SRI BALAJI CHOCKALINGAM ENGINEERING COLLEGE

A.C.S Nagar(Irumbedu), Arni,

T.V.Malai Dt.-632 317.

Department

Of

Information Technology

CCS356 – OBJECT ORIENTED SOFTWARE

ENGINEERING LABORATORY

SRI BALAJI CHOCKALINGAM ENGINEERING COLLEGE

A.C.S Nagar(Irumbedu), Arni, T.V.Malai Dt.-632 317.

Department

of

Information Technology

BONAFIDE CERTIFICATE

Certified that this is a bonafide record of work done by…………………..…….……
of Third Year / VI Semester **B.Tech Information Technology** *in the Anna University*
Practical Examination during the year **20   - 20** *in CCS356 – Object Oriented Software*
Engineering Laboratory.

Register No. :

Staff In-Charge   **Head of the Department**

Submitted for Practical Examination held on…………………….

Internal Examiner   **External Examiner**

INDEX

EX.NO.	DATE	NAME OF THE EXPERIMENT	PAGE NO.	SIGNATURE

EX.NO: 1	PASSPORT AUTOMATION SYSTEM
DATE:	

AIM:

To develop the Passport Automation System using rational rose tools.

PROBLEM ANALYSIS AND PROJECT PLAN

➢ To simplify the process of applying passport, software has been created by designing through rational rose tool, using visual basic as a front end and Microsoft access as a back end.

➢ The applicant apply passport in the online, after submitting his details then verification process started. During verification process the status of the verification process is displayed.

➢ The applicant can view their passport status.After the verification process completed successfully the passport is issued to applicant.

PROBLEM STATEMENT

➢ Passport Automation System is used in the effective dispatch of passport to all of the applicants. This system adopts a comprehensive approach to minimize the manual work and schedule resources, time in a cogent manner.

➢ The core of the system is to get the online registration form (with details such as name, address etc.,) filled by the applicant whose testament is verified for its genuineness by the Passport Automation System with respect to the already existing information in the database.

➢ This forms the first and foremost step in the processing of passport application. After the first round of verification done by the system, the information is in turn forwarded to the regional administrator's (Ministry of External Affairs) office.

➢ The application is then processed manually based on the report given by the system, and any forfeiting identified can make the applicant liable to penalty as per the law.

➢ The system forwards the necessary details to the police for its separate verification whose report is then presented to the administrator. After all the necessary criteria have been met, the original information is added to the database and the passport is sent to the applicant.

SOFTWARE REQUERMENT SPECIFICATION

S. no	Software Requirement Specification
1.0	Introduction
1.1	Purpose
1.2	Scope
1.3	Definition, Acronyms and Abbreviation
1.4	Reference
1.5	Tools to be used
1.6	Overview
2.0	Overall description
2.1	Productive description
2.2	Software interface
2.3	Hardware interface
2.4	System functions
2.5	User characteristics
2.6	Constraints
2.7	Usecase model Description

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.

PASSPORT AUTOMATION SYSTEM GANTT CHART
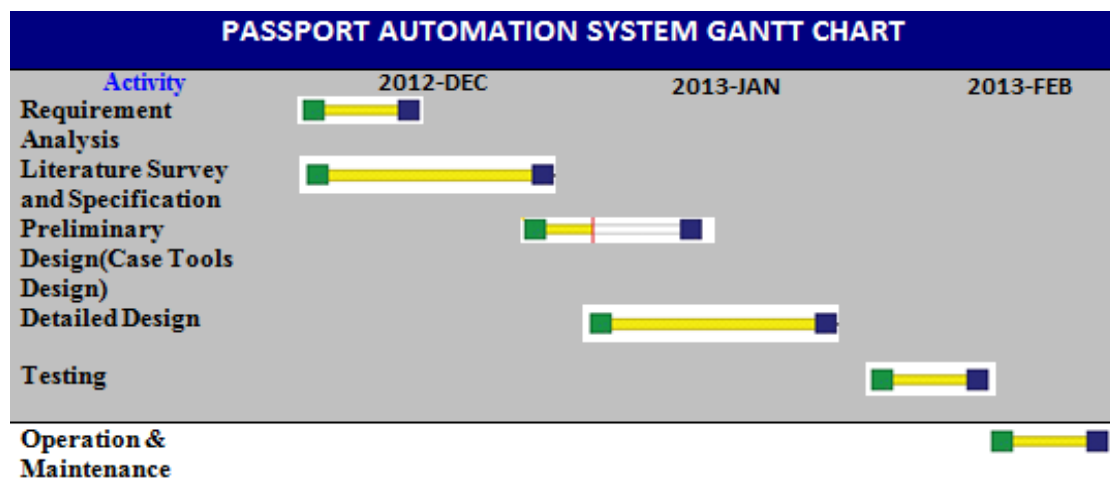
1.0 INTRODUCTION

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 reduce 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 and submit the necessary documents (may be by scanning).

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.

Users/Applicants will come to know their status of application and the date in which they must subject themselves for manual document verification.

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.

HTML - Markup Language used for creating web pages.

J2EE – Java 2 Enterprise Edition is a programming platform and it is the part of the java platform for developing and running distributed java applications.

HTTP - Hyper Text Transfer Protocol.

TCP/IP – Transmission Control Protocol/Internet Protocol is the communication protocol used to connect hosts on the Internet.

1.4 References

IEEE Software Requirement Specification format.

1.5 Tools to be Used

• Eclipse IDE (Integrated Development Enivronment)

• Rational Rose tool (for developing UML Patterns)

1.6 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.

2.0 OVERALL DESCRIPTION

2.1 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.

2.2 SOFTWARE INTERFACE

• **Front End Client**

The applicant and Administrator online interface is built using JSP and HTML. The Administrators's local interface is built using Java.

• **Web Serve**r

Glassfish application server(Oracle Corporation).

• **Back End** –

MS ACCESS database.

2.3 Hardware Interface

The server is directly connected to the client systems. The client systems have

access to the database in the server.

2.4 System Functions

Secure Registration of information by the Applicants.

Schedule the applicants an appointment for manual verification of original documents.

Panel for Passport Application Status Display by the Administrator.

SMS and Mail updates to the applicants 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.

2.5 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.

2.6 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.

2.7 Use Case Model Description

The usecase model is a representation of the interaction between the users and the system. It captures the goals of the users and the responsibility of the system to the users.

It is a special flow of events through the system. Grouping of usecases can manages the complexities and reduce the number of usecases in the package. The usecase model describes the uses of the system and show the courses of events that can be performed. A usecase is an interaction between user and system; it captures the goals of the user and the responsibility of the system to its users. It defines what happens in the system when the usecase is performed.

UMLDIAGRAM

Sno	UML DIAGRAMS
1	Use Case diagram
2	Class diagram
3	Sequence diagram
4	Collaboration diagram
5	State Chart diagram
6	Activity diagram
7	Component diagram
8	Deployment diagram
9	Package diagram

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
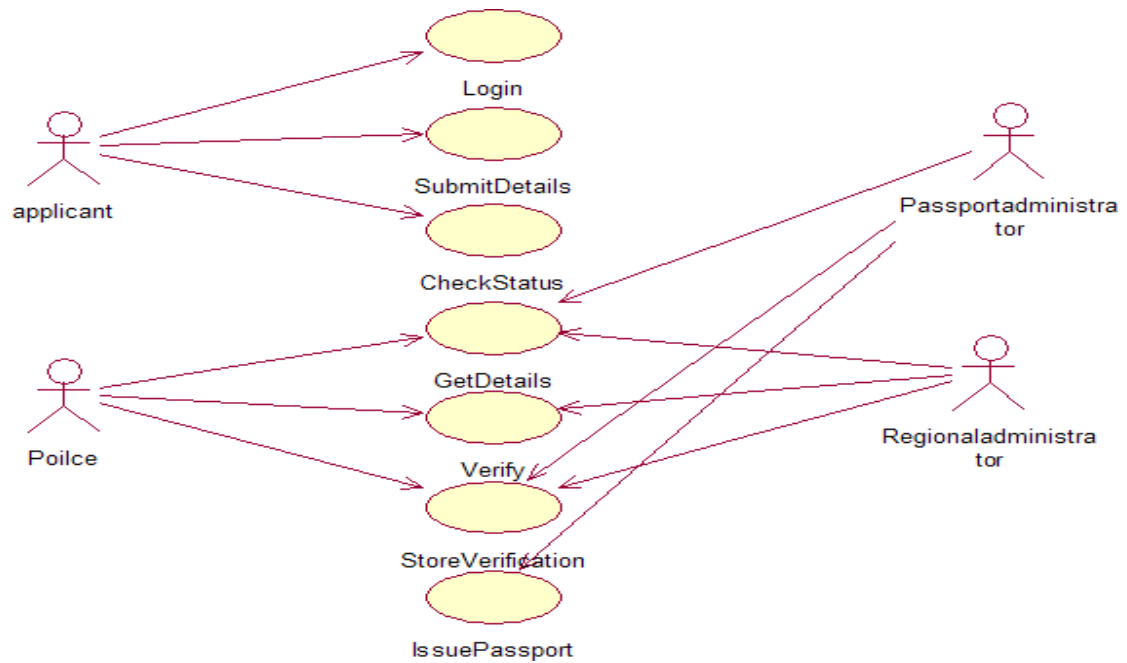
CLASS DIAGRAM

• 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.
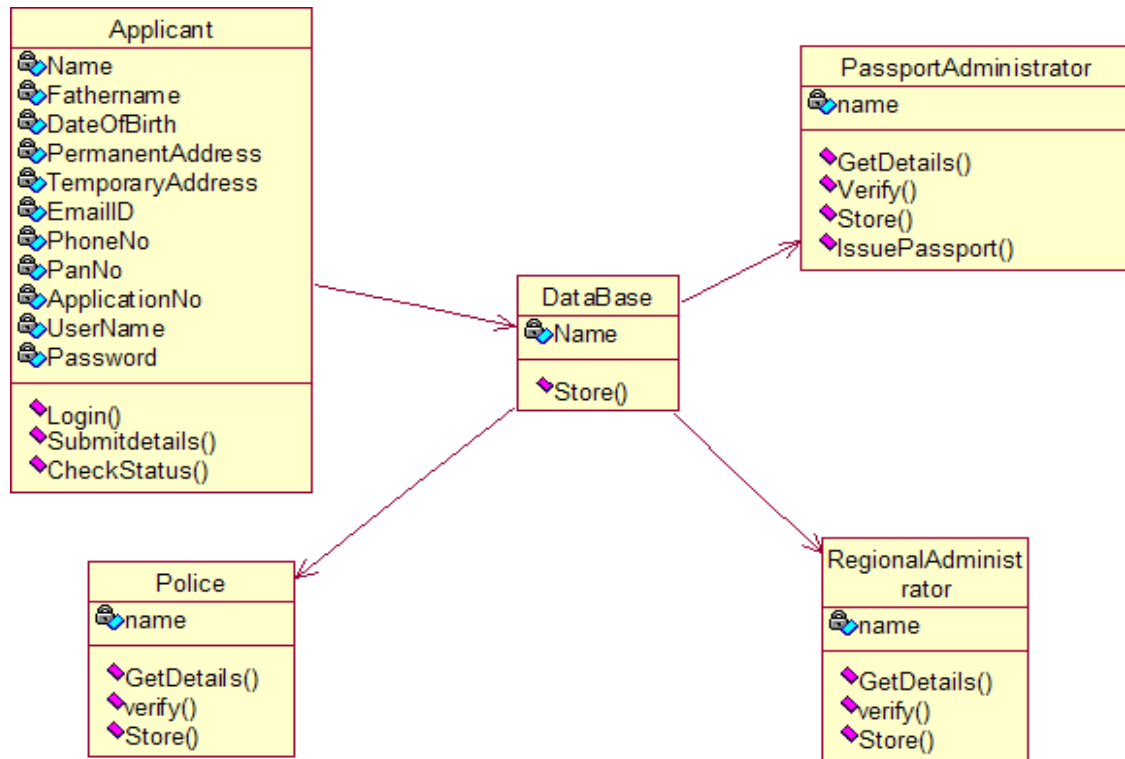
SEQUENCE DIAGRAM.

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 .
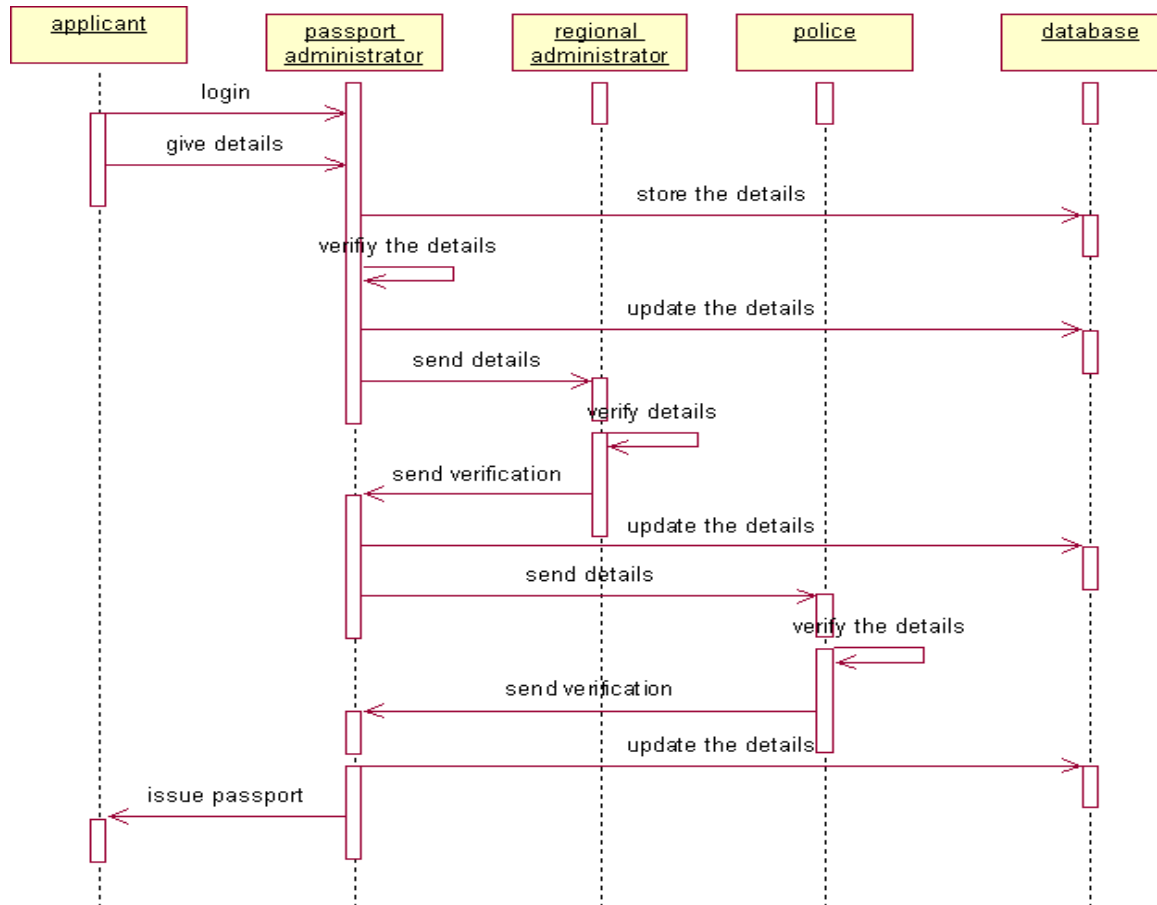
COLLABORATION DIAGRAM

- 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.

4: verifiy the details

1: login
2: give details

applicant

passport
administrator

7: verify details

6: send details

14: issue passport

8: send verification

regional
administrator

12: send verification

3: store the details
5: update the details
9: update the details
13: update the details

11: verify the details

10: send details

police

databas
e
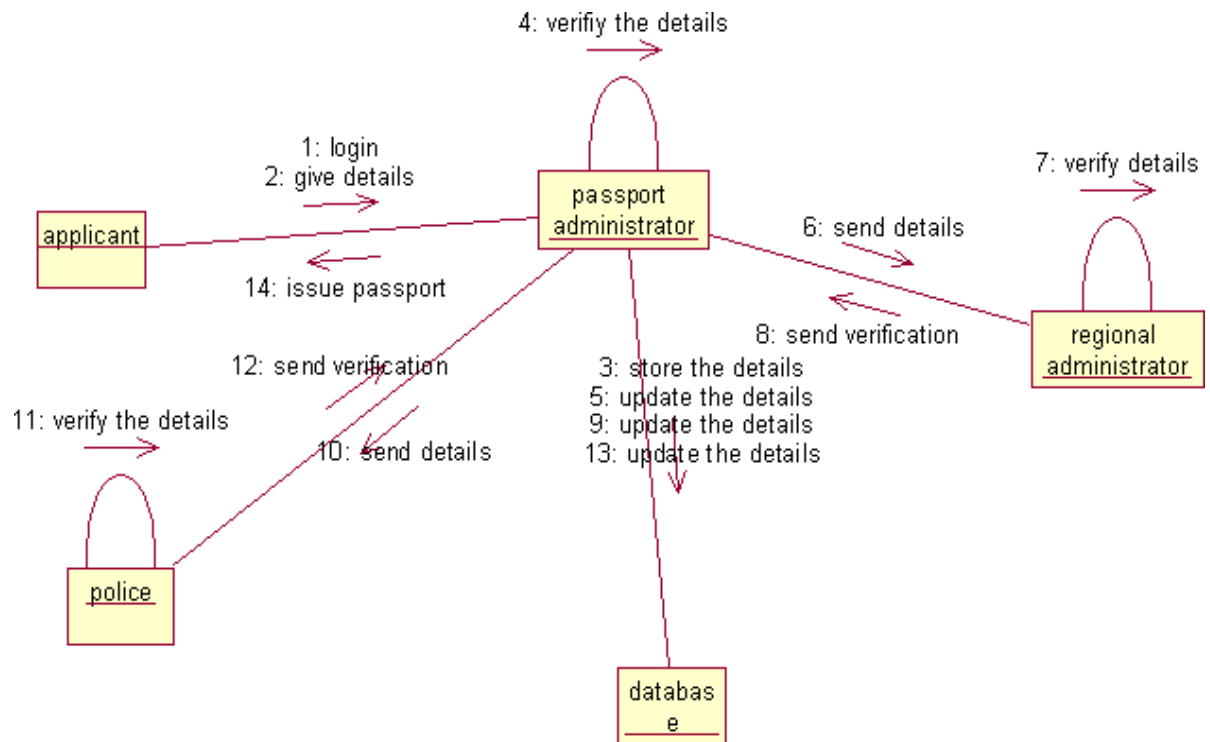
STATE CHART DIAGRAM

• 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

Login   Givedetails   Getdetails   verification   Issue
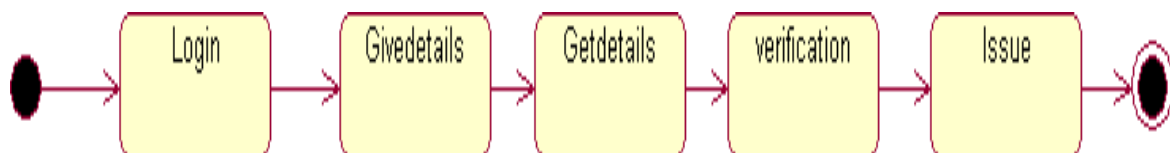
ACTIVITY DIAGRAM

• 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.
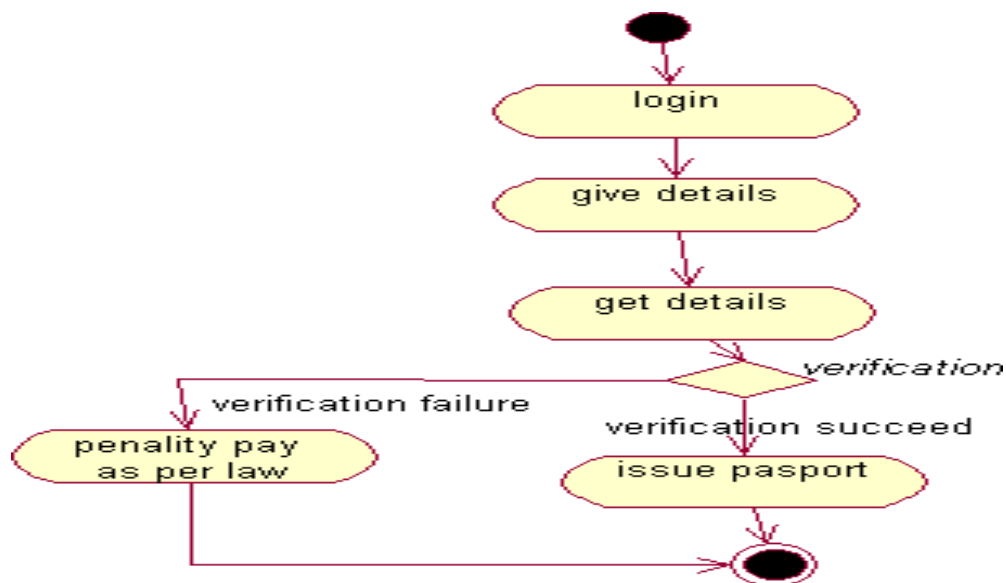
COMPONENT DIAGRAM

• The 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
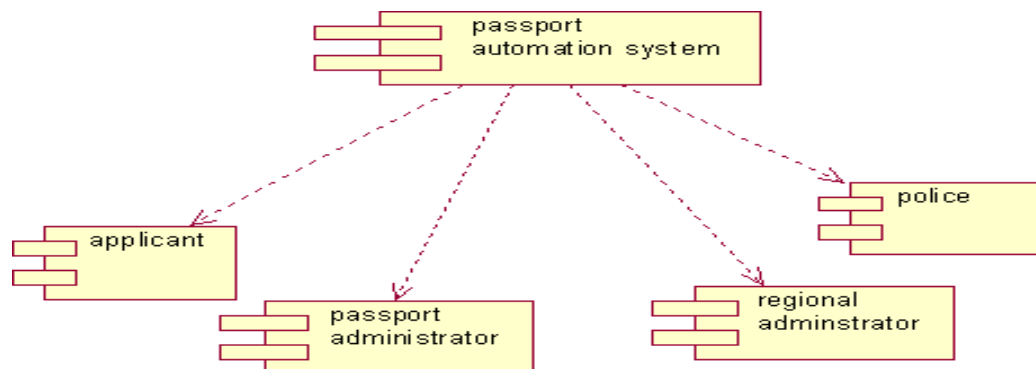
DEPLOYMENT DIAGRAM

• 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
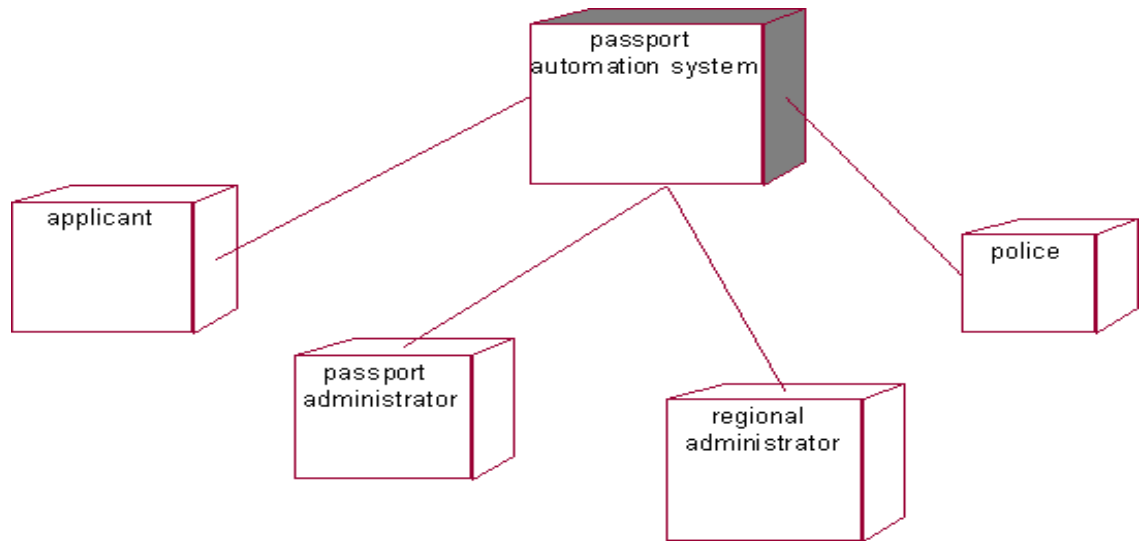
UML PACKAGE DIAGRAM

- 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.
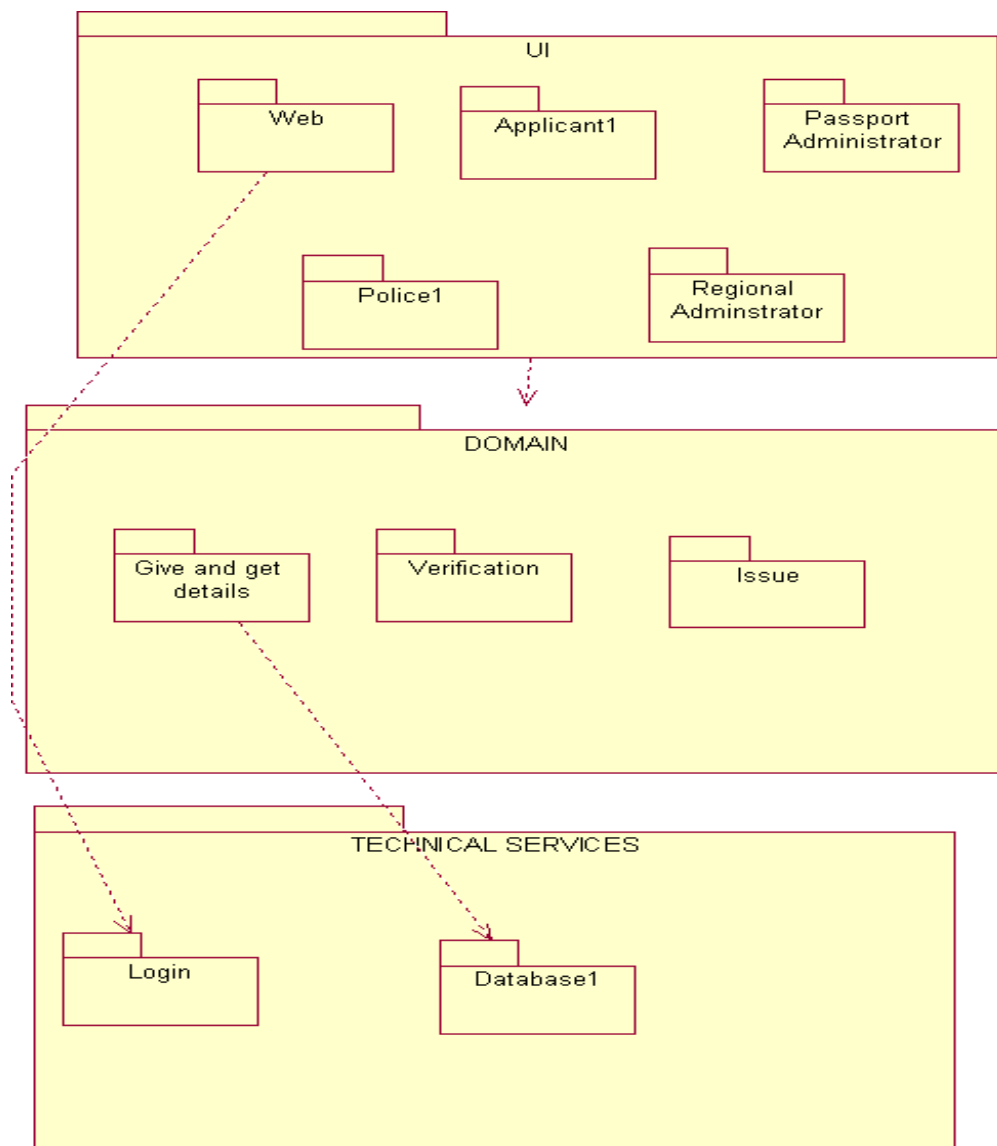
RESULT:

    Thus the Passport Automation System is successfully done and the UML diagram are implemented by using the Rational rose.

