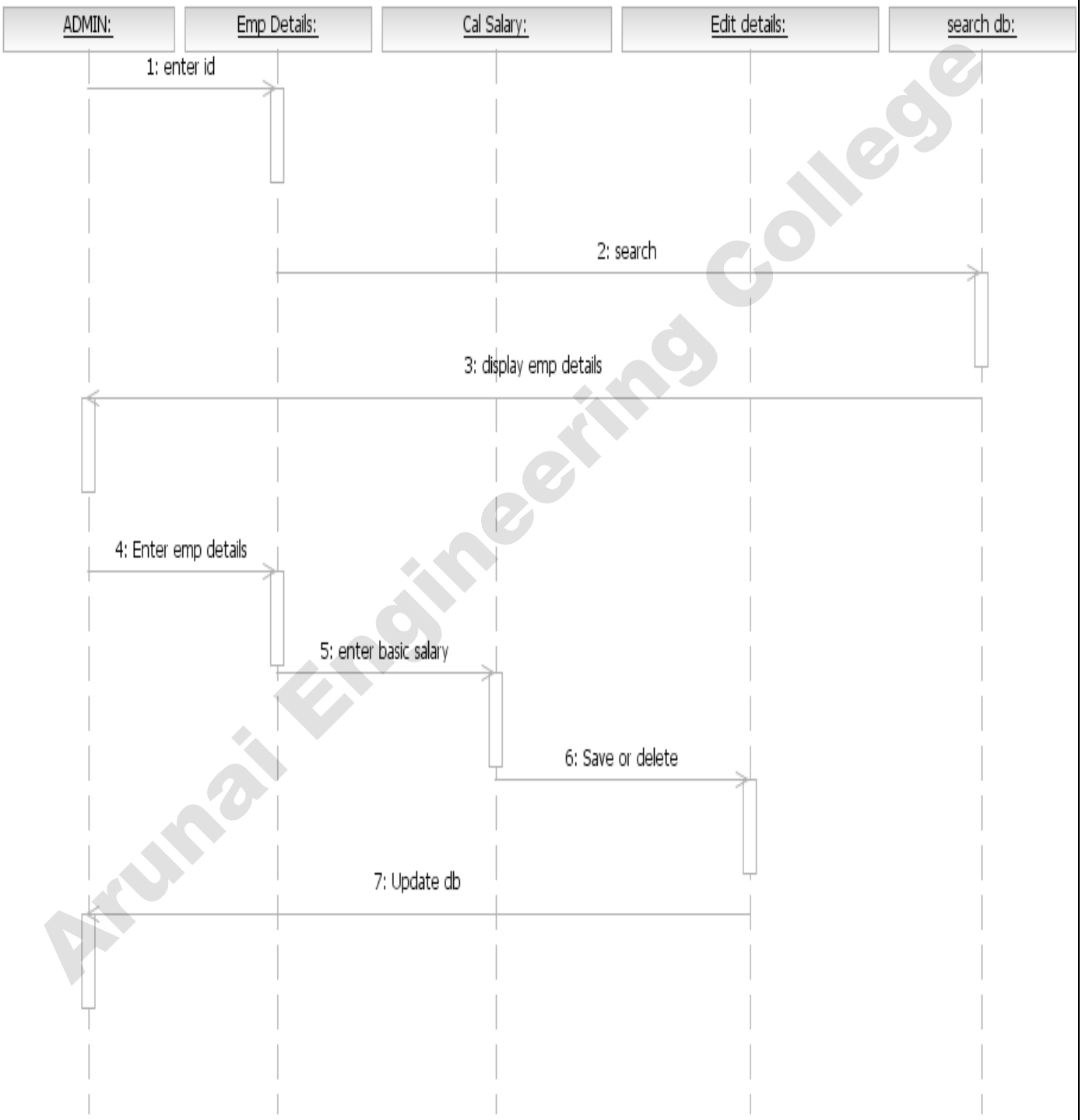
The activity diagram notation is an action, partition, fork join and object node. Most of the notation is self explanatory, two subtle points. Once an action finished, there is an automatic outgoing transaction. The diagram can show both control flow and data flow.



UML INTERACTION DIAGRAMS:

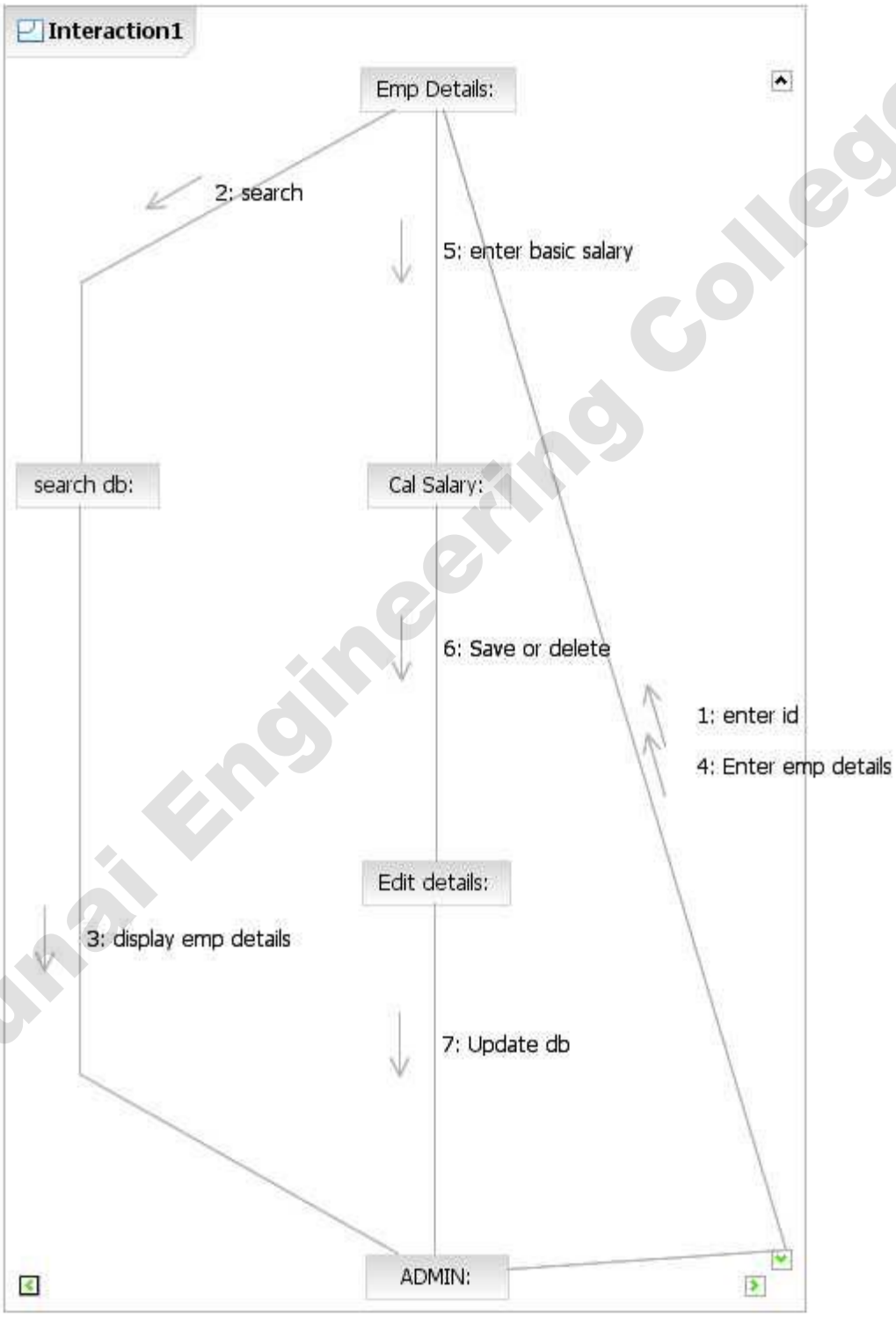
UML SEQUENCE DIAGRAM:

The sequence diagram is constructed for employee and HR regarding training details and salary details of the employee. The HR will verify the details of the employee and update the salary for each employee. The employee can view his salary data. If employee needs to undergo anytraining the he will be receiving the training information and training period. After completion of the training period HR will issues salary increment.



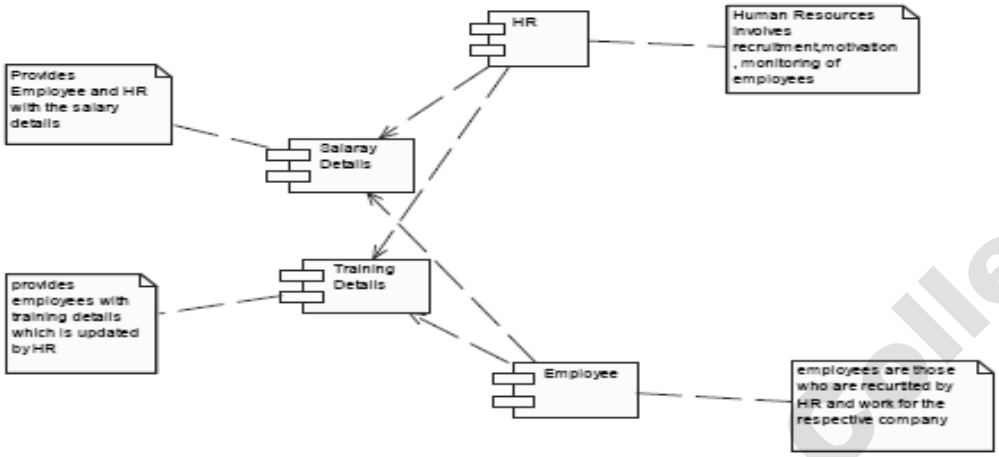
COLLABORATION DIAGRAM:

The collaboration diagram is similar to the sequence but the series of activity are numbered instead of timing sequence. The employee can view his salary and get the training information from the HR . The HR will update the training, salary for the employee.



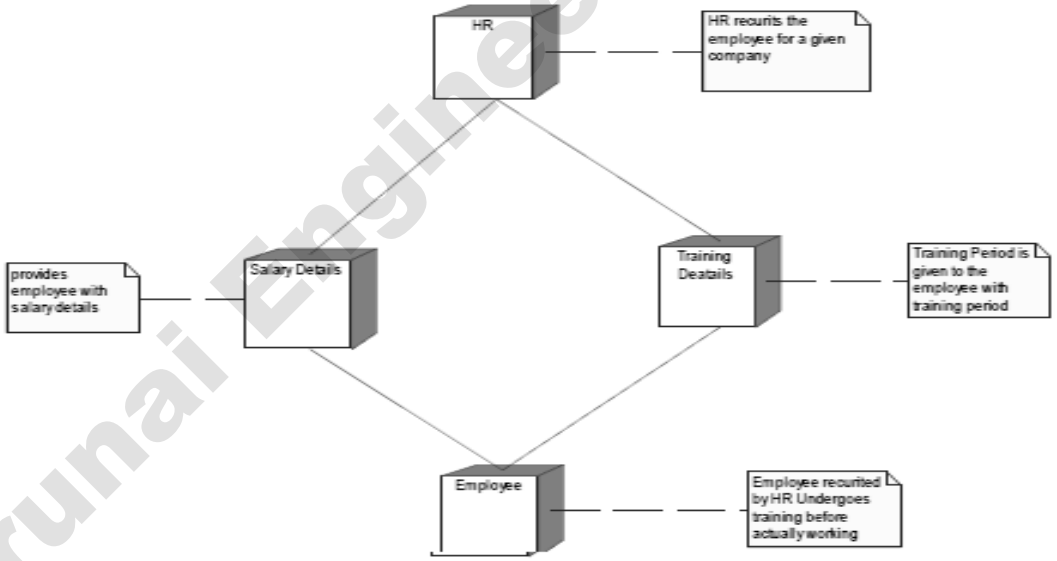
UML COMPONENT DIAGRAM:

The HR recruits, motivate and monitor the employee, HR also update the salary details and training details for reference. The employee are those who are recruited by HR and work for the company. The training details provide employees with training details which is updated by HR.



UML DEPLOYMENT DIAGRAM:

HR recruits employee for a company employee recruited by HR goes under training before actually working. Training period is given to the employee with the training details. The salary details for the employee are provided.



Ex.No. 8 **ATM SYSTEM**
Date:
SRS Document:

1. OBJECTIVE:

- This document describes the software requirements and specification (SRS) for an automated teller machine (ATM) network.
- The document is intended for the customer and the developer (designers, testers, maintainers).
- The reader is assumed to have basic knowledge of banking accounts and account services.
- Knowledge and understanding of Unified Modelling Language (UML) diagrams is also required.

2. Scope:

The software supports a computerized banking network called '**Bank24'**. The network enables customers to complete simple bank account services via automated teller machines (ATMs) that maybe located off premise and that need not be owned and operated by the customer's bank.

The ATM identifies a customer by a cash card and password. It collects information about a simple account transaction (e.g., deposit, withdrawal, transfer, bill payment), communicates the transaction information to the customer's bank, and dispenses cash to the customer. The banks provide their own software for their own computers.

3. Documentation Conventions:

Account: A single account at a bank against which transactions can be applied. Accounts may be of various types with at least checking and savings. A customer can hold more than one account.
MaxDailyWD: The maximum amount of cash that a customer can withdraw from an account in a day (from 00:00 AM to 23:59 PM) via ATMs.
PIN: It refers to Personal Identification Number. Used to identify and validate the login of an ATM user.

4. Overall Description

•Product Perspective:

An **automated teller machine (ATM)** is a computerized telecommunications device that provides the customers of a financial institution with access to financial transactions in a public space without the need for a human clerk or bank teller. On most modern ATMs, the customer is identified by inserting a plastic ATM card with a magnetic stripe or a plastic smartcard with a chip, that contains a unique card number and some security information, such as an expiration date or CVC (CVV). Security is provided by the customer entering a personal identification number (PIN).

•Product functions:

Using an ATM, customers can access their bank accounts in order to make cash withdrawals (or credit card cash advances) and check their account balances.

The functions of the system are:
1. Login
2. Get Balance Information
3. Withdraw Cash
4. Transfer Funds

5. External Interface Requirements

•User interfaces.
The customer user interface should be intuitive, such that 99.9% of all new ATM users are able to complete their banking transactions without any assistance.

•Hardware interfaces
The hardware should have following specifications:
•Ability to read the ATM card
•Ability to count the currency notes

Software interfaces
The software interfaces are specific to the target banking software systems. At present, two known banking systems will participate in the ATM network.
•State Bank
•Indian Overseas Bank

6. DOMAIN MODEL:

A domain model is a visual representation of conceptual classes or real situations object in a domain.

- In object oriented analysis; the domain model is the most important.
- It illustrates the concept in the domain.
- It acts as a source of inspiration for designing some software objects.

7. PARTIAL LAYERED ARCHITECTURE:

Sequence diagram is an interaction overview diagram. It provides a big picture overview of how a set of interaction are related in terms of logic and process flow. This Partial layer architecture shows the interface of the sequence diagram; here the administrator shows the interface by displaying actor symbol.

8. LOGICAL ARCHITECTURE:

The Logical architecture is large scale organization of software class into packages, sub system layer; It is called logical architecture because there is no direction about how these elements are display on different operating system.

9. RISK ACTIVITY:

- Personal short falls.
- Unrealistic schedules and budgets.
- Developing the wrong functions and programs.
- Developing the wrong user interface.

- Continuing stream of requirements changes.
- Short falls in externally furnished component.
- Real time performance short falls.
- Straining computer science capabilities.

RISK ASSESSMENT:

- Figure out what the risks are and what to focus on.
- Making a list of all of the potential dangers that will affect the project.
- Assessing the probability of occurrence and potential roses of each item listed.

RISK CONTROL:

- Monitoring the effectiveness of the strategies and the changing levels of risk throughout the project.
- Techniques and strategies to migrate the highest ordered risks.

10. POST- FUNCTION AND PRE-FUNCTION:

MODULE: ATM card

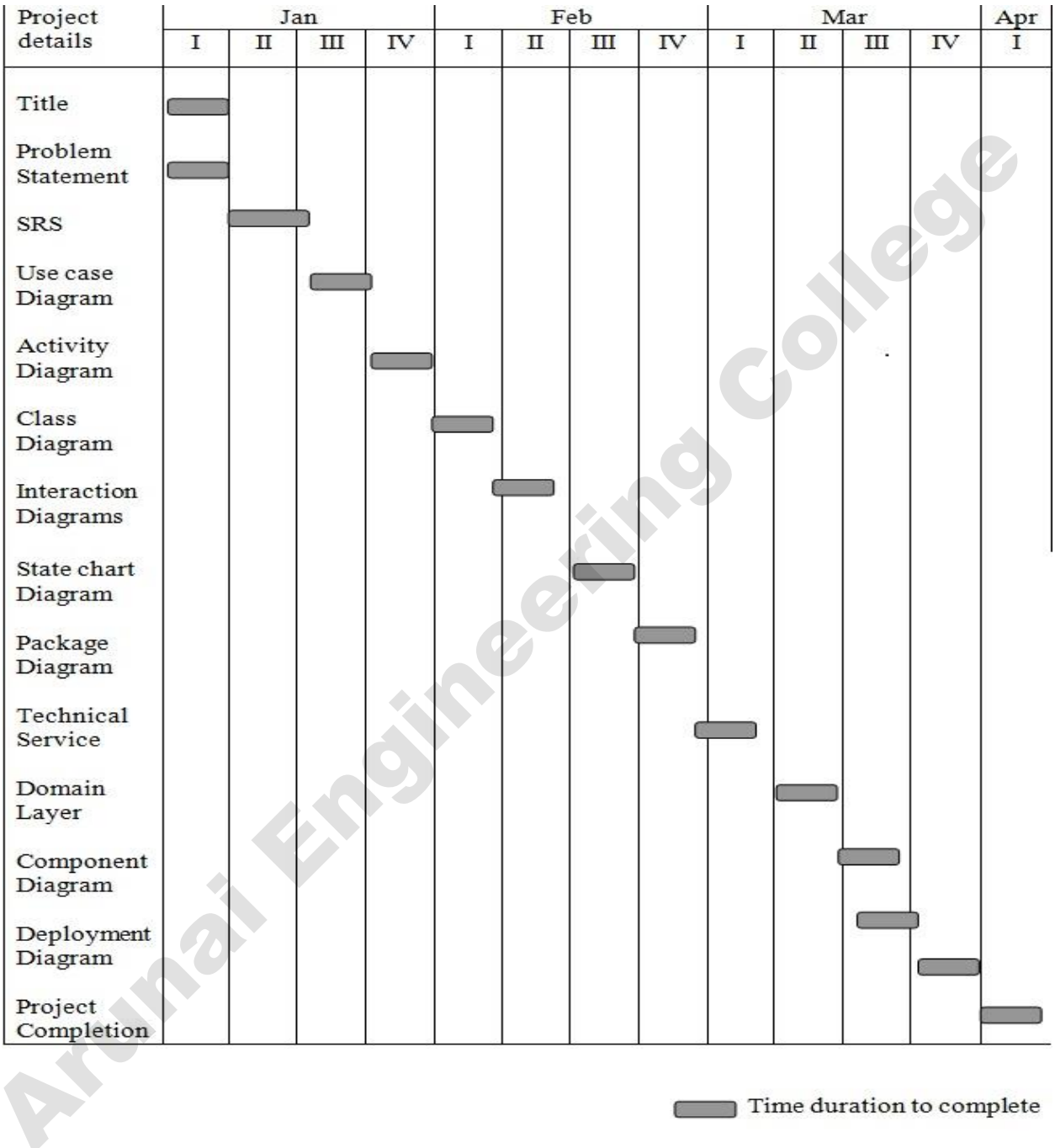
PRE-FUNCTION:
User has inserted a card and has been authenticated
POST-FUNCTION:
System in baseline state to receive and invited assign

MODULE: Display Account details

PRE-FUNCTION:
Analyze an account detailed information
POST-FUNCTION:
Display the required amount details.

GANTT CHART:

It describes the time schedule for the planning to complete the corresponding and after completion of core product, what the time is taken for the project action of core product.



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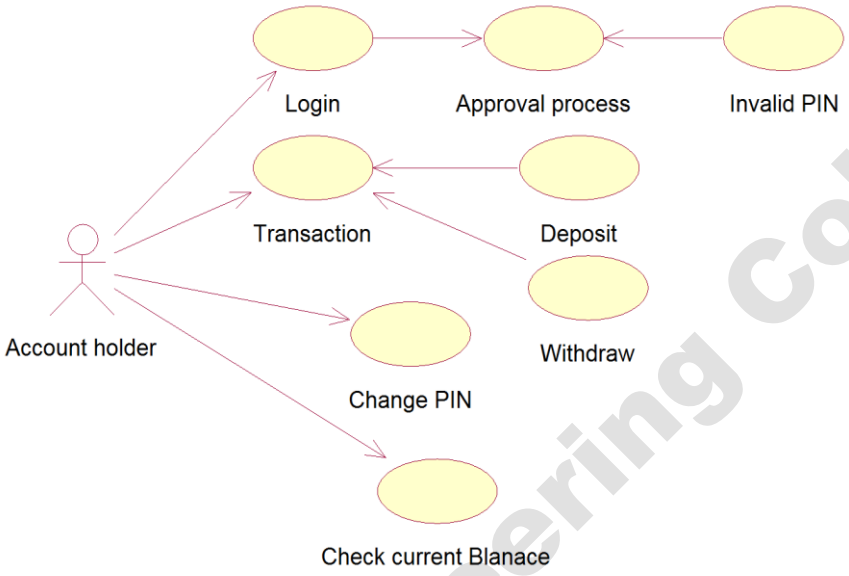
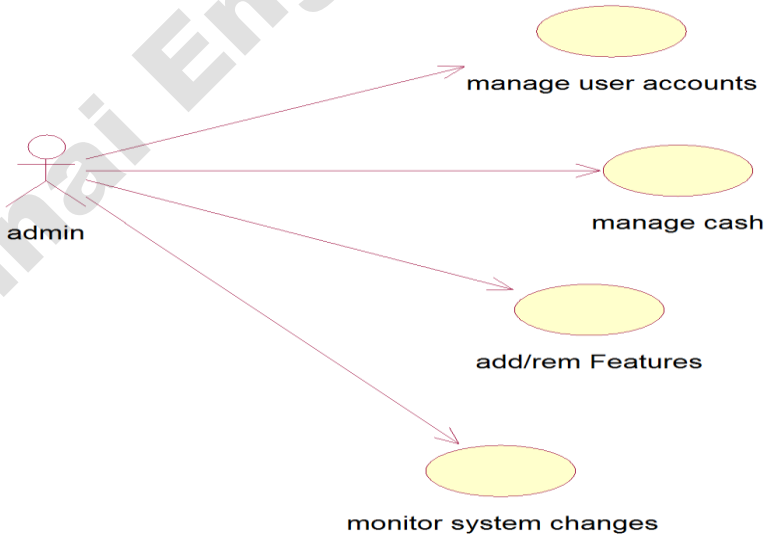


Use Case Diagram Administrator



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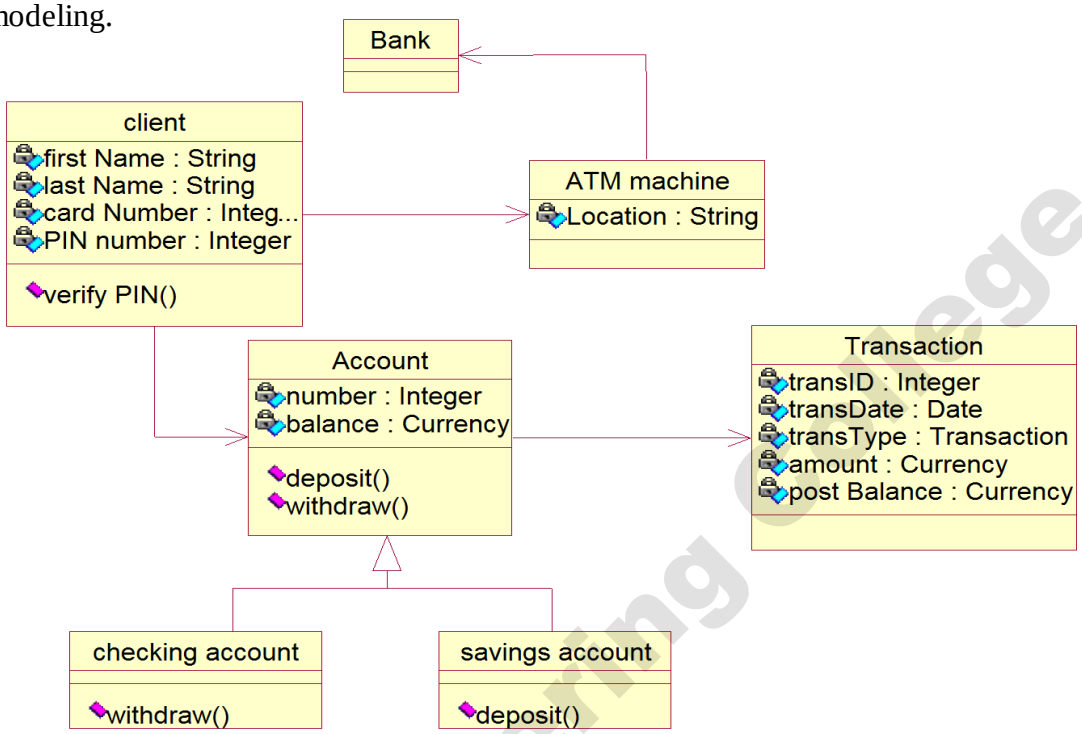
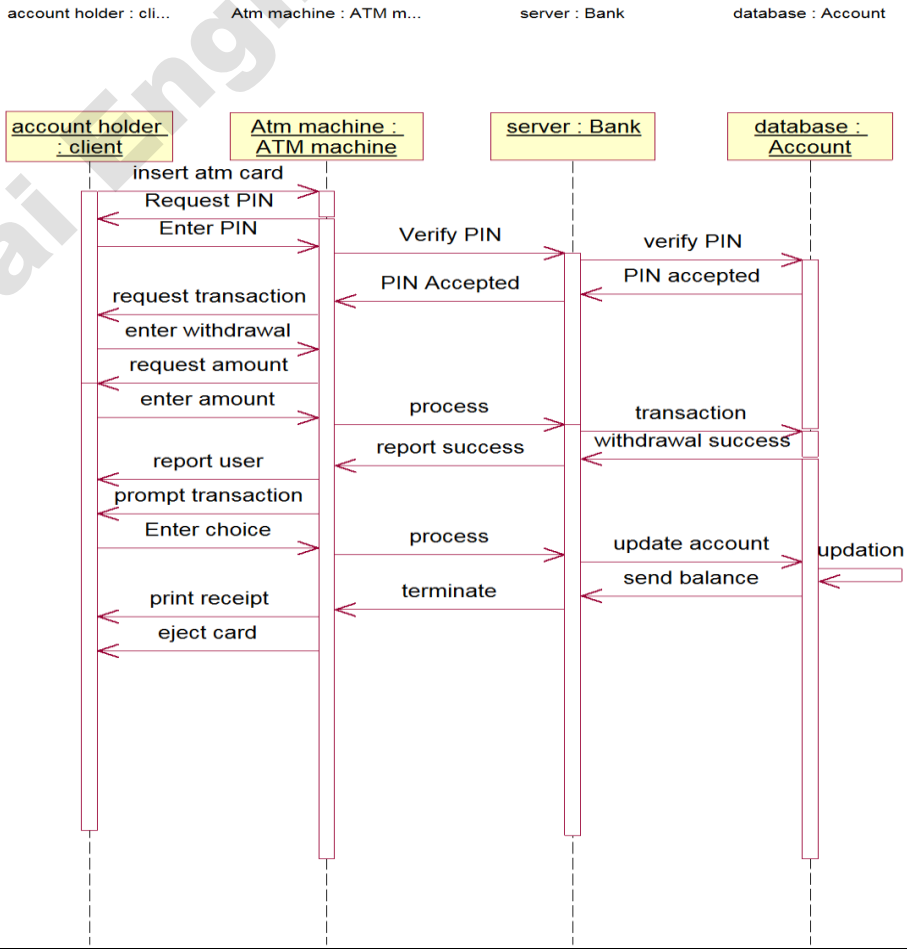