EX.NO: 2	BOOK BANK SYSTEM
DATE:	

AIM

To design an object oriented model for Book Bank using rational rose tools, and implement it in the visual basic and MS access

PROBLEM ANALYSIS AND PROJECT PLANNING

The requirements book from the student is got and the requirements about the Book Bank are refined. The requirements are analyzed and verified. So that it enable the student to efficiently get the book from Book Bank. The project scope is identified and problem statement is prepared.

PROBLEM STATEMENT

- ➢ Student visit and enquire the Book Bank.
- ➢ Student selects the required scheme.
- ➢ The form was filled by the student for join the Book Bank.
- ➢ The membership card is issued.
- ➢ The Book Banker checks the availability from the database.
- ➢ If the book is available, the banker issues the book else collect books in a particular date.

SOFTWARE REUIREMENT SPECIFICATON

S. no	Software Requirement Specification
1.0	Introduction
1.1	Purpose
1.2	Scope
1.3	Definition, Acronyms and Abbreviation
1.4	Reference
1.5	Tools to be used
1.6	Overview
1.7	Overall description
1.8	Productive description
2.0	Software interface

2.1	Hardware interface
2.2	System function
2.3	User characteristics
2.4	Constraints

1. OBJECTIVE:

To implement book bank system online.To provide the students with the information on books and scheduled times of book rental available. To ensure validity and security in the online book bank management system.

2. SCOPE OF THE PROJECT:

The book bank system project is a software tool created to help and access the students gather required information about the various books in the institution the project is web based interactive application. Focus is laid solely on the book display,schedule,categories,syllabus and payment as per required.

3. PROJECT DESCRIPTION:

USER PERSONAL AND CHARACTERISTICS:

The target client for our software are students who lively are interested in rental of books be it either from engineering or medical genre in the institution. They can log into our website and browse the courses which they have aspiration to study. The student must register themselves online, which is free. The booking or reservation of the books is online, the detailed description about their book package and necessary terms and condition norms would be emailed to the students registered email address which he/she may provide during the time of registration.

PRODUCT PERSPECTIVE:

This product requires a web browser which is capable of playing flash media.

This program will not be dependent on any other software and is not a component of another program.This program does not require any new hardware.

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 inout,the behaviour and output.

i. A main menu including a brief help section.

ii. Login

iii. Viewing book details.

iv. Displaying details.

v. Maintain and update book details.

vi. Logout.

REQUIREMENTS:

The system should have the requirements of the project. The developer should prepare the requirements of the project. The should prepare the requirements which are need for the software.

ANALYSIS:

Analyze the requirements whether it provides proper operations/output and performs the task.

DESIGN:

Project manager should design the layout of the project before going to implement time allocation , cost allocation and staff allocation will coming under design process.

IMPLEMENTATION:

After encomposing all the diagrams,we have to generate code for each and every diagrams i.e from usecase to deployment.

TESTING:

After implementing the diagram with domain language ,we have to test the particular projects.

MAINTAINENCE:

The system should be easily updated.The system should utilize the interchangeable plugins software developed should maintain the cost and time schedule of the project.

(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.

i. PERFORMANCE REQUIREMENTS:

Performance requirements define acceptable response times for system functionality

The total time for user interface screens will take no longer than two seconds.

The login information shall be verified within the seconds.

Queries shall results within five seconds.

ii. DESIGN CONSTRAINTS:

The software shall be a standard system running in a windows environment. The system shall be developed using rational enterprise suite and oracle 10i database.

iii. RELIABILITY:

Specify the factors required to establish the required reliability of the software system at time of delivery.

iv. AVAILABILITY:

The system should have an availability of 99.99%.

v. PORTABILITY:

The system should be extremely via the usb drive.

The system shall be easy to migrate or backed up via another use drive.

vi.   MAINTAINABILITY:

The system shall utilize interchangeable plugins.

The system shall be easily updateable for fixes and patches.

(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:

OS   -   Windows XP/vista.

Front end Tool   -   Rational Rose Enterprise suite.

<div align="center">Back end Tool   -   MSAccess</div>

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 students 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 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 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 ross 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. 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.

BOOK BANK GANTT CHART

Activity	2012-DEC	2013-JAN	2013-FEB
Requirement Analysis	▮▬▬▮		
Literature Survey and Specification	▮▬▬▬▬▮		
Preliminary Design(Case Tools Design)	▮▬▬▯▮		
Detailed Design		▮▬▬▬▮	
Testing		▮▬▮	
Operation & Maintenance			▮▬▮
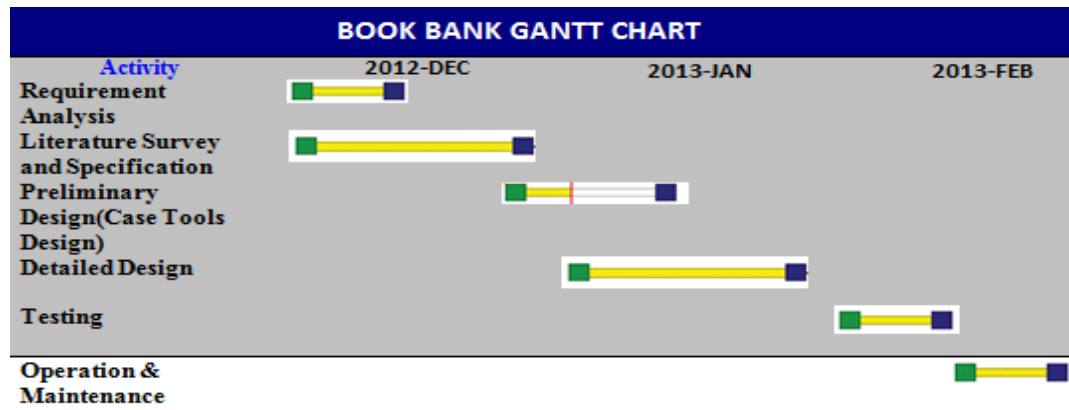
11. POST- FUNCTION AND PRE-FUNCTION:

MODULE: Registering

PRE-FUNCTION:

Login to the website.

Collection the required documents to be submitted for registration.

POST-FUNCTION:

Verification of documents submitted.

Conformation email sent accessing that authentication can be prevailed for the individual.

MODULE:

Display book details

PRE-FUNCTION:

Analyze the course of semester of logger.

POST-FUNCTION:

Display the required book details.

13. TECHNICAL SERVICES LAYER:

Technical service layer describes the relationship between different actors, components of the software process for any admin seek the registration for new visitor. So that the new visitor can login the website and search for book and if need can buy it.

14. DOMAIN SERVICES LAYER:

After technical services layer from partial layered architecture, we are going to generate

the coding in java or VB the project domain is now finalized in JAVA/VB.

15. USER INTERFACE LAYER:

i. ADMIN:

The administrator is used to register a new visitor for the website. Admin can keep those records update. Admin keep sales record i.e., now much book is downloaded and how much book is buyed newly with copy write etc.

ii. REGISTERED USER:

Registered user can search the book whatever needs and can read the book in online. If user is satisfied with this book, can download the book but after payment.

iii. VISITOR:

The visitor can register the application form and become a member of the website. The visitor can search books and read the boook but he must register to buy or download the book.

UML DIAGRAMS

Sno	UML DIAGRAMS
1	Use Case diagram
2	Class diagram
3	Sequence diagram
4	Collaboration diagram
5	State Chart diagram
6	Activity diagram
7	Component diagram
8	Deployment diagram
9	Package diagram

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.

Register

book details

Students

issueing the book

bookbank

collecting the book

database
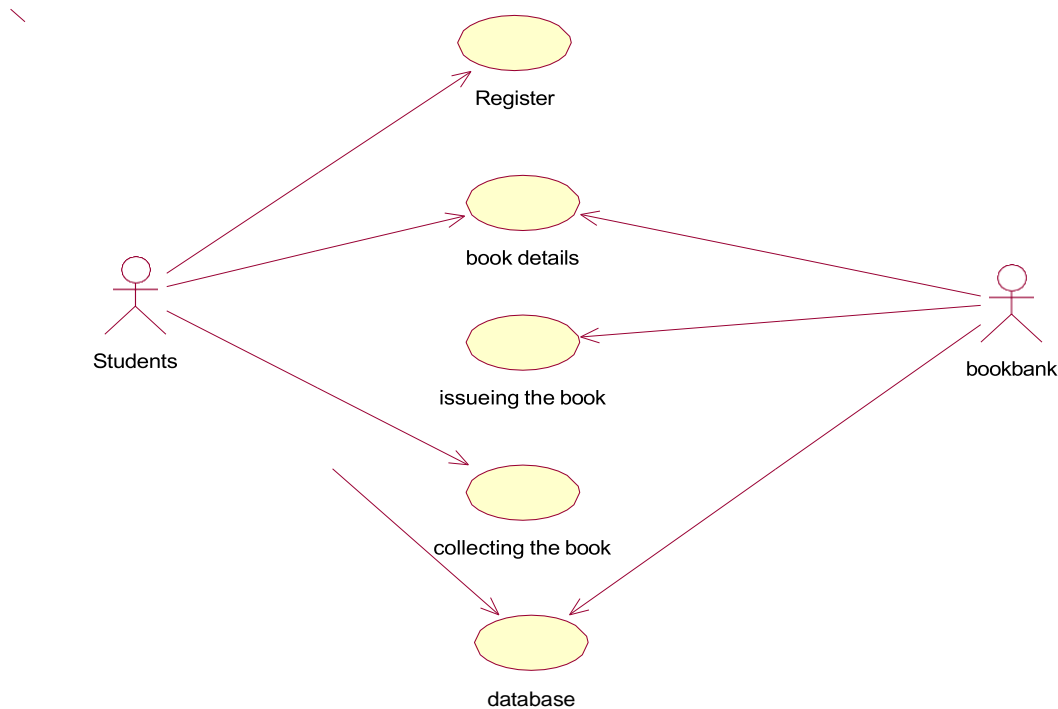
CLASS DIAGRAM

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.
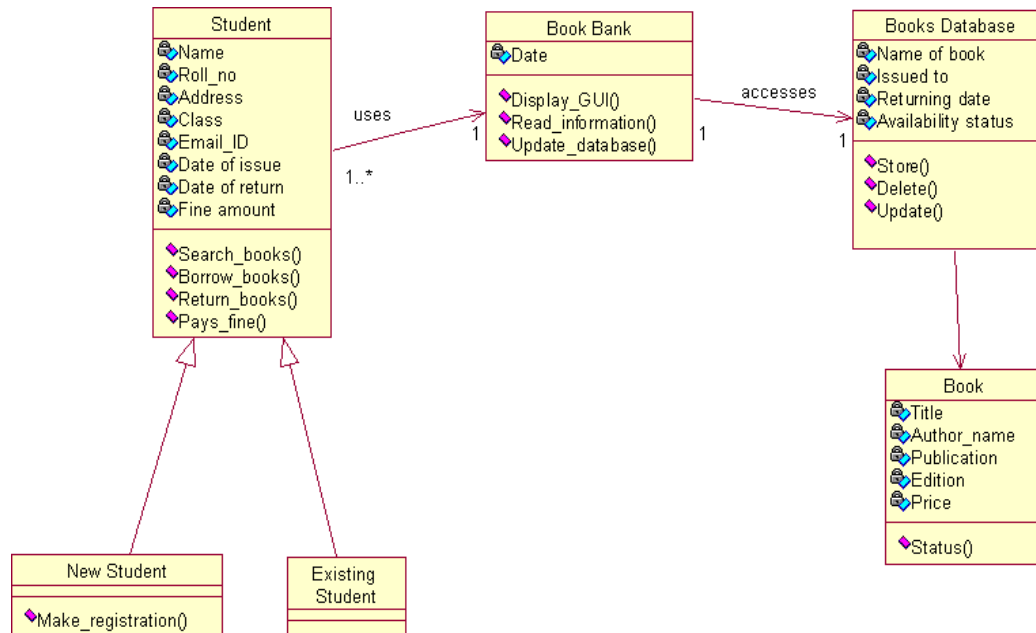
SEQUENCE DIAGRAM

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 retu
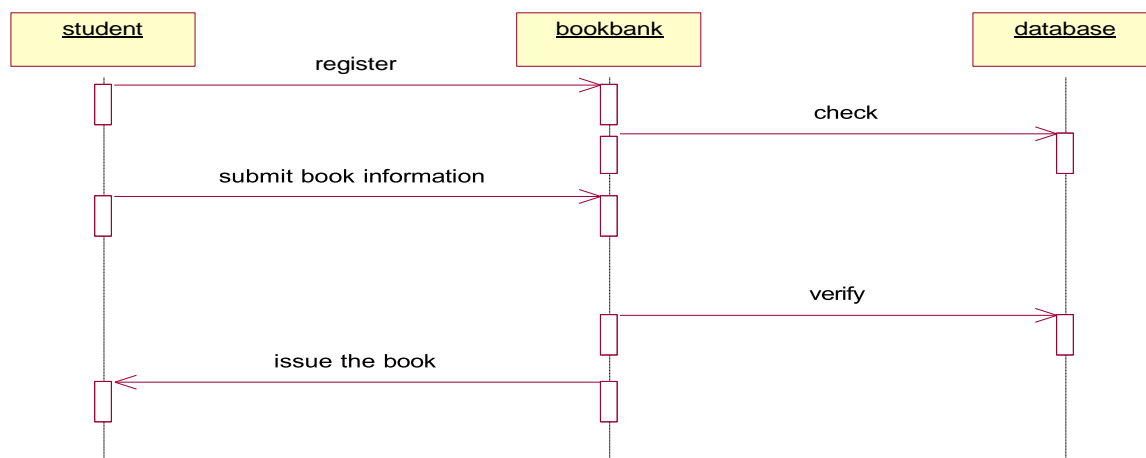
COLLABORATION DIAGRAM

Enquire the information about the book bank a8nd 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

```
                              1: register
                           3: request the book
                                   →
   student ────────────────────────────────────── bookban
                                                       k
                           5: issue the book
                                   ←


                                          4: verify
                                          2: check

                 databas
                    e
```
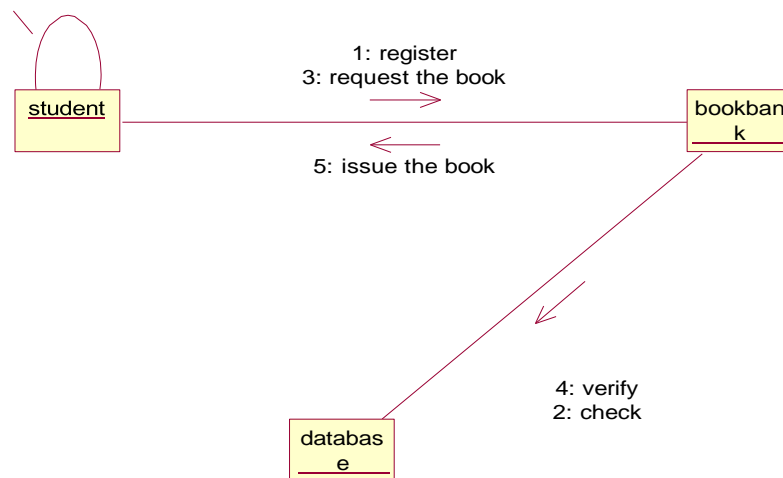
STATECHART DIAGRAM

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

```
        invalid
                                                       Payment

          login              View book
                             details                              updation
        invalid
                                                          Delivery
      acc.registra         Authenticati
          tion                 on                                   logout
```
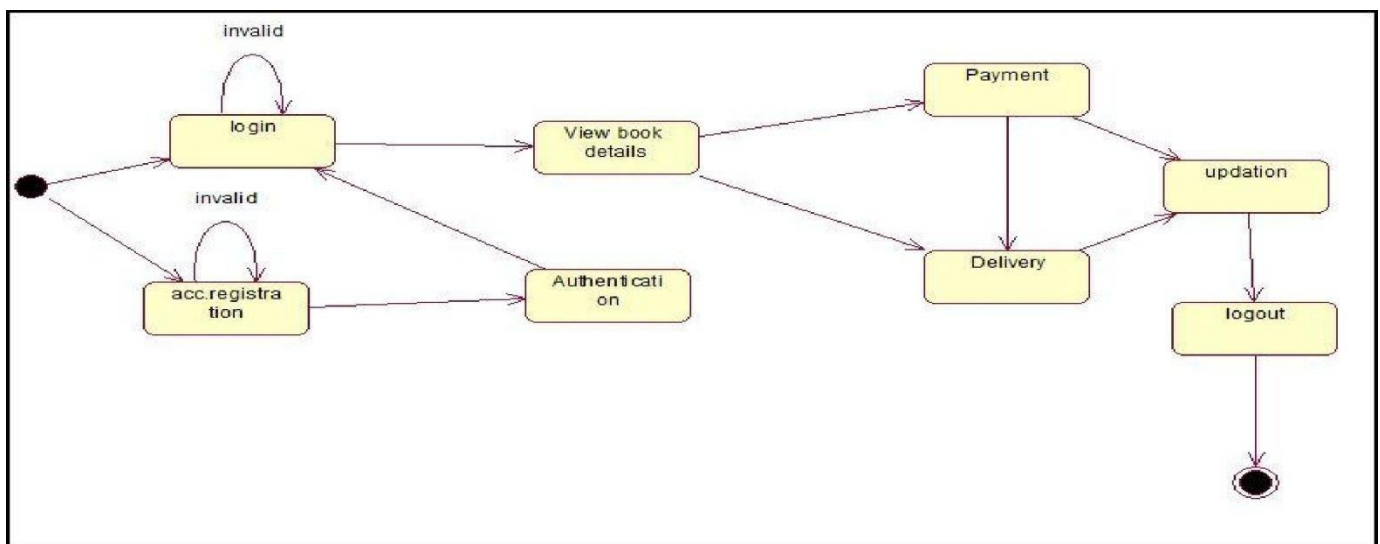
ACTIVITY DIAGRAM

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 .
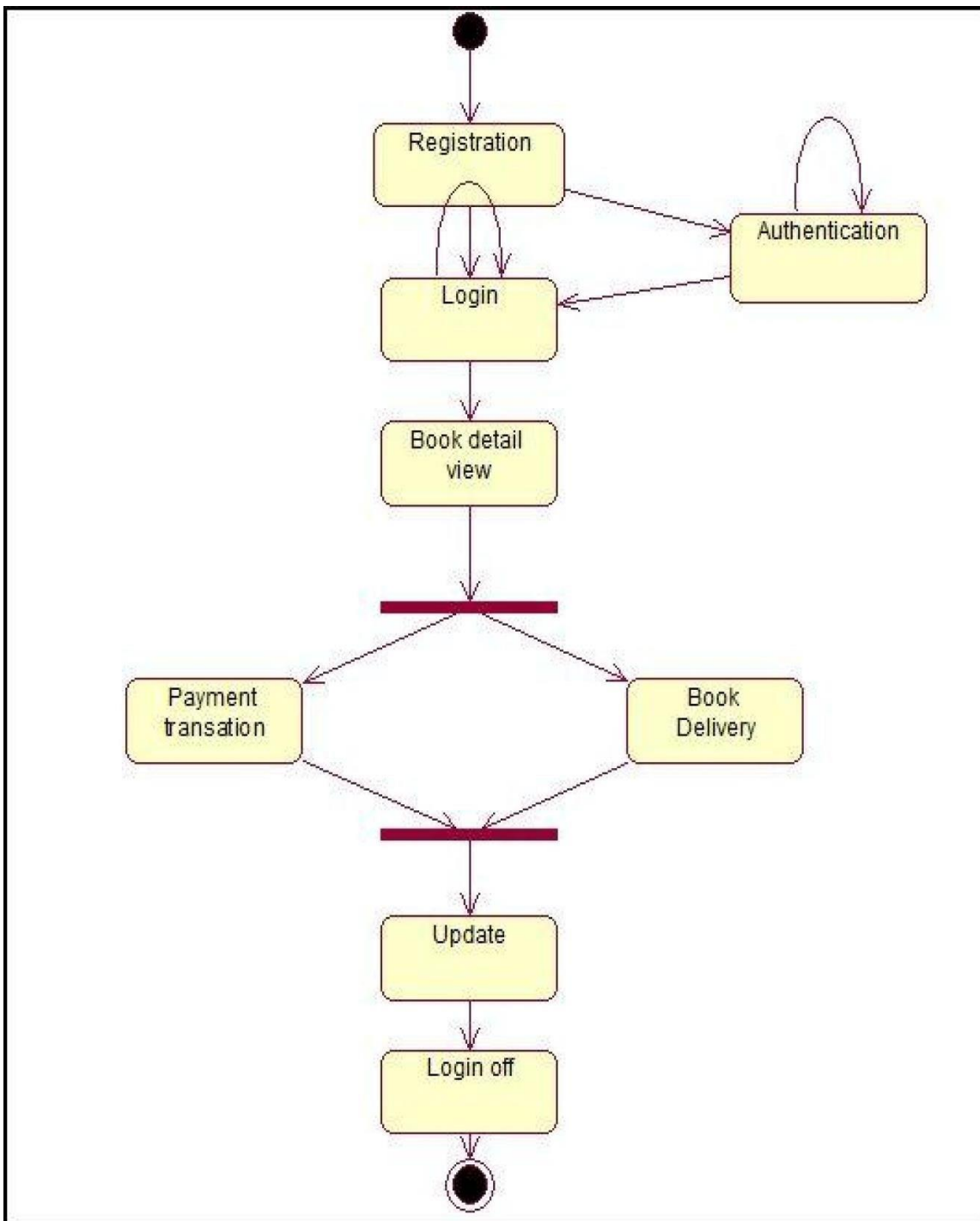
COMPONENT DIAGRAM