Interaction Diagram

Sequence Diagram



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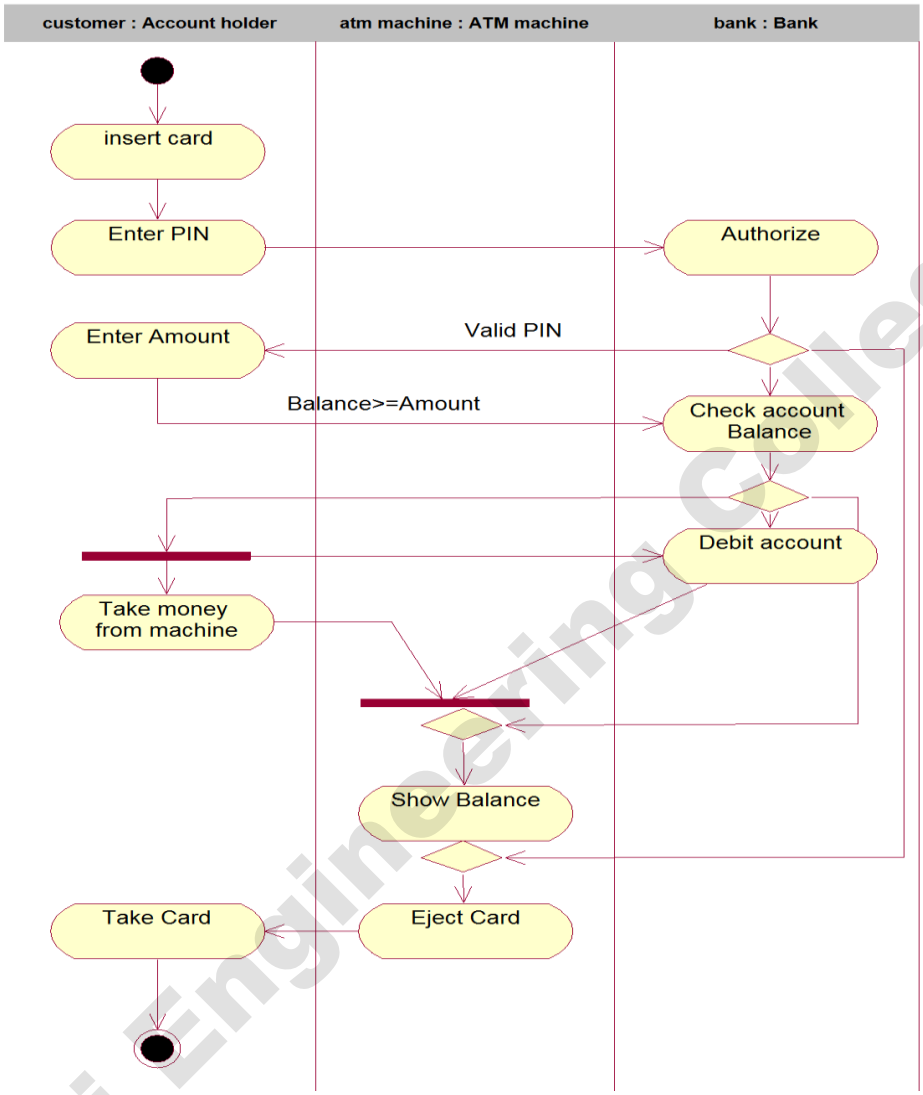

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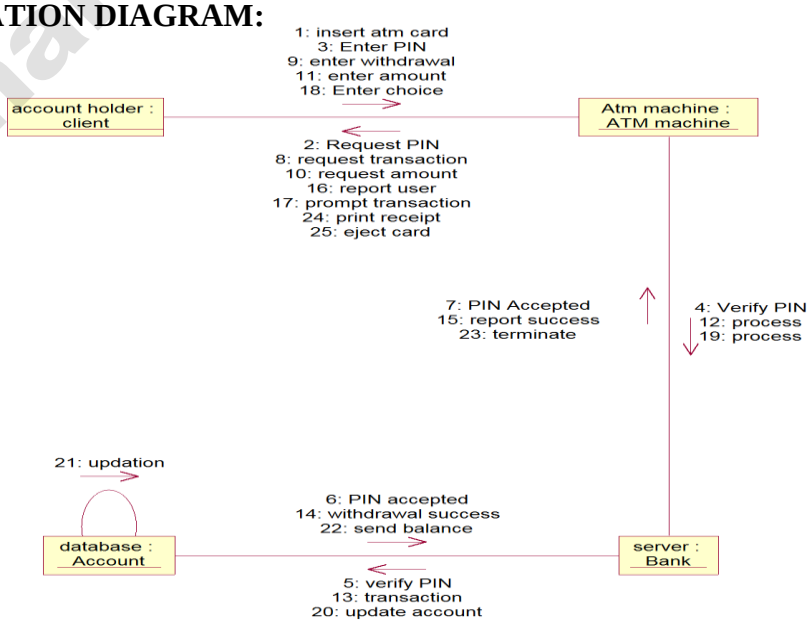

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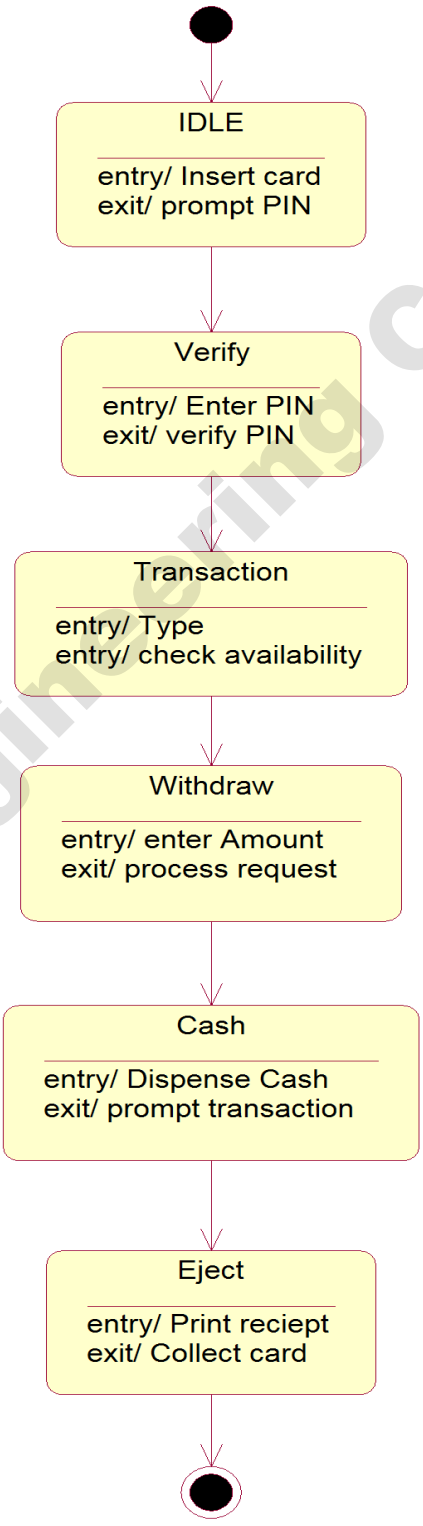

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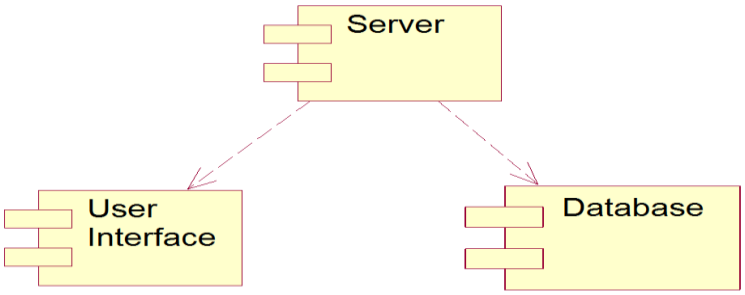

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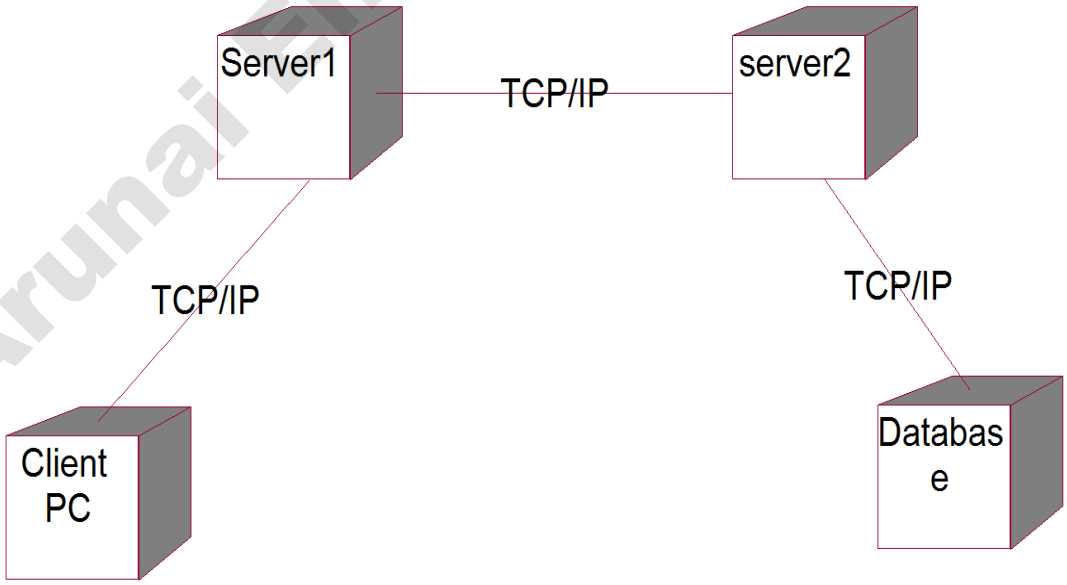
Forward Engineering



Ex.No. 9 **E-BOOK MANAGEMENT SYSTEM**

Date:

SRS (SOFTWARE REQUIREMENT SPECIFICATION) DOCUMENT :

1.OBJECTIVE:

The main objective of the document is to illustrate the Requirements of project E-Book Management system. The document gives the detailed description of both functional and non-functional requirements. It will also explain about the features of the system interface of the system. What the system will do, the constraint under which it must operate and how the system will react to external stimuli. The document is developed after a number of consultations with team members and specification of the given project.

2.SCOPE OF THE PROJECT:

The software provide the visitor, customer and administrator a easy and efficient way to buy and manage books in online.

- Software provides following facilities to customer:
- Facilitates easy shopping online.
- Provides information about the products in categories.
- Provides e-mail facility for future correspondence.
- Transportation of hard copy of Book.
- Look after the payment method.

3.PROJECT DESCRIPTION:

This software is totally self contained and works relatively an efficient on the package relates to the software. It provides simple database rather than complex one for high requirement and it provides a good and easy graphical user interface to both new and naïve as well as experienced user of the computer.

4.REQUIREMENTS:

(a).FUNCTIONAL REQUIREMENTS:

- Register - Enter details in application form.
- Login - Enter Username and Password.
- Search - Search book by attribute.
- Buy - Download softcopies and order for hard copy.
- Payment - Pay for books in different method.
- Update - Update User details

(b).NON- FUNCTIONAL REQUIREMENTS:

- BookMark - Bookmark the Website.
- Categories - Book categories in Website.
- Most Downloaded - Highest purchased book.
- Offers - Offer given by merchant.
- Carting - Mark and select multiple books.

(c).HARDWERE REQUIREMENTS:

1. Processor - Intel Pentium IV-2.0 GHZ.
2. Hardware - 40 GB(Seagate)
3. RAM - 512mb
4. DVD RAM - 1 nos.

(d).SOFTWARE REQUIREMENTS:

1. OS - windows XP/vista.
2. Front end Tool - Rational Rose Enterprise suite.

3. Back end Tool - Oracle 10i.

5.MODULE DISCRIPTION:

In this project we have defined different modules to enable the E-Book Management in successful manner.

i. REGISTER:

The register module contains the application form or registration form which contains following details.

• Name, Address, Contact number, E-mail id, Password etc.

ii. LOGIN:

The Login module contain the form which contain membership name and member password. It includes Username and Password.

iii. SEARCH BOOK:

The search book module contain list of books, from this list we search for the book which we need. This also contains another field called as categories where can select the category of the book.

iv. DOWNLOAD:

The download module contains the downloading option for where purpose where we can download, whatever e-book we search and found.

v. PAYMENT:

After the book is searched and found. Then the user is going to download the book. Before the downloading the books needs payment for that book. So user has to select the type of transaction whether credit card (or) debit card (or) cash (or) cheque (or) DD.

vi. SALES RECORD:

The website admin has to maintain the sales record where the record should be in updated, where how many books is sale. How much amount credited and names of user who downloaded that book and how much they paid for downloading the book.

vii. UPDATE:

- The update module should maintained by the website administrator. The admin should update each and every process like.
- Number of user registered
- Registered user viewing.
- Downloading by user.
- Payment offered by user.

6:DOMAIN MODEL:

A domain model is a visual representation of conceptual classes or real situations object in a domain.

- In object oriented analysis, the domain model is the most important.
- It illustrates the concept in the domain.
- It act as a source of inspiration for designing some software objects.

7:PARTIAL LAYERED ARCHITECTURE:

Sequence diagram is an interaction overview diagram. It provides a big picture overview of how a set of interaction are related in terms of logic and process flow. This Partial layer architecture shows the interface of the sequence diagram, here the administrator shows the interface by displaying actor symbol.

8:LOGICAL ARCHITECTURE:

The Logical architecture is large scale organization of software class into packages, sub system layer, It is called logical architecture because their is no direction about how these elements are display on different operating system.

9:RISK ACTIVITY:

- If the system fails to update the book details of unnecessary confusion may be avoided.
- When the member may not register the form correctly. It may affect the login.
- If the administrator fails to save the new register and new visitor may affect in update.
- Failure of Backup details.

POST- FUNCTION AND PRE-FUNCTION:

i. REGISTER:

PRE-FUNCTION: Enter details in registration form.
POST-FUNCTION: Verify details in registration form.

ii. LOGIN:

PRE-FUNCTION: Enter user name and password.
POST-FUNCTION: Verify user name and password.

iii. SEARCH BOOK:

PRE-FUNCTION: Enter name of book, author and category for searching.
POST-FUNCTION: Check whether the book is available in the database.

iv. DOWNLOAD:

PRE-FUNCTION: Entering the name of book to be download.
POST-FUNCTION: After downloading the book the user must pay the money.

v. PAYMENT:

PRE-FUNCTION: Enter the type of payment for downloading book whether through online credit card, debit, cheque.

POST-FUNCTION: Check whether the transaction is valid or not whether the money is in transaction card or cheque is valid or not.

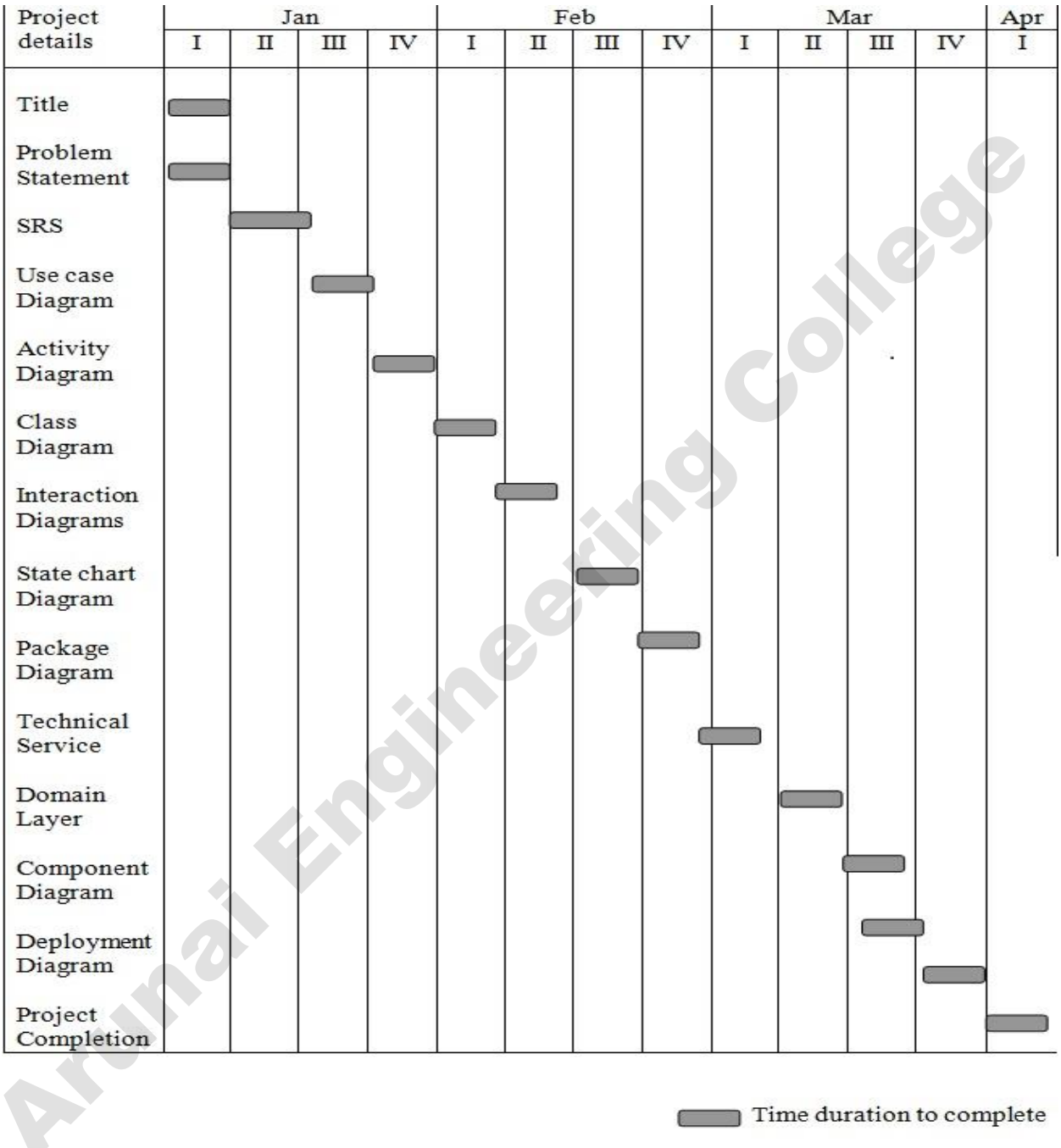
vi. SALES RECORD AND UPDATE:

PRE-FUNCTION: Before downloading the books the administrator keep the book sales account correctly and updatable.

POST-FUNCTION: After downloading the book, the administrator update the record at time whenever the book in downloaded.

GANTT CHART:

It describe the time schedule for the planning to complete the corresponding and after completion of core product, What is the time taken for the project action of core product.



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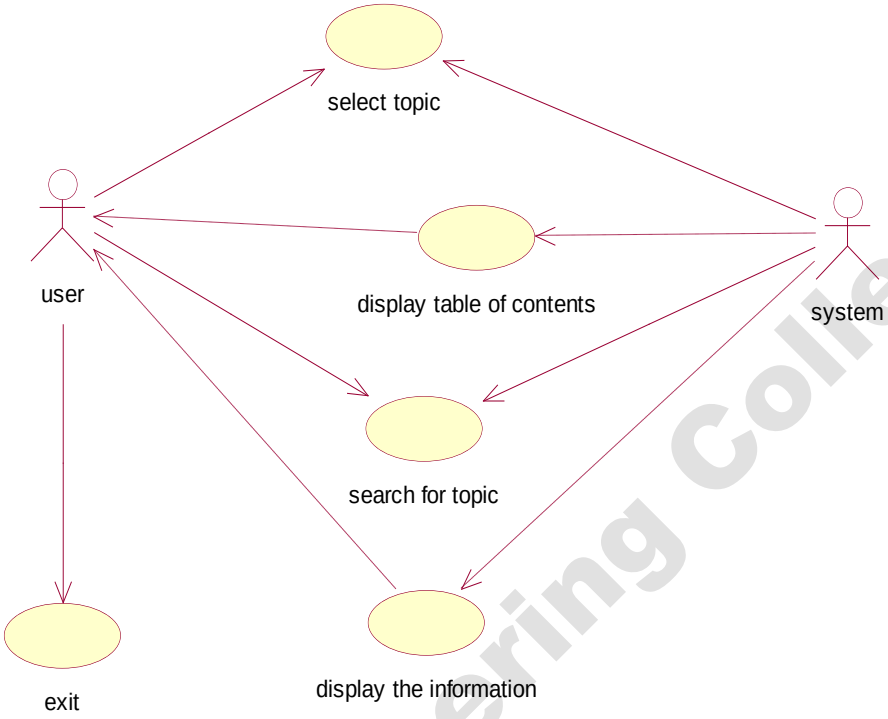

UML ACTIVITY DIAGRAM:

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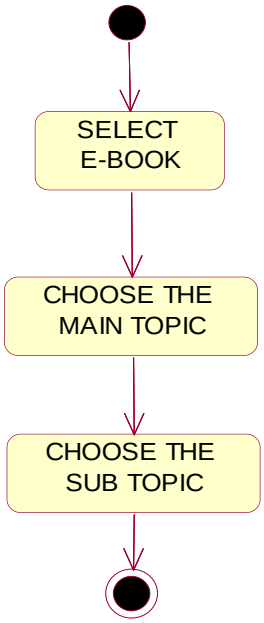
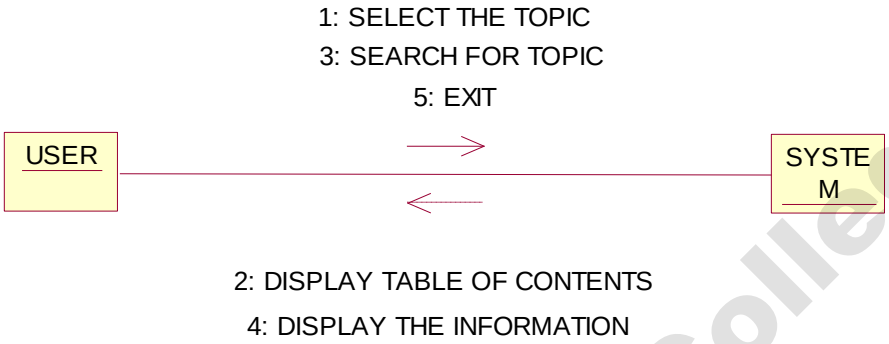


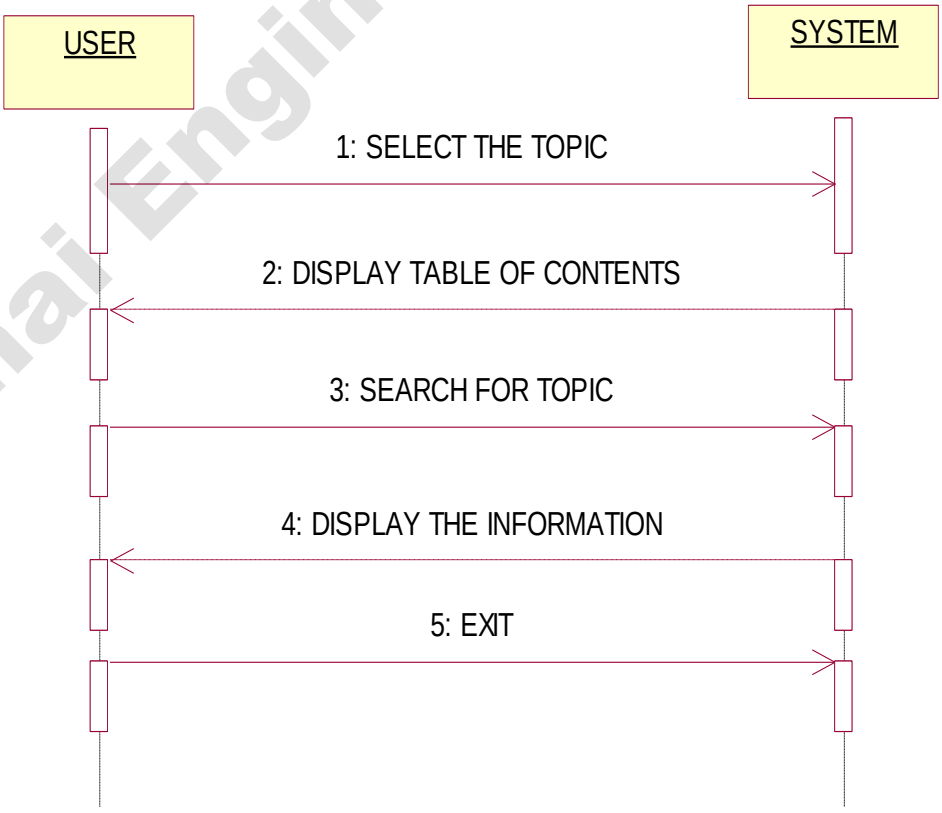
UML COLLABORATION DIAGRAM

Communication diagram illustrate that object interact on a graph or network format in which object can be placed where in the diagram. In collaboration diagram the object can be placed in anywhere on the diagram. The collaboration comes from sequence diagram.



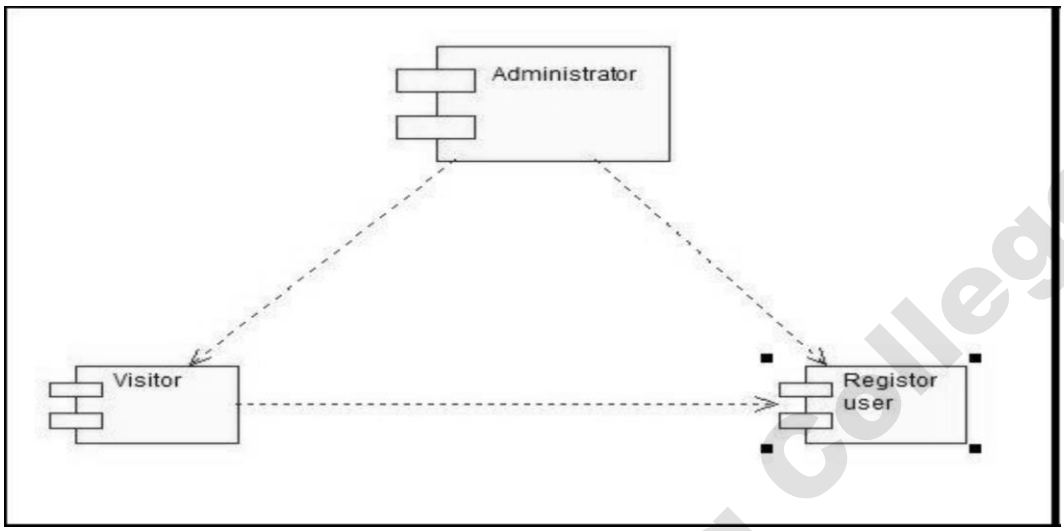
UML SEQUENCE DIAGRAM:

A sequence diagram illustrate a kind of format in which each object interact via message. It is generalize between two or more specialized diagram.



UML COMPONENT DIAGRAM:

Components are slightly fuzzy concept in this Uml, because both class and components can be used to model the something.