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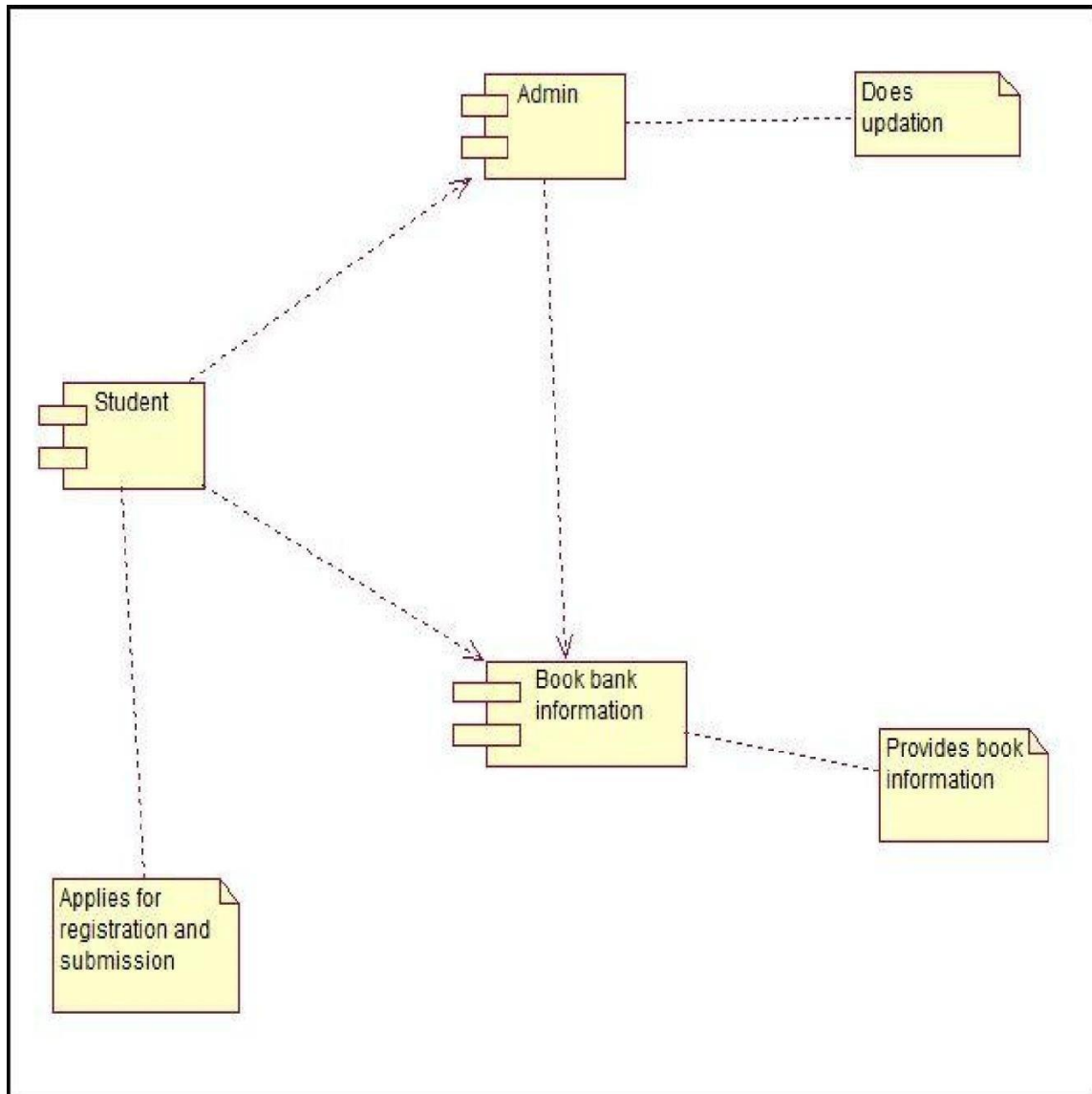
DEPLOYMENT DIAGRAM

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
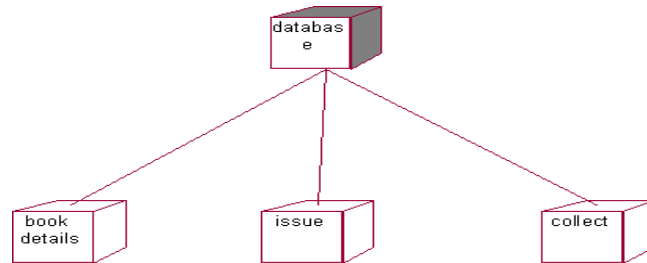
UML PACKAGE DIAGRAM

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.
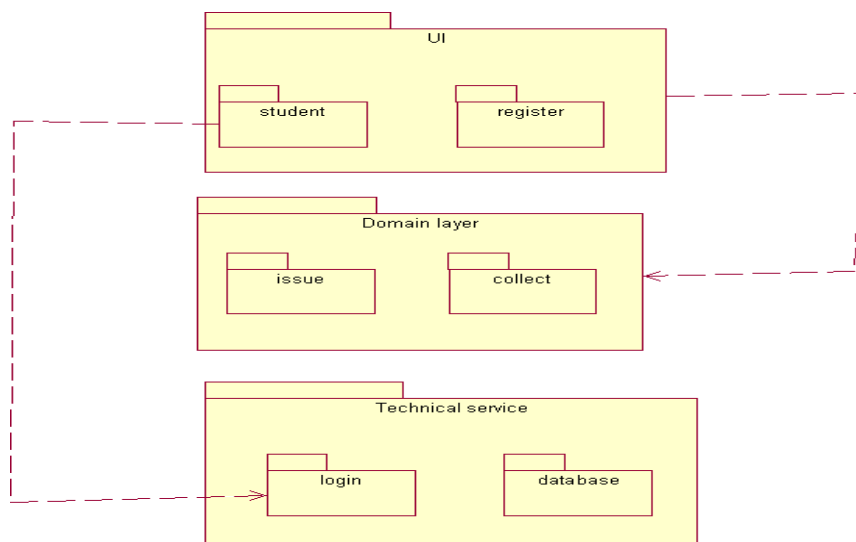
RESULT

Thus the Book Bank process is successfully done and the UML diagram are implemented by using the Rational rose.

EX.NO: 3 **DATE:**	**EXAM REGISTRATION SYSTEM**

AIM:

To develop the exam registration using rational rose tools, visual basic and MS access.

PROBLEM ANALYSIS AND PROJECT PLAN:

- ➤ Design an automated exam registration System that contains a database that holds five different questions with four options.

- ➤ The user has to select one option and 2points is awarded on each correct answer.

- ➤ The Quiz comprises of five questions.

- ➤ Each question contains four options of which one is correct.

- ➤ The user has to select one option and he/she is awarded 2points on each correct answer.

PROBLEM STATEMENT:

- ➤ Design a Login form to enter Username. Before entering the Quiz, an Instruction form is shown to the user.

- ➤ If the user accepts the instruction, the Quiz Questions form is shown.

- ➤ The user has to select one correct option out of the four options for each question and click next. 2 points are awarded on each correct answer given. After answering the last question of the Quiz, the Score form is displayed.

SOFTWARE REQUIREMENTS SPECIFICATION

S. no	Software Requirement Specification
1.0	Introduction
1.1	Purpose
1.2	Scope
1.3	Definition, Acronyms and Abbreviation
1.4	Reference
1.6	Tools to be used

1.7	Overview
1.8	Overall description
1.9	Productive description
2.0	Software interface
2.1	Hardware interface
2.2	System function
2.3	User characteristics
2.4	Constraints

GANTT CHART
EXAM REGISTRATION GANTT CHART:

EXAM REGISTRATION SYSTEM GANTT CHART

Activity	2012-DEC	2013-JAN	2013-FEB
Requirement Analysis			
Literature Survey and Specification			
Preliminary Design(Case Tools Design)			
Detailed Design			
Testing			
Operation & Maintenance			
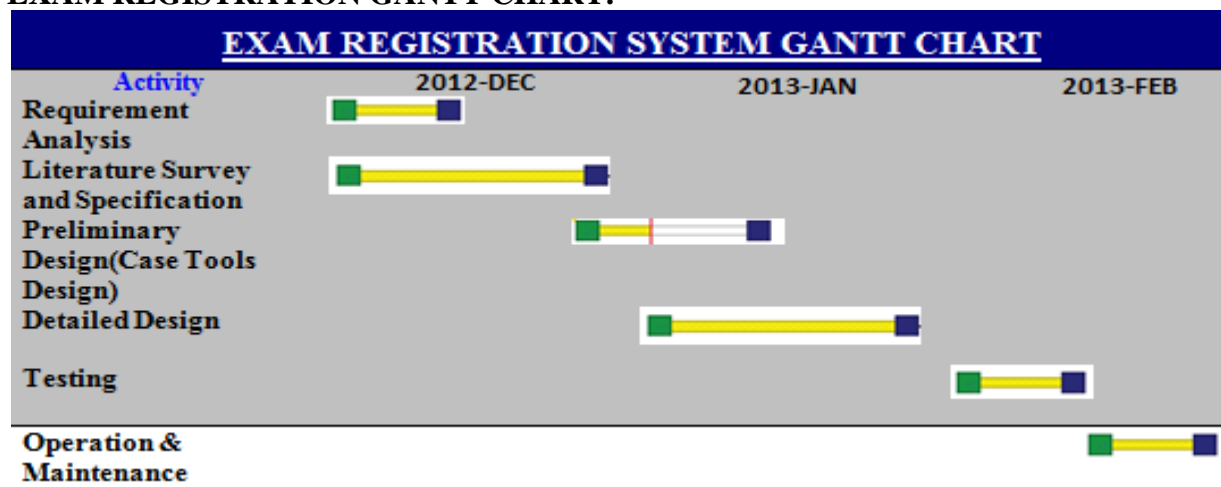
1.0 INTRODUCTION:

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

1.1 PURPOSE

If the entire process of 'Issue of Exam' 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 exam 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 Register.

ERS

Refers to this Exam Registration System.

1.4 REFERENCES

IEEE Software Requirement Specification format.

1.5 TOOLS TO BE USED

Rational Rose tool (for developing UML Patterns)

1.6 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.

1.7 OVERALL DESCRIPTION:

1.8 PRODUCT PERSPECTIVE:

The ERS 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 register.

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.

SYSTEM FUNCTIONS

Secure Registration of information by the Applicants.

Message box for Exam registration 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

Participant
They are the people who desires to obtain the Exam and submit the information to the database.

Administrator
He has the certain privileges to add the passport status and to approve the issue of Exam.

System
Contains all Databases.

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.

UML DIAGRAMS

Sno	UML DIAGRAMS
1	Use Case diagram
2	Class diagram
3	Sequence diagram
4	Collaboration diagram
5	State Chart diagram
6	Activity diagram
7	Component diagram
8	Deployment diagram
9	Package diagram

USE CASE DIAGRAM

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

CLASSDIAGRAM

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.
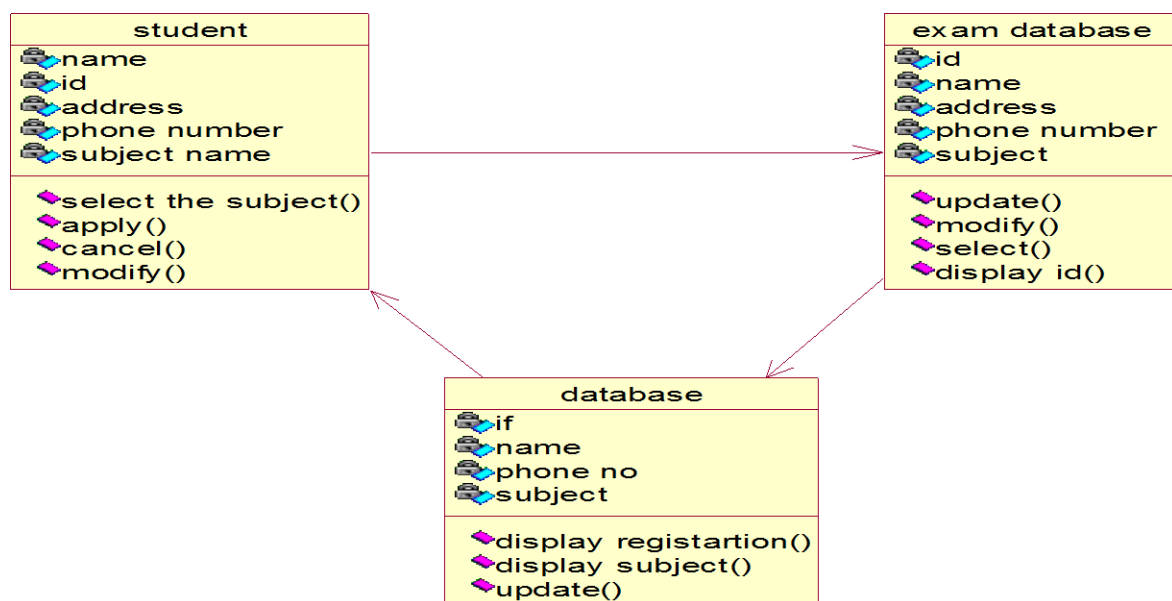
SEQUENCE DIAGRAM

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.
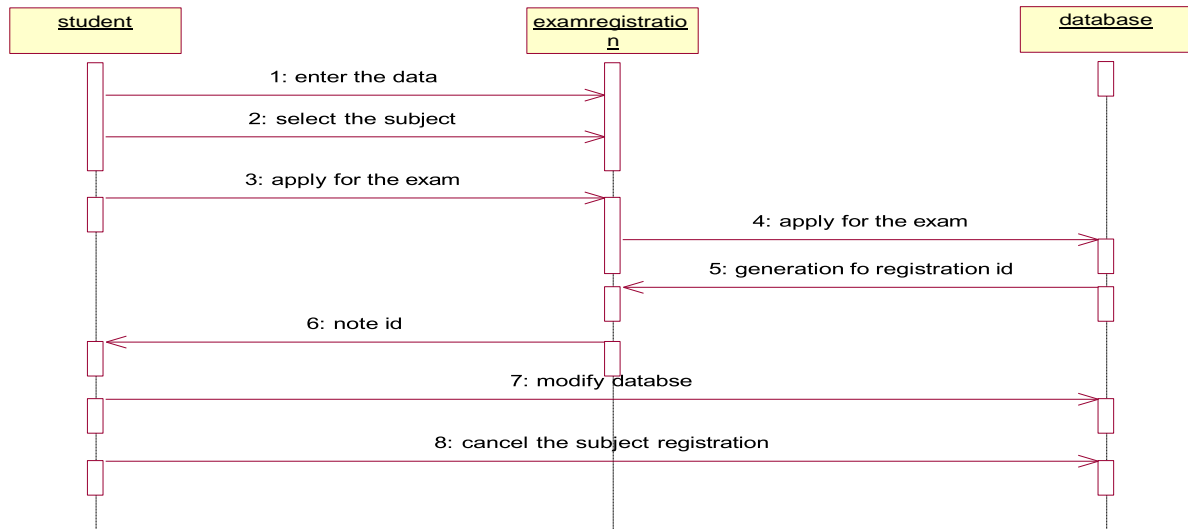
COLLABRATION DIAGRAM:
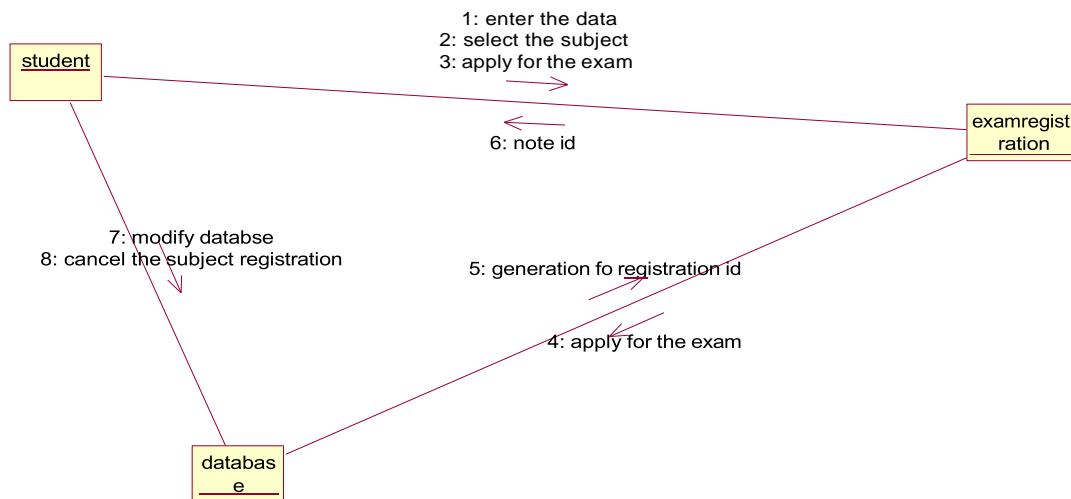
ACTIVITY DIAGRAM:

In this activity diagram user is entering in to the system. he may have two options,

1. cancel the registration.

2. selecting the subject for new registration.

Finally the filled application is submitted to the system for exam registration .Then application details are updated in database.
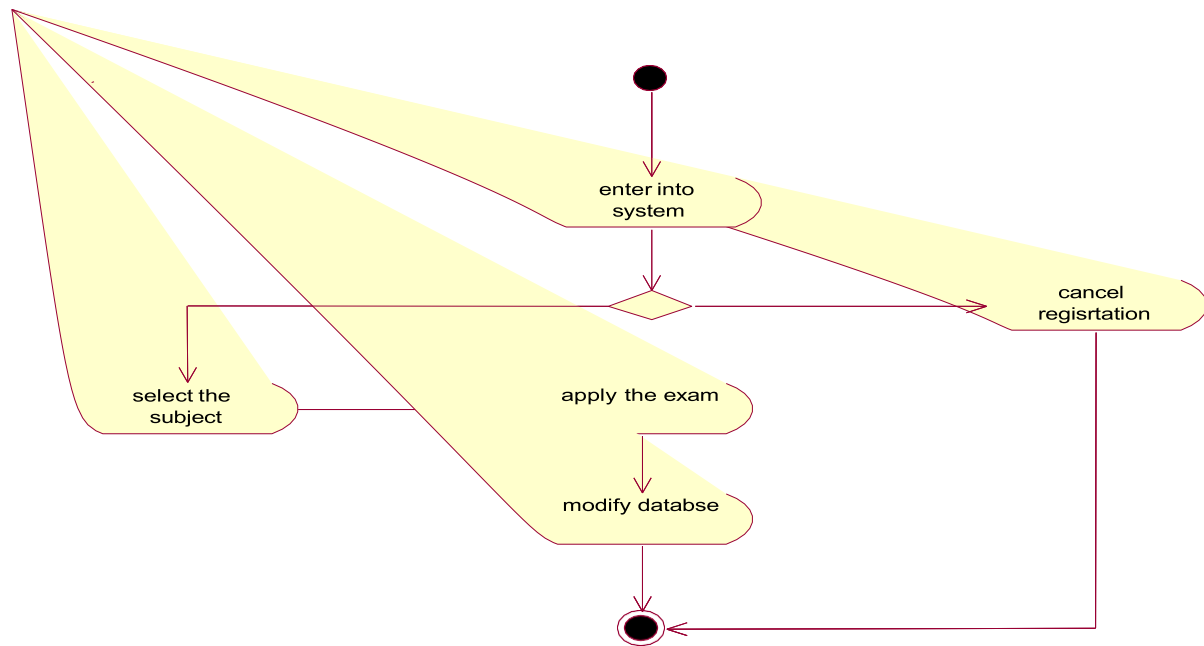
STATE CHART DIAGRAM

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.

State Chart Diagram:
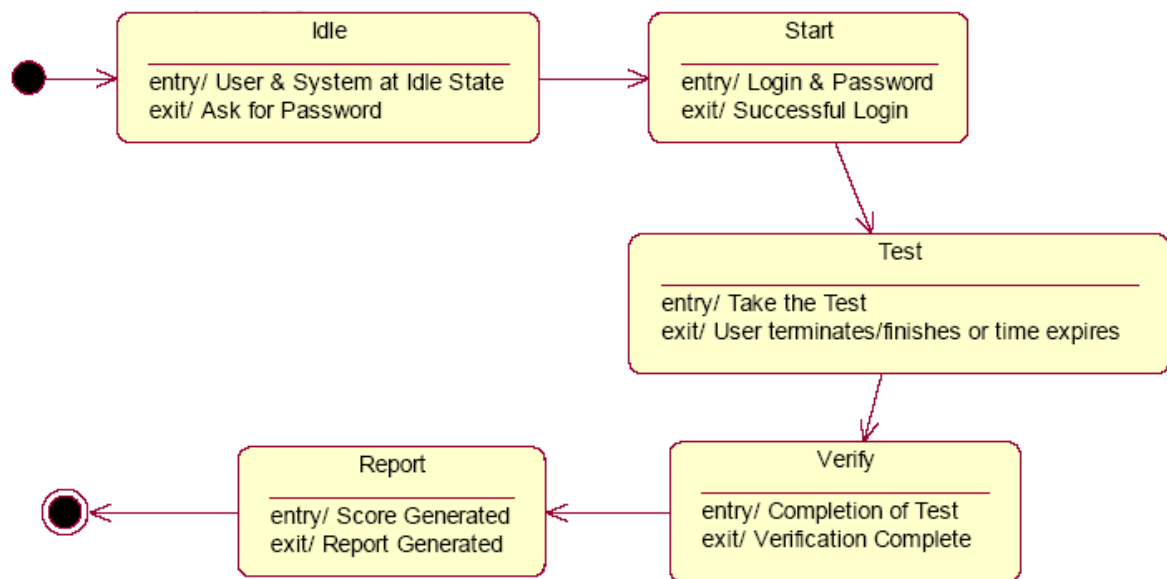
COMPONENT DIAGRAM

The component diagram is represented by figure dependency and it is a graph of design of figure dependency. The modules in the component diagram are server, user interface and database.

Component Diagram:
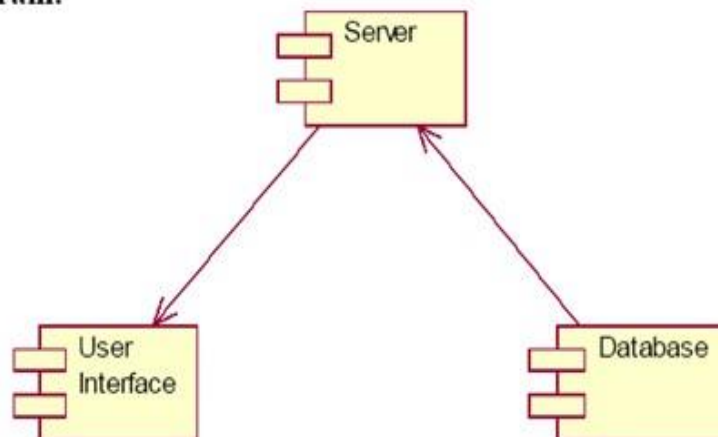
DEPLOYMENT DIAGRAM

The modules in the deployment diagram are

Server(exam registration)

Client PC(student)

Database

student

exam
registration

Databse
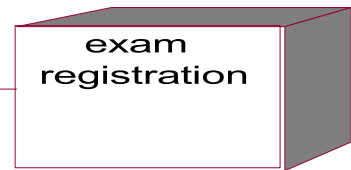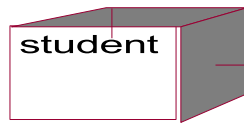
RESULT :

Thus the Exam Registration System is successfully done and the UML diagram
are implemented by using the Rational rose.

EX.NO: 4	
DATE:	**STOCK MAINTENANCE SYSTEMS**

AIM:

To develop the stock maintenance system using rational rose tools, visual basic and MS access.

PROBLEM ANALYSIS AND PROJECT PLAN:

➢ To improve the operational efficiency of a mail order company, the chief executive officer is interested in computerizing the company's business process. The major business activities of the company can be briefly described as follows.

➢ The company aims to provide high quality mail order service to all registered members of the company.

➢ An individual or a company registers as a member by completing the registration form and sending it to the customer service department.

PROBLEM STATEMENT:

➢ At the beginning the system displays the order option window. The customer may select an order from the list of orders present in the window. The customer service department verifies the membership and forwards the order to the sales department. If the order can be processed with existing stock, the sales department processes the order and issue delivery note to the inventory department and the information about each order present in the order details helps the trader to update the database.

➢ Otherwise a sales department isseues the purchase order to the supplier. When all items are available, the inventory department delivers the item to the member, and the accounts deparment issues the invoice to the member.

➢ On receiving the payment the accounting system is updated and the trading manager closes the order. The customer can cancel the order at any time and the database is updated. The customer details and the order details, which are placed, must be prevented from unauthorized access.

SOFTWARE REQUIREMENTS SPECIFICATION:

S. no	Software Requirement Specification
1.0	Introduction
1.1	Purpose
1.2	Scope
1.3	Definition, Acronyms and Abbreviation
1.4	Reference
1.6	Tools to be used
1.7	Overview
1.8	Overall description
1.9	Productive description
2.0	Software interface
2.1	Hardware interface
2.2	System function
2.3	User characteristics
2.4	Constraints

GANTT CHART:
STOCK MAINTENANCE SYSTEM GANTT CHART

STOCK MAINTAINANCE SYSTEM GANTT CHART
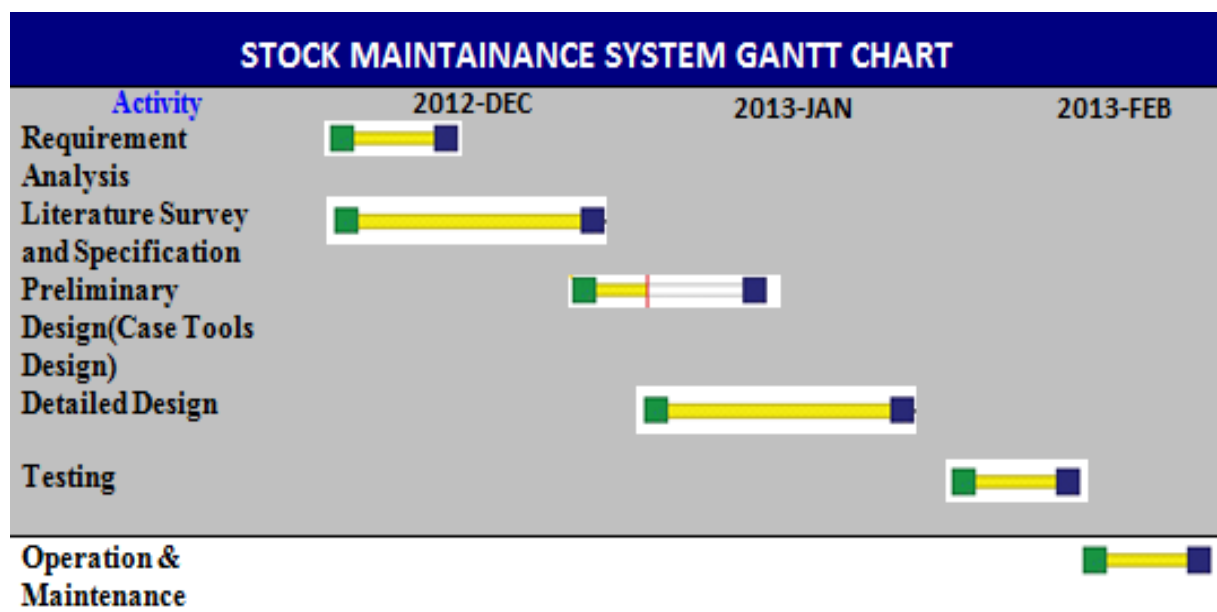
1.0 INTRODUCTION:

Stock Maintenance 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 stock keeper and reduces the complexities involved in it to the maximum possible extent.

1.1 PURPOSE

If the entire process of 'Issue of stock' 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.

SMS
Refers to this Stock Maintenance System.

1.4 REFERENCES

IEEE Software Requirement Specification format.

1.5 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.

1.6 OVERALL DESCRIPTION
1.7 PRODUCT PERSPECTIVE

The SMS acts as an interface between the 'customer' 'owner' and the 'clerk'. 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 customer receives the stock details.

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 Customer 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

Customer –
They are the people who desires to obtain the stock maintenance and submit

the information to the database.

Owner

He has the certain privileges to add the Stock status and to approve the issue of

stock the documents and give suggestion whether or not to approve the dispatch of passport.

Client

He is the person who upon receiving intimation from the SMS.

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.

UML DIAGRAMS

Sno	UML DIAGRAMS
1	Use Case diagram
2	Class diagram
3	Sequence diagram
4	Collaboration diagram
5	State Chart diagram
6	Activity diagram
7	Component diagram
8	Deployment diagram
9	Package diagram

USECASE DIAGRAM

The customer in use case diagram are Applicant, regional administrator, database, passport

Administrator, clerk.

The use cases are Login, givedetails, logout, collectdetails, verification, issue.

The customer uses the use case are denoted by the arrow
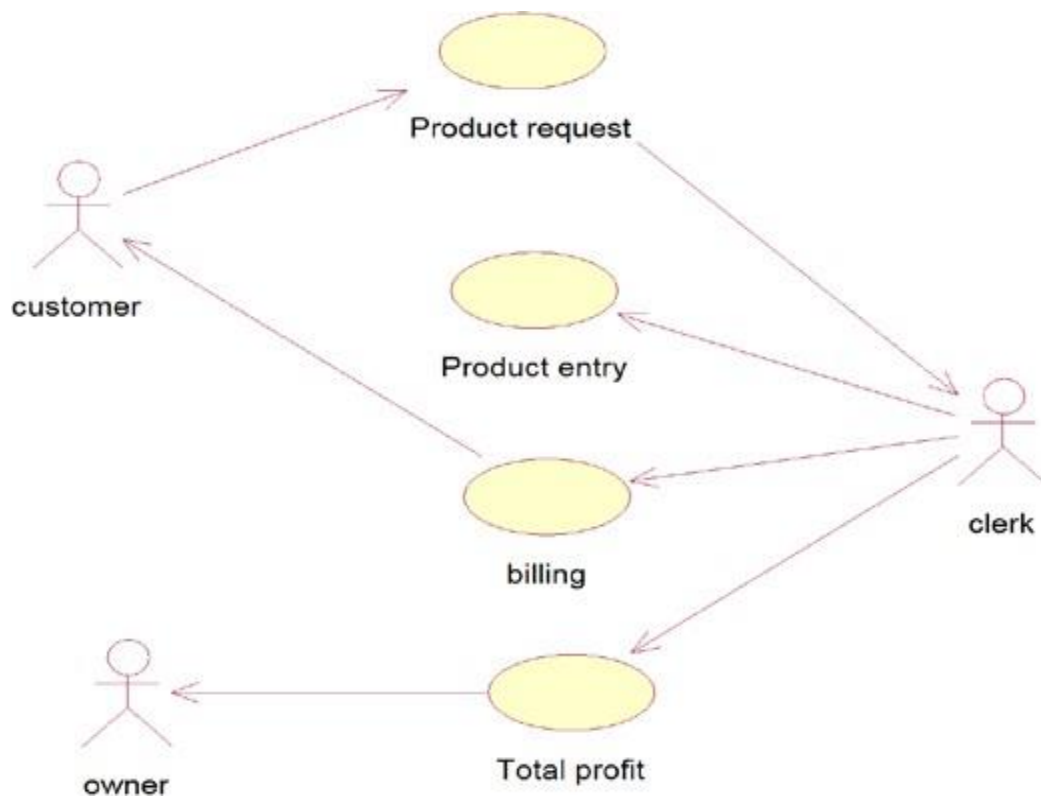
CLASS DIAGRAM

The classes are total profit,order, system,credit card, cash, agent and item.

Above said classes are having their own attributes and functionalities.

All the classes have been connected by using the class diagram notations like association,multiplicity, generalization etc.
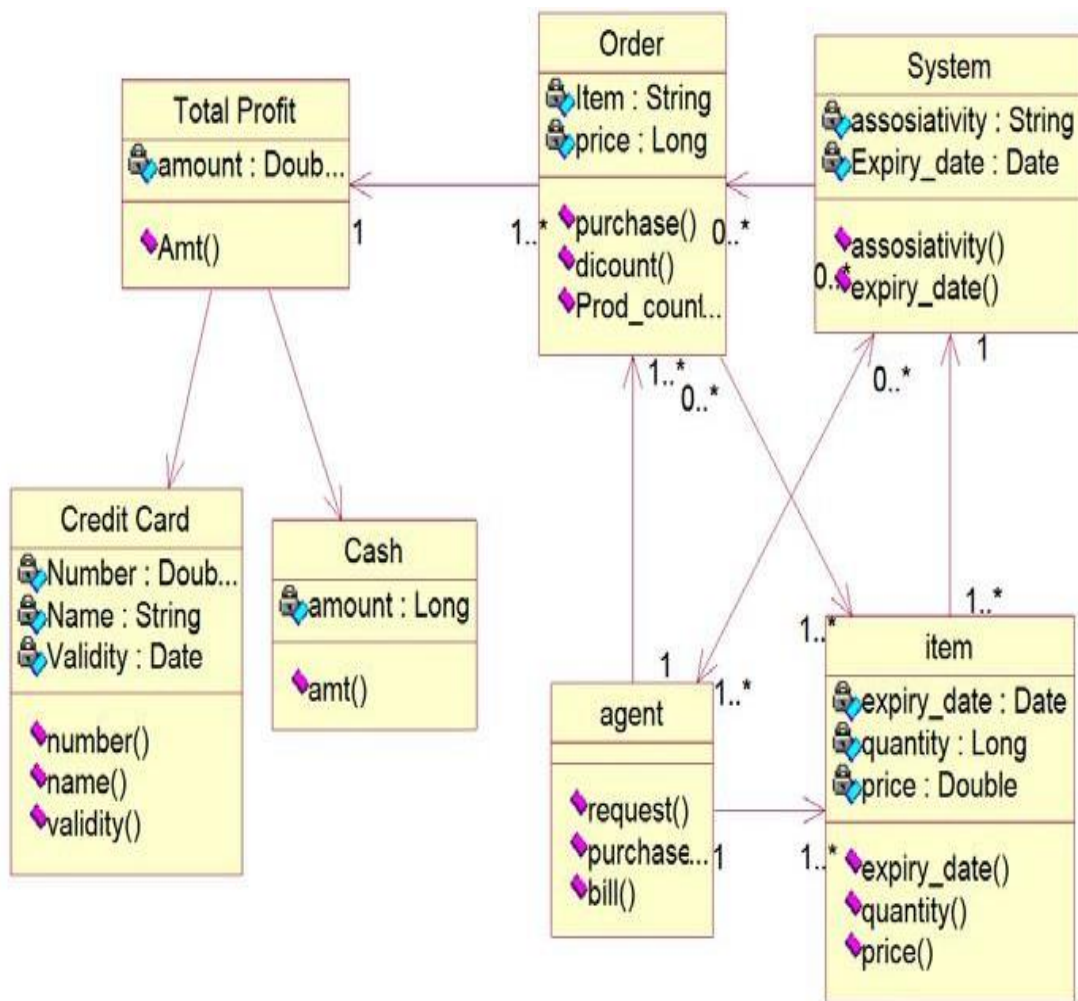
SEQUENCE DIAGRAM:

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. The applicant login the database and give his details and database store the details.

The stock administrator get the details from the database and do verification and the forward to regional administrator.

customer	agent	billing	product count	datebase

asks for

checks for

indicating expiry date

confirms

request billing

billing the products

reduce product count correspondingly
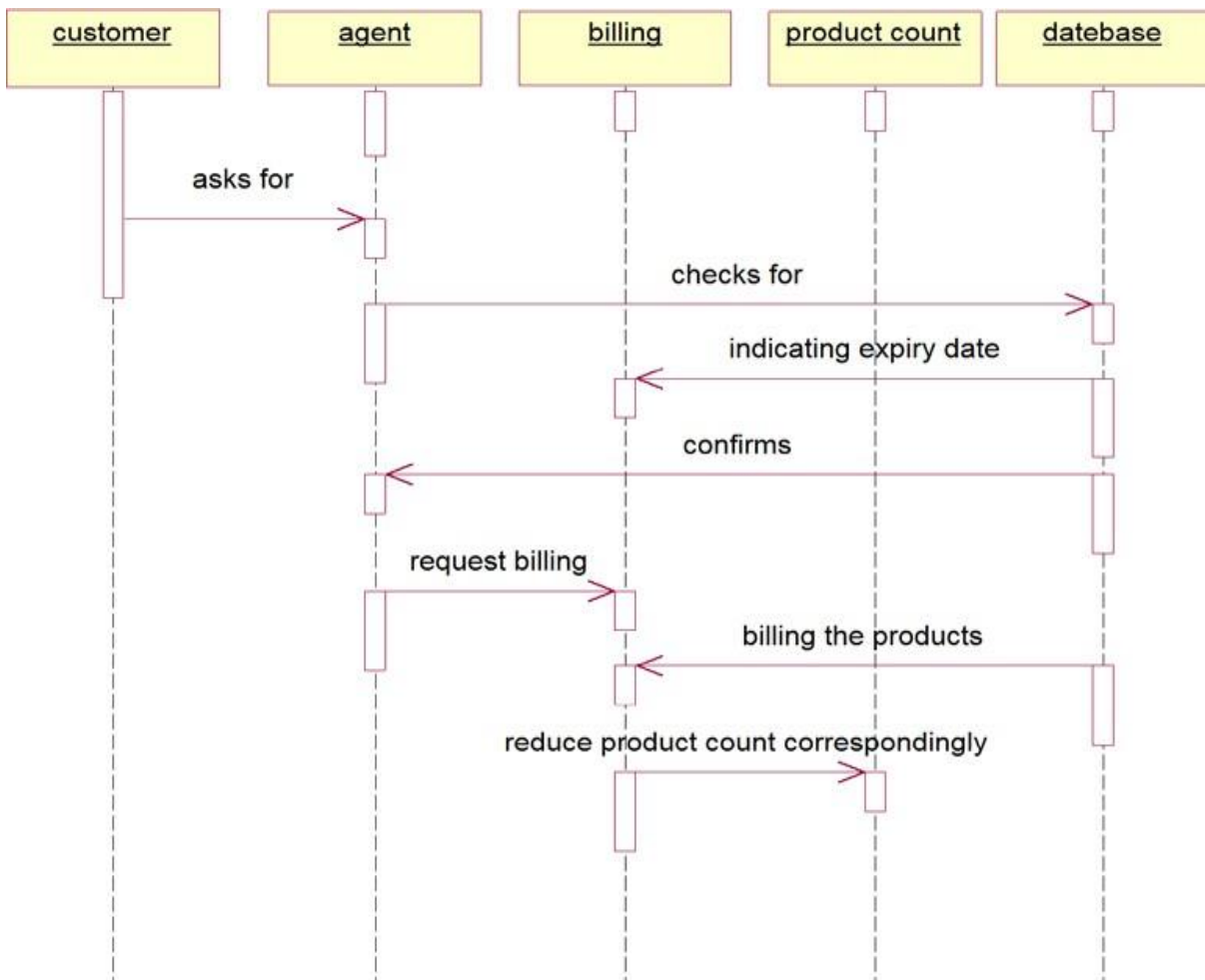
COLLABORATION DIAGRAM:
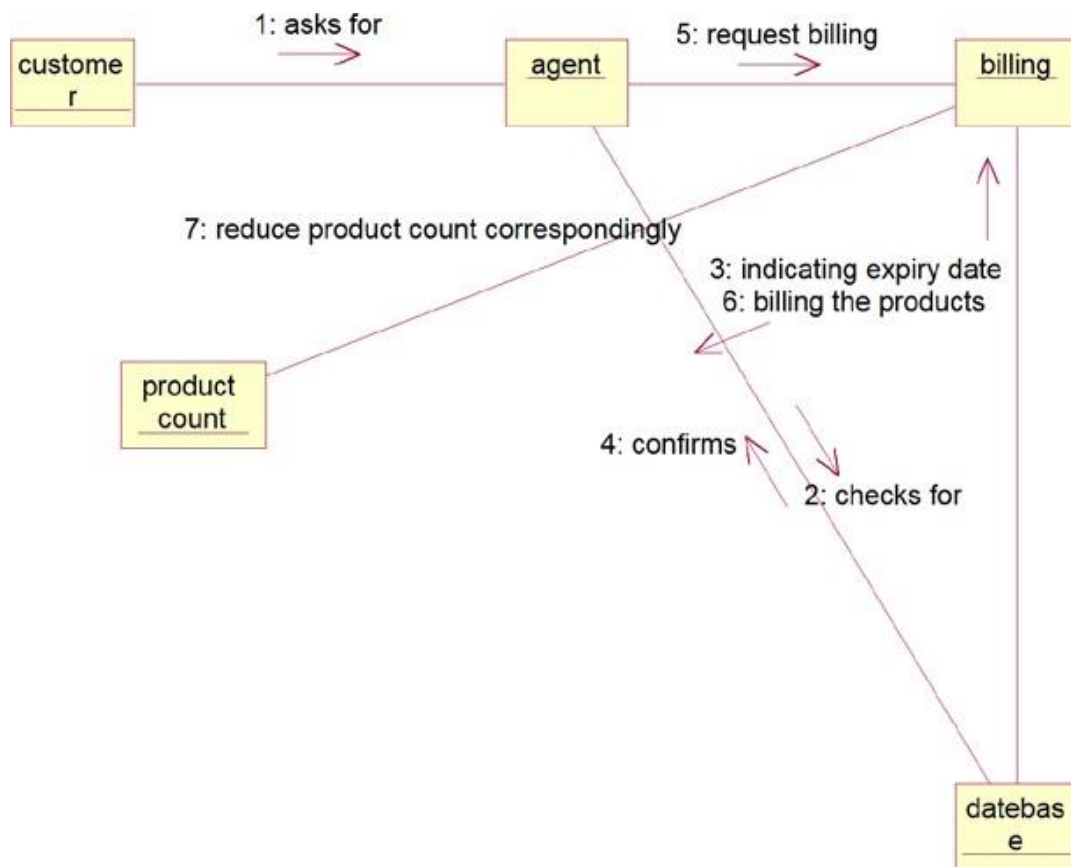
STATECHART DIAGRAM:

The states of the stock maintenance system are denoted in the state chart diagram

Login state represent authentication for login the stock maintenance system.

In this state, it checks whether the applicant has provided all the details that is required.

clerk, regional administrator and stock administrator get necessary details and verification of the applicant are denoted from the Get detail state and verification state

ACTIVITY DIAGRAM:
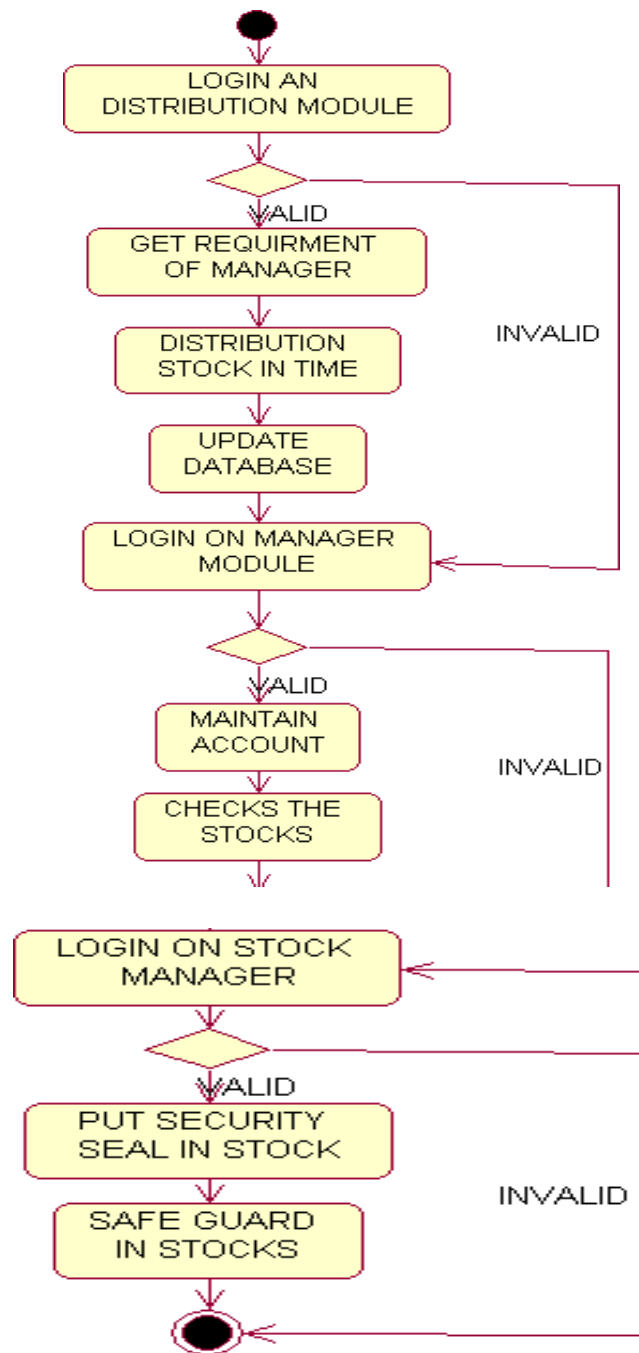
LOGIN AN
DISTRIBUTION MODULE

VALID

GET REQUIRMENT
OF MANAGER

INVALID

DISTRIBUTION
STOCK IN TIME

UPDATE
DATABASE

LOGIN ON MANAGER
MODULE

VALID

MAINTAIN
ACCOUNT

INVALID

CHECKS THE
STOCKS

LOGIN ON STOCK
MANAGER

VALID

PUT SECURITY
SEAL IN STOCK

INVALID

SAFE GUARD
IN STOCKS

COMPONENT DIAGRAM:

The modules in the component diagram are applicant, passport administrator, regional administrator clerk stock maintenance system.

The applicant stock administrator regional administrator and clerk are dependent on the stock maintenance system are shown by the dotted arrow
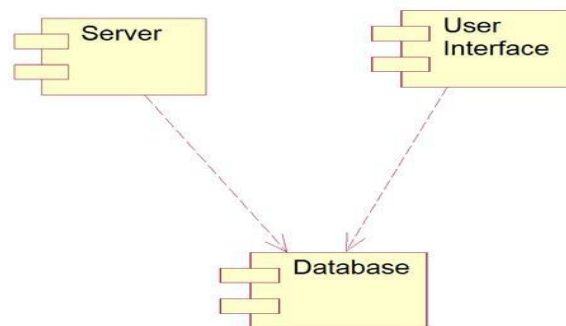
DEPLOYMENT DIAGRAM:

The modules in the deployment diagram are applicant, passport administrator, regional administrator, clerk and stock maintenance system.

The applicant stock administrator regional administrator and police are dependent on the stock maintenance system are shown by the arrow.
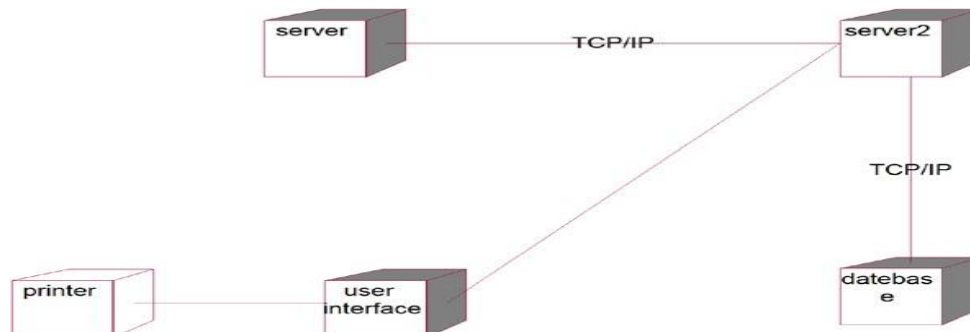
RESULT :

Thus the Stock Maintenance System is successfully done and the UML diagram are implemented by using the Rational rose.

EX.NO: 5	
DATE:	**ONLINE COURSE RESERVATION SYSTEM**

AIM

To develop the Online Course Reservation System using rational rose tools, visual basic and MS access

PROBLEM ANALYSIS AND PROJECT PLAN

➢ As the head of information systems for a college, you are tasked with developing a new student registration system.

➢ The college would like a new client-server system to replace its much older system developed around main frame technology.

➢ The new system will allow students to register for courses and view report cards from PCs attached to the campus LAN.

➢ Professors will be able to access the system to sign up to teach courses as well as record grades.

.

PROBLEM STATEMENT

➢ Students may request a course catalogue containing list of course offering for all college.

➢ Information about each course, such as professor, department and prerequisites, will be included to help students make informed decisions.

➢ Once the registration process is completed for the student, the registration system sends

➢ information to the billing system so that the student can be billed for the course.