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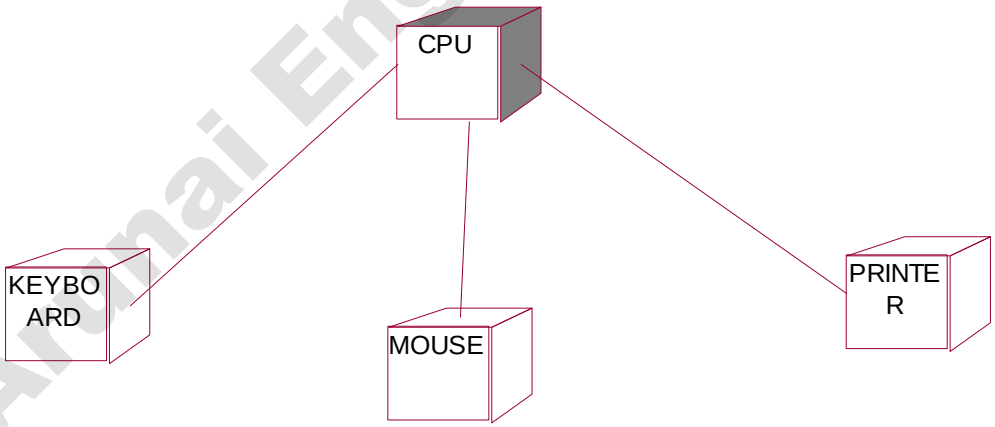


Ex.No.10 **RECRUITMENT SYSTEM**

Date:

SRS (Software Requirement Specification) Document :

1. INTRODUCTION :

Recruitment is the premier major steps in the selection process in the Organizations. It has been explained as an activity directed to obtain appropriate human resources whose qualifications and skills match functions of the relevant posts in the Organization. Its importance cannot be over-emphasized and can also be best described as the 'heart' of the organization.

1.1 PURPOSE :

The process of recruitment does not stop when it commences, it is a dynamic activity. The purpose of it is to provide an Organization with a pool of qualified candidates.

1.2 SCOPE :

- To assist augment the success rate of selection process by reducing the numbers of obviously under-qualified and over-qualified applicants.
- To increase Organizational and individual effectiveness in the short and long term plans.

1.3 REFERENCES :

IEEE Software Requirement Specification format.

1.4 TECHNOLOGIES USED :

- HTML
- JSP
- Java script
- Java

1.5 TOOLS USED :

- Eclipse IDE (Integrated Development Environment)
- Visual paradigm (for developing UML Patterns)

1.6 OVERVIEW :

It has some basic steps in the overview of recruitment system. They are given below,

Step 1 Written Application
Step 2 Telephone Interview
Step 3 Assessment Center

- Personal Interview
- Individual Tasks
- Group work (discussions).

Step 4 Final Interview

2. GENERAL DESCRIPTION :

2.1 PRODUCT PERSPECTIVE :

The recruitment system is an interaction between interviewer and interviewee in which the organization choses a person to work for its company. In this system the interviewee has to pass over through many steps and rounds . It may be online or in person. This is the product perspective of the Recruitment system.

2.2 PRODUCT FUNCTIONS :

- Checks for eligible criteria.
- Accept the applicant's application.
- Check details for his or her qualification related jobs
- Call applicant for interview.

2.3 PRODUCT CHARACTERISTICS :

Based on different types of organizations the recruitment systems differ. Some organizations keep only two rounds in an interview namely aptitude round and technical cum HR round, and some organizations keep four round like aptitude, GD, technical and finally HR round. Some other organizations keep levels and increase dynamically according to their wish.

3.EXTERNAL INTERFACE REQUIREMENTS:

3.1 USER INTERFACES :

- A computer with recruitment software installed.
- Internet connection.

3.2 SOFTWARE INTERFACES :

- **Front End Client** - The applicant and Administrator online interface is built using JSP and HTML. The Administrator's local interface is built using Java.
- **Web Server** – apache web server or free web host sites
- **Back End** – mySql.

3.3 HARDWARE INTERFACES :

The server is directly connected to the client systems. The client systems have access to the database in the server.

3.4 COMMUNICATION INTERFACES :

- HTTP over TCP/IP connections

4. SYSTEM FUNCTIONS:

- Gathers applicant details from the user.
- Checks whether the applicant is eligible or not.
- Stores applicant data in database.
- The data is distributed to all the organizations which wants to recruit the person with required criteria.

5. USER CHARACTERISTICS :

Applicant: one who applies for job.

Organizations : one who recruits persons for its company.

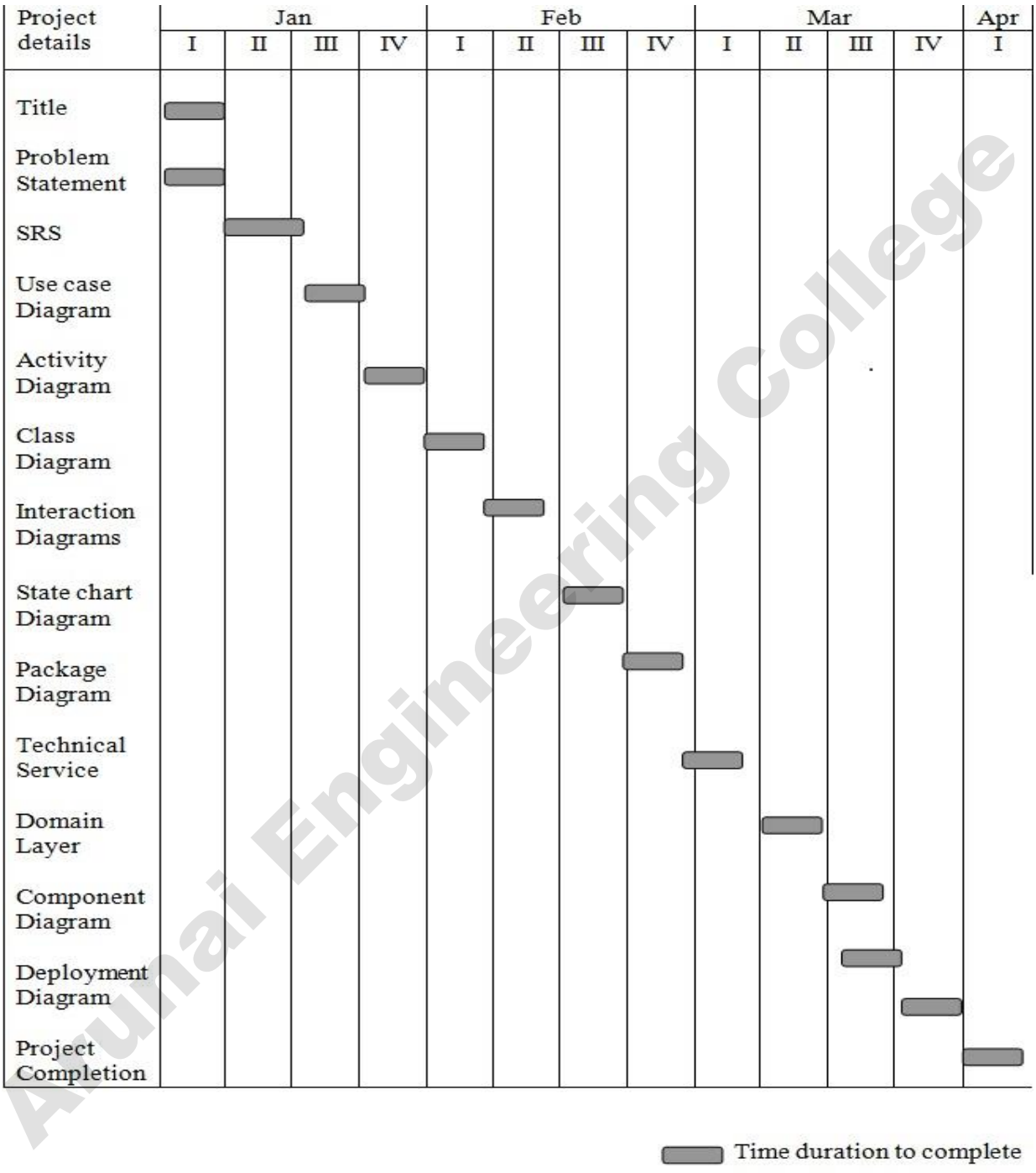
Software : one who helps to communicate applicant with organizations.

6.CONSTRAINTS :

- Applicant should have qualified requirements base to organizations.
- Applicant should choose only one job if he/she gets more than one jobs.

GANTT CHART:

It describe the time schedule for the planning to complete the corresponding and after completion of core product, What is the time taken for the project action of core product.



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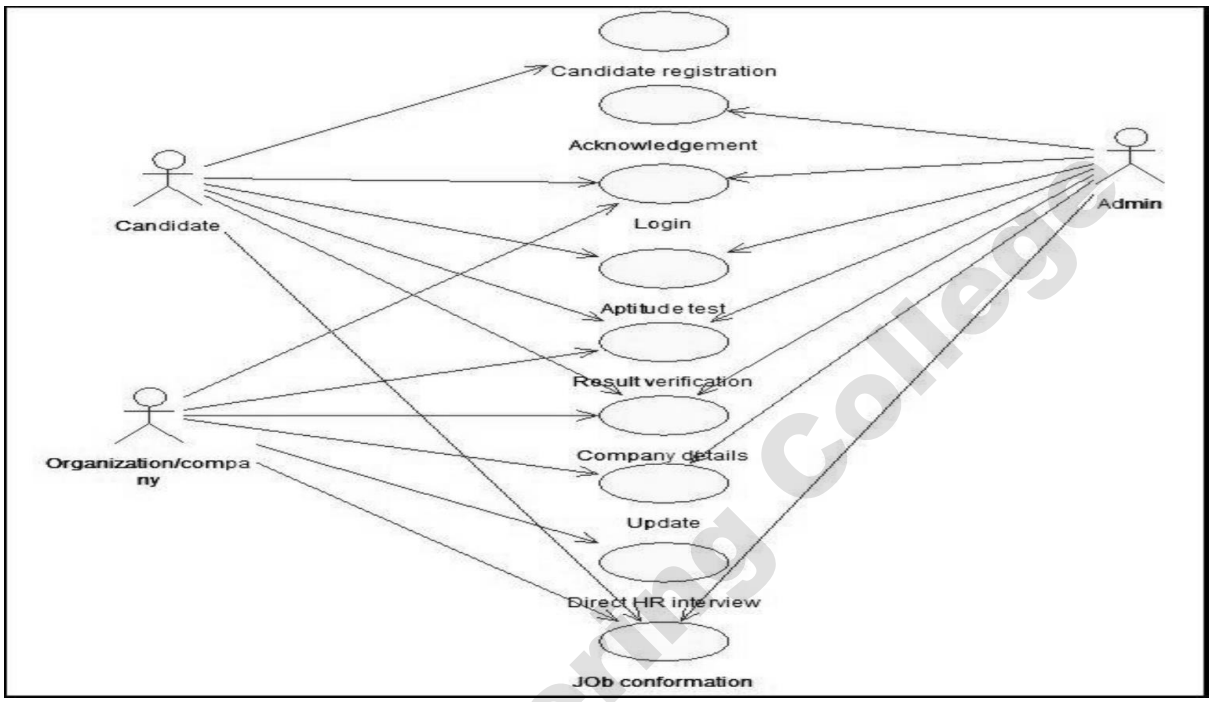

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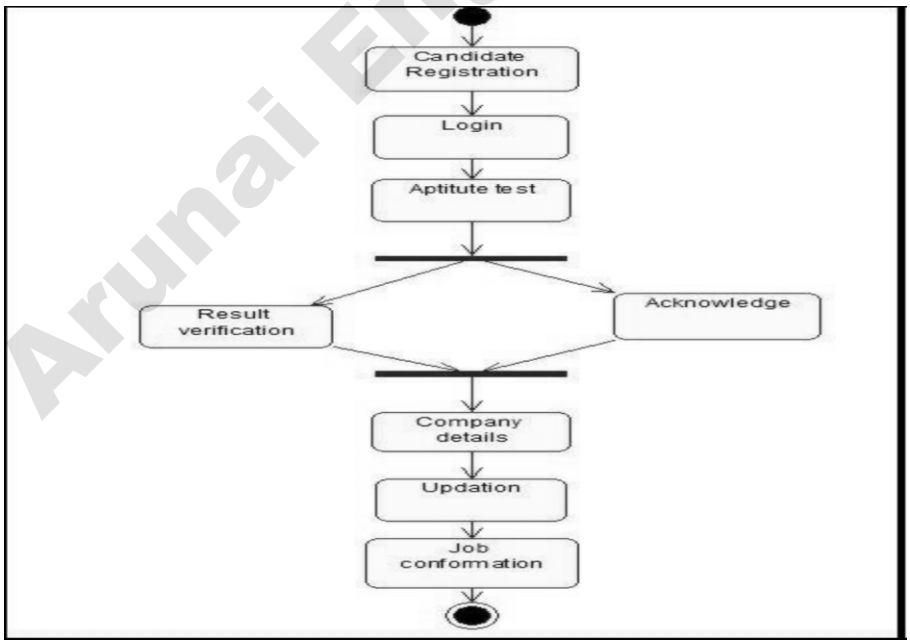
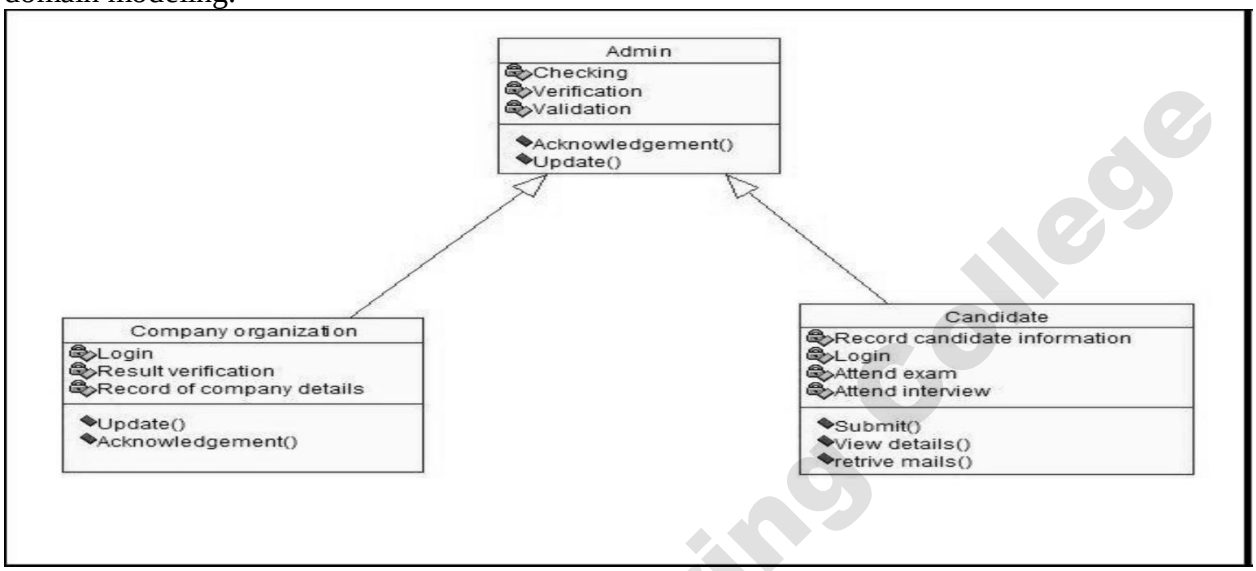


UML CLASS DIAGRAM:

The Uml class diagram is to illustrates class interfaces and their actions. They are used for static object modeling, we have already introduced and used their uml diagram while domain modeling.



UML INTERACTION DIAGRAMS:

UML SEQUENCE DIAGRAM:

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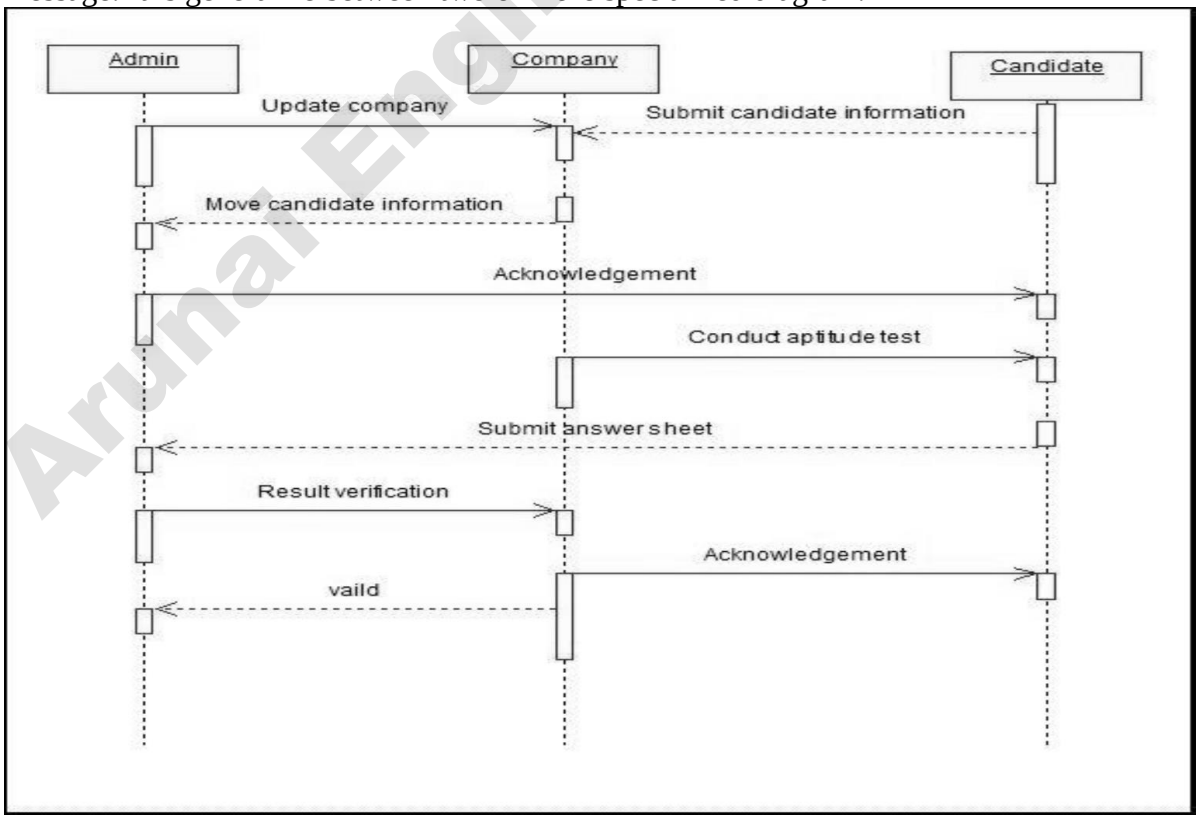

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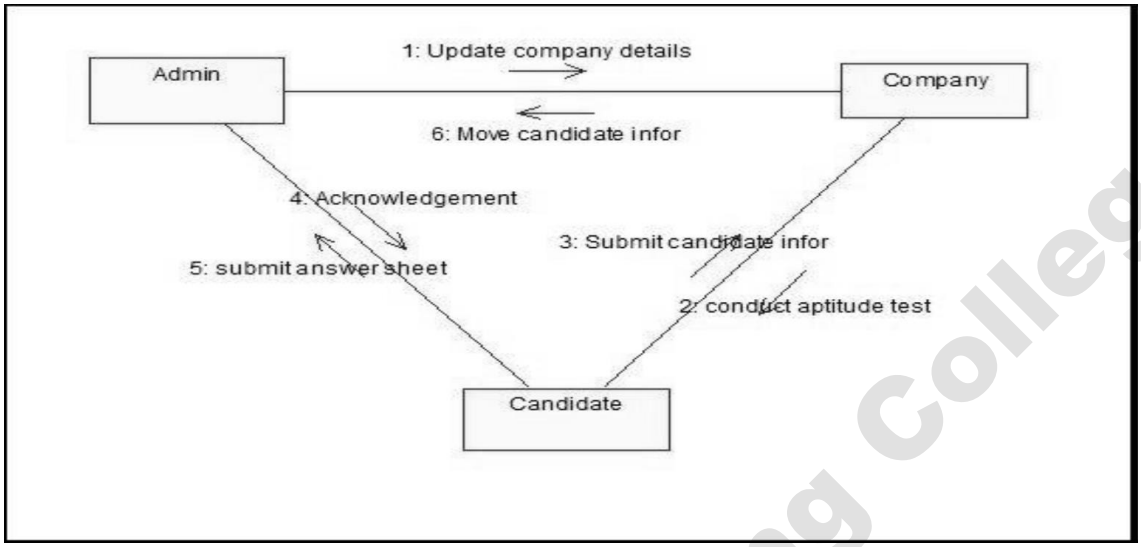
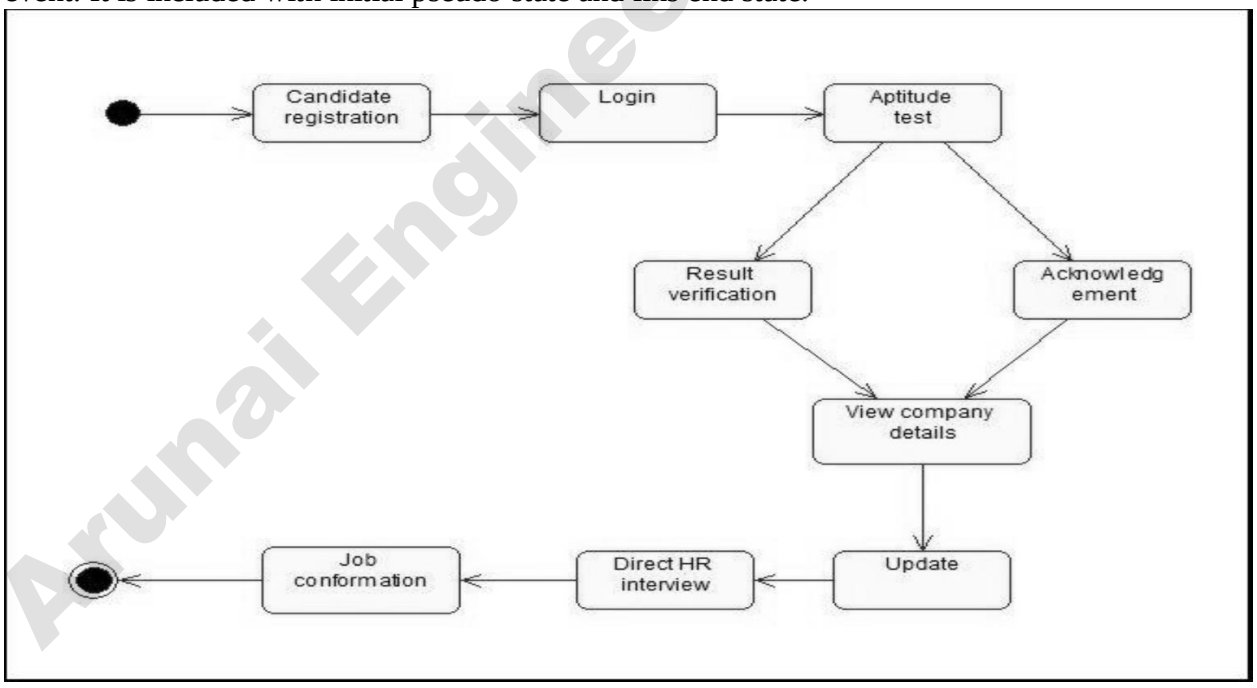


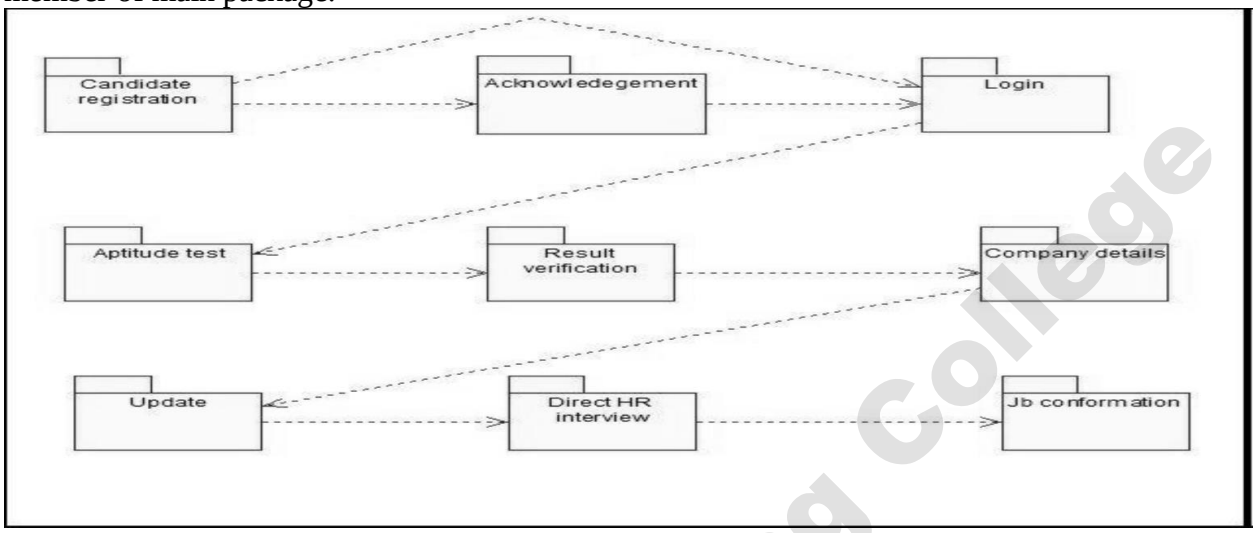
UML STATE CHART DIAGRAM:

A Uml state machine represents the interaction events and states of an object and behavior of an object in reaction to an event.. Transaction shown as allows labelled with their event. It is included with initial pseudo state and fins end state.



PACKAGE DIAGRAM:

A package diagram provides a way to group element. Here we have grouped the 6 main elements of software project grouped the in order register, login, search book. It goes to update and sales record. A package name may be based on tab if the package shows the inner member of main package.