SOFTWARE REQUIREMENTS SPECIFICATION

S. no	Software Requirement Specification
1.0	Introduction
1.1	Purpose
1.2	Scope
1.3	Definition, Acronyms and Abbreviation
1.4	Reference
1.6	Tools to be used
1.7	Overview
1.8	Overall description
1.9	Productive description
2.0	Software interface
2.1	Hardware interface
2.2	System function
2.3	User characteristics
2.4	Constraints

GANTT CHART:
ONLINE COURSE RESERVATION GANTT CHART :
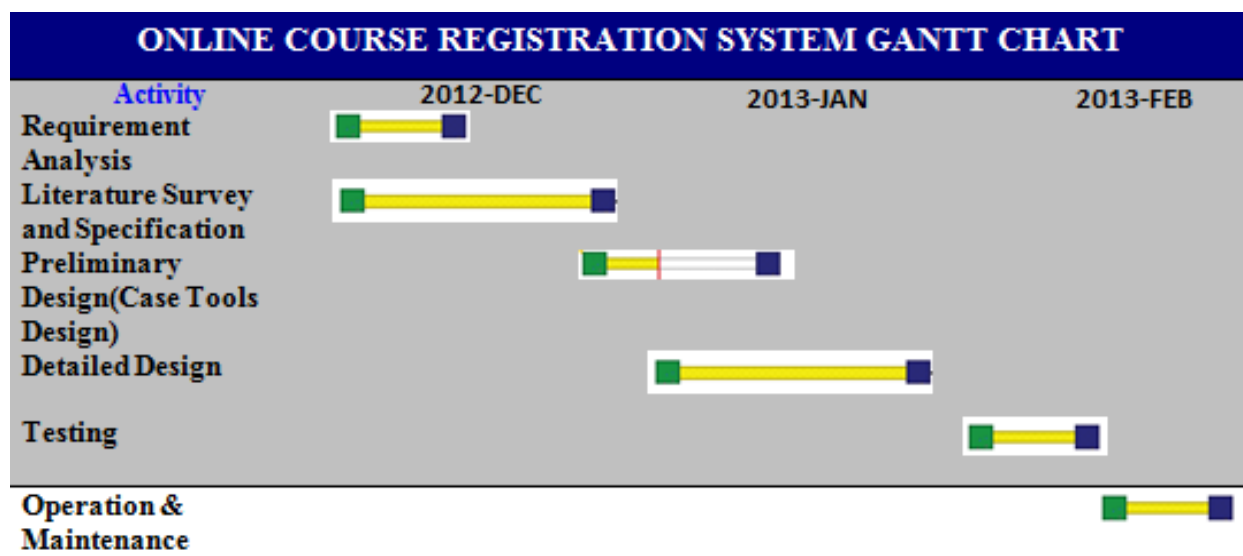
1.0 INTRODUCTION

Online Course Reservation System is an interface between the Administrator and the Student responsible for the verifying the information . It aims at improving the efficiency in the information and reduces the complexities involved in it to the maximum possible extent.

1.1 PURPOSE

If the entire process of 'Verifying the Information' done in a manual manner then it would take several months for the Register to reach the applicant. Considering the fact that the number of applicants for Register 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 Administrator of Register and the student for verification of applicant's information.

1.1 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.

Student

One who wishes to obtain the Register.

OCRS

Refers to this Online Course Reservation System.

1.4 REFERENCES

IEEE Software Requirement Specification format.

1.5 TOOLS TO BE USED

Rational Rose tool (for developing UML Patterns)

1.6 OVERVIEW

OCRS 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.

1.7 OVERALL DESCRIPTION

1.8 PRODUCT PERSPECTIVE

The OCRS acts as an interface between the 'Student' 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 student 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 Register 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

Student
They are the people who desires to obtain the register and submit the information to the

database.

Administrator

He has the certain privileges to add the Register 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.

Clerk

He is the person who upon receiving intimation from the OCRS, perform a personal verification of the applicant and see if he has any criminal case against him before or at present.

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.

UML DIAGRAMS

Sno	UML DIAGRAMS
1	Use Case diagram
2	Class diagram
3	Sequence diagram
4	Collaboration diagram
5	State Chart diagram
6	Activity diagram
7	Component diagram
8	Deployment diagram
9	Package diagram

USE CASE DIAGRAM

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

The Student in use case diagram are Login, administrator, database.

The use cases are Login, give details, logout, collect details, verification, issue.

The student uses the use case are denoted by the arrow
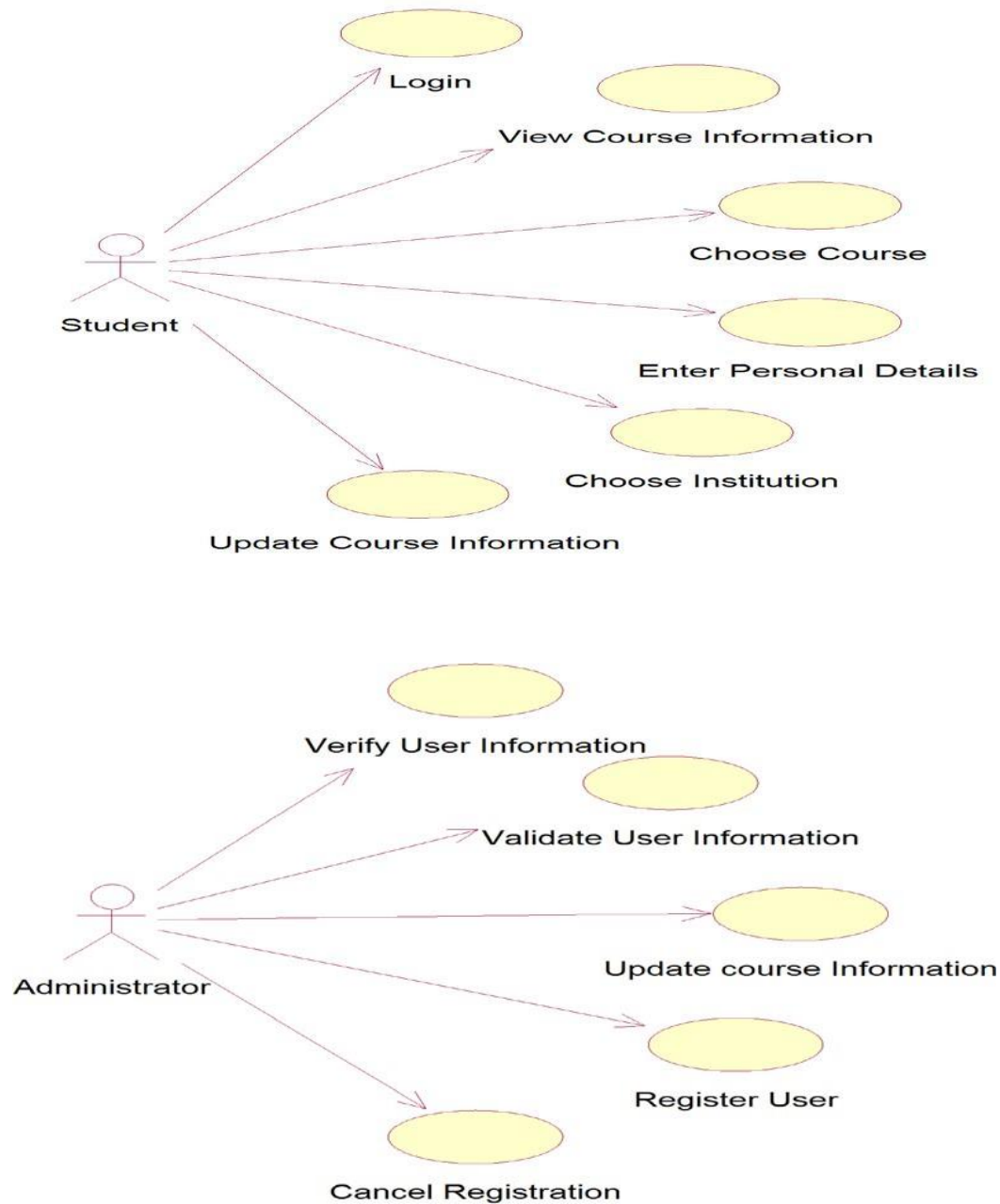
CLASS DIAGRAM

The classes are student,, database, regional administrator, reg administrator and catalog.

The applicant has attribute such as name and password and operations are login, give details and logout.

The database has attributed such as name and operation is store.

The register administrator has attribute such as name and operation are get details, verify details and issue.

CLASS DIAGRAM:
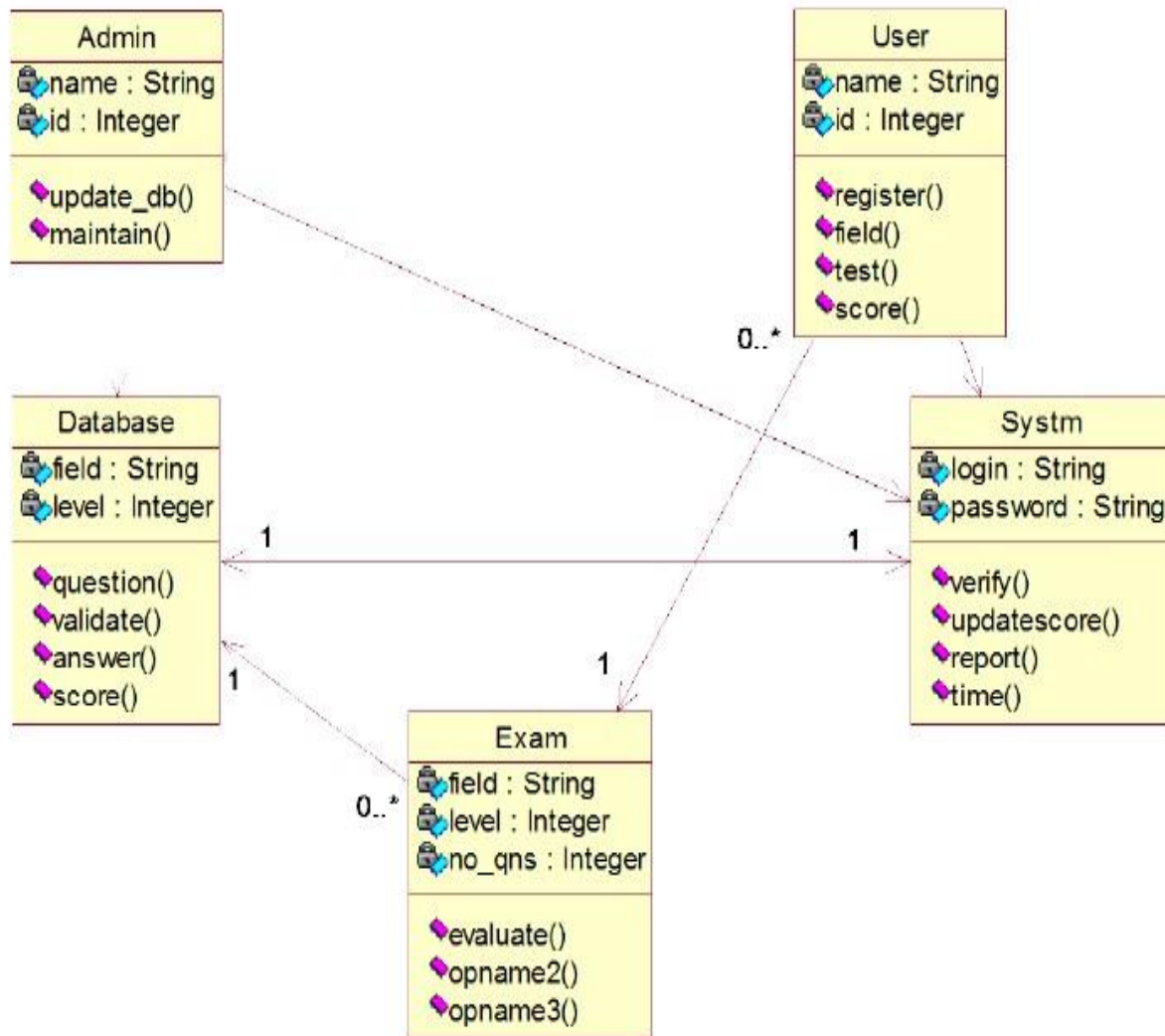
ACTIVITY DIAGRAM

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 he purpose is to provide view of close and what is going on inside a use case or among several classes.

| STUDENT | SYSTEM | DATABASE |

start

Login
entry/ Enter the system

Obtain
Details

Retrieve
Details

Decide
Course

Form to be
Filled

Enter valid Details
and Register

course valid

Check Course
Availability

course ivalid

course available

course available

Copy Of
Registration

Display Successfull
Registration

Update Course
Information

stop
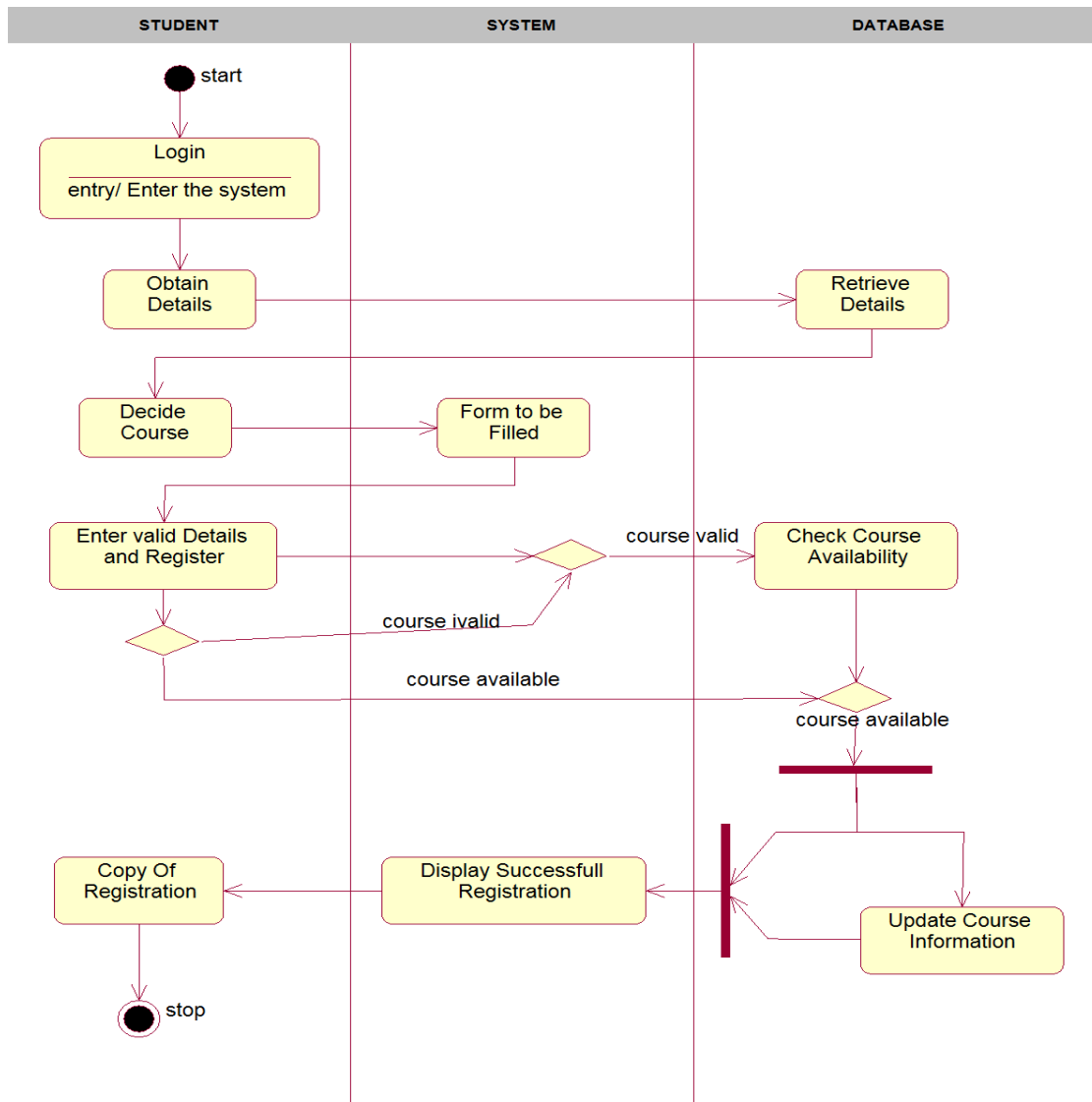
SEQUENCE DIAGRAM

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.

Sequence Diagram:
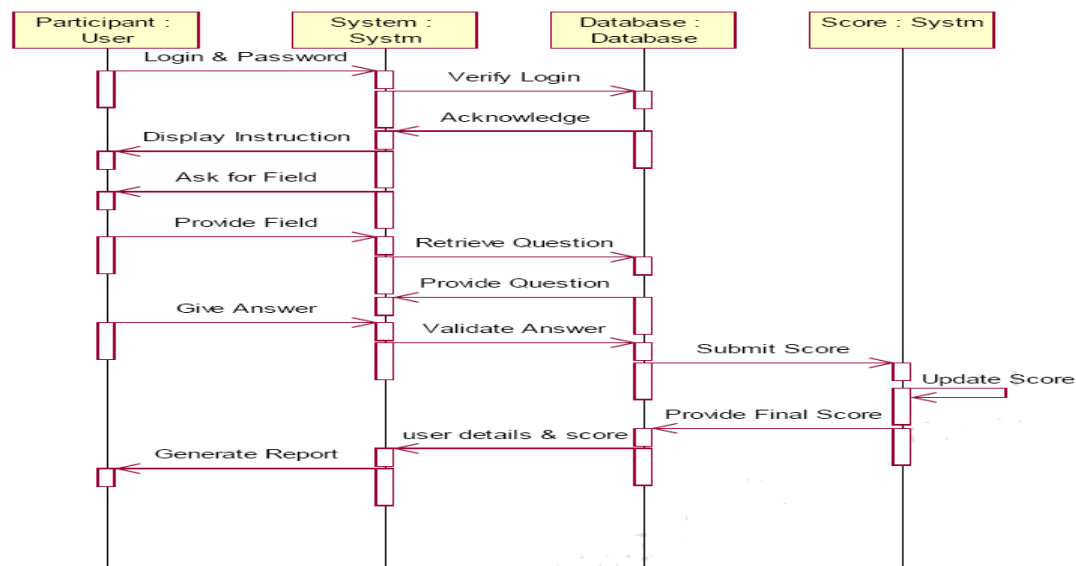
COMPONENT DIAGRAM

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

Component Diagram:
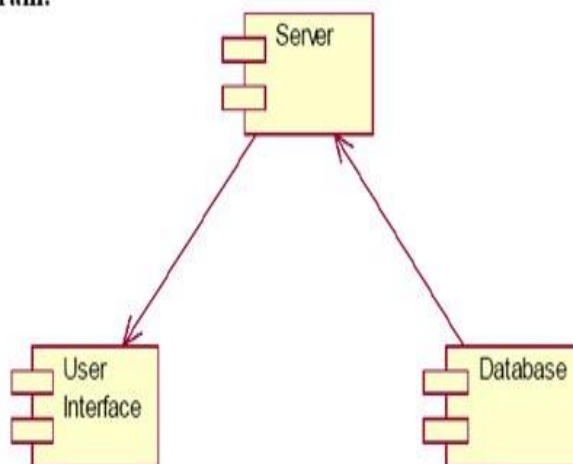
DEPLOYMENT DIAGRAM

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

Deployment Diagram:
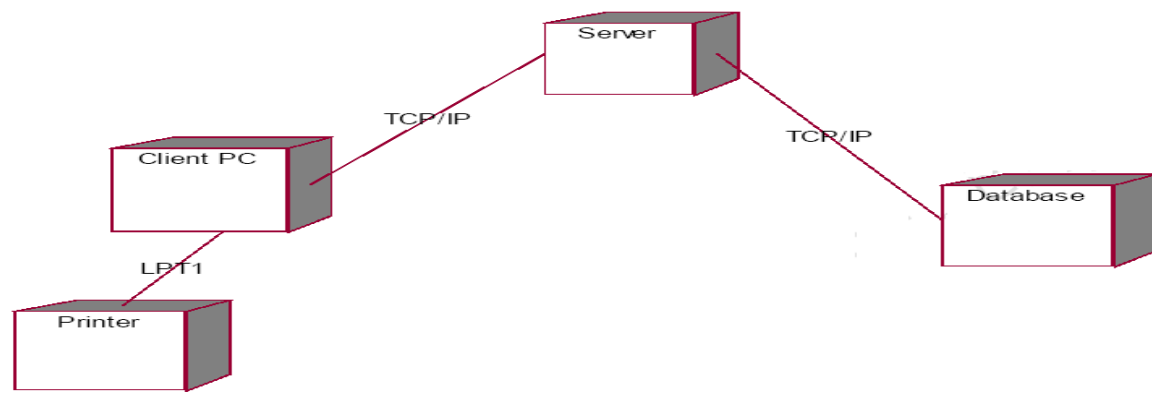
RESULT :

Thus the Online Course Registration System is successfully done and the UML diagram are implemented by using the Rational rose.

EX.NO: 6	
DATE:	**AIRLINE / RAILWAY RESERVATION SYSTEM**

AIM:

To develop the Airline Reservation System using rational rose tools, visual basic and MS access.

PROBLEM ANALYSIS AND PROJECT PLAN:

➢ Our project is carried out to develop software for online Railway Reservation System. The software is coded in VB, which is the front end, and it has Back end, which contains information about the reservation and the availability of seats in trains.

➢ It has various options like reservation, cancellation and to view details about available seats. Our project mainly simulates the role of a Railway ticket booking officer, in a computerized way.

PROBLEM STATEMENT:

➢ The reservation option enables a person to reserve for a ticket at their home itself. All he/ she has to do is to just login and enter the required details. After this the reservation database is updated with the person details, train name and also the source and destination place.

➢ The cancellation option enables the passenger to cancel the tickets that has been already booked by him/her.

➢ The availability option prompts the person to enter train number, train name and date of travel. After this the availability database is accessed and available positions are produced.

SOFTWARE REQUIREMENTS SPECIFICATION:

S. no	Software Requirement Specification
1.0	Introduction
1.1	Purpose
1.2	Scope
1.3	Definition, Acronyms and Abbreviation
1.4	Reference
1.5	Tools to be used
1.6	Overview
1.7	Overall description
1.8	Productive description
2.0	Software interface
2.1	Hardware interface
2.2	System function
2.3	User characteristics
2.4	Constraints

GANTT CHART
E- TICKETING GANTT CHART _

ONLINE TICKET RESERVATION SYSTEM GANTT CHART
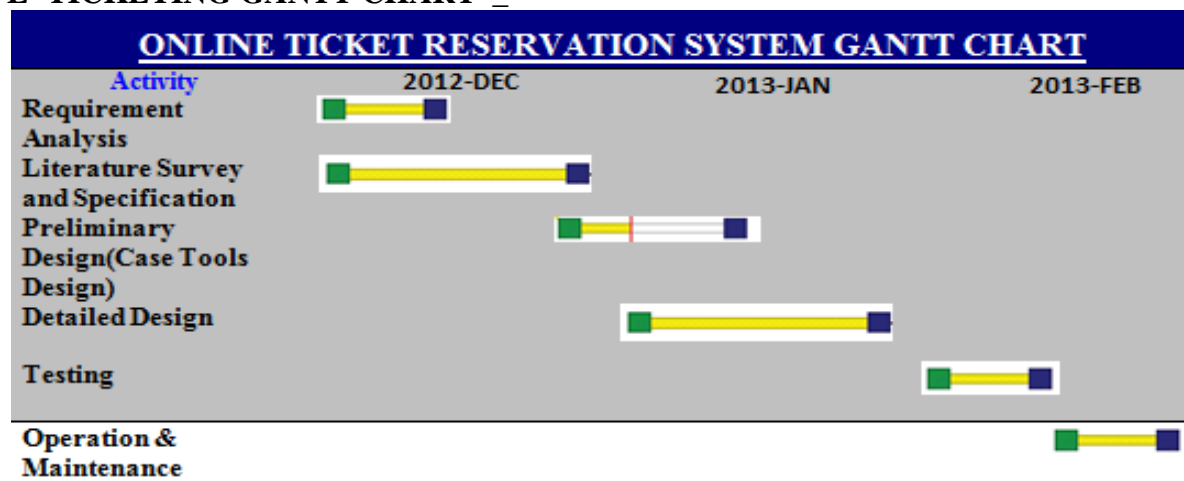
1.0 INTRODUCTION

E- Ticketing System is an interface between the Passenger and the Authority responsible for the Issue of Tickets. It aims at improving the efficiency in the Issue of Tickets and reduces the complexities involved in it to the maximum possible extent.