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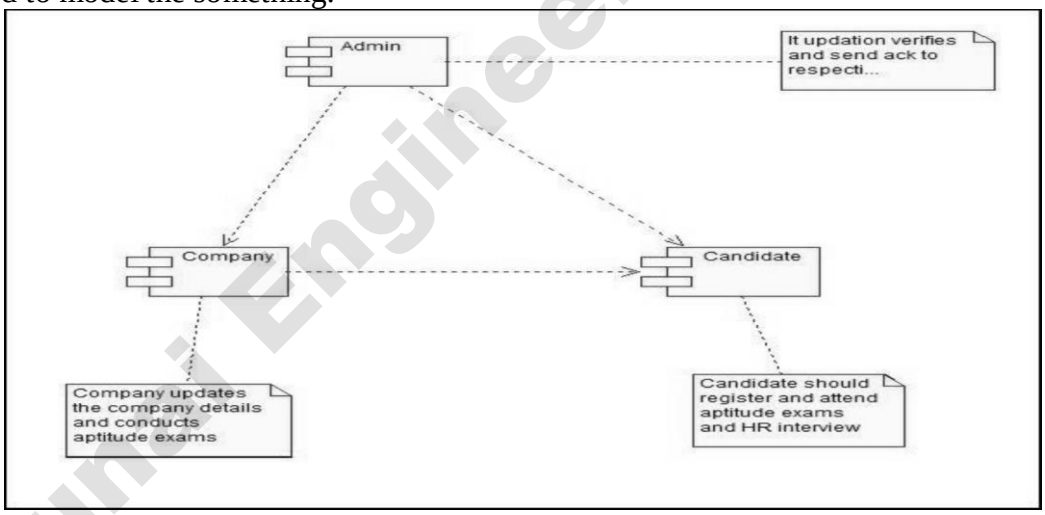

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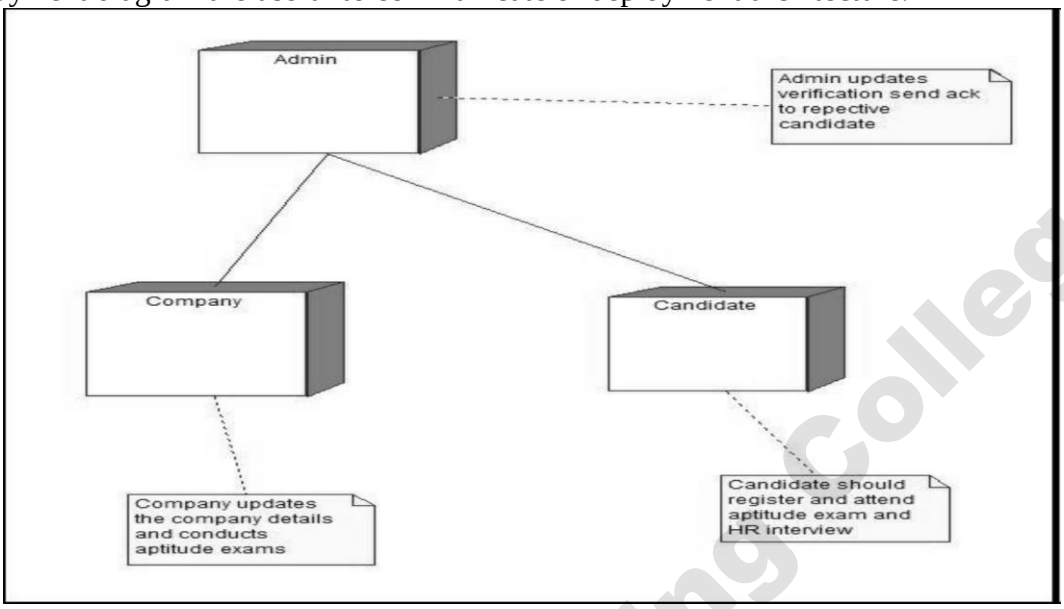


Ex.No.11 **FOREIGN TRADING SYSTEM**
Date:

SOFTWARE REQUIREMENT SPECIFICATION

1.INTRODUCTION

Foreign trading system is the powerful feature where one products are trade for another; it is a largest market in the world. The foreign exchange market is the mechanism by which currencies are valued relative to one another, and exchanged. An individual or institution buys one currency and sells another in a simultaneous transaction. The products are also exchanged.

2.PURPOSE

The products are exchanged between the countries. Their economical position can be improved. Their needs can be satisfied. Foreign Exchange Traders generate profits, or losses, by speculating whether a currency will rise or fall in value in comparison to another currency. A trader would buy the currency which is anticipated to gain in value, or sell the currency which is anticipated to lose value against another currency. The value of a currency, in the simplest explanation, is a reflection of the condition of that country's economy with respect to other major economies.

3.SCOPE

Whether or not an economy is flourishing or falling into a recession, a trader can earn money by either buying **or** selling the currency. Reactive trading is the buying or selling of currencies in response to economic or political events, while speculative trading is based on a trader anticipating events

5.OVERALL DESCRIPTION

When a trader wishes to trade a commodity, she contacts a company trader and the request to trade the commodity announced. The company trader analysis the offer to trade for a detailed discussion of this phase the use case is referred. The terms and conditions are discussed clearly. Upon acceptance, the trades are registered with the trade admin. The trade admin makes a permanent, persistent record of the trade details and the notifies the position.

6.FUNCTIONALITY

M any customer will place order at the same time. The seller has to verify all the details and have to get the permission from the authority simultaneously.

7.USABILITY

The user interface to make the foreign trading system to be efficient.

8.PERFORMANCE

It is the capability about which it can perform function for many customers efficiently at the same time without any problem in trading and database.

9.FUNCTIONAL REQUIREMENTS

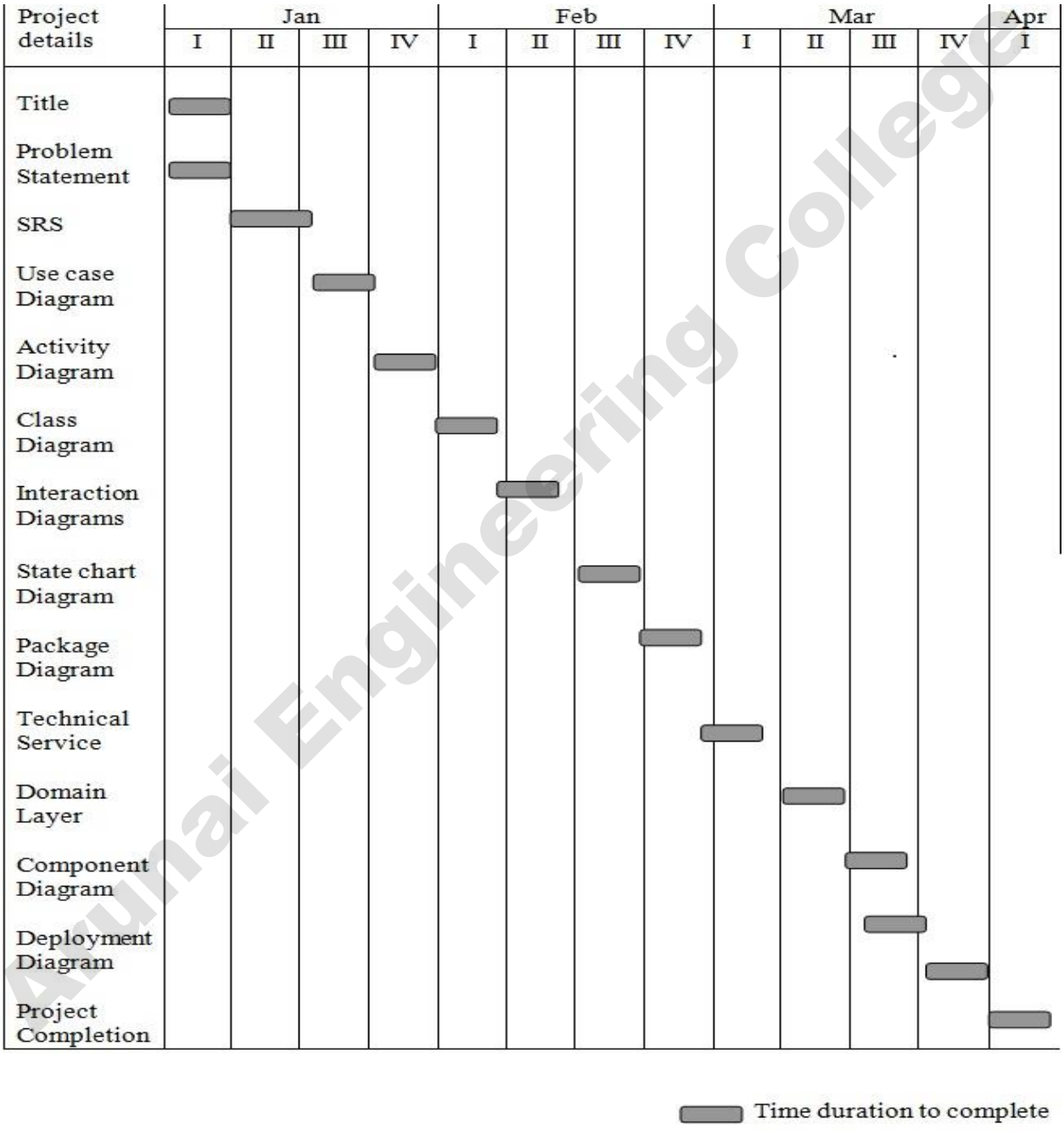
Functional requirements are observable tasks or processes that must be performed by the system under development. The task of the foreign trading system is the product must be transformed from one country to another. The product must be imported from other country which has the lowest price. In the same time the product must be good. The updation must be done periodically.

10. NON FUNCTIONAL REQUIREMENTS

Non functional requirements are qualities or standards that the system under development must have or comply with, but which are not tasks that will be automated by the system.

GANTT CHART:

It describe the time schedule for the planning to complete the corresponding and after completion of core product, What is the time taken for the project action of core product.



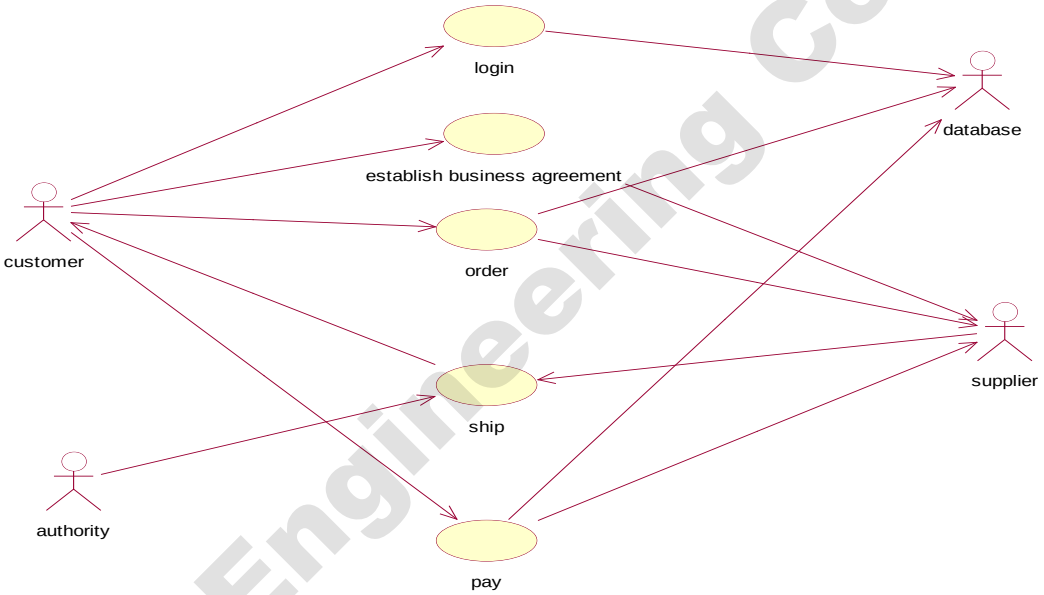
UML DIAGRAMS

The UML is a graphical language with set of rules of semantics. It is a language for specifying, constructing, visualizing and documenting the software system and its components. The diagrams are as follows:

USE CASE

It is an interaction between users and computers. It captures the goal of the users and responsibility of the system to its users.

User (or) person playing a role with respect to system. A single actor may perform many use cases further more a use case may have several actors performing it.



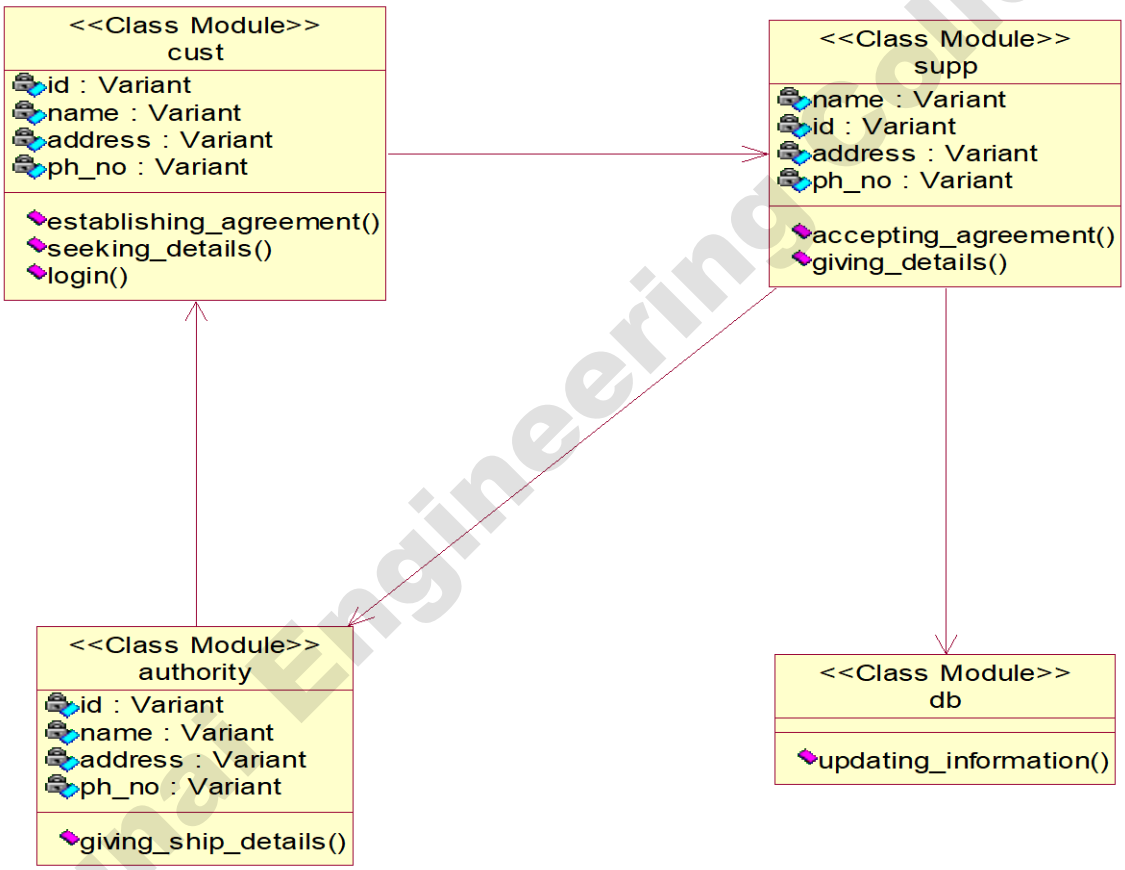
DOCUMENTATION OF USECASE DIAGRAM:

- **Customer**-A customer is the most important person in any business. A customer does us a favor when he comes in. A customer is a part of the business.
- **Seller**-Entity that makes (or) offers (or) contracts to make, a sale to an actual (or) potential buyer. Also called vendor, particularly the one selling the real property.
- **Authority**-Legal or rightful power; a right to command or to act; power exercised buy a person in virtue of his office or trust. Here he is giving permission for trading through ship.\
- **Database**-A database is a collection of information that is organized so that it can easily be accessed, managed, and updated.
- **Login**-The user id and password is given for secure trading.
- **Establishing agreement**-The details about the products will be given to the seller.

- **Order**-The order will be placed by the customer.
- **Ship**-The product will be delivered to the customer through ship.
- **Pay**-The customer settle their payment to the seller.

CLASS DIAGRAM

A class is drawn as a rectangle box with 3 components (or) compartments separated by horizontal lines. The top name compartment holds the class name, middle compartments holds the attributes, bottom compartments holds the list of operation.



DOCUMENTATION OF CLASS DIAGRAM

The various class involved in the system are customer, supplier, authority, database.

- **Customer**-The agreement is established for the trading and the details are requested.
- **Seller**-The agreement is verified and accepted to deliver the products.
- **Authority**-The product will be delivered to the customer through the ship after getting the permission from authority.
- **Database**-The product will be delivered to the customer. The cash payment will be done. And it will be updated.

SEQUENCE DIAGRAM

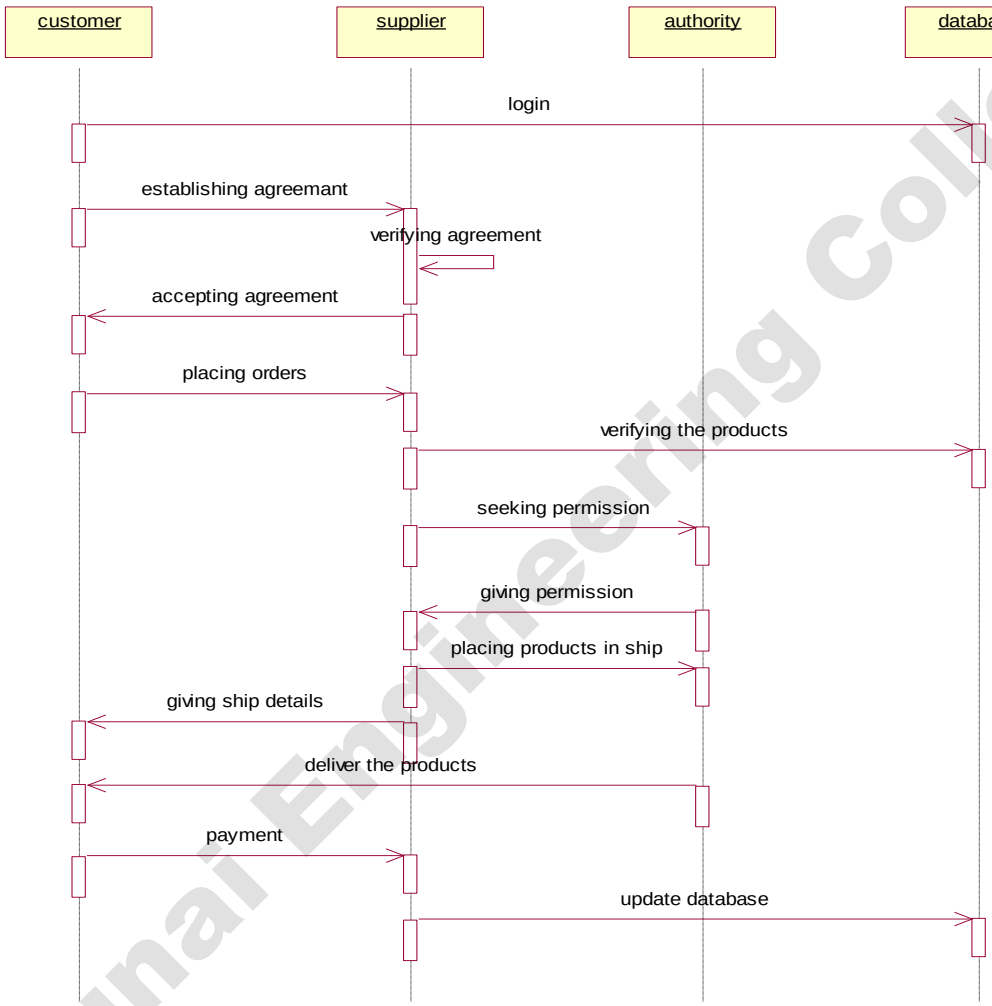
This diagram shows an interaction arranged in time sequence. It shows the objects participating in the interaction by their life lines and the messages their exchange, arranged in a time sequence.

The sequence diagram has 2 dimensions:

1.Vertical dimension

2.Horizontal dimension

The vertical line is called object life line. The life line represents the object restrictions during the inter actions.



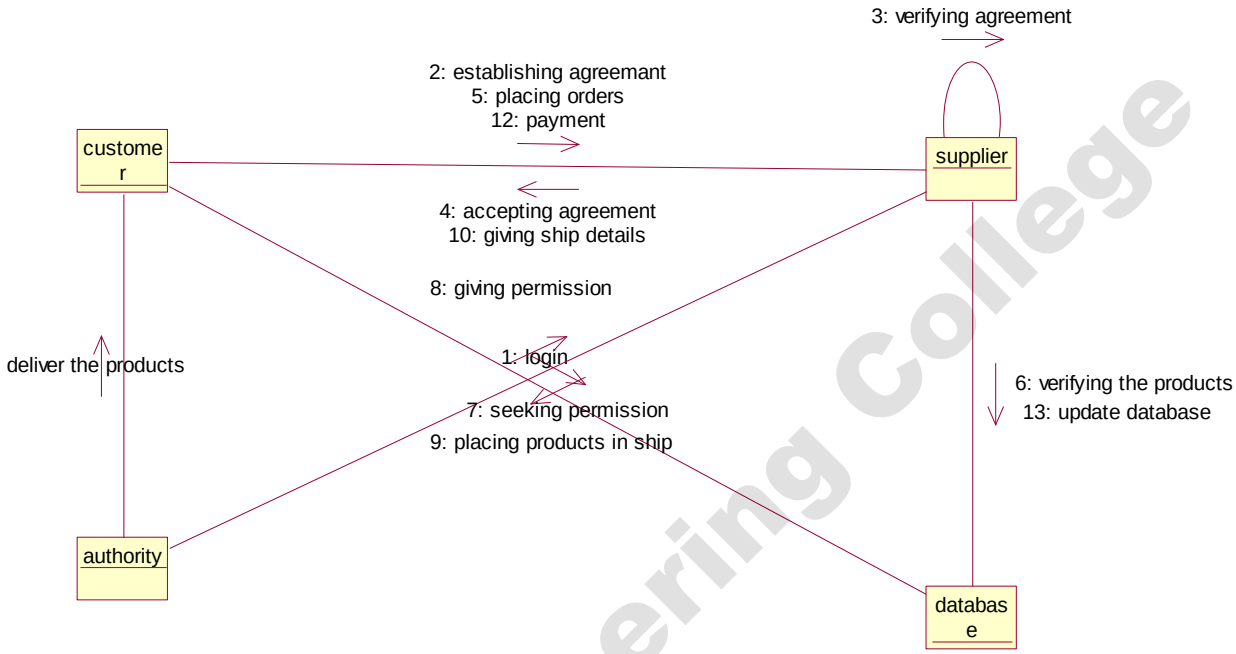
DOCUMENTATION OF SEQUENCE DIAGRAM

The single use case in the foreign trading system is taken and sequence of operation followed in the use case.

- The customer establish the agreement for getting the products.
- The seller verify the agreement before giving the product. That product will be checked in the database to know whether the product is available or not.
- The seller gets the permission from the authority person for trading through ship.
- The product is delivered to the customer.

COLLABORATION DIAGRAM

In a collaboration diagram the sequence is indicated by numbering the message



DOCUMENTATION OF COLLABORATION DIAGRAM

This diagram is also similar to sequence diagram. But difference is the various operations involved in the particular use case will be numbered. In this diagram the sequence of the step is

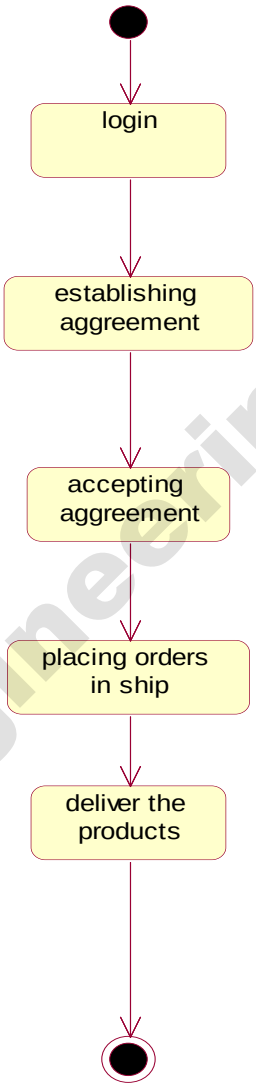
- Establishing the agreement.

The agreement will be verified

- The seller get the permission from authority for ship trading.
- The product will be delivered.
- The amount will be settled.

STATE CHART DIAGRAM

The purpose of state chart diagram is to understand the algorithm involved in performing a method. A state is represented as routed box which may contain one (or) more compartments. The compartments are all optional.



DOCUMENTATION OF STATE CHART DIAGRAM

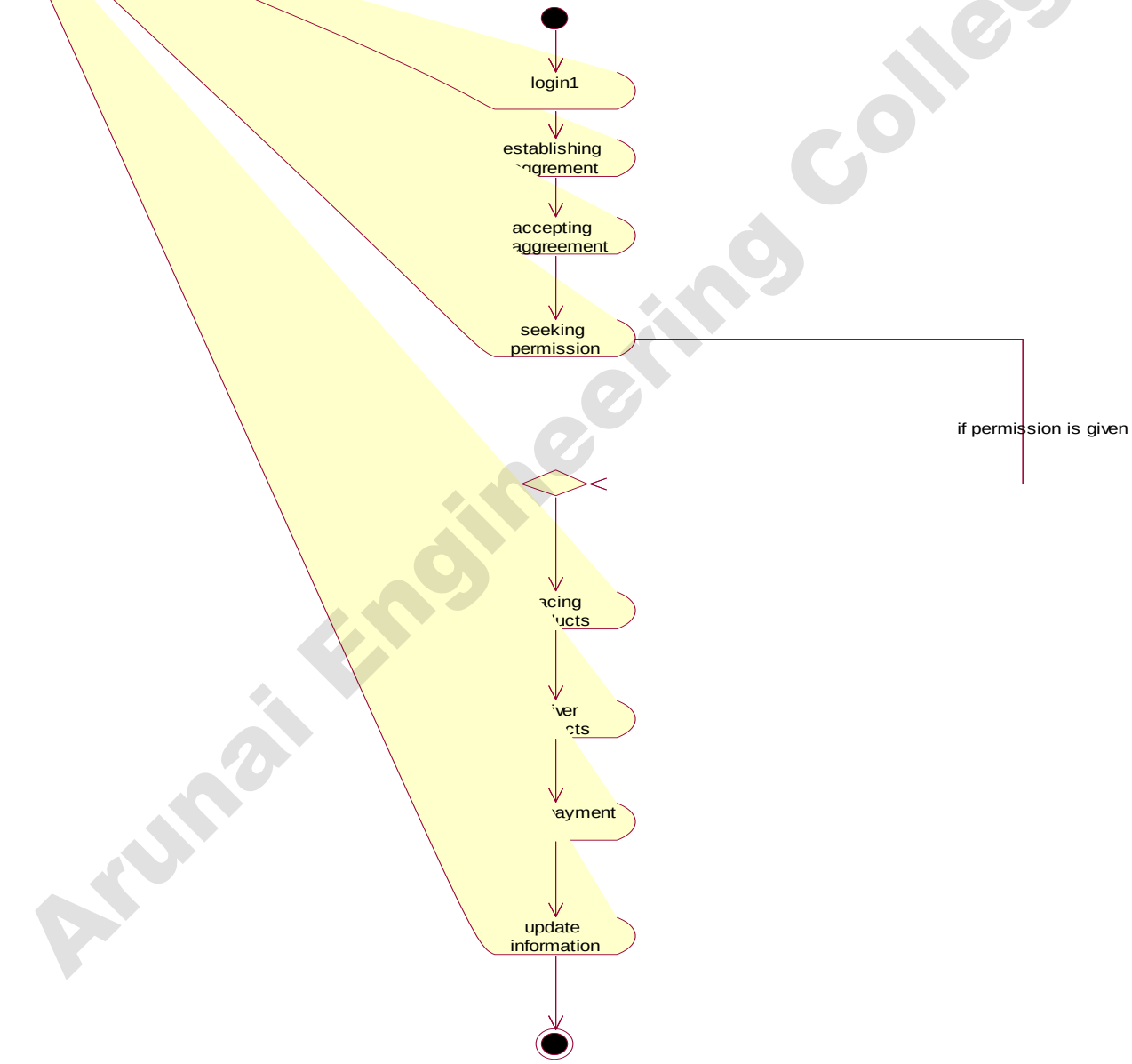
The various steps are establishing agreement, verifying agreement, getting permission from authority person.

- The main purpose is to trade the products.
- The product will be delivered to the customer.

- The database will be updated.

ACTIVITY DIAGRAM

An activity diagram is variation (or) special case of a state machine in which states are activities representing the performance of operation and the transitions are triggered by the completion of the operation. The purpose of activity diagram is to provide a view of close and what is going on inside a use case (or) among several classes.