1.1 PURPOSE

If the entire process of 'Issue of Tickets' 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 passengers for tickets is increasing, 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 passenger and the administrator.

Transfer of data between the Ticket Issuing Authority and the Passenger for verification of applicant's information.

1.2 DEFINITIONS, ACRONYMS AND THE ABBREVIATION

Reservation System

Refers to the super user who is the Central Authority who has been vested with the privilege to manage the entire system.

Passenger

One who wishes to obtain the Passport.
ETS

Refers to this E-Ticketing System.

1.3 REFERENCES

IEEE Software Requirement Specification format.

1.4 TOOLS TO BE USED

Rational Rose tool (for developing UML Patterns)

1.5 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.

1.6 OVERALL DESCRIPTION
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 E-Ticket 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

Passenger
    They are the people who desires to obtain the ticket and submit the information to the database.

Reservation System
    He has the certain privileges to add the passport status and to approve the issue of tickets.

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.

UML DIAGRAMS

Sno	UML DIAGRAMS
1	Use Case diagram
2	Class diagram
3	Sequence diagram
4	Collaboration diagram
5	State Chart diagram
6	Activity diagram
7	Component diagram
8	Deployment diagram
9	Package diagram

USECASE DIAGRAM

The actors in use case diagram are Passenger, Reservation status database, Flight status database, reservation system

The use cases are login, get flight details, reservation form, cancellation, reserve ticket, issue ticket, store reservation details, store flight details.

The actors uses the use case are denoted by the arrow
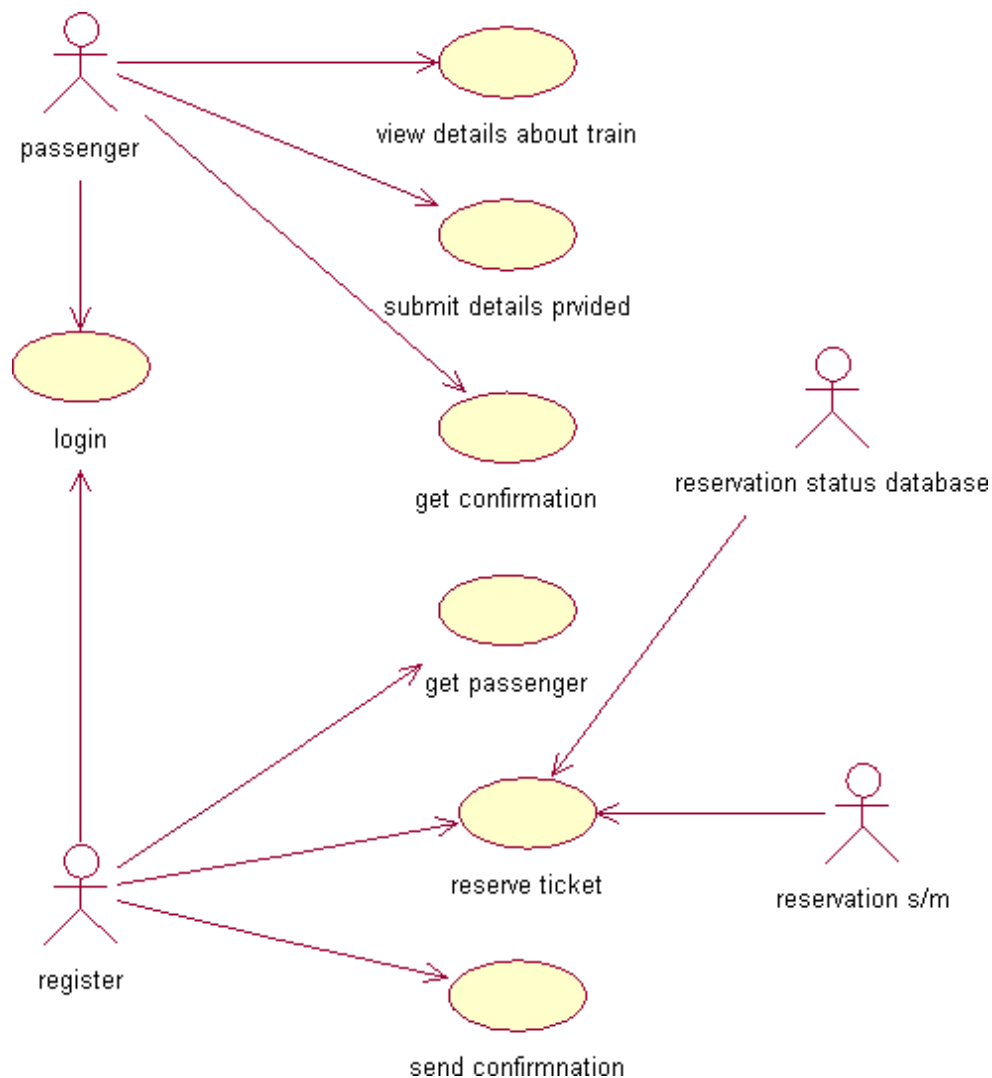
CLASSDIAGRAM

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.

There are four classes namely passengers,registration system, train details, database administrator.

All the classes are having their own attributes , functionalities and dependancies.
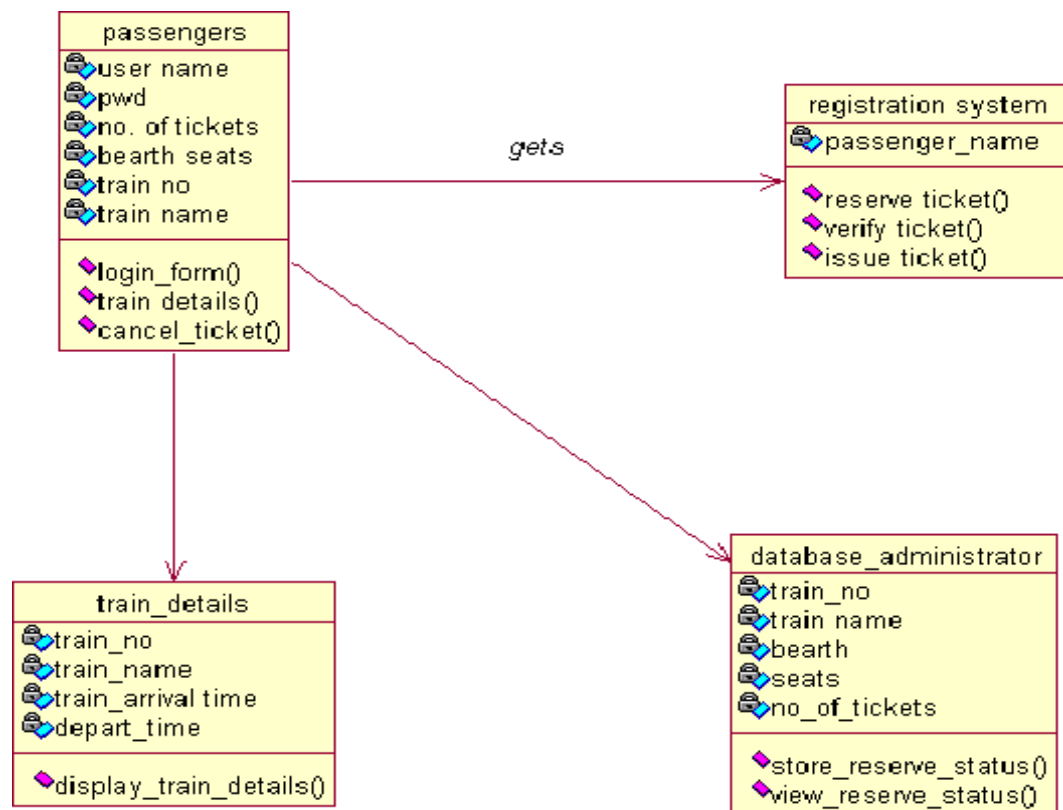
SEQUENCE DIAGRAM

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.

The passenger login to the reservation system.

The reservation system gives the details of the flight.

The passenger get reservation form and reserves ticket.

The system issues ticket and updates.

TICKET RESERVATION

passenger	reservation system	reservation status database	database administrator

login

view train details

get reservation system

submit details

reserve ticket

issue ticket

update train details

update reservation details

TICKET CANCELLATION

passenger	reservation system	registrar	database administrator

login

check ticket status

return status

fill form

status valid

submit cancellation

cancellation accepted

return reserved ticket

TICKET ISSUING

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.

TICKET RESERVATION

TICKET CANCELLATION

```
                                    1: login
                                    5: fill form
        ┌──────────────┐                          ┌──────────────┐
        │  passenger   │────────────────────────→│  reservation │
        └──────────────┘                          │    system    │
                           ←────────              └──────────────┘
                           4: status valid
                           8: return reserved ticket
                                                         │
                                                   6: submit cancellation
                                                         ↓
   2: check ticket status    3: return status
        │                              ↗
        ↓                                            7: cancellation accepted
   ┌──────────────┐                          ┌──────────────┐
   │   database   │                          │   registrar  │
   │ administrator│                          └──────────────┘
   └──────────────┘
```

TICKET ISSUING

```
   ┌──────────────┐       1: submit details        ┌──────────────┐
   │  passengers  │───────────────────────────────→│   registrar  │
   └──────────────┘       ←───────────             └──────────────┘
                          7: issue tools

        6: seats available                         4: valid acc no
                      ↗                                    ↓
                          ←────
                          2: view profile
                          5: check availablity of seats

   ┌──────────────┐         ───────────→            ┌──────────────┐
   │   database   │                                  │   banking    │
   │ administrator│                                  │    system    │
   └──────────────┘  3: check valid acc no or credit no └──────────┘
```

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 labeled with their event. It is included with initial pseudo state and fins end state.

The activities taken place in the system are given in the activity diagram.

The passenger verifies the train details and reserves train.

The system issues reservation and updates.
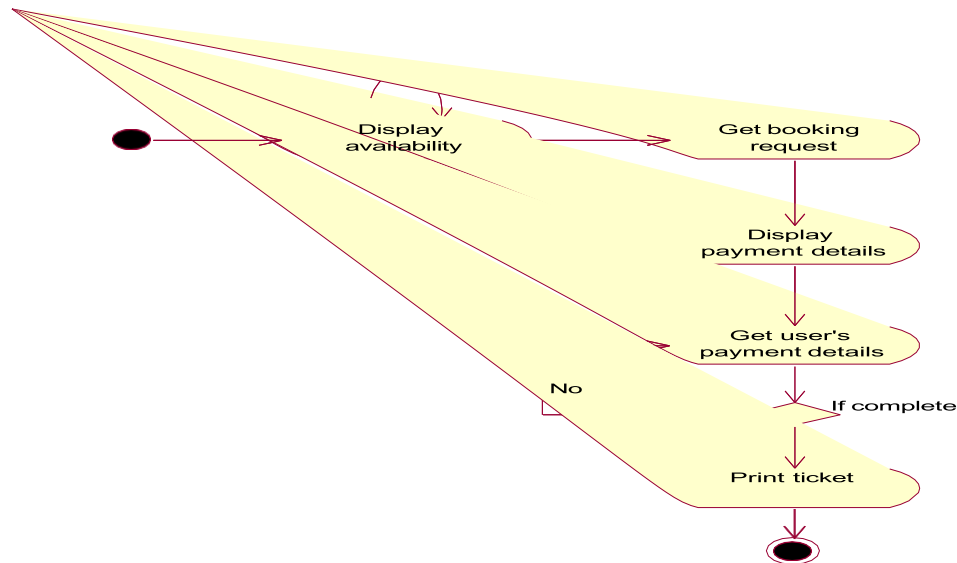
ACTIVITY DIAGRAM

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.

COMPONENT DIAGRAM

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

DEPLOYMENT DIAGRAM

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

The modules in the deployment diagram are Online reservation system and printer and database.
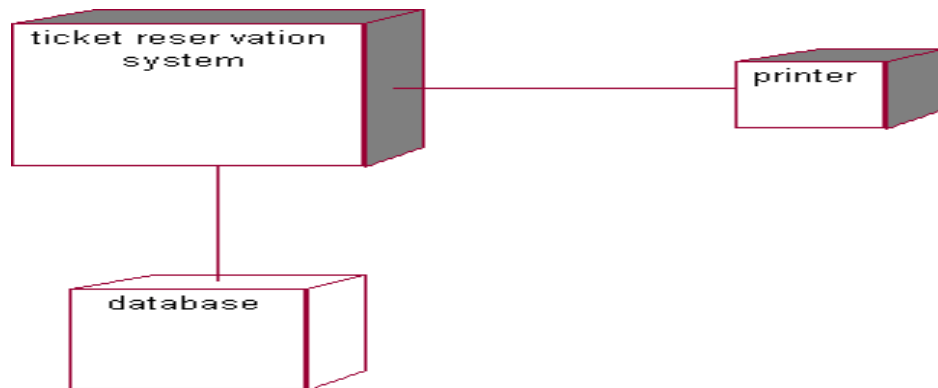
RESULT:

   Thus the Airline/Railway reservation System is successfully done and the UML diagram are implemented by using the Rational rose.

EX.NO: 7	
DATE:	**SOFTWARE PERSONNEL MANAGEMENT SYSTEM**

AIM:

To develop the Software Personnel Management System using rational rose tools, visual basic and MS access.

PROBLEM ANALYSIS AND PROJECT PLAN:

- ➢ The three modules are
- ➢ Entry form
- ➢ The employee details, edit details and exit command buttons are present. We can choose the required command button.
- ➢ Pay slip form
- ➢ Fill in the form with details such as employee id, employee name, department, experience, and basic pay in the text boxes and submit using CALCULATE command
- ➢ button Update it in the database using UPDATE command button.
- ➢ Database form
- ➢ Updated database would be present. We can search for the required Pay details using
- ➢ SEARCH command button

PROBLEM STATEMENT:

- ➢ To compute the gross pay of a person using the software personnel management
- ➢ system software and to add new details to the existing database and update it, using visual
- ➢ basic 6.0 and MS Access.
- ➢ To create an software having the description of software personnel management system,

SOFTWARE REQUIREMENTS SPECIFICATION

S. no	Software Requirement Specification
1.0	Introduction
1.1	Purpose
1.2	Scope
1.3	Definition, Acronyms and Abbreviation
1.4	Reference
1.5	Tools to be used
1.6	Overview
1.7	Overall description
1.8	Productive description
2.0	Software interface
2.1	Hardware interface
2.2	System function
2.3	User characteristics
2.4	Constraints

GANTT CHART
SOFTWARE PERSONNEL MANAGEMENT SYSTEM
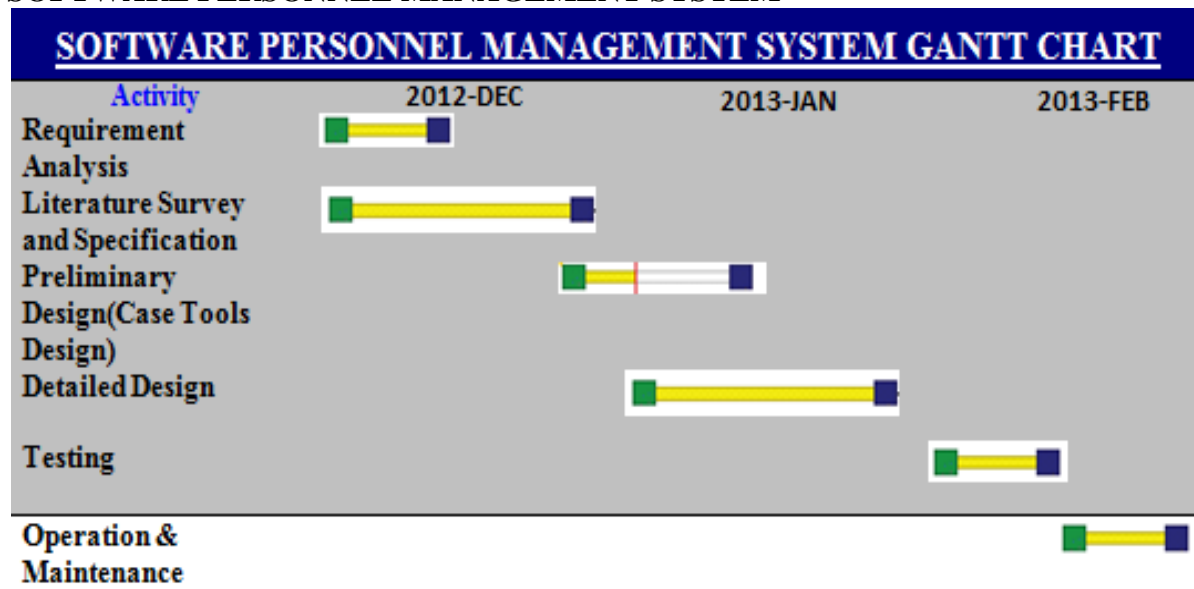
1.0 INTRODUCTION

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

1.1 PURPOSE

If the entire process of 'Software Personnel Management' 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 Software skills 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.

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.

1.3. REFERENCES

IEEE Software Requirement Specification format.

1.4. TOOLS TO BE USED

Rational Rose tool (for developing UML Patterns)

1.5 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 acto

1.6.PRODUCT PERSPECTIVE

The SPMS acts as an interface between the 'employee' and the 'payroll'. 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.

2.4 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.

UML DIAGRAMS

Sno	UML DIAGRAMS
1	Use Case diagram
2	Class diagram
3	Sequence diagram
4	Collaboration diagram
5	State Chart diagram
6	Activity diagram
7	Component diagram
8	Deployment diagram
9	Package diagram

UML USECASE DIAGRAM

The actors in use case diagram are Employee, Administrator and database.

The use cases are authentication, view details and edit employee details.

The actors uses the use case are denoted by the arrow
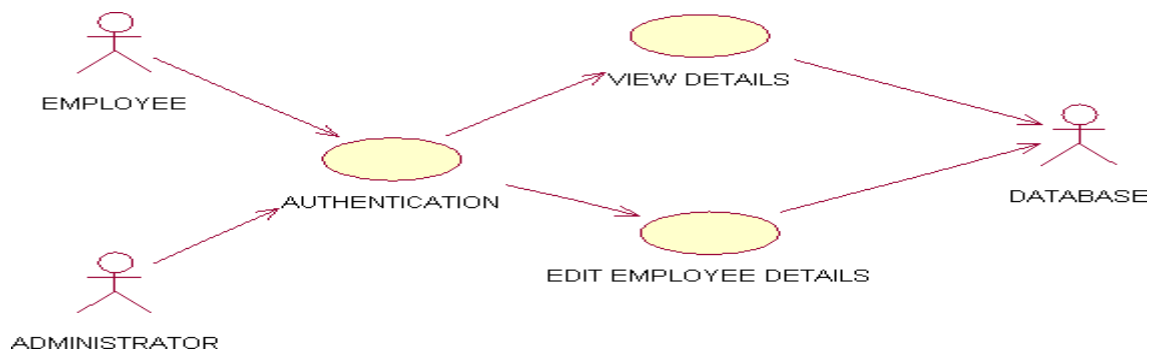
UML CLASS DIAGRAM:

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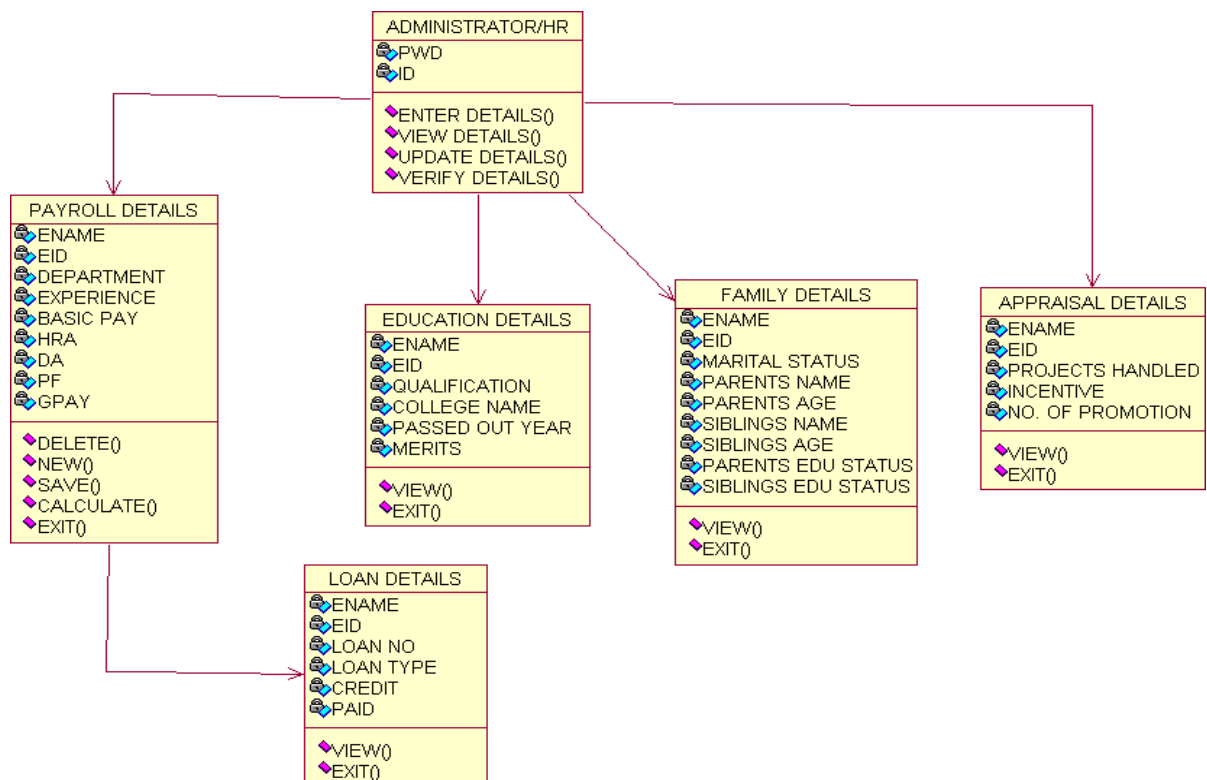
SEQUENCE DIAGRAM:

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
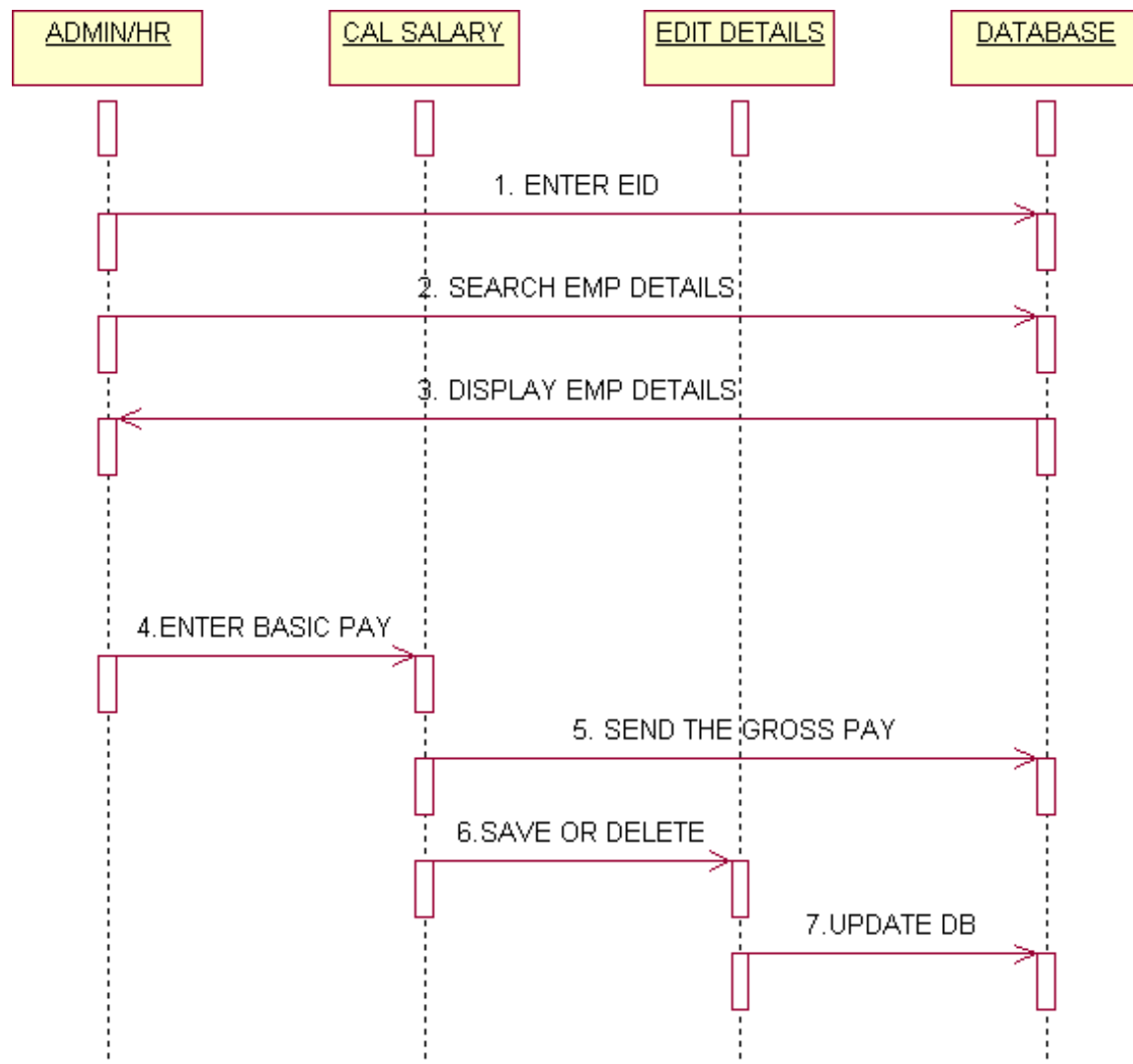
UML ACTIVITY DIAGRAM:

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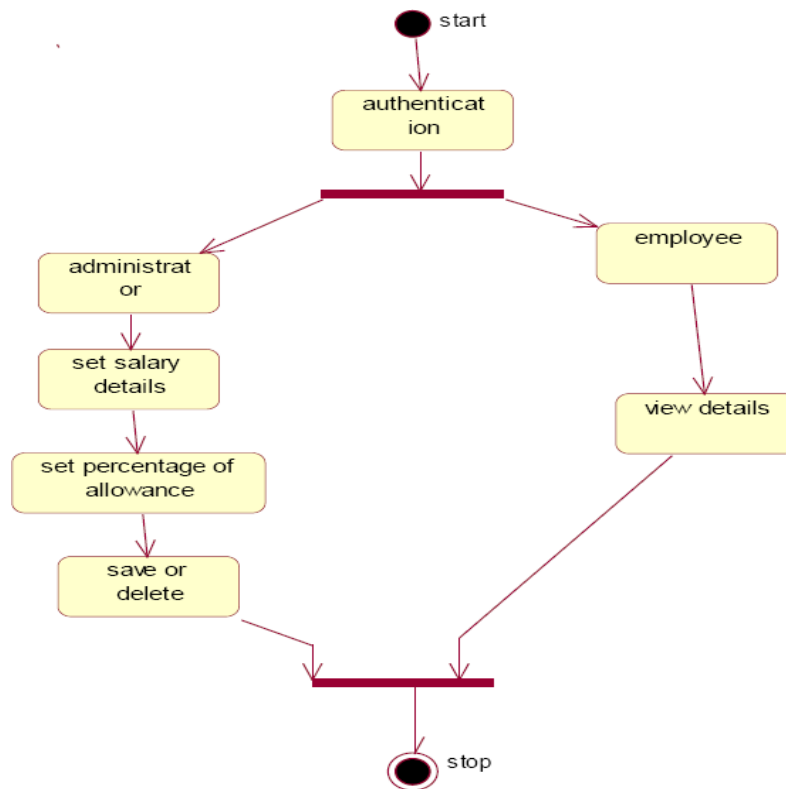
UML COLLABRATION DIAGRAM:

COLLABRATION 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.
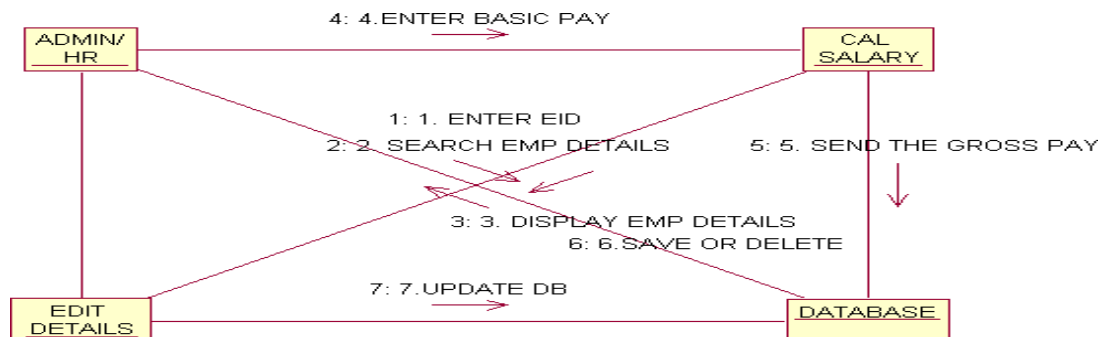
UML COMPONENT DIAGRAM:

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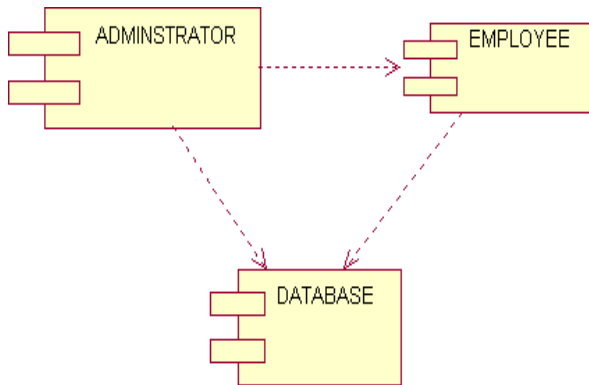
UML DEPLOYMENT DIAGRAM:

Deployment diagram shows the assignment of concrete software artifact to computational nodes. It shows the deployment of software elements to the physical elements. Deployment diagram are useful to communicate or deployment architecture.
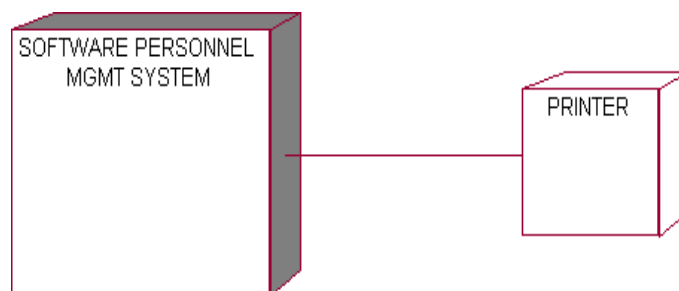
RESULT :

   Thus the Software Personnel Management System is successfully done and the UML diagram are implemented by using the Rational rose.

EX.NO: 8	CREDIT CARD PROCESSING SYSTEM
DATE:	

AIM

To develop the Credit card System using rational rose tools, visual basic and MS access

PROBLEM ANALYSIS AND PROJECT PLAN

➢ Software is developed for credit card system coded in VB, which is the front end, and it has a Microsoft Access database that is used as the back end, which contains the information about the customer details and there account details.

➢ It has various options like cash payment, amount balance books.

➢ The buy option enables a customer to search for different things on internet easier and efficient manner.

➢ All he has to do is to just enter the required category and the amount transaction details.

PROBLEM STATEMENT

➢ Once the item is available the customer is asked to enter his/her account number and the item is issued.

➢ The view option enables the customer to view details about the available balance and to get the information about the transactions.

➢ By entering the account number he can view the list of transaction details.

➢ Manual work makes the process to take more time.

SOFTWARE REQUIREMENTS SPECIFICATION:

S. no	Software Requirement Specification
1.0	Introduction
1.1	Purpose
1.2	Scope
1.3	Definition, Acronyms and Abbreviation
1.4	Reference
1.6	Tools to be used
1.7	Overview

1.8	Overall description
1.9	Productive description
2.0	Software interface
2.1	Hardware interface
2.2	System function
2.3	User characteristics
2.4	Constraints

GANTT CHART
CREDIT CARD SYSTEM
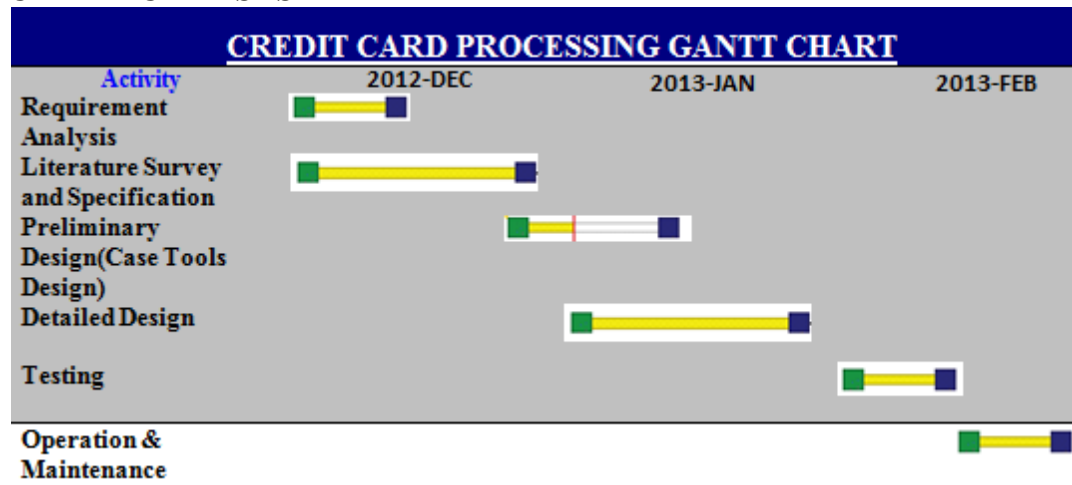
1.0 INTRODUCTION

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

1.1 PURPOSE

If the entire process of 'Issue of Credit card' is done in a manual manner then it would take several months for the card to reach the applicant. Considering the fact that the number of applicants for credit card 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 card can use this system to reduce his workload and process the application in a speedy manner.
Provide a communication platform between the user and the administrator.

User
> One who wishes to obtain the Credit card.

CCS
> Refers to this Credit Card System.

1.2 REFERENCES
> IEEE Software Requirement Specification format.

1.3 TOOLS TO BE USED
> Rational Rose tool (for developing UML Patterns)

1.4 OVERVIEW
> CCS 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.

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 Credit card 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.

USER CHARACTERISTICS
User

They are the people who desires to obtain the credit card and submit the information to the database.

Administrator
> He has the certain privileges to add the card status and to approve the issue of card.

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.

UML DIAGRAMS

Sno	UML DIAGRAMS
1	Use Case diagram
2	Class diagram
3	Sequence diagram
4	Collaboration diagram
5	State Chart diagram
6	Activity diagram
7	Component diagram
8	Deployment diagram
9	Package diagram

USECASE DIAGRAM

The actors in use case diagram are Admin and Account holder.

The use cases are login, approval process, invalid pin, transaction, deposit, change pin, withdraw, check current process .

The actors uses the use case are denoted by the arrow
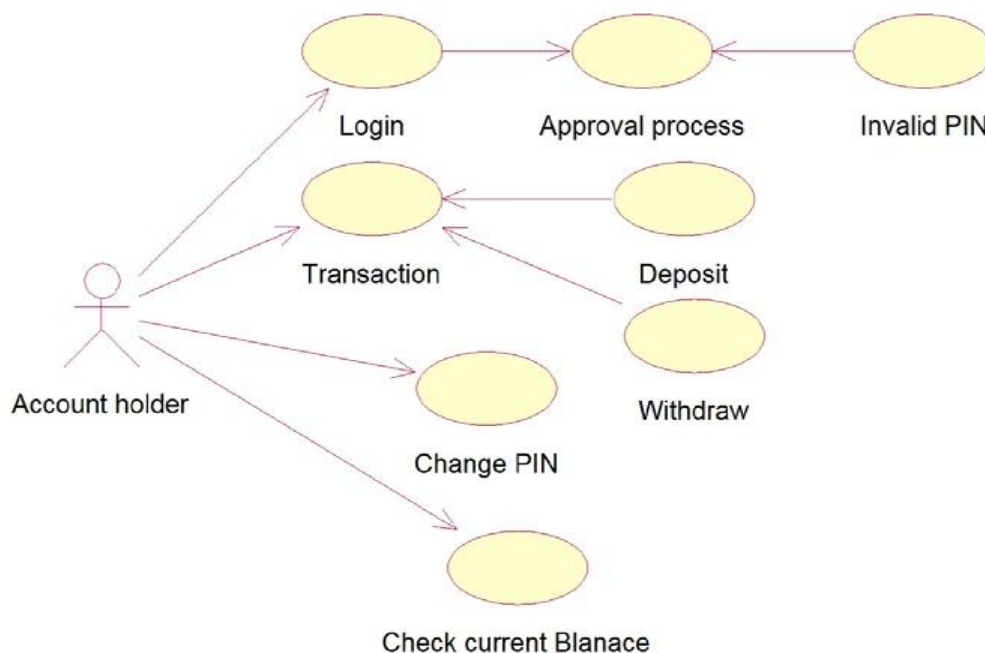
CLASS DIAGRAM

The classes are Bank, Client, ATM machine, Account, Transaction, checking account and saving account.

The Client has the attributes first name, last name, card number and the pin number.

The ATM machine has the attribute Location.

The Account has the attributes number and balance.

The Transaction has the attribute trans ID, trans Date, amount and post balance.

The checking account has withdraw and the saving account has deposit.
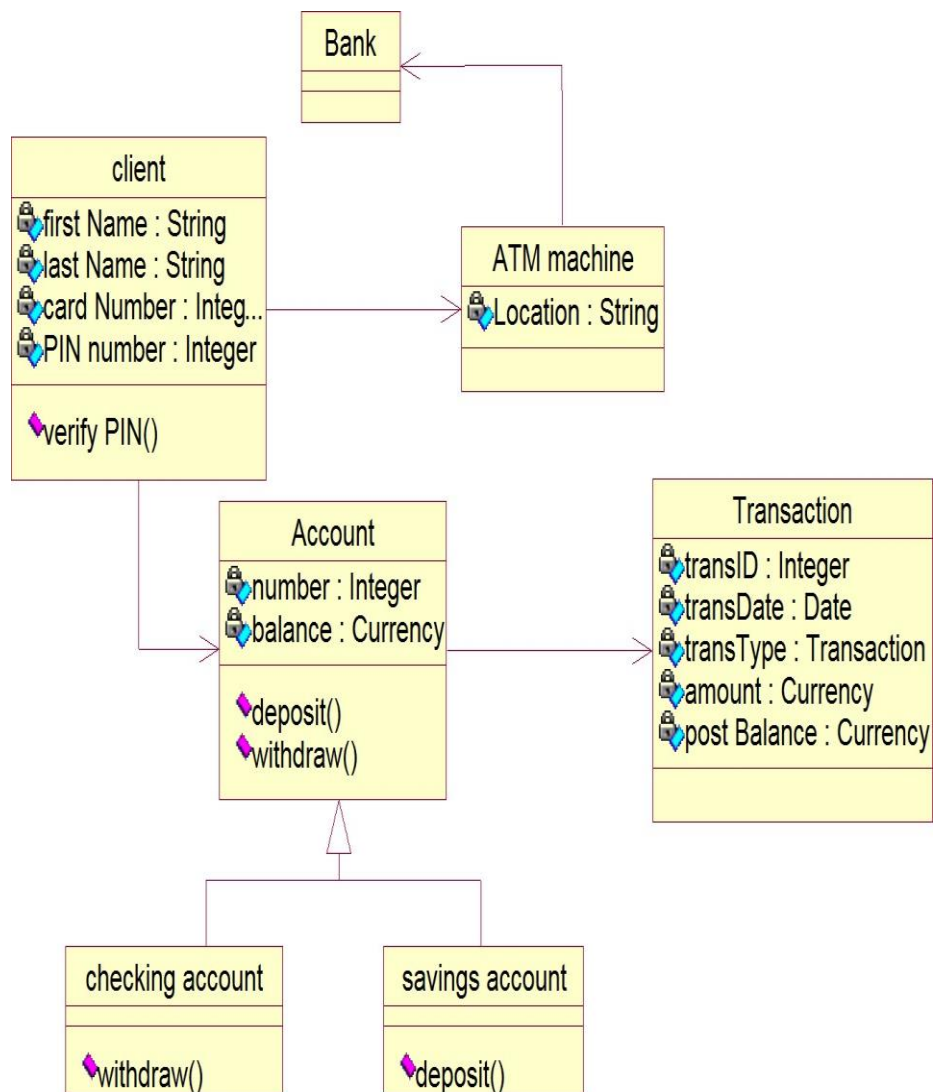
SEQUENCE DIAGRAM.

The Account holder logins to the ATM machine and inserts card.

ATM machine requests PIN and user enters the pin.

The ATM machine verifies the pin by referring the server and the PIN is accepted.

Thus the transaction is done successfully and card is ejected.

account holder : cli...	Atm machine : ATM m...	server : Bank	database : Account
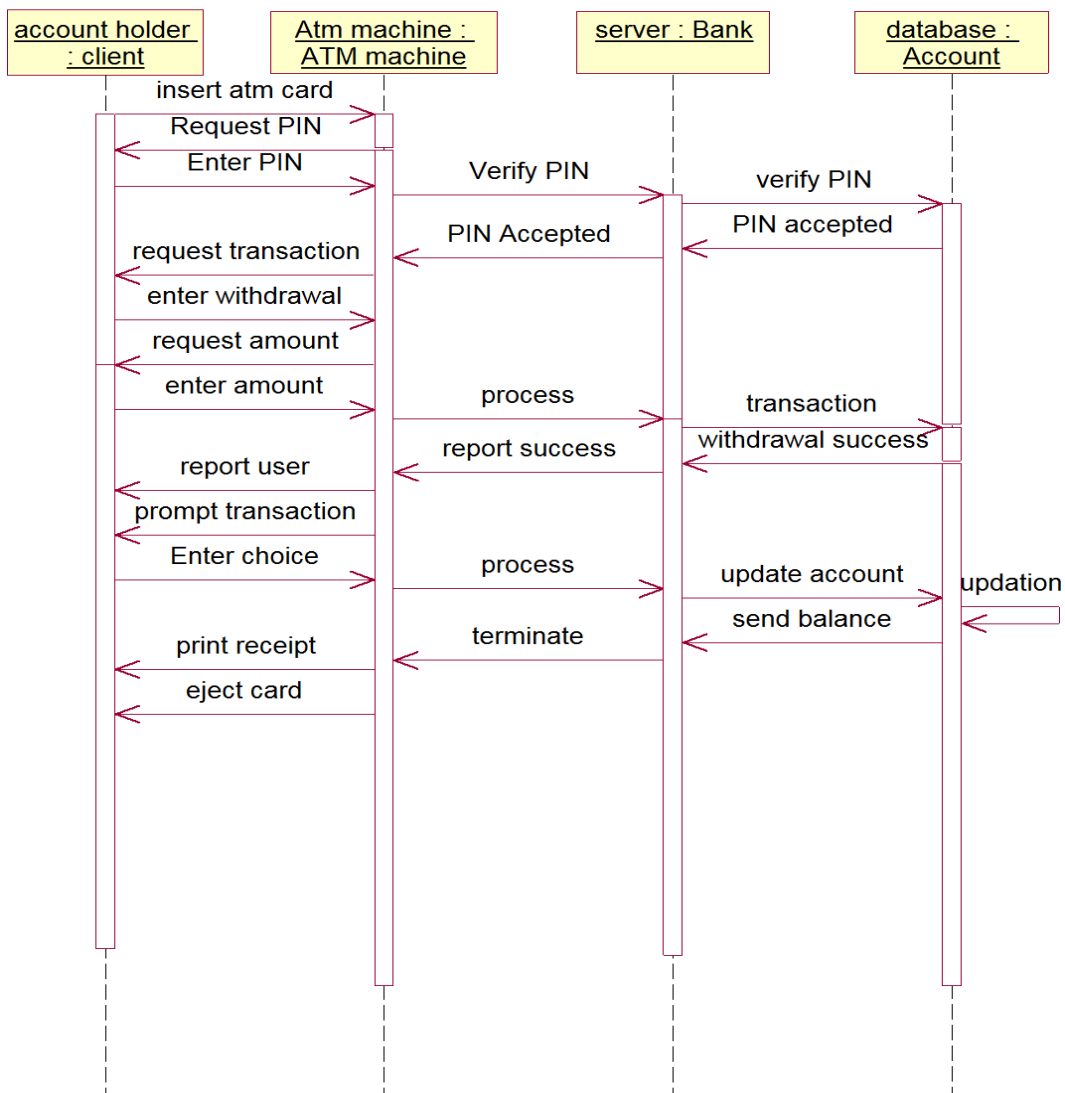
account holder : client	Atm machine : ATM machine	server : Bank	database : Account

insert atm card

Request PIN

Enter PIN

Verify PIN

verify PIN

PIN Accepted

PIN accepted

request transaction

enter withdrawal

request amount

enter amount

process

transaction

report success

withdrawal success

report user

prompt transaction

Enter choice

process

update account

updation

send balance

print receipt

terminate

eject card

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.

The account holder enters the card and enters the pin number.

The machine verifies the pin number and transacts the money.

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.

IDLE

entry/ Insert card
exit/ prompt PIN

Verify

entry/ Enter PIN
exit/ verify PIN

Transaction

entry/ Type
entry/ check availability

Withdraw

entry/ enter Amount
exit/ process request

Cash

entry/ Dispense Cash
exit/ prompt transaction

Eject

entry/ Print reciept
exit/ Collect card

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.

COMPONENT DIAGRAM

The component diagram is represented by figure dependency and it is a graph of design of figure dependency.The modules in the component diagram are Server, User interface and the database.
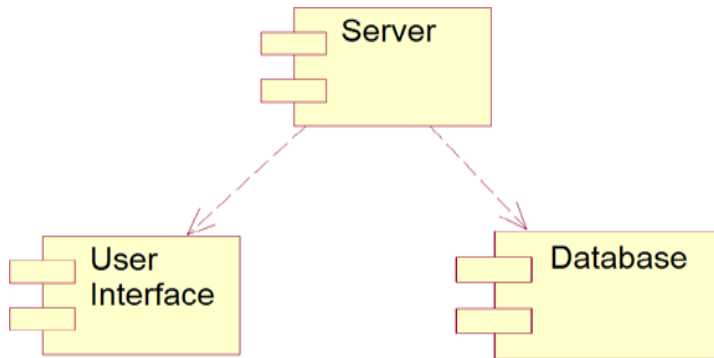
DEPLOYMENT DIAGRAM

It is a graph of nodes connected by communication association. It is represented by a three dimensional box.   The modules in the deployment diagram are

     Server 1
     Server 2
     Client PC and
     the database.
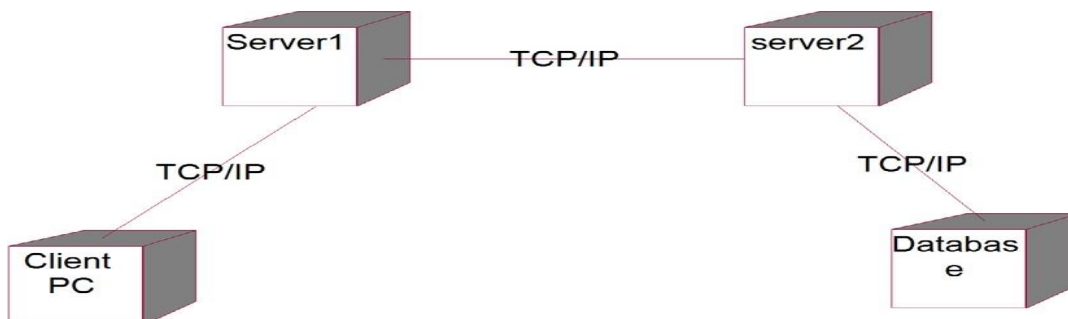
RESULT :

Thus the Application for Credit Card System is successfully done and the UML diagram are implemented by using the Rational rose.

EX.NO: 9	E BOOK MANAGEMENT SYSTEM
DATE:	

AIM :

To develop the E-book management System using rational rose tools, visual basic and MS access

PROBLEM ANALYSIS AND PROJECT PLAN

➢ This E-BOOK should contain index of the topics.

➢ Create a main page.

➢ Main page contains index of certain topics.

➢ When a particular topic is required double click on it.

➢ It displays a page with the contents of that topic.

➢ A separate option is present to go back to main page.

PROBLEM STATEMENT

➢ Passport Automation System is used in the effective dispatch of E-book to all of the users. This system adopts a comprehensive approach to minimize the manual work and schedule resources, time in a cogent manner.

➢ The core of the system is to get the online registration form (with details such as name, address etc.,) filled by the applicant whose testament is verified for E-book System with respect to the already existing information in the database.

➢ The application is then processed manually based on the report given by the system, and any forfeiting identified can make the applicant liable to penalty as per the law.

➢ The system forwards the necessary details to the Administrator for the issue of books and to verify the details of the book.