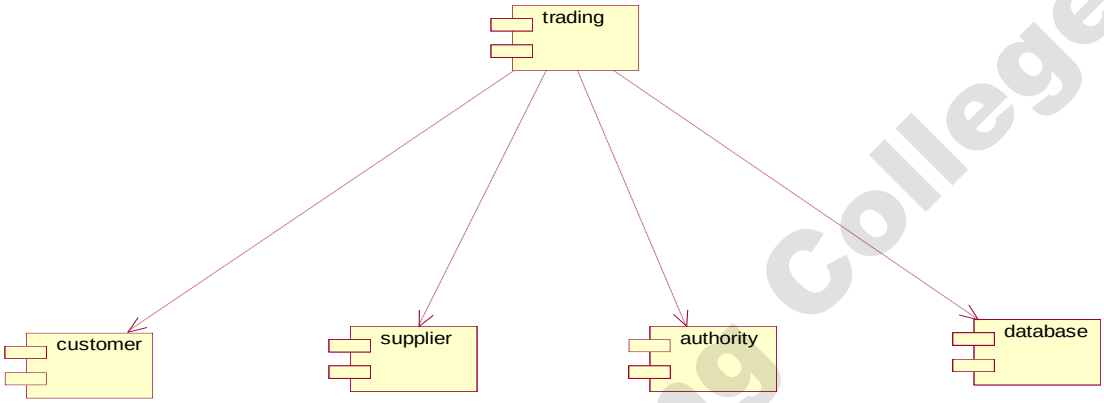
DOCUMENTATION OF ACTIVITY DIAGRAM

- The customer will login to the foreign trading system.

- The customer will send the agreement.
- The agreement will be verified and the product will be delivered.

COMPONENT DIAGRAM

It is represented by box figured. It is a graph of design component.

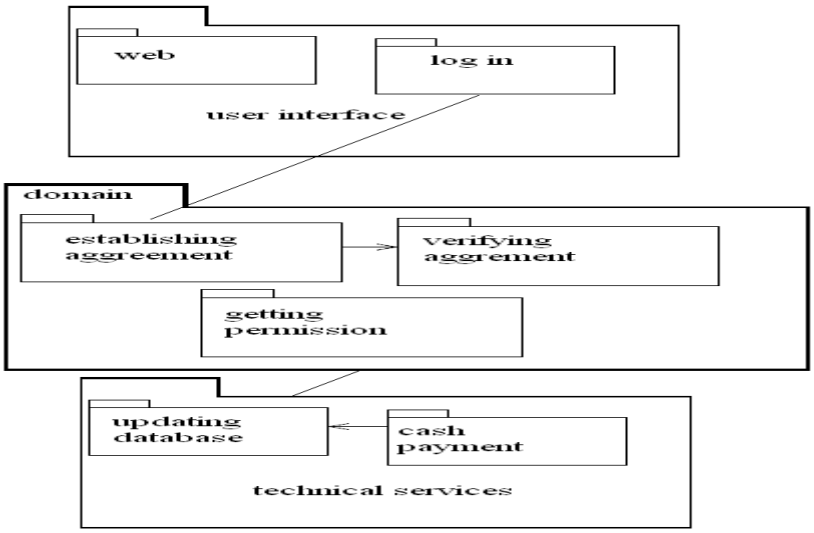


DOCUMENTATION OF COMPONENT DIAGRAM

- The agreement will be established. It is verified.
- The product will be delivered through ship.
- The amount will be paid.

PACKAGE DIAGRAM

The package is represented as a folder shown as a large rectangle with a tab attached to its upper left corner. A package must contain both subordinate packages and ordinary model elements. All UML model elements and diagrams can be organized into packages.



DOCUMENTATION OF PACKAGE DIAGRAM

The package diagram has 3 layers. They are

1.User Interface-A user interface is the system by which people (users) interact with a machine. The user interface includes hardware (physical) and software (logical) components

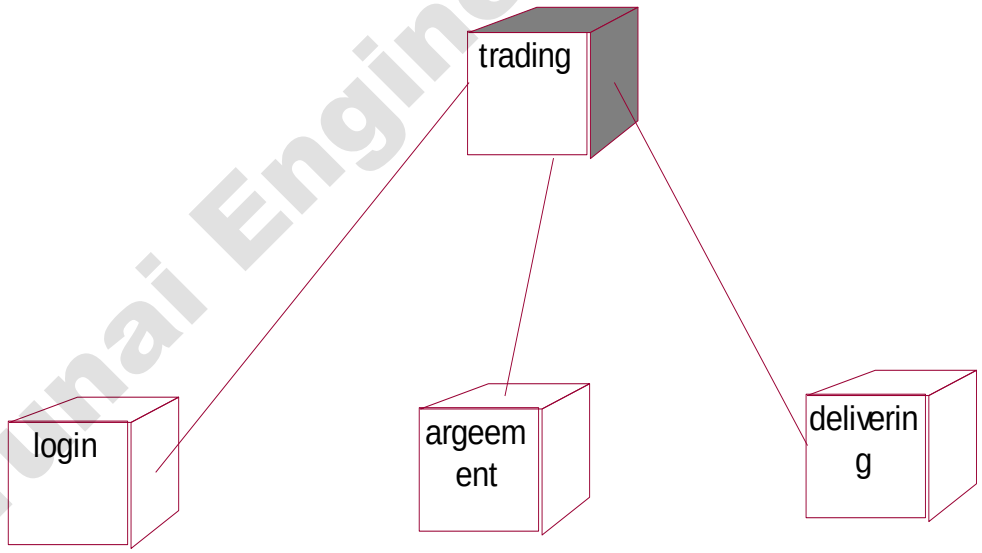
2.Domain-Software object represents domain concepts that fulfill domain requirements.

3.Technical-Service-General purpose objects and subsystems provide supporting technical services. The customer will login to the foreign trading system.

- The customer will send the agreement.
- The agreement will be verified and the product will be delivered.

DEPLOYMENT DIAGRAM

It is a graph of nodes connected by communication association. It is represented by 3 dimensional box. The 2 nodes can be connected by lines.



DOCUMENTATION OF DEPLOYMENT DIAGRAM

- The customer will login to the foreign trading system.
- The customer will send the agreement.
- The agreement will be verified and the product will be delivered

EX.NO.12 CONFERENCE MANAGEMENT SYSTEM
DATE:

SRS DOCUMENT :

1.OBJECTIVE:

The main objective of the document is to illustrate the Requirements of project Conference management System. The document gives the detailed description of both functional and non-functional requirements. It will also explain about the features of the system interface of the system. What the system will do, the constraint under which it must operate and how the system will react to external stimuli.

2.SCOPE OF THE PROJECT:

The software provide the facility for the conference management system in an organization. Software provides following facilities to customer:

.

3.PROJECT DESCRIPTION:

This software is totally self contained and works relatively an efficient on the package relates to the software. It provides simple database rather than complex one for high requirement and it provides a good and easy graphical user interface to both new and naïve as well as experienced user of the computer.

4: DOMAIN MODEL:

A domain model is a visual representation of conceptual classes or real situations object in a domain.

. In object oriented analysis, the domain model is the most important.
. It illustrates the concept in the domain.
. It act as a source of inspiration for designing some software objects.

5. PARTIAL LAYERED ARCHITECTURE:

Sequence diagram is an interaction overview diagram. It provides a big picture overview of how a set of interaction are related in terms of logic and process flow.

6.LOGICAL ARCHITECTURE:

The Logical architecture is large scale organization of software class into packages, sub system layer, It is called logical architecture because their is no direction about how these elements are display on different operating system.

7.**RISK ACTIVITY:**

. If the system fails to update the stock details of unnecessary confusion may be avoided.
. When the member may not register the form correctly. It may affect the login.
. If the administrator fails to save the new register and new visitor may affect in update.
. Failure of Backup details.

8. OVERALL DESCRIPTION:

1. Login Form:

Authenticate the user and administrator.

2. Department Selection Form:

This form will give the options for selecting the department to get knowledge about the conference.

3. Conference view Form:

This form contains the details about the conferences is conducting by various institutions and we can see the date and time for the conference.

4. Database Form:

The details about the conferences going to conduct by various institutions.
Administrator can add the details about the conference for the students and also for the staff members.

2.1 SOFTWARE REQURIEMENTS:

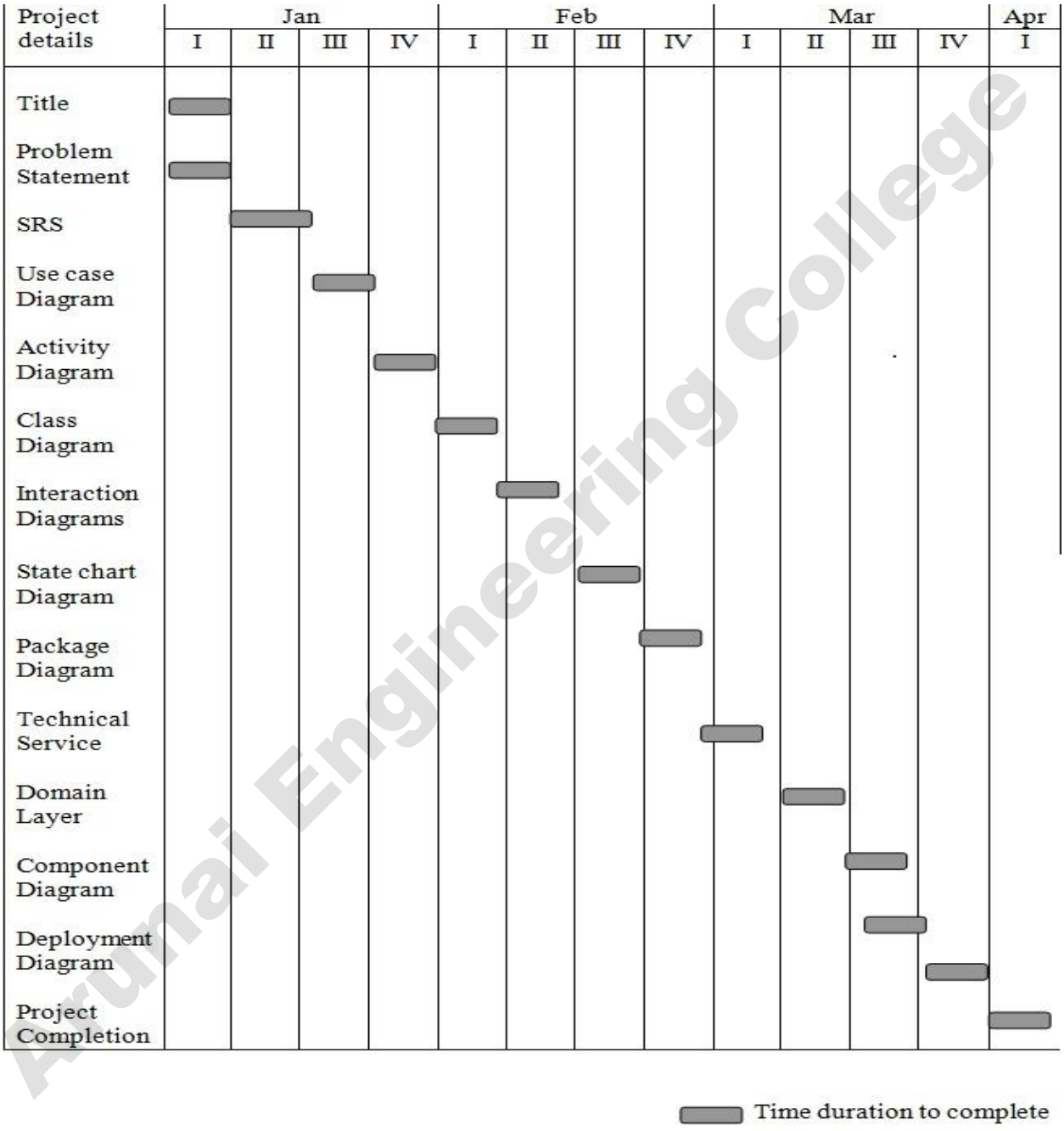
1. Microsoft Visual Basic 6.0
2. Rational Rose
3. Microsoft Access.

2.2 HARDWARE REQURIMENTS:

1. 128MB RAM
2. Pentium III Processor

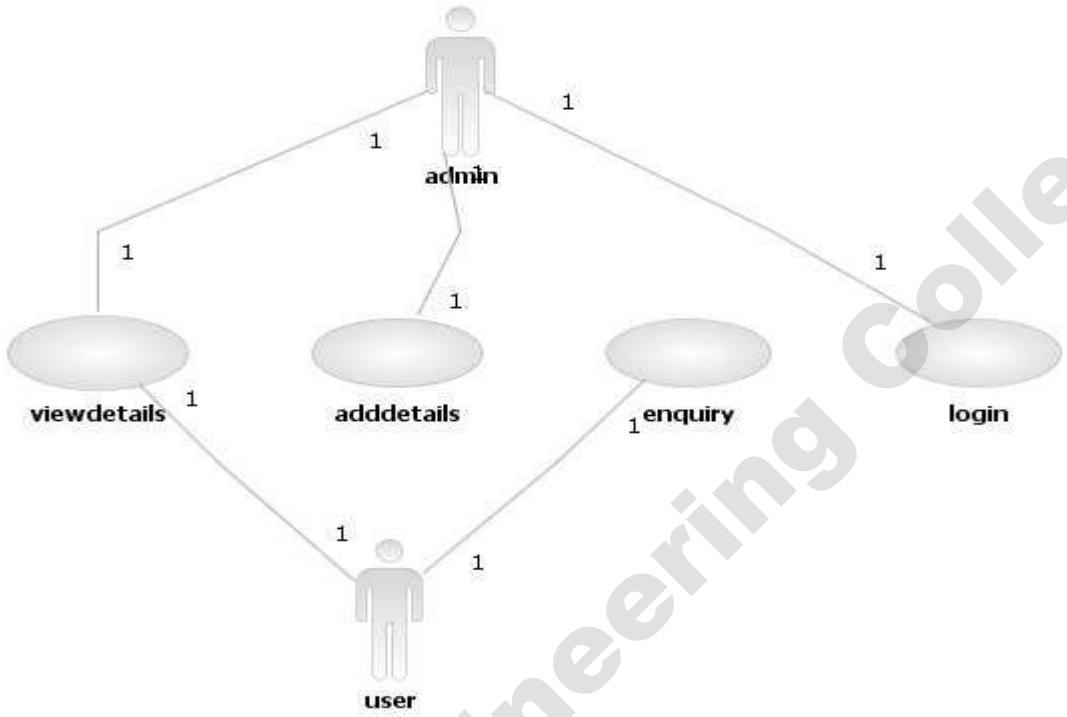
GANTT CHART:

It describe the time schedule for the planning to complete the corresponding and after completion of core product, What is the time taken for the project action of core product.



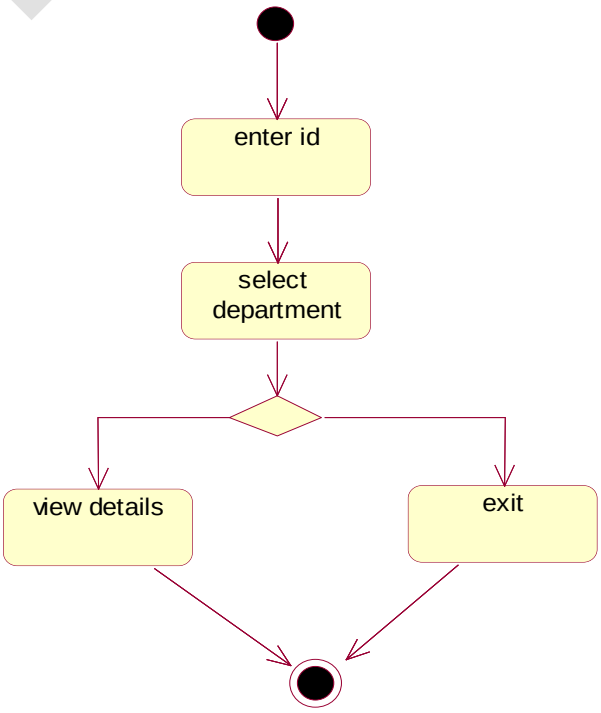
UML USECASE DIAGRAM:

Uml provides use case diagram natation to illustrate the names of use case and author relationship between them. Use case diagram and case relationship are secondary in use case work use case text document.



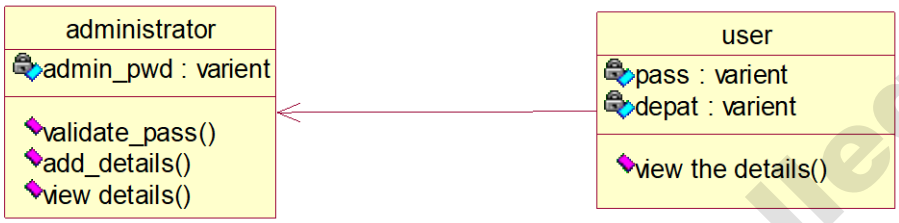
UML ACTIVITY DIAGRAM:

A Uml activity diagram shows sequential and parallel activates in a process, work flows, data flows and compiler algorithm.



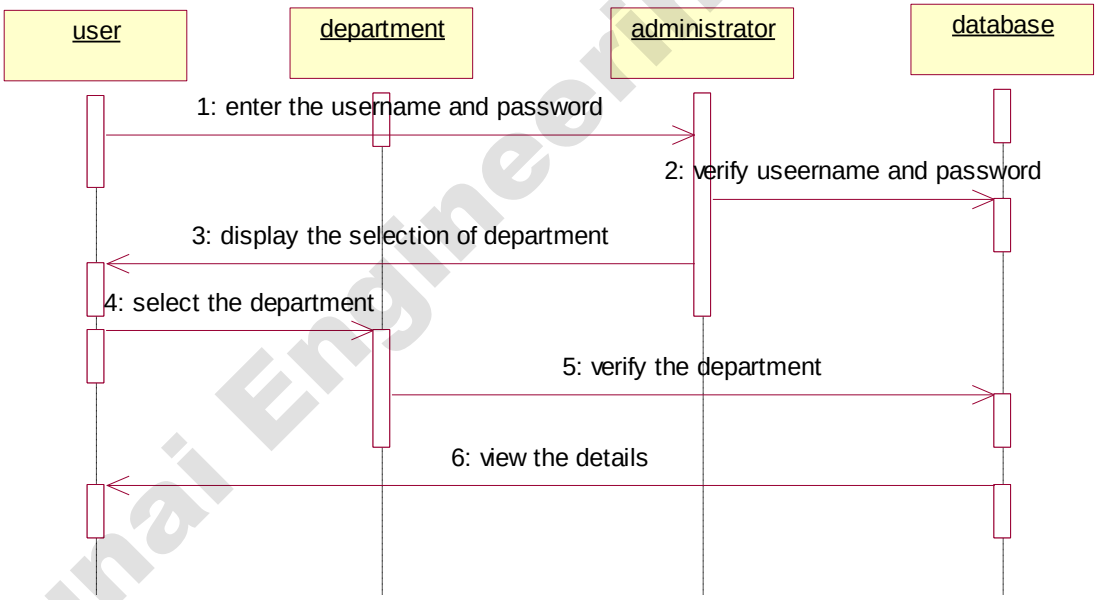
UML CLASS DIAGRAM:

The Uml class diagram is to illustrates class interfaces and their actions. They are used for static object modeling, we have already introduced and used their uml diagram while domain modeling.



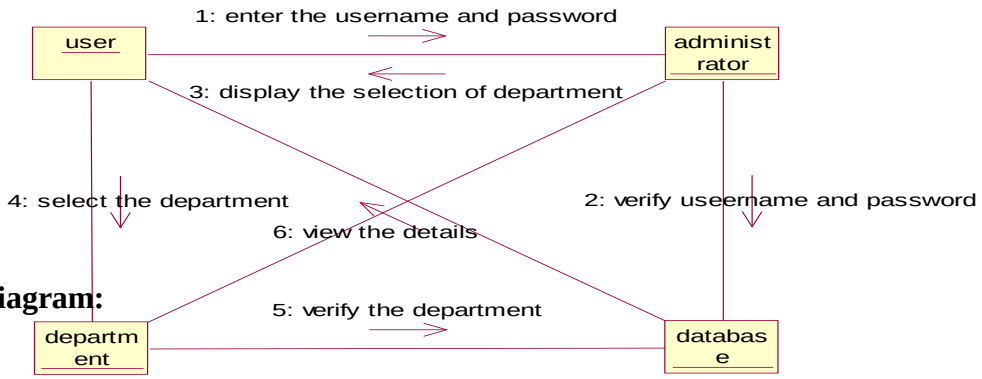
UML SEQUENCE DIAGRAM:

A sequence diagram illustrate a kind of format in which each object interact via message. It is generalize between two or more specialized diagram.



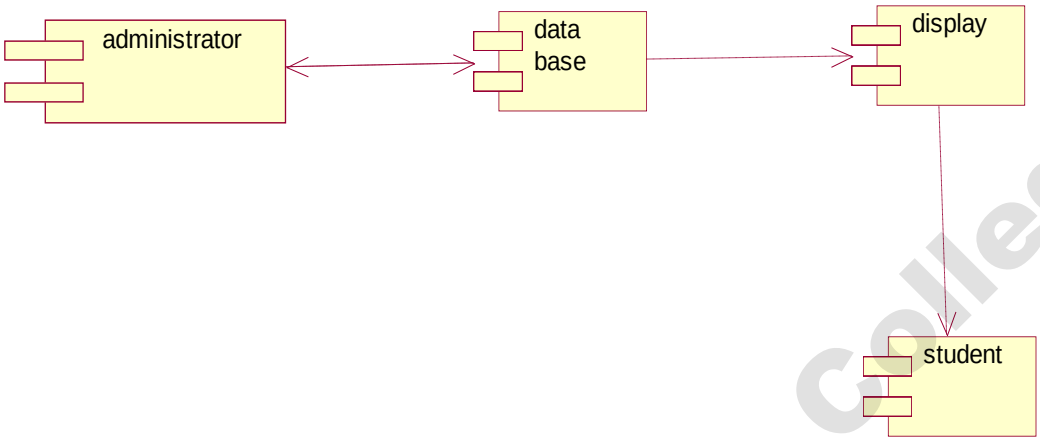
UML COLLABORATION DIAGRAM:

Communication diagram illustrate that object interact on a graph or network format in which object can be placed where an the diagram.



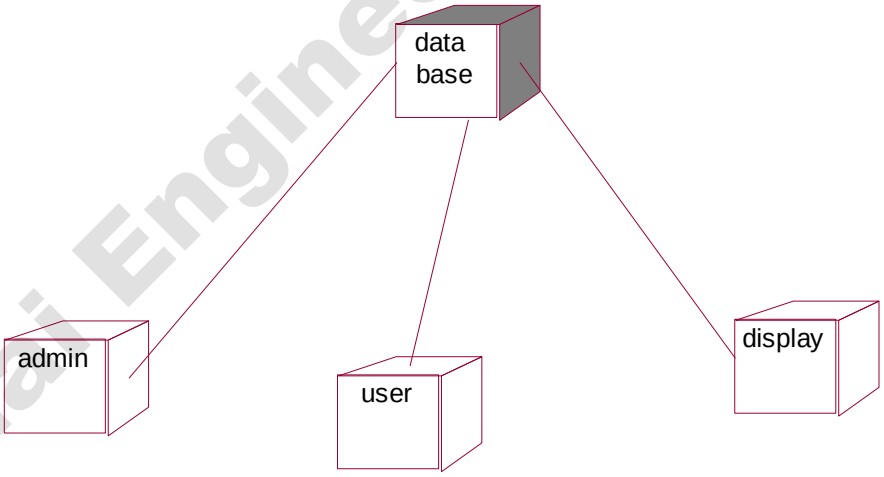
Component diagram:

A component represent a modular part of a system, that encapsulates it contents and whose manifestation is replaced with in its environment. A component define its behaviors in terms of provide and required interfaces. Here the three components are applicant, system admin and authority. The interface between people and system admin, from people to authority



Deployment diagram:

A deployment shows the assignment of concrete artifacts to computational nodes. It shows the deployment of software elements to the physical architecture, and the communication. Deployment diagrams are useful to communicate the physical and deployment architecture.



Ex.No.13 BPO MANAGEMENT SYSTEM
Date:

OBJECTIVE:
To implement a software for BPO Management System

Problem Statement: With the reduction in communication costs and improved bandwidths and associated infrastructure, BPO as a segment is witnessing a massive growth. One of the key challenges that BPO companies that provide data entry/data validation services is an efficient and effective way of getting the source documents from different customers and accurately route the same to different operators for processing.

SOFTWARE REQUIREMENT SPECIFICATION:

PRODUCT PERSPECTIVE

The BPOS acts as an interface between the 'client' and the 'administrator'. This system tries to make the interface as simple as possible and at the same time not risking the security of data stored in. This minimizes the time duration in which the user receives the documents.

SOFTWARE INTERFACE

- **Front End Client** - The applicant and Administrator online interface is built using JSP and HTML. The Administrator's local interface is built using Java.
- **Web Server** - Glassfish application server (SQL Corporation).
- **Back End** - SQL database.

HARDWARE INTERFACE

The BPO system's server is directly connected to the client systems via ftp. The client systems have access to the database in the server.