SOFTWARE REQUIREMENTS SPECIFICATION

S. no	Software Requirement Specification
1.0	Introduction
1.1	Purpose
1.2	Scope
1.3	Definition, Acronyms and Abbreviation

1.4	Reference
1.5	Tools to be used
1.6	Overview
1.7	Overall description
1.8	Productive description
2.0	Software interface
2.1	Hardware interface
2.2	System function
2.3	User characteristics
2.4	Constraints

GANTT CHART
E-BOOK MANAGEMENT SYSTEM GANTT CHART
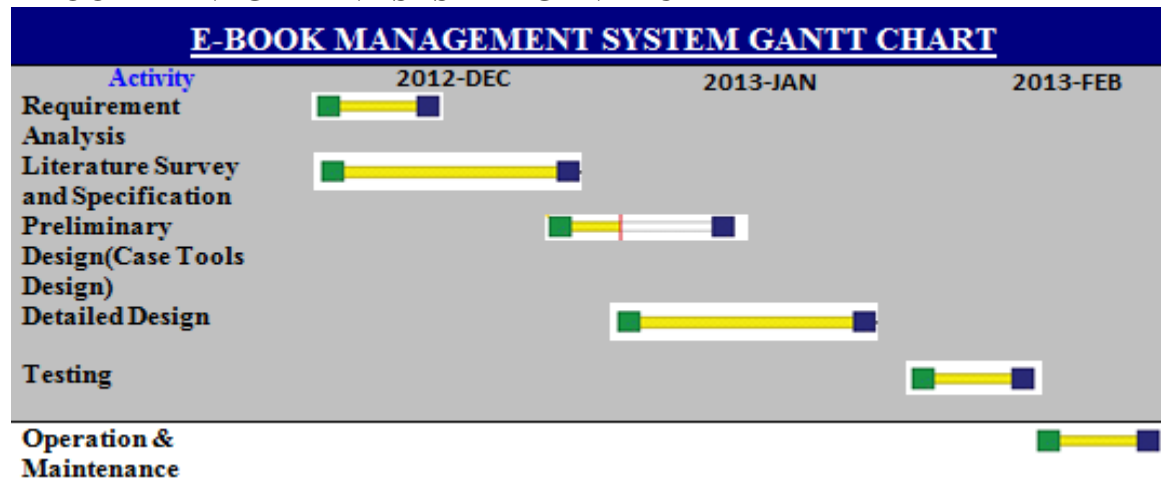
1.0 INTRODUCTION

E-Book management System is an interface between the User and the Authority responsible for the Issue of Book. It aims at improving the efficiency in the Issue of Books and reduces the complexities involved in it to the maximum possible extent.

1.1 PURPOSE

If the entire process of 'Issue of Books' is done in a manual manner then it would take several processes for the books to reach the user. Considering the fact that the number of users for E-Book 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.

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 E-Book Issuing Authority and the User 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.

User

One who wishes to obtain the Books.

EMS

Refers to this E-Book Management System.

1.4 REFERENCES

IEEE Software Requirement Specification format.

1.5 TOOLS TO BE USED

Rational Rose tool (for developing UML Patterns)

1.6 OVERVIEW

EMS 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.

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 E-Book 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

User

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 Books.

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.

UML DIAGRAMS

1	Use Case diagram
2	Class diagram
3	Sequence diagram
4	Collaboration diagram
5	State Chart diagram
6	Activity diagram
7	Component diagram
8	Deployment diagram

USE CASE DIAGRAM

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

The actors in use case diagram are Users and Admin.

The use cases are select topic, display table of contents, search for topic, display the information.

The actors uses the use case are denoted by the arrow
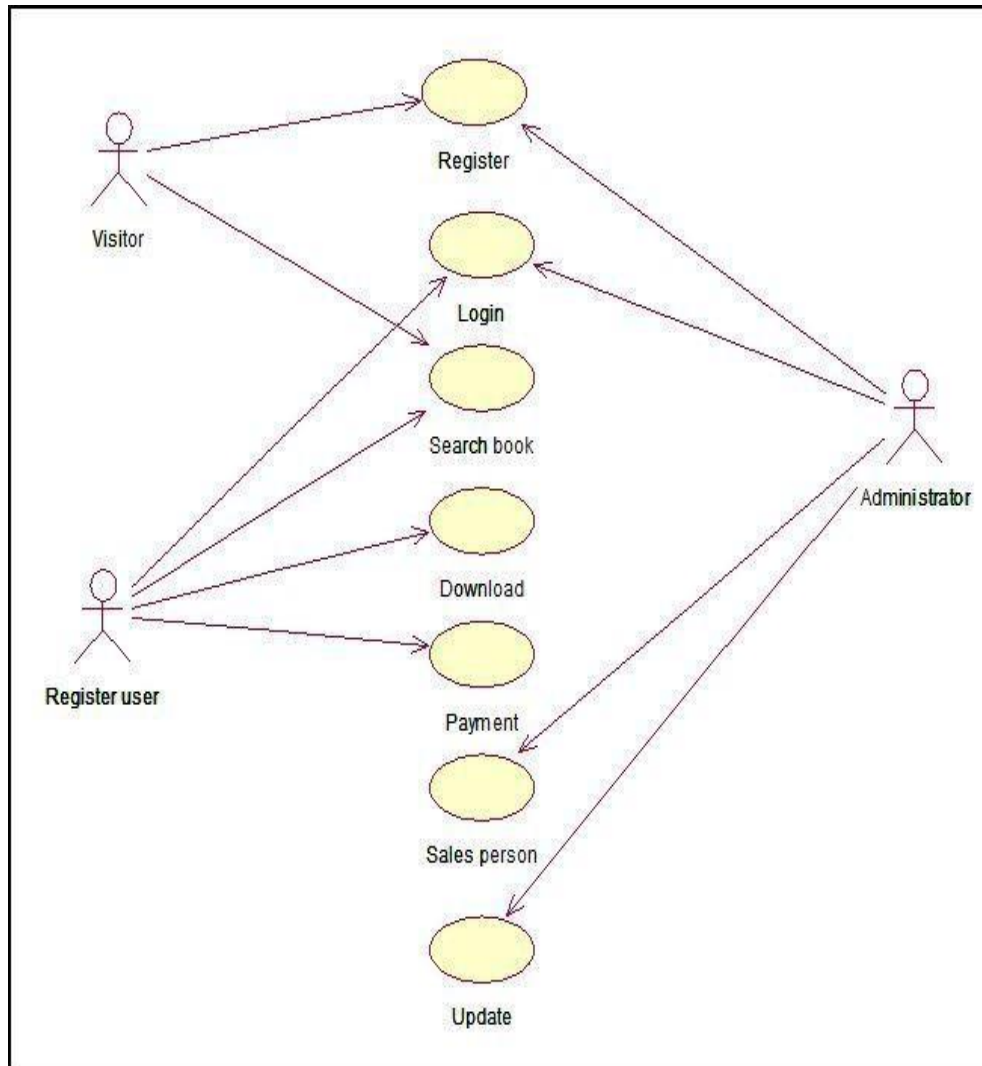
CLASSDIAGRAM

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.
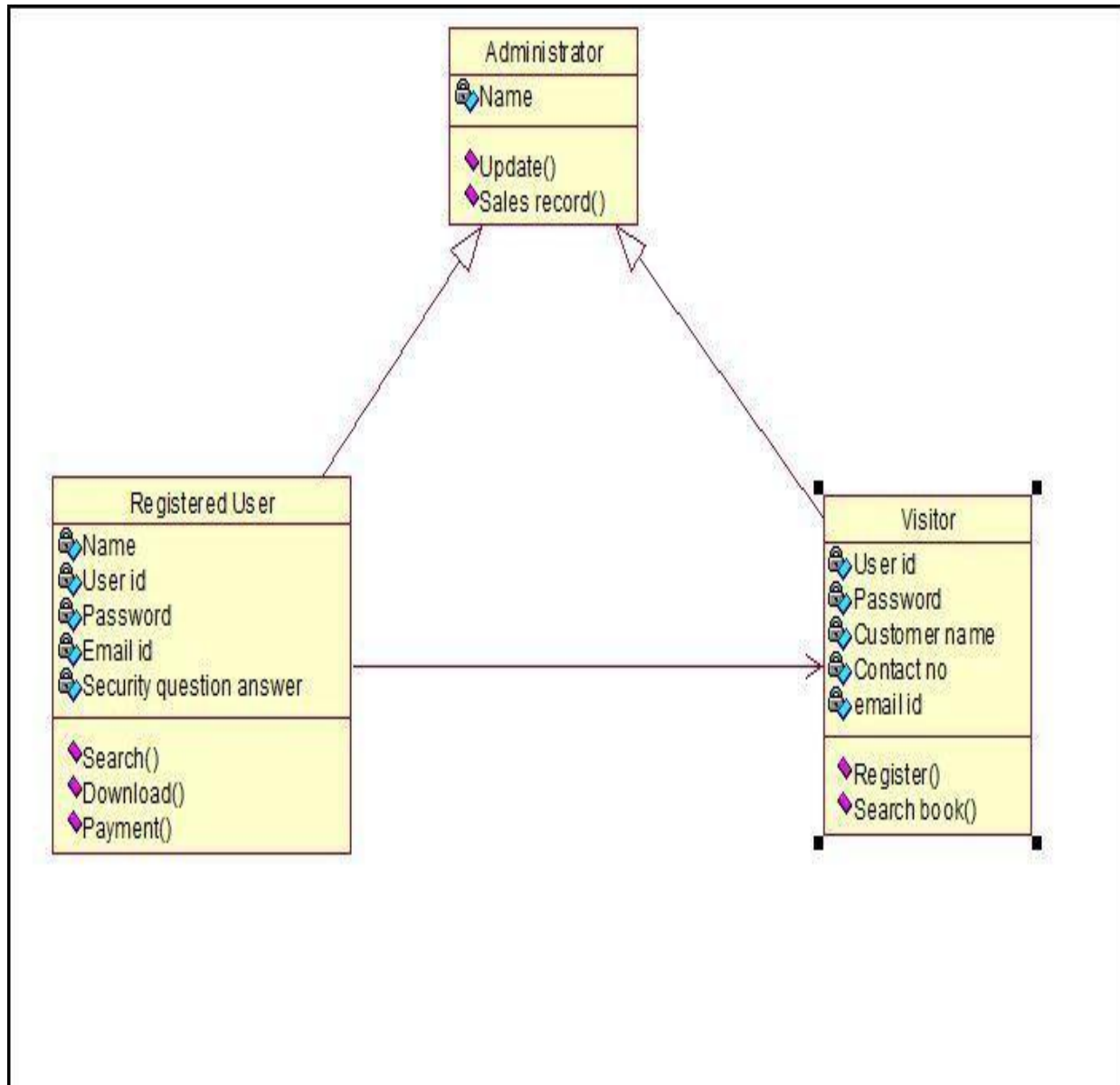
SEQUENCE DIAGRAM

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.

STATE CHART DIAGRAM

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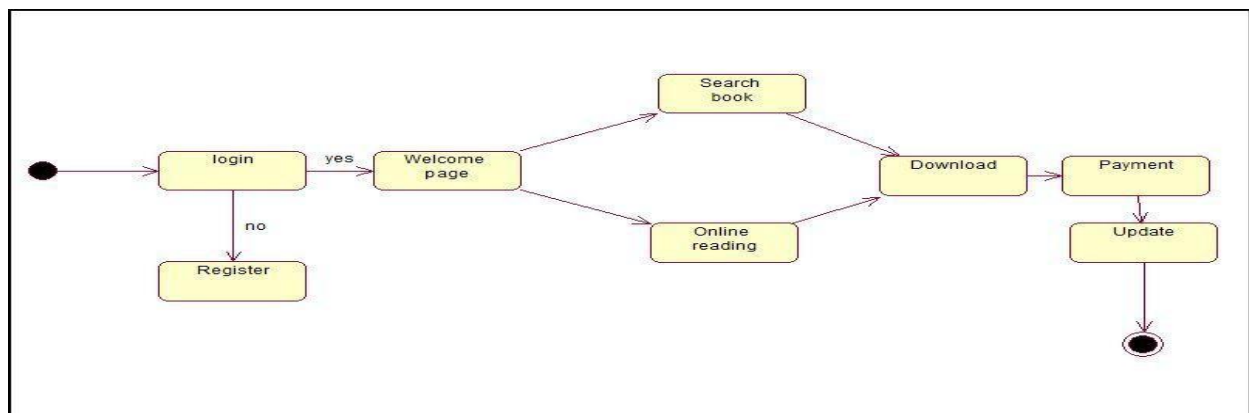
COLLABORATION DIAGRAM

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

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.
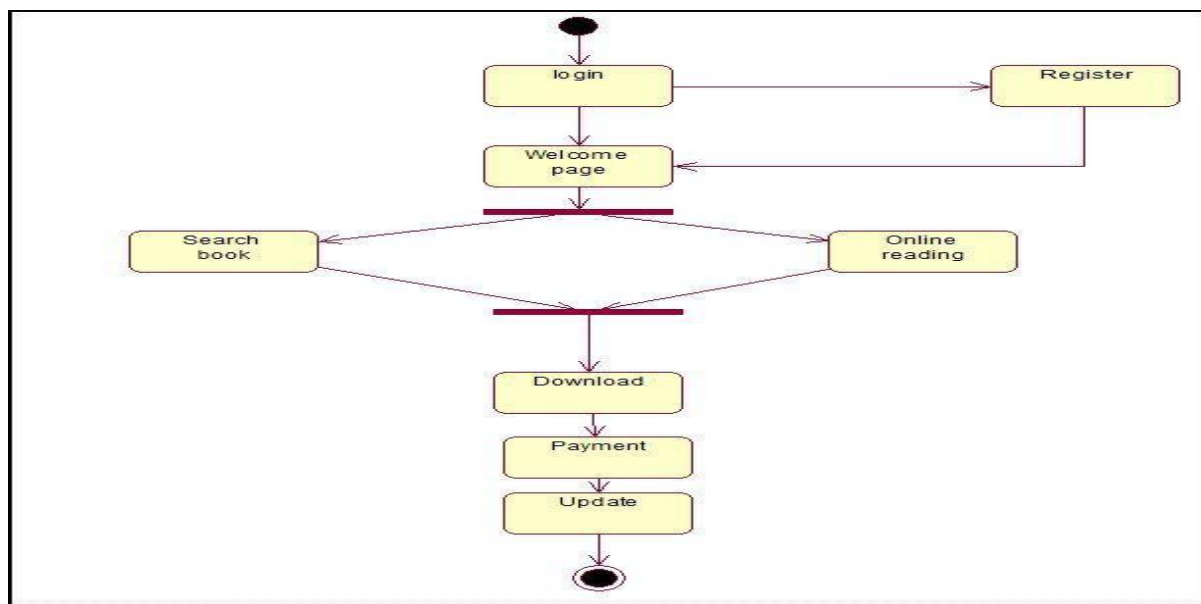
COLLABORATION DIAGRAM

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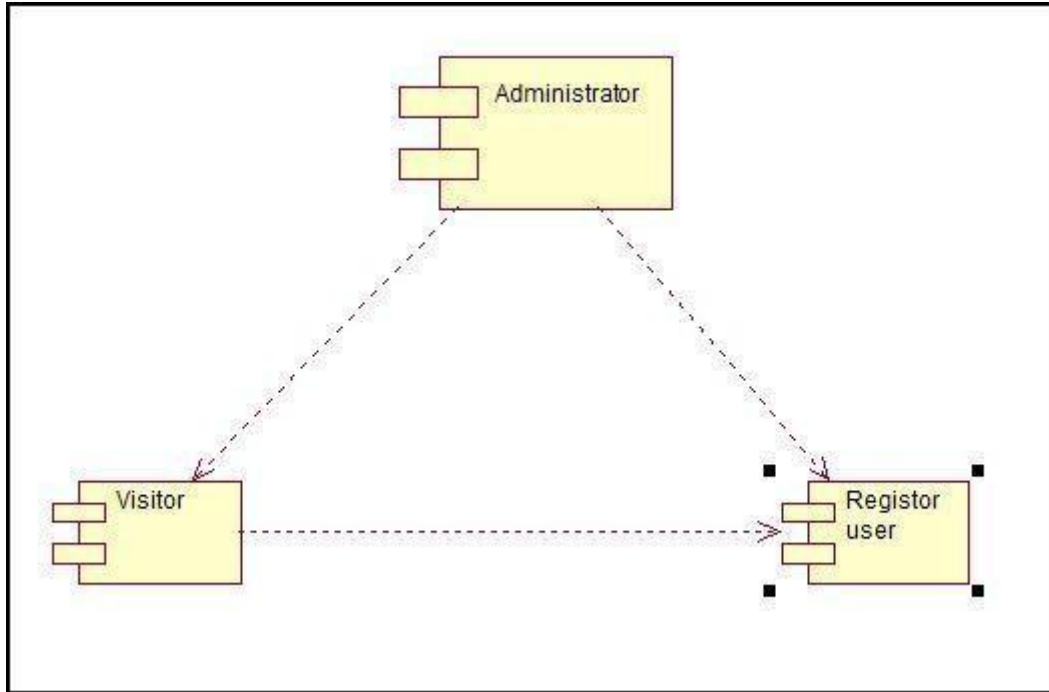
DEPLOYMENT DIAGRAM

Deployment diagram shows the assignment of concrete software artifact to computational nodes. It shows the deployment of software elements to the physical elements. Deployment diagram are useful to communicate or deployment architecture.
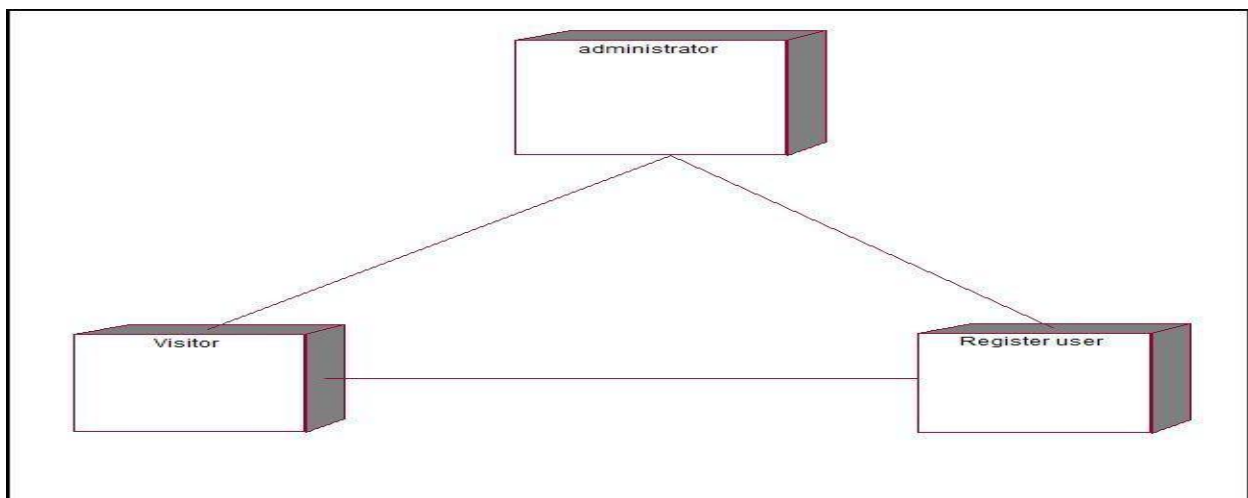
RESULT:

Thus the E-Book Management System is successfully done and the UML diagram are implemented by using the Rational rose.

EX.NO: 10 DATE:	RECRUITMENT SYSTEM

AIM:

    To develop the Recruitment System by using rational rose tools, visual basic and MS access

PROBLEM ANALYSIS AND PROJECT PLAN:

- ➢ After logging in, the next task is to display all the details of the employee displaying the details such as
- ➢ Name.
- ➢ Designation
- ➢ Employee ID
- ➢ The next task is to calculate the salary of the employee taking into account the following details such as HRA, DA, TA, PF, LIC as follows
- ➢ Gross Salary = (per day salary * worked days) + (HRA + DA + TA)
- ➢ The final task is to calculate the net salary by calculating the detection
- ➢ Deduction = PF + LIC
- ➢ Net Salary = Gross Salary – Deduction

PROBLEM STATEMENT:

- ➢ Design a Recruitment System with all necessary details such as Employee number, Employee name, his personal details and Designation, etc. where a operator can select his Employee number and see the details of him.
- ➢ And also calculate Basic pay, HRA, Allowance, etc, for salary details. The Employee Payroll System consist of details of Employee who already working in the company or a newly employed person.
- ➢ The details of newly employed person should be updated in the database.
- ➢ This new software for payroll does various tasks to facilitate the companies recruitment and payroll calculation To get the employee ID that is used for login purposes.

SOFTWARE REQUIREMENTS SPECIFICATION

S. no	Software Requirement Specification
1.0	Introduction
1.1	Purpose
1.2	Scope
1.3	Definition, Acronyms and Abbreviation
1.4	Reference
1.5	Tools to be used
1.6	Overview
1.7	Overall description
1.8	Productive description
2.0	Software interface
2.1	Hardware interface
2.2	System function
2.3	User characteristics
2.4	Constraints

GANTT CHART
RECRUITMENT SYSTEM GANTT CHART _
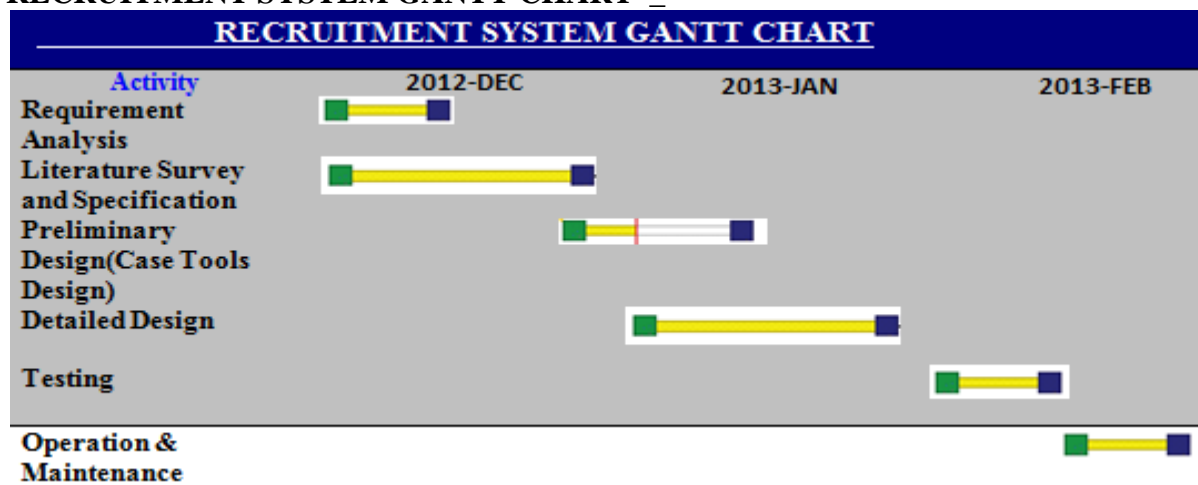
1.0 INTRODUCTION

Recruitment System is an interface between the Employee and the Employee Database responsible for the Recruitment System. It aims at improving the efficiency in the verifying the login and reduces the complexities involved in it to the maximum possible extent.

1.1 PURPOSE

If the entire process of Issue of Salary is done in a manual manner then it would take several processes for the Employee to reach the user. Considering the fact that the number of users for employee 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.

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 salary can use this system to reduce his workload and process the application in a speedy manner.

Provide a communication platform between the employee and the employee database

Transfer of data between the salary Issuing Authority and the User for verification of applicant's information.

1.3 DEFINITIONS, ACRONYMS AND THE ABBREVIATIONS
Employee

Refers to the super user who is the Central Authority who has been vested with the privilege to manage the entire system.

Employee Database

One who wishes to obtain the Books.

RS

Refers to this Recruitment System.

1.4 REFERENCES

IEEE Software Requirement Specification format.

1.5 TOOLS TO BE USED

Rational Rose tool (for developing UML Patterns)

1.6 OVERVIEW

RS 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.

1.7 OVERALL DESCRIPTION

1.8 PRODUCT PERSPECTIVE

The RS acts as an interface between the 'Employee' and the 'Employee Database'. 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 salary.

2.0 SOFTWARE INTERFACE

Front End Client
The employee and Employee Database 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 Recruitment Application Status Display by the Employee

Employee Database 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

Employee
They are the people who desires to obtain the passport and submit the information to the database.

Employee database
He has the certain privileges to add the passport status and to approve the issue of Books.

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.

USECASE DIAGRAM

The employee in use case diagram are User and System.

The use cases are select topic, display table of contents, search for topic, display the information.