Requirements
A requirement is defined as a condition or capability needed by a user to solve a problem or achieve an objective.

a)FUNCTIONAL REQUIREMENTS:
A functional requirement describes an interaction between its environments.
Functional requirements describes the system function in details, its input and output , exception etc.,.The functional requirement are as follows:
ANALYSIS: In this phase, the project requirement is analyzed and the availability of the requirement is seen.
DESIGN: The design of a project is made by the project manager.
IMPEMENTATION: The construction of project is done and coding is developed.
TESTING: Testing activities are made several types of testing is carried on.
MAINTENANCE: In this the software maintenance and the ways to avoid the drawback of the software is made.
DEPLOYMENT:IT is the process of installing and kick starting of the program.

b)NON-FUNCTIONAL REQUIREMENT:

Non-functional requirement are requirements which are not directly concerned with the specific functions delivered by the system. They relate to emergent system properties such as reliability, response time and store occupancy. They relate to the system as whole rather than to
individual system features which means that they are more critical than individual functional requirements. The non-functional requirement are as follows:

SPEED: This software designed as a high speed software.
SIZE: The size of this software is about 100MB.
PORTABILITY: This software can be easily portable.
RELIABILITY: The rate of failure of this software is very low.

c) HARDWARE REQUIREMENT:

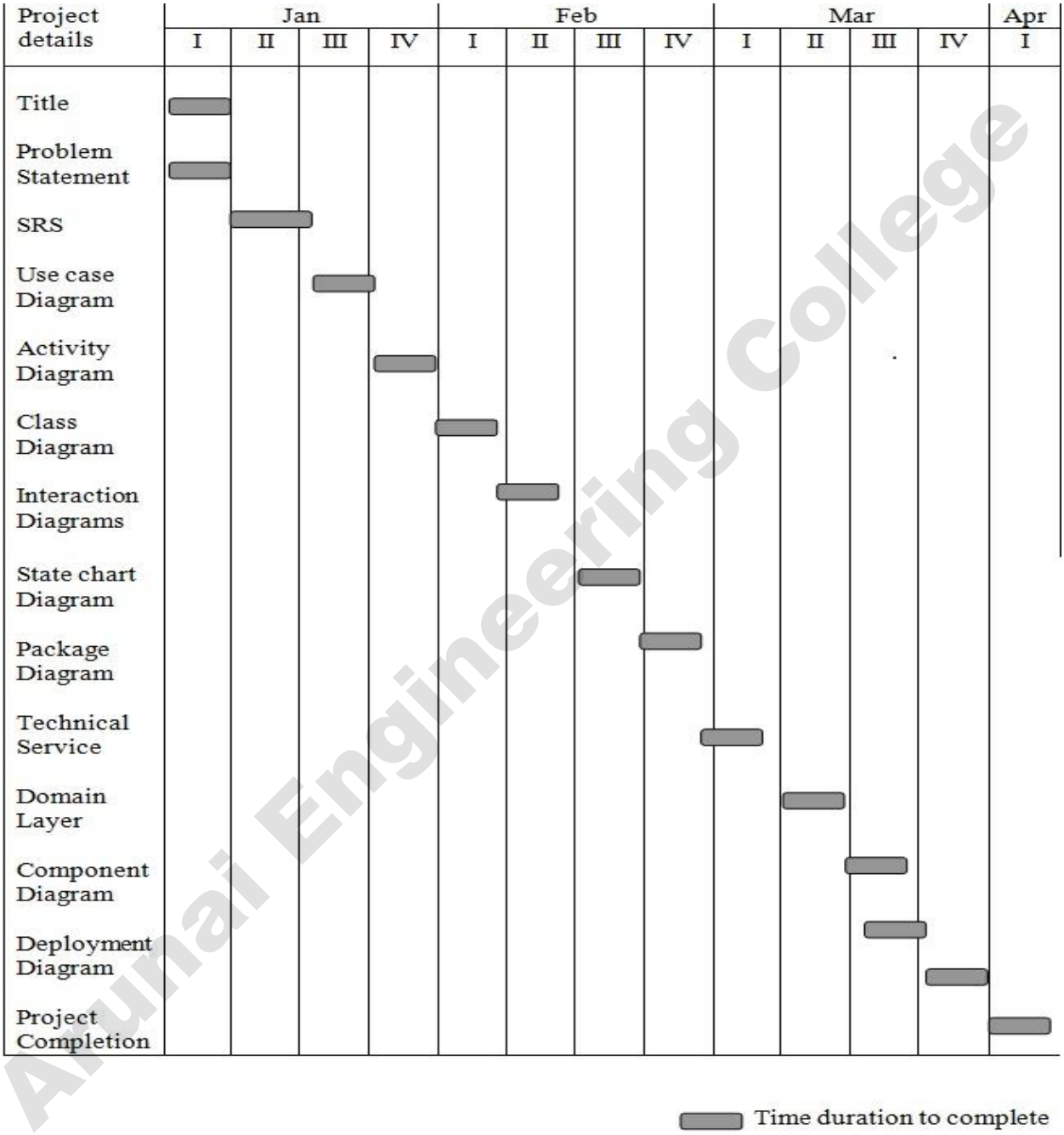
Processor: Pentium IV
Harddisk:40GB
Ram:512MB
DVD drive:1

d) SOFTWARE REQUIREMENT:

Operating System: Windows xp
Front end tool: Rational Rose Enterprise suit
Back end tool: Oracle 10

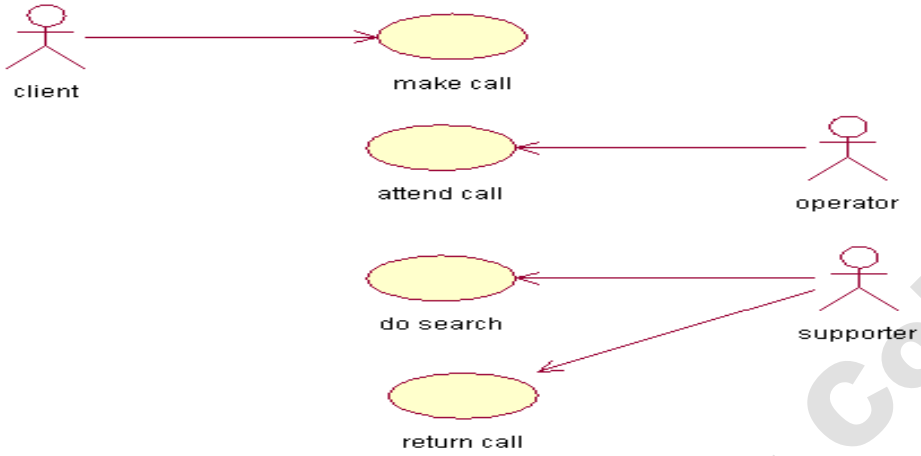
GANTT CHART:

It describe the time schedule for the planning to complete the corresponding and after completion of core product, What is the time taken for the project action of core product.



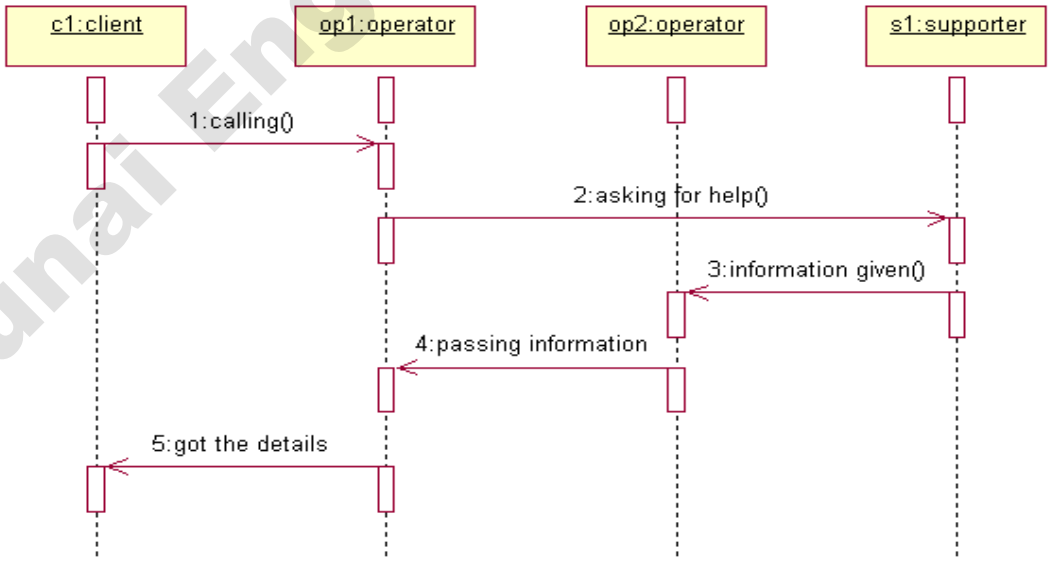
UML USECASE DIAGRAM:

Uml provides use case diagram notation to illustrate the names of use case and author relationship between them. Use case diagram and case relationship are secondary in use case work use case text document



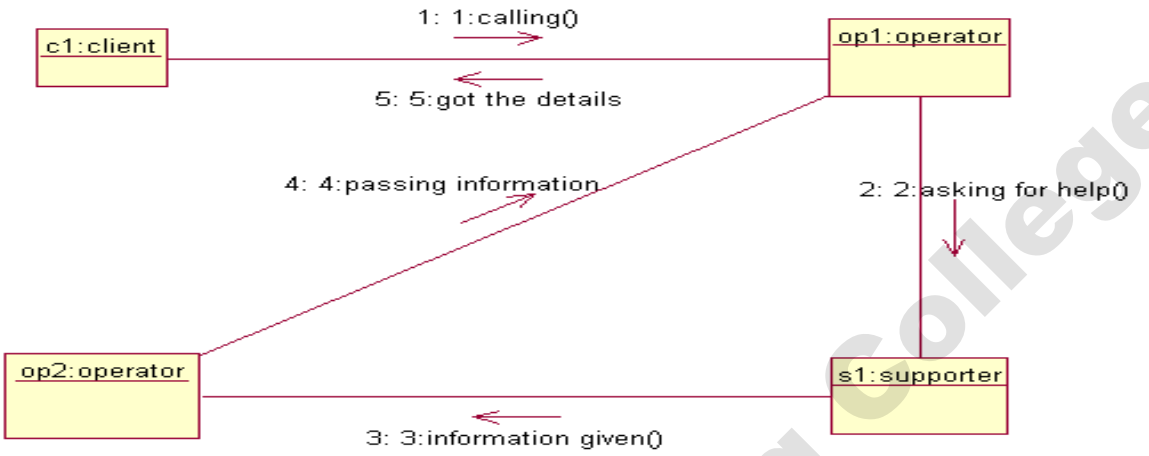
SEQUENCE DIAGRAM:

The sequence are an easy and initiative way of describing the behavior of our system by using interaction between the system and its environment.



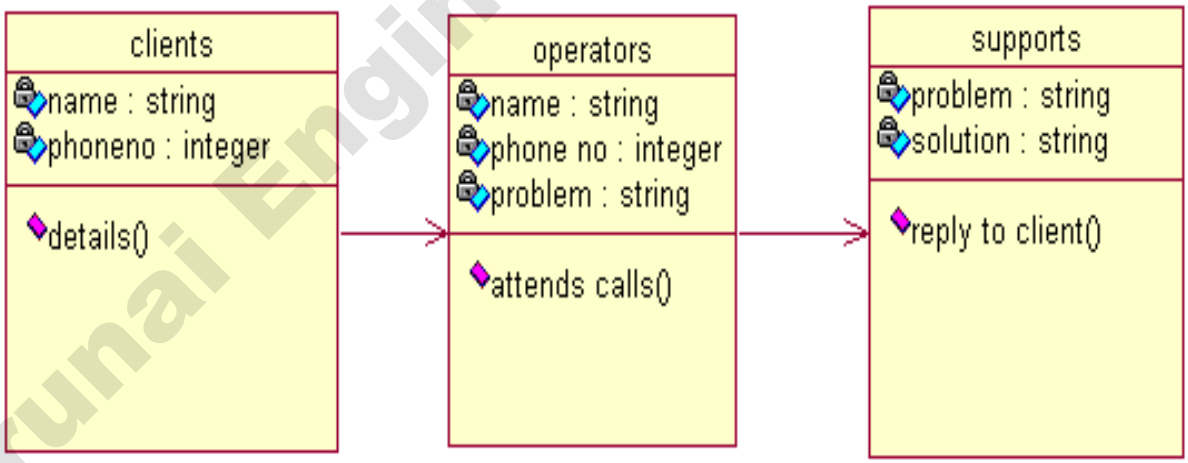
COLLABORATION DIAGRAM:

A collaboration diagram represents the collaboration which is a set of objects of a particular context its environment.



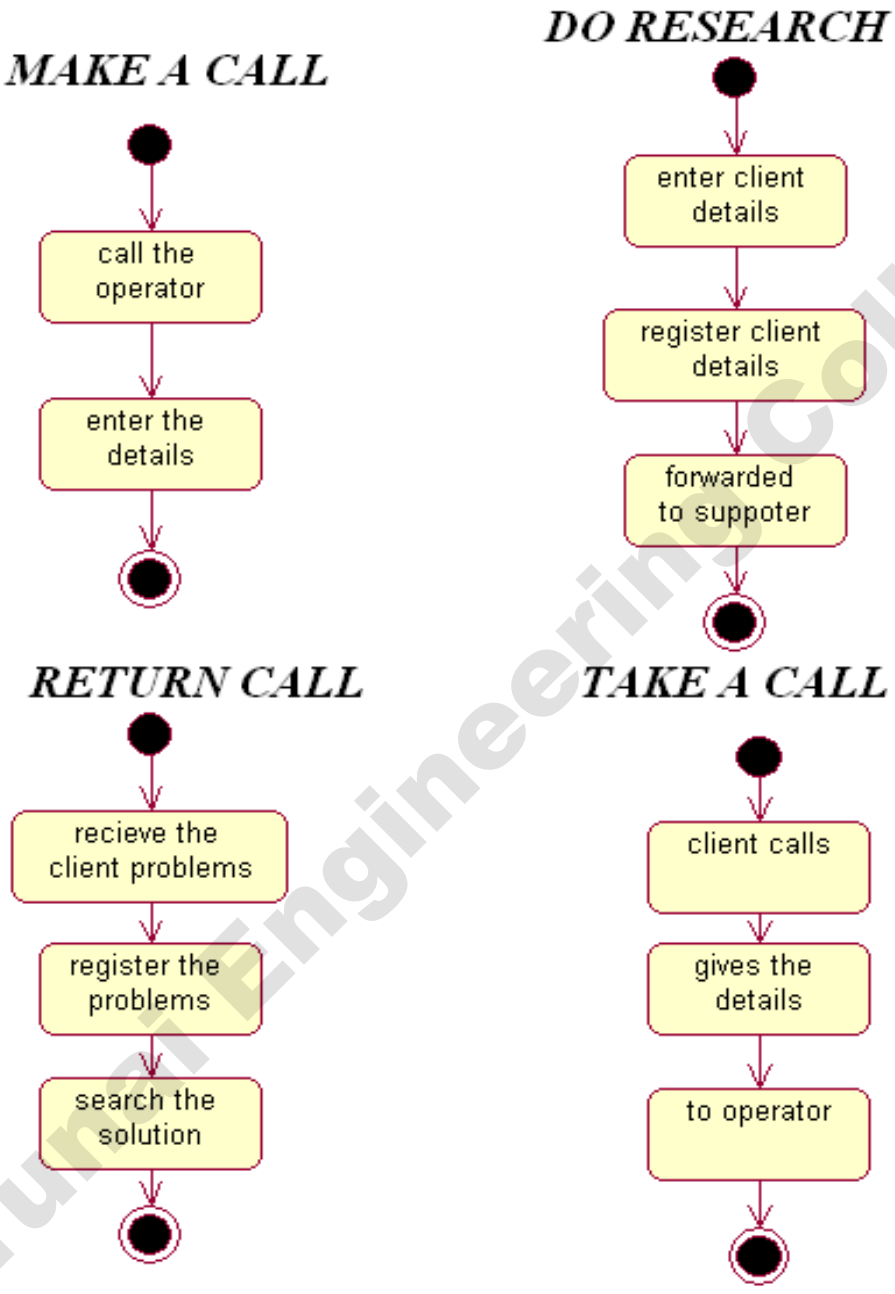
CLASS DIAGRAM:

The class diagram is also referred to a object modeling in the main status analysis. It contains Association and Attributes.



ACTIVITY DIAGRAM:

Activity diagram which show the sequence of the state that an object goes through during its lifestyle in response to outside simulate and messages.



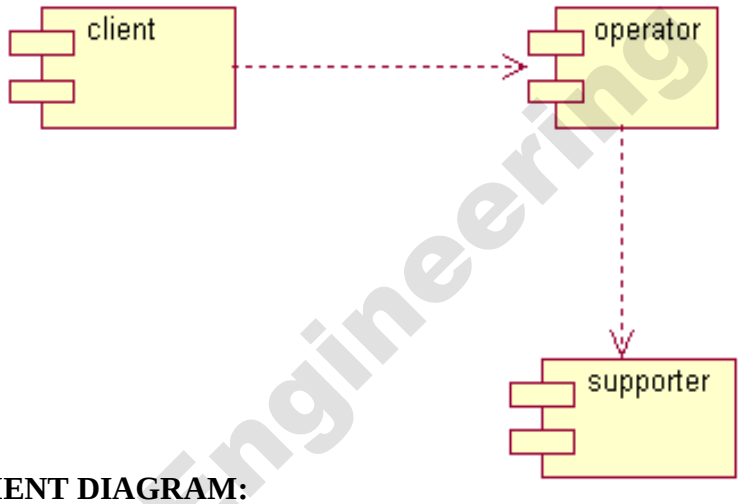
COMPONENT DIAGRAM:

Component diagram model the physical component in a design these high level physical components may or may not be equivalent to many smaller components.

List of components are,

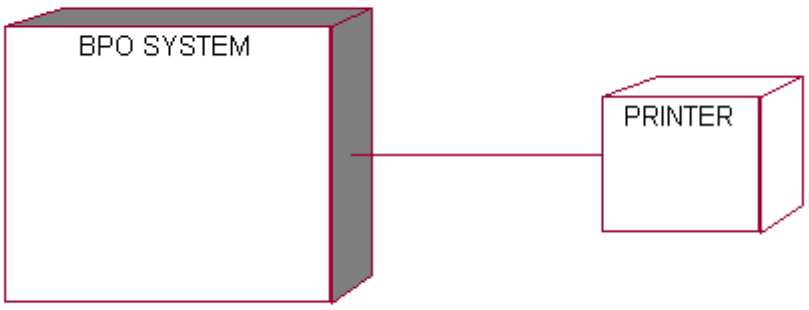
- Client
- Operator
- Supporter

Component diagram:



DEPLOYMENT DIAGRAM:

A Deployment diagram shows the relationship among software and hardware components in the delivered system.



Ex.No. 14 **LIBRARY MANAGEMENT SYSTEM**
Date:

SOFTWARE REQUIREMENTS SPECIFICATION

The main purpose of creating the document about the software is to know about the list of the requirements that is required in the software project, part of the project to be developer. It specifies the requirements to develop a processing software part that complete the set of requirements. The students need the book for study about the subject. The L:ibrary Management System offers the student to borrow the required book to study for particular days and return it safely to the library before the due date.

1.GLOSSARY

Generally a glossary is performed to define the entire domain used in the problem. It defines about the storage item that are familiar to the user membership card, it provide these definite. The data dictionary provide all the definition and information about the attribute we are using the particular project to the user.

2.DEFINITION:

The glossary contains the working definition for the key concept in the Library Management system.

3. LOGIN ID:

The login id is issued to the student when the student join the library management system

4. PROFESSION

The person who issues the book to the Student.

5. SCOPE

In this specification, we define about the system requirement that is apart from the functionality.

6. FUNCTIONALITY

Many member of the process line to check for its occurrence and transaction, we all have to carryover at sometime.

7. USABILITY

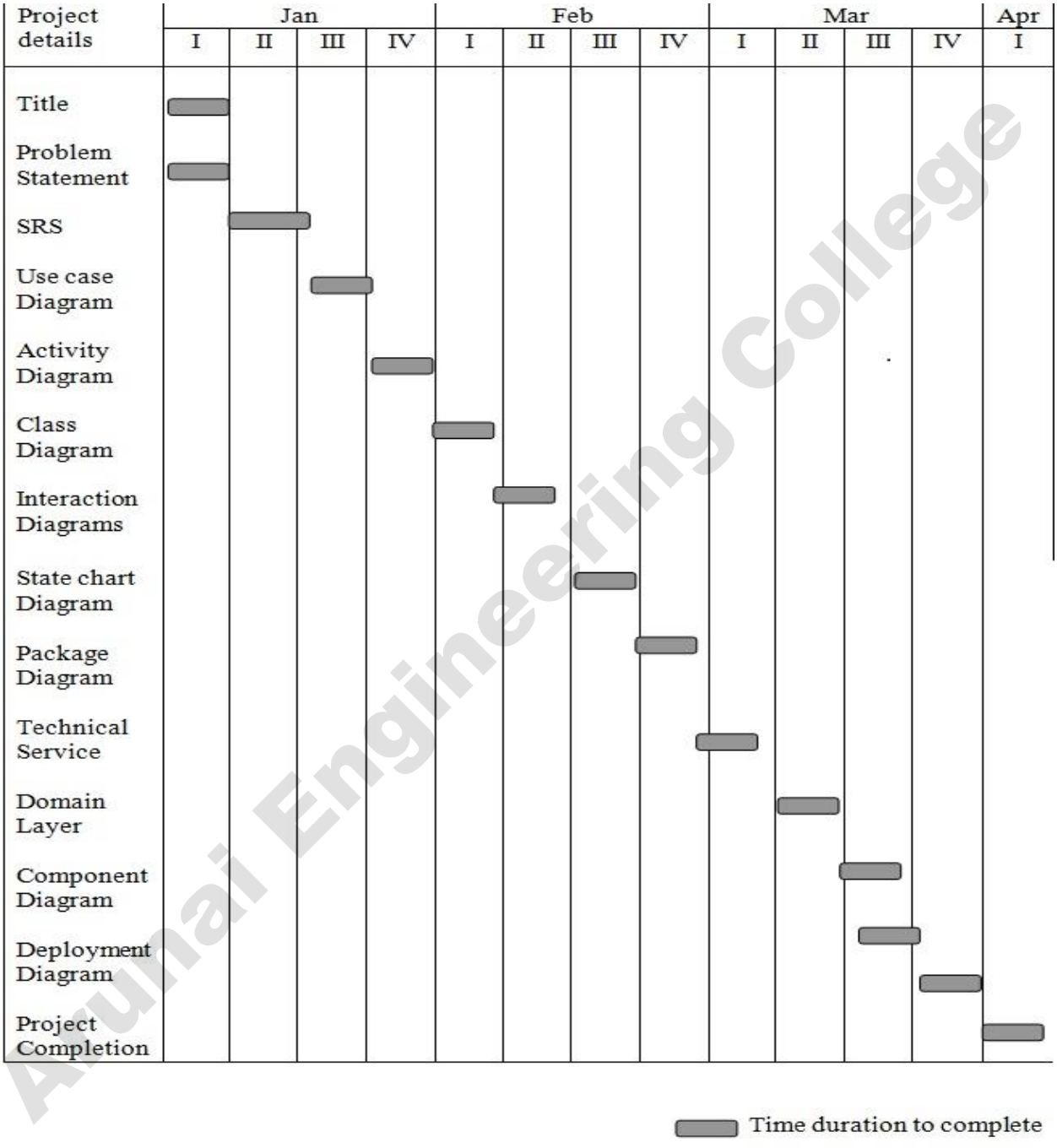
The user interface to make the transaction should be effectively.

8. PERFORMANCE

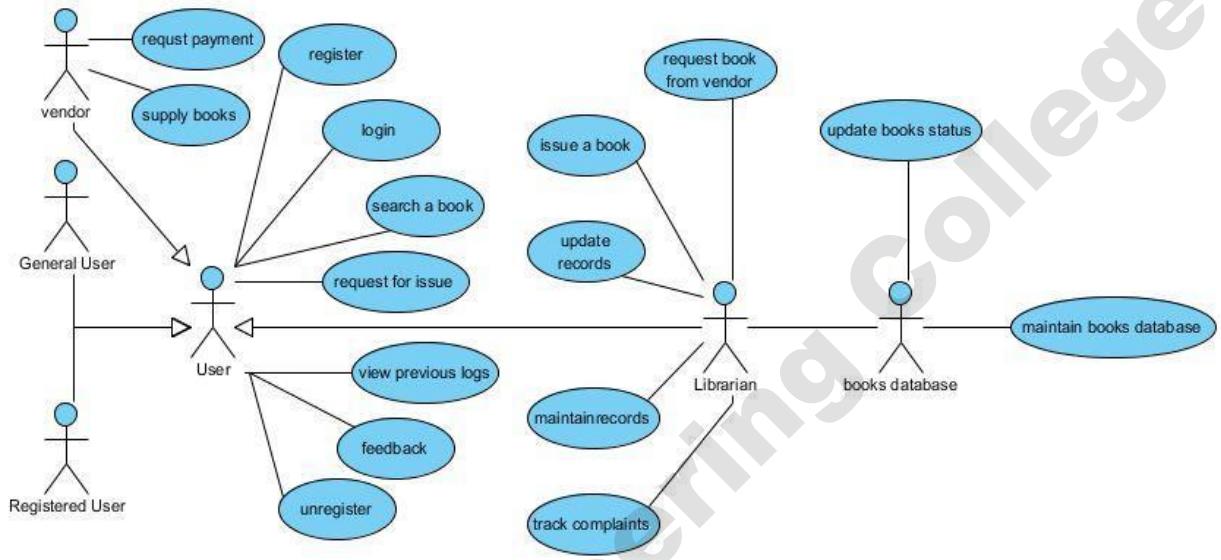
It is the capability about which it can perform function for many users at the same time effectively without any error occurrence.

GANTT CHART:

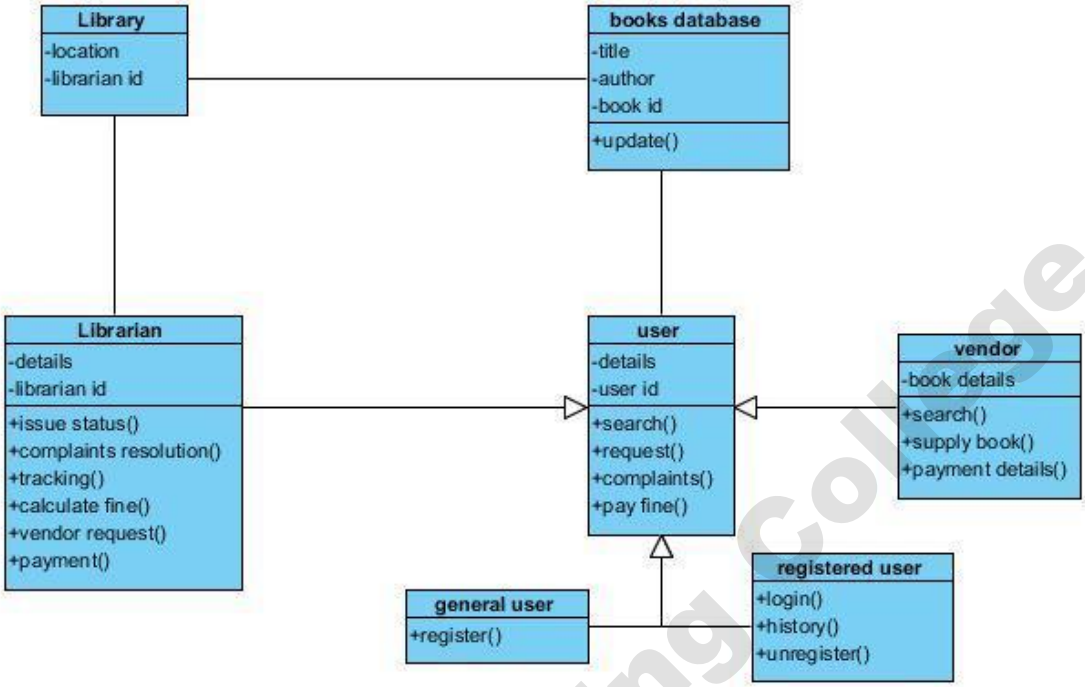
It describes the time schedule for the planning to complete the core product and after complete of core product, what is the time taken for the project action of core project.



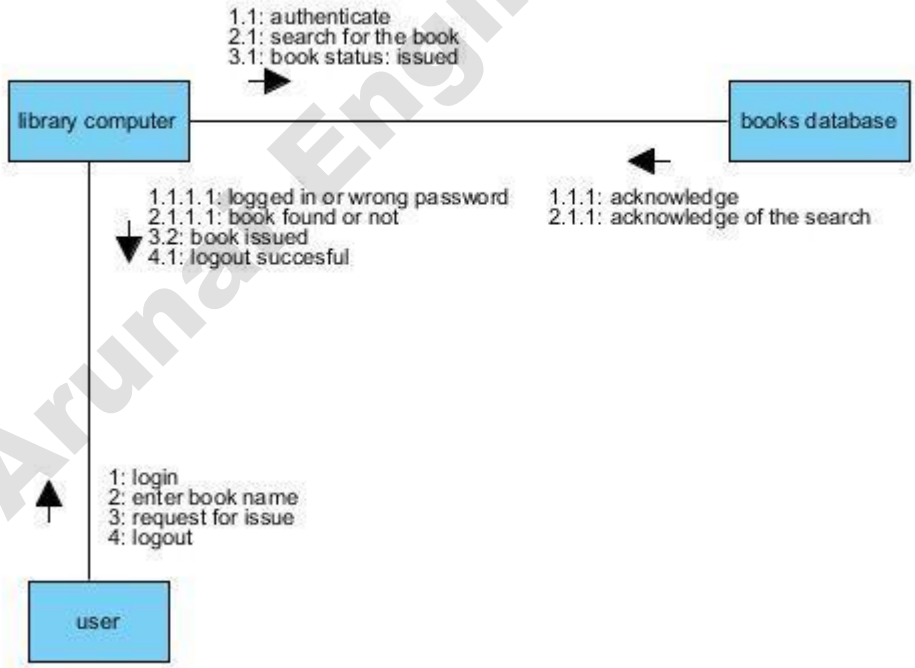
USE CASE DIAGRAM:



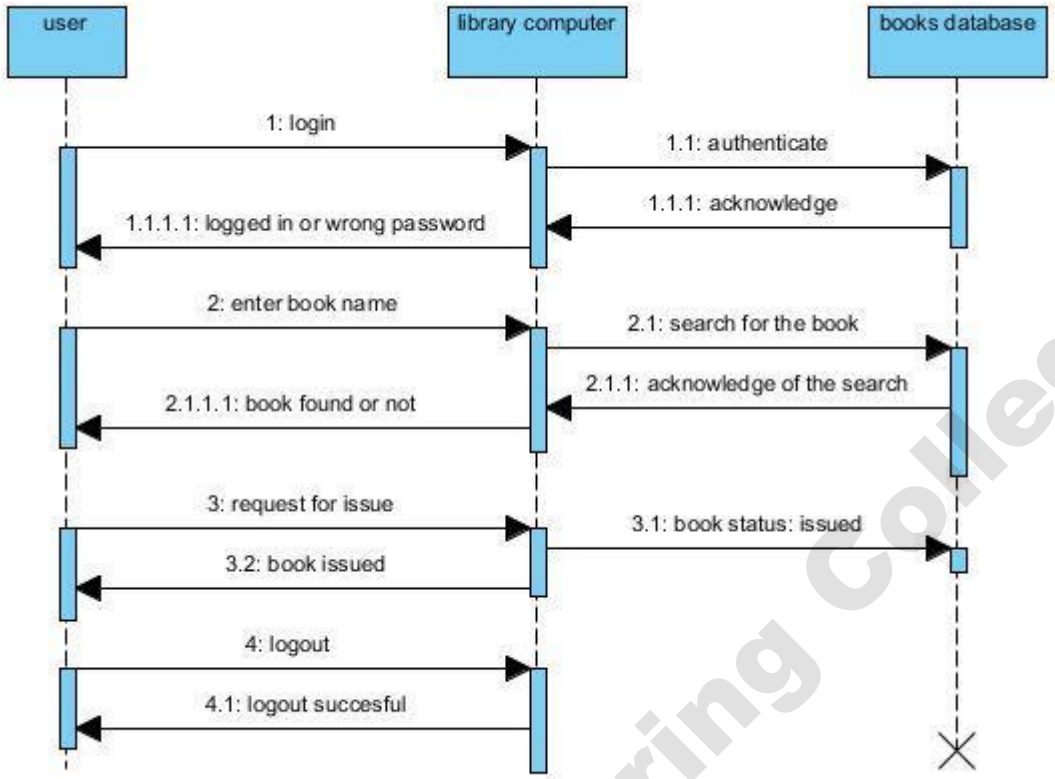
CLASS DIAGRAM:



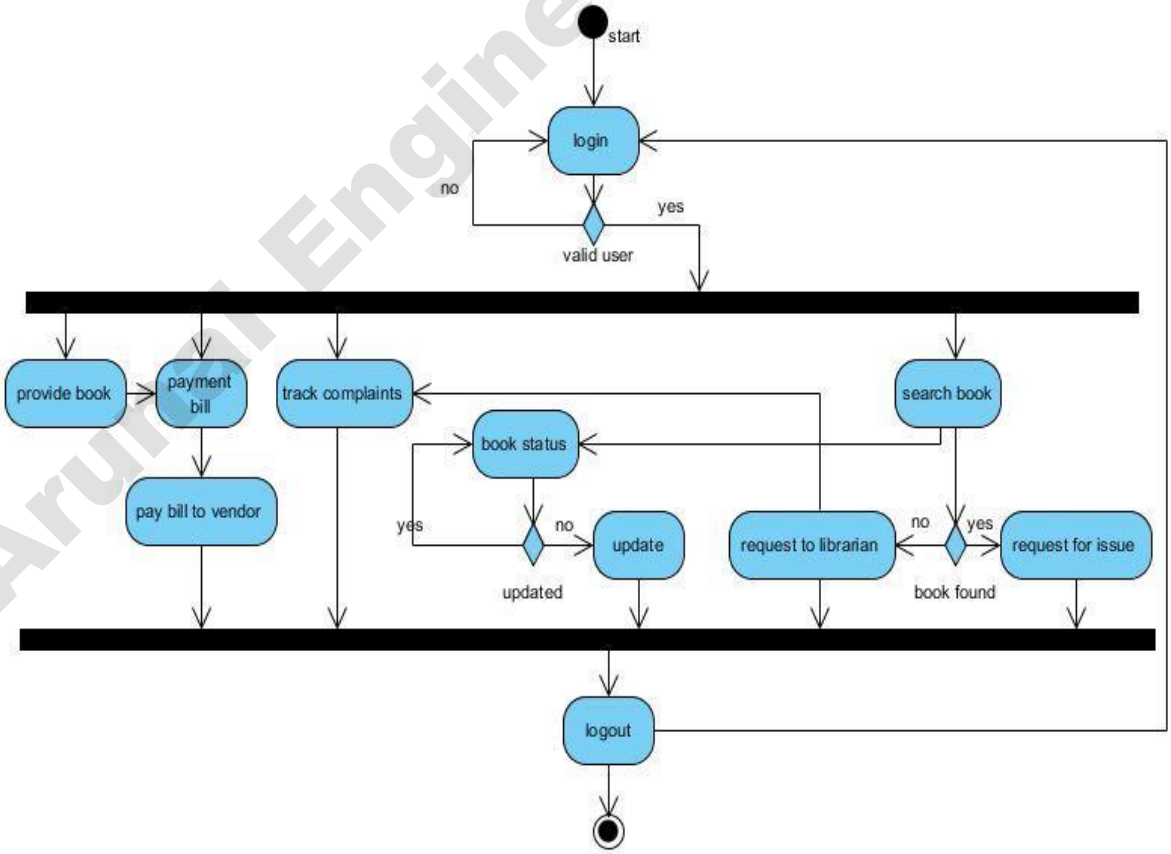
COLLABORATION DIAGRAM:



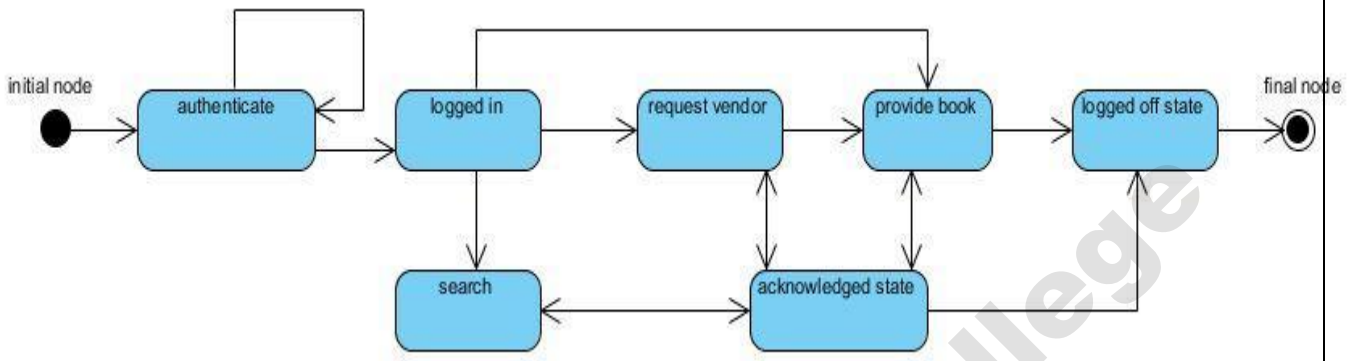
SEQUENCE DIAGRAM:



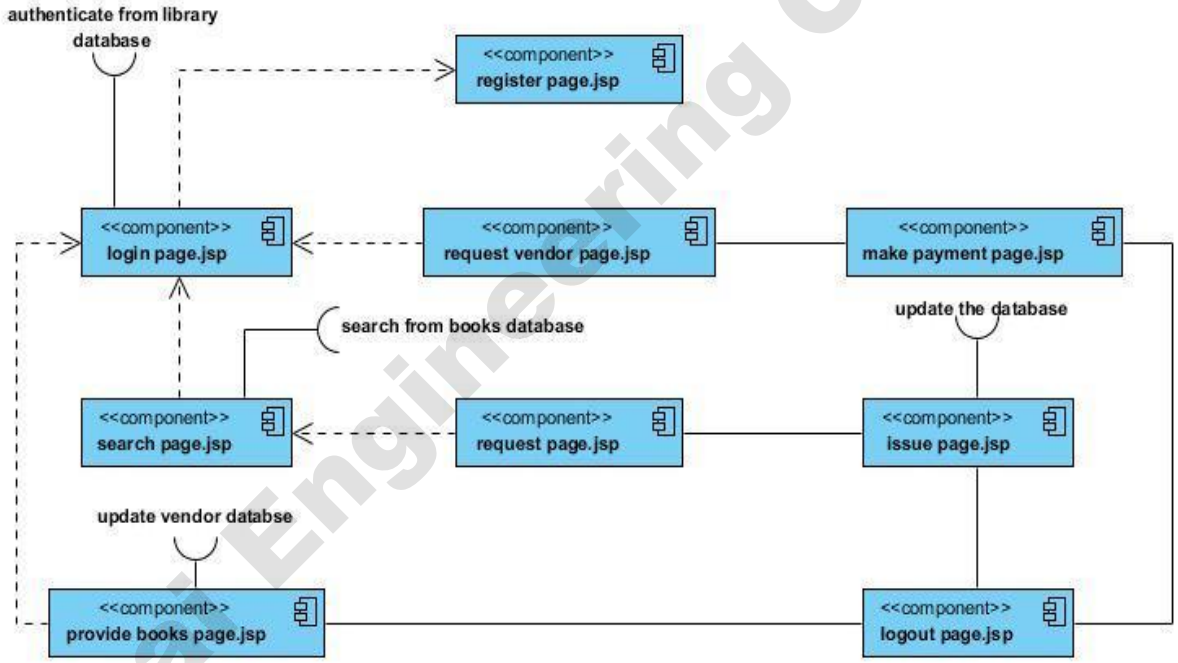
ACTIVITYDIAGRAM:



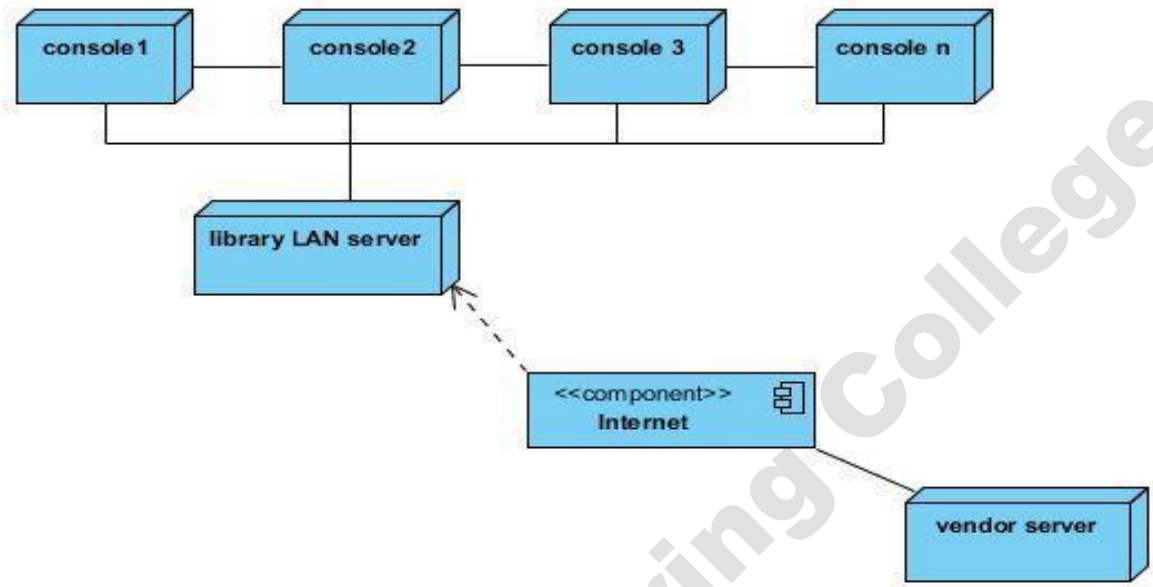
STATE CHART DIAGRAM:



COMPONENT DIAGRAM:



DEPLOYMENT DIAGRAM:



Ex.No. 15 STUDENT INFORMATION SYSTEM
Date:

SOFTWARE REQUIREMENTS SPECIFICATION

The main purpose of creating the document about the software is to know about the list of the requirements that is required in the software project, part of the project to be developer. It specifies the requirements to develop a processing software part that complete the set of requirements. It offers an effective way for administration to maintain all the student records

1.GLOSSARY

Generally a glossary is performed to define the entire domain used in the problem. It defines about the storage item that are familiar to the user membership card, it provide these definite. The data dictionary provide all the definition and information about the attribute we are using the particular project to the user.

2.DEFINITION:

The glossary contains the working definition for the key concept in the student information system.

3. PROFESSION

The person who maintains all the information about the Student.

4. SCOPE

In this specification, we define about the system requirement that is apart from the functionality.

6. FUNCTIONALITY

Many member of the process line to check for its occurrence and transaction, we all have to carry over at sometime

7. USABILITY

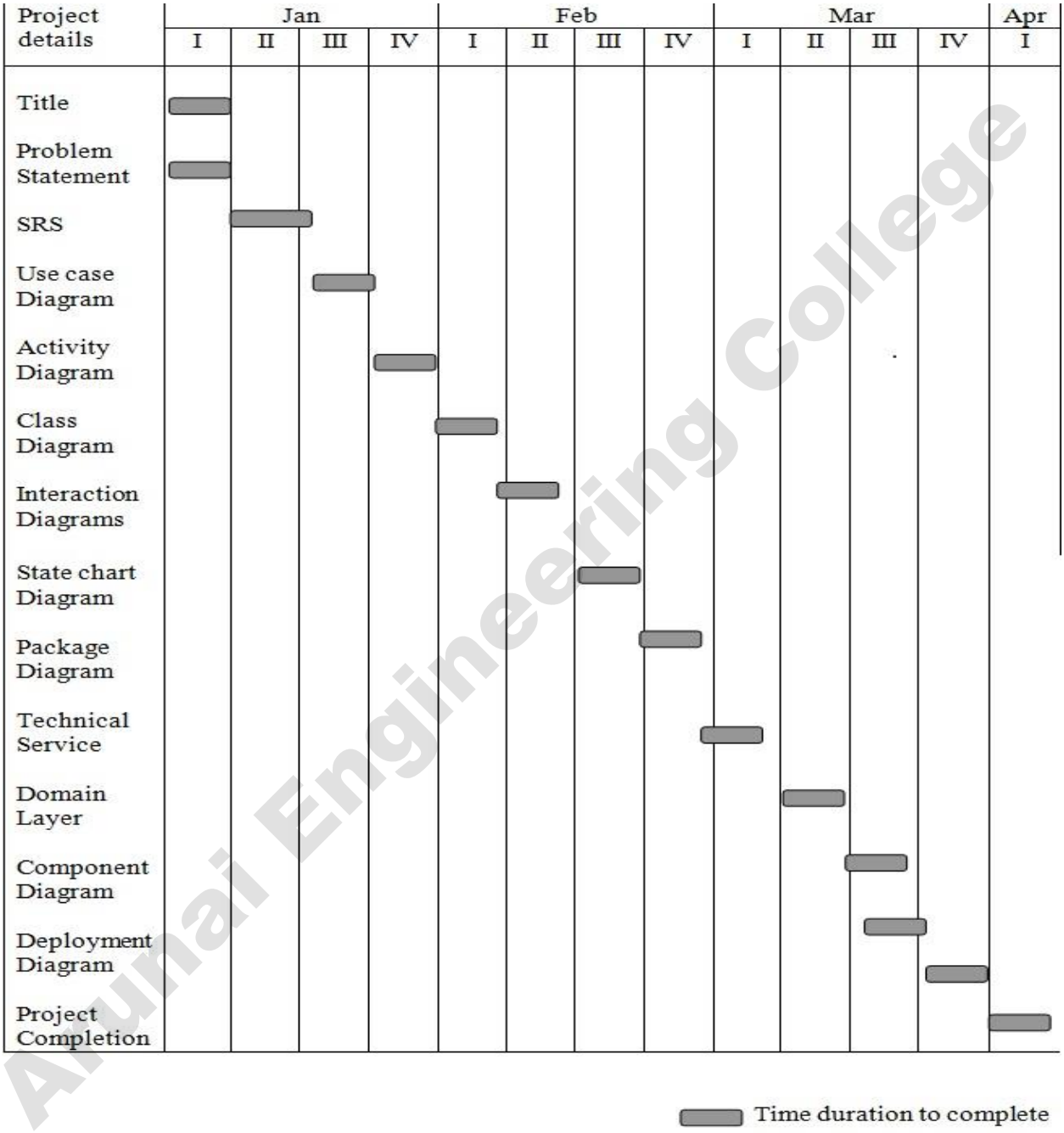
The user interface to make the transaction should be effectively.

8. PERFORMANCE

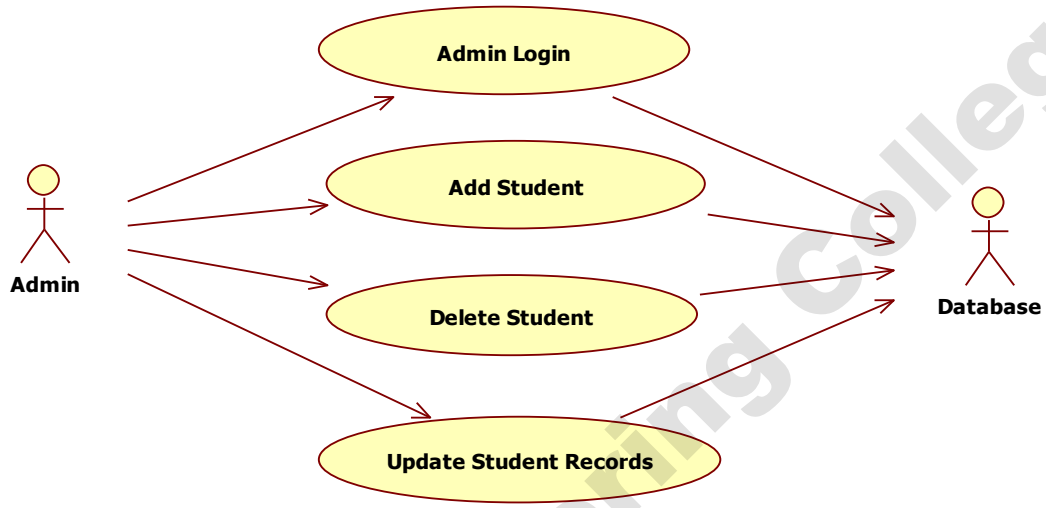
It is the capability about which it can perform function for many users at the same time effectively without any error occurrence.

GANTT CHART:

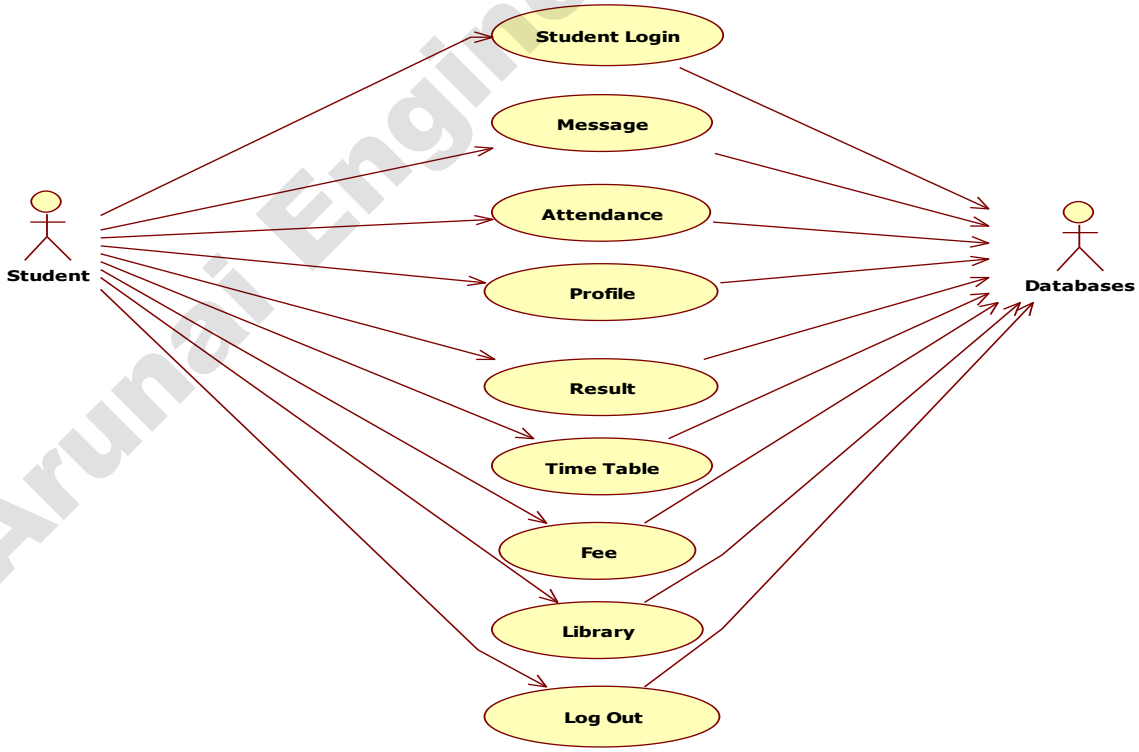
It describes the time schedule for the planning to complete the corresponding and after completion of core product, what the time is taken for the project action of core.



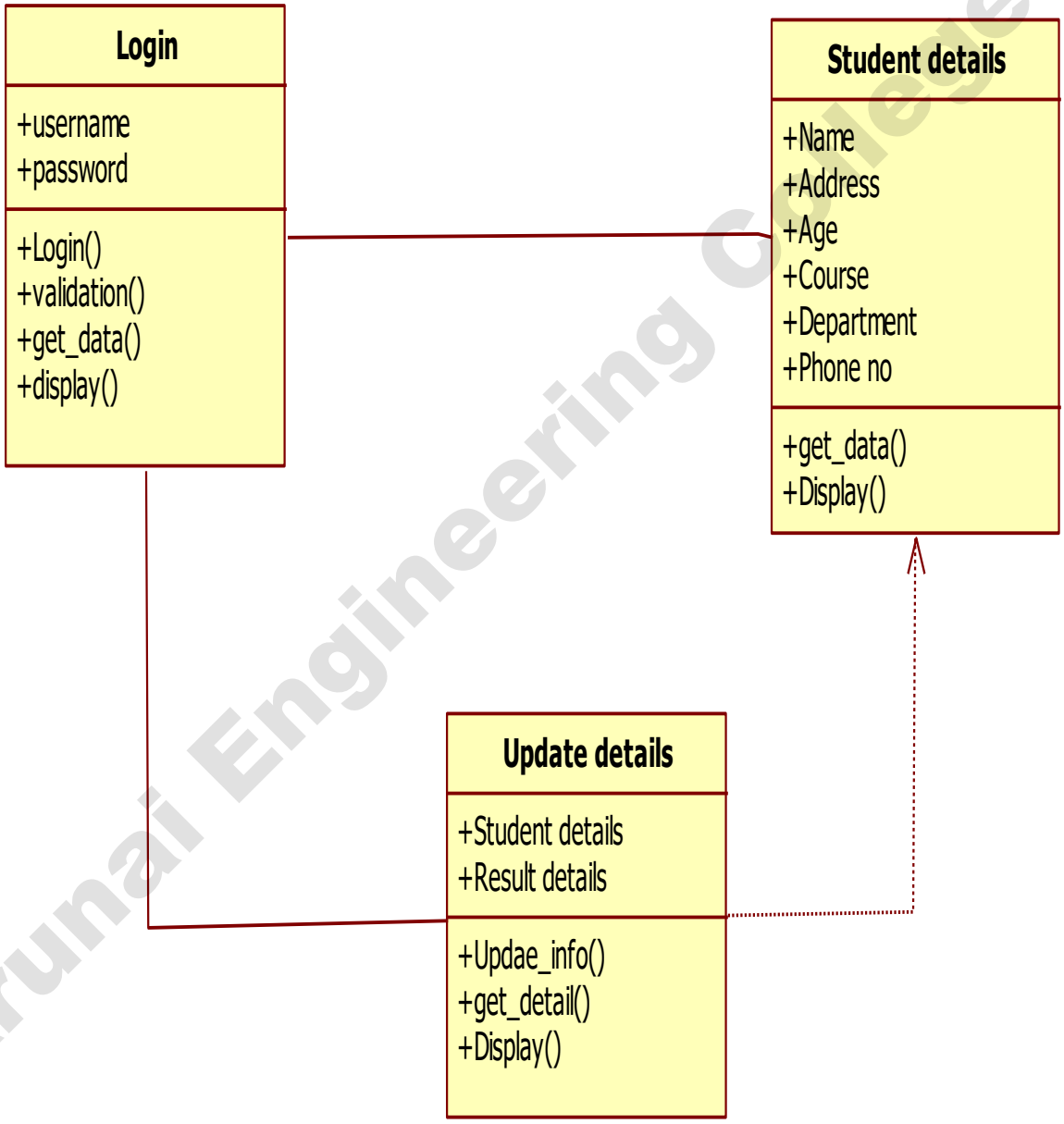
USE CASE DIAGRAM:
For Administrator:



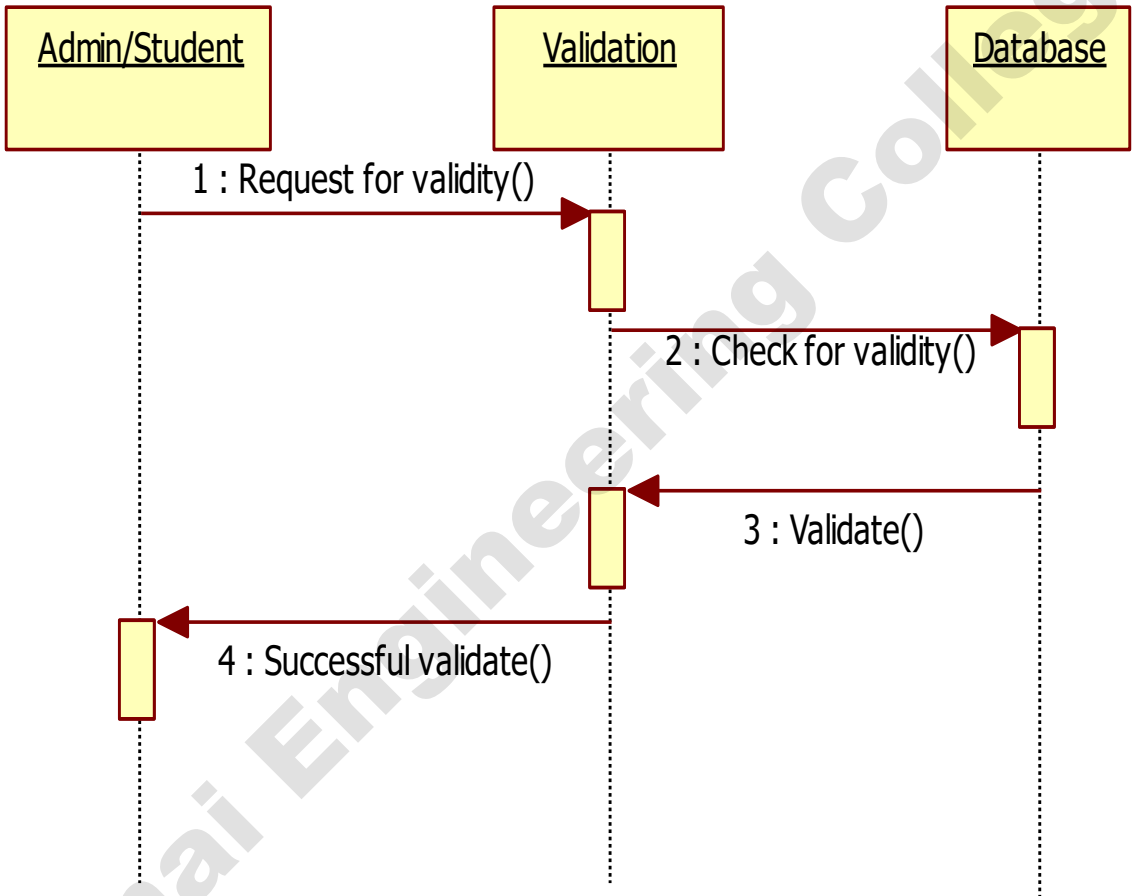
For Student:



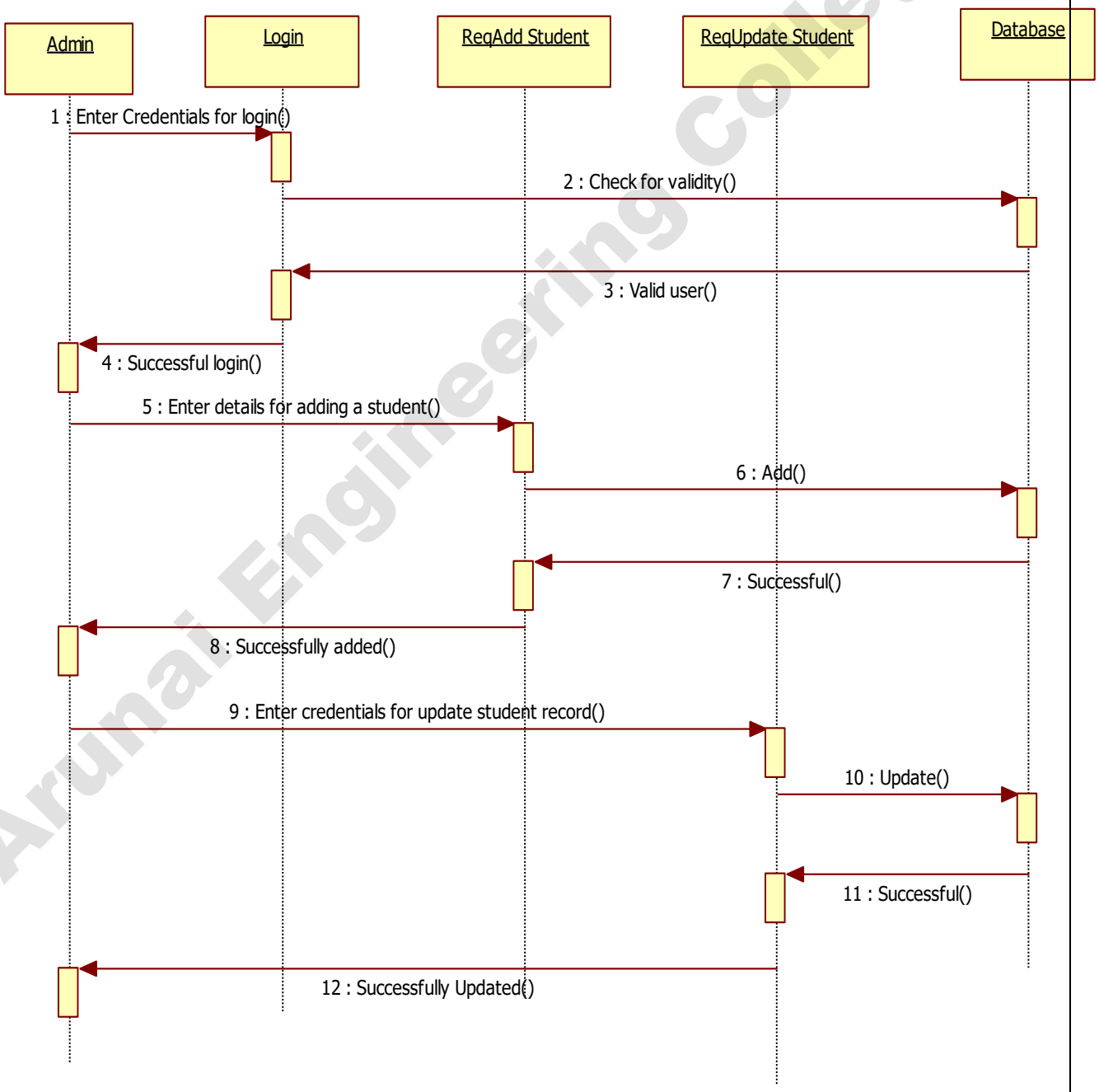
CLASS DIAGRAM:



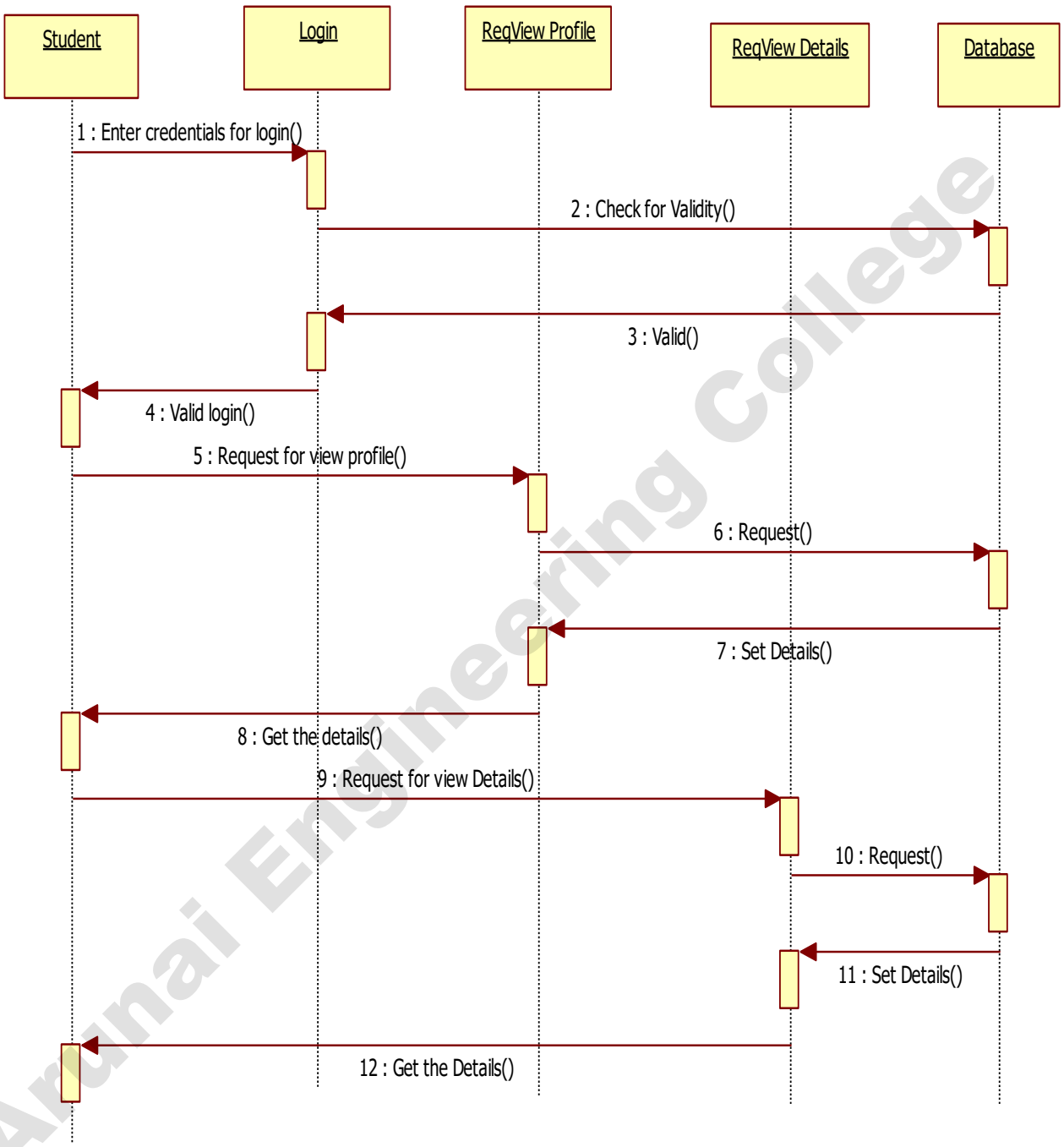
SEQUENCE DIAGRAM:
For Validity:



For Administrator:

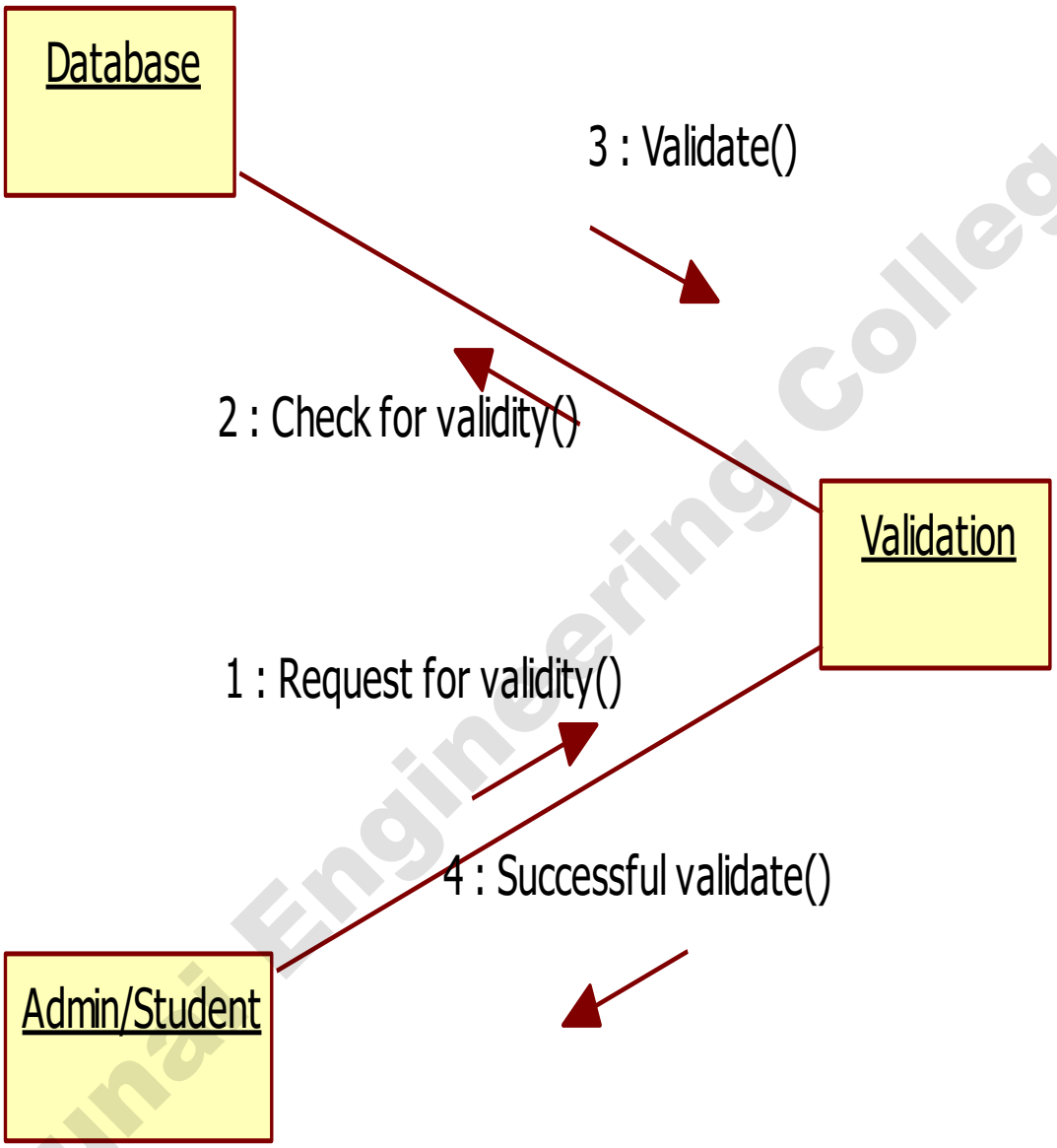


For Student:

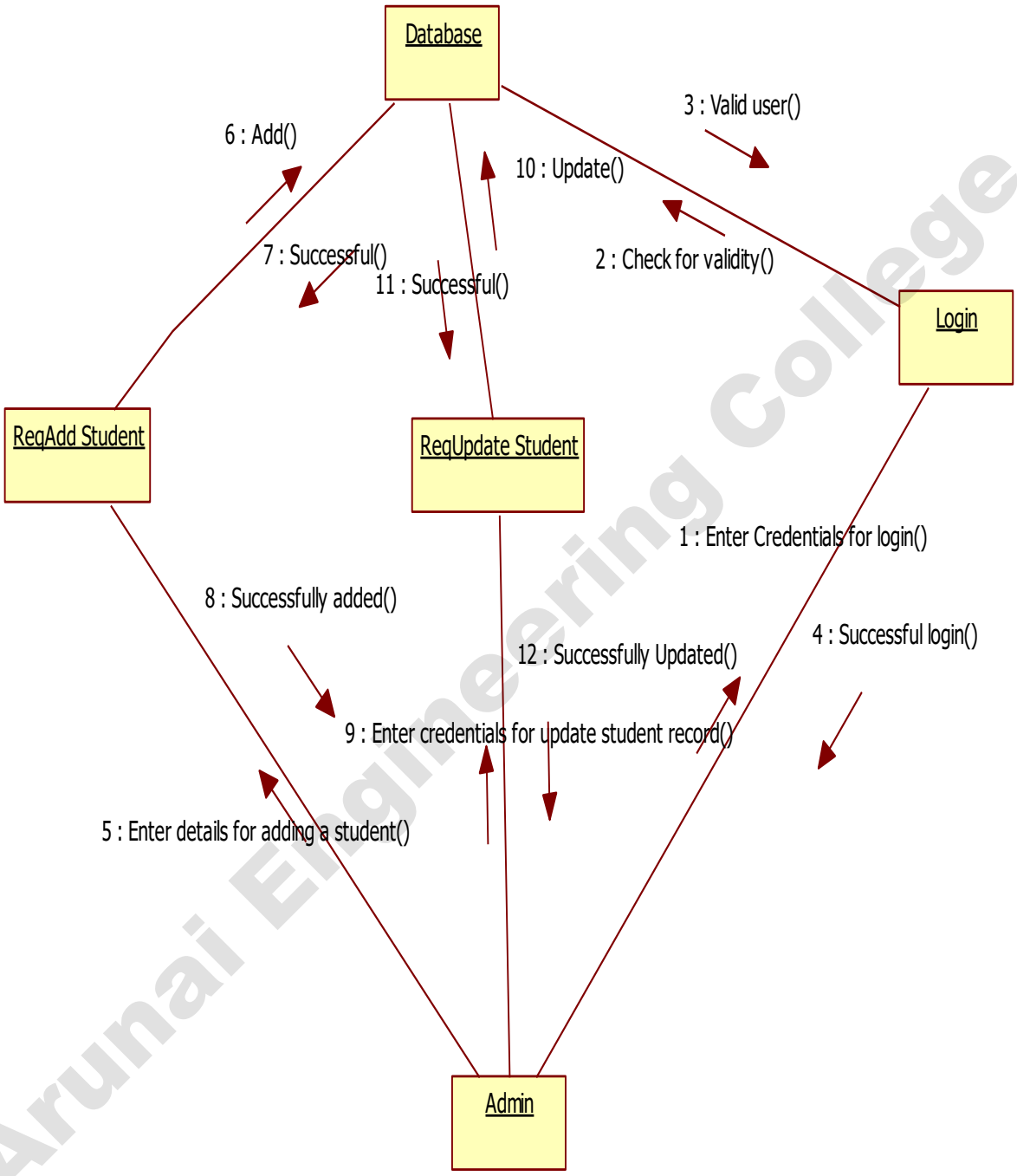


COLLABORATION DIAGRAM:

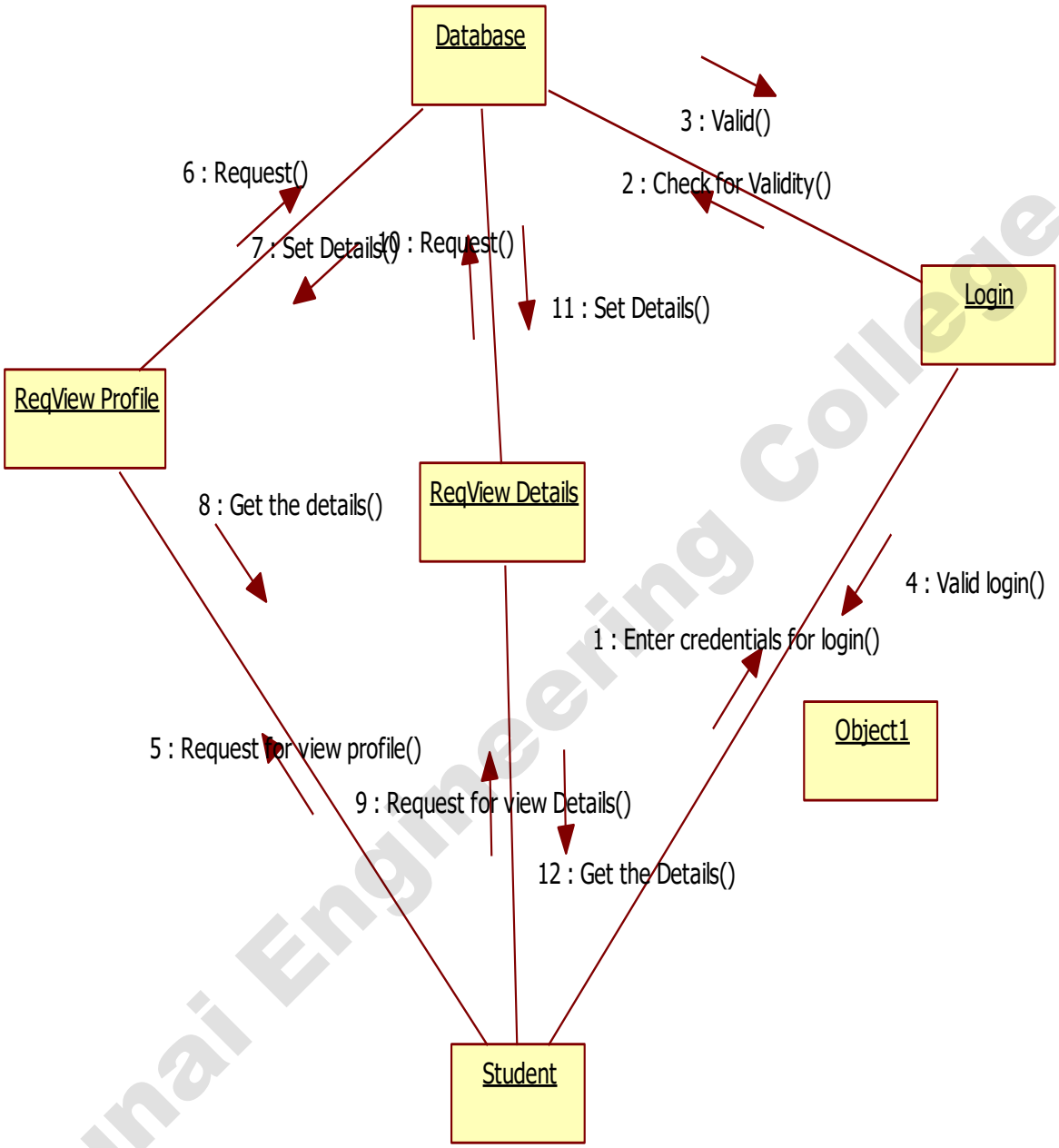
For Validity:



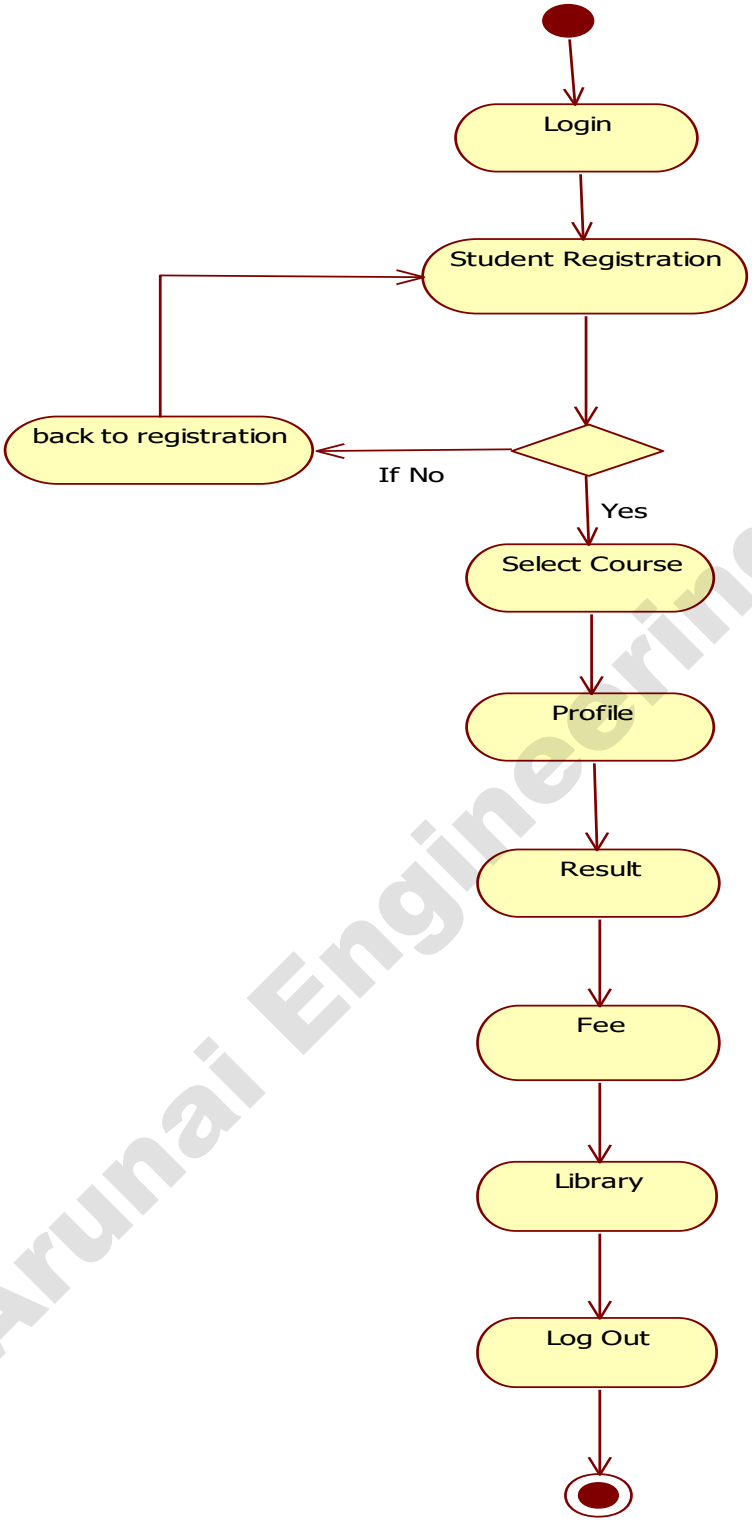
For Administrator:



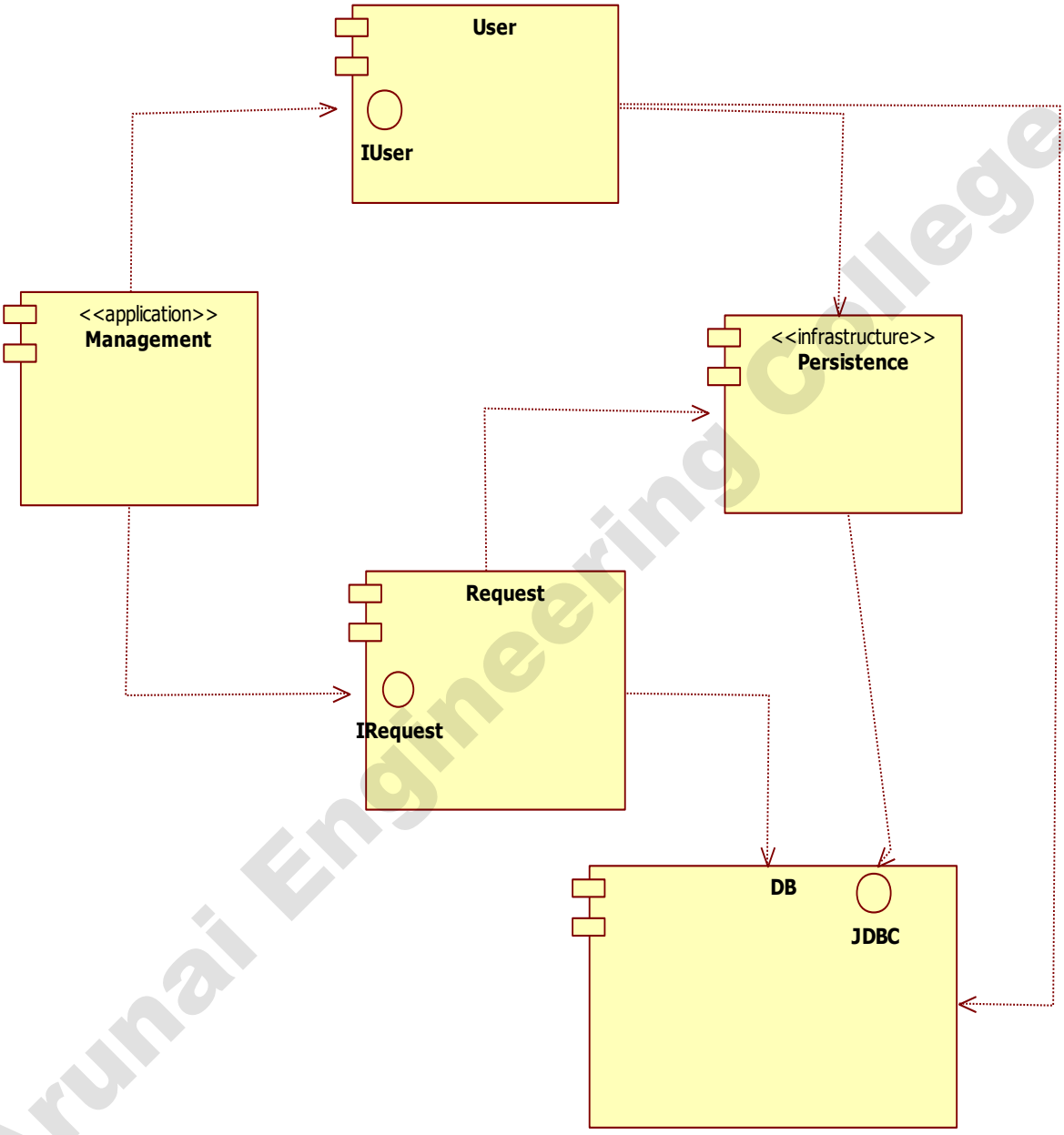
For Student:



ACTIVITY DIAGRAM:



COMPONENT DIAGRAM:



DEPLOYMENT DIAGRAM: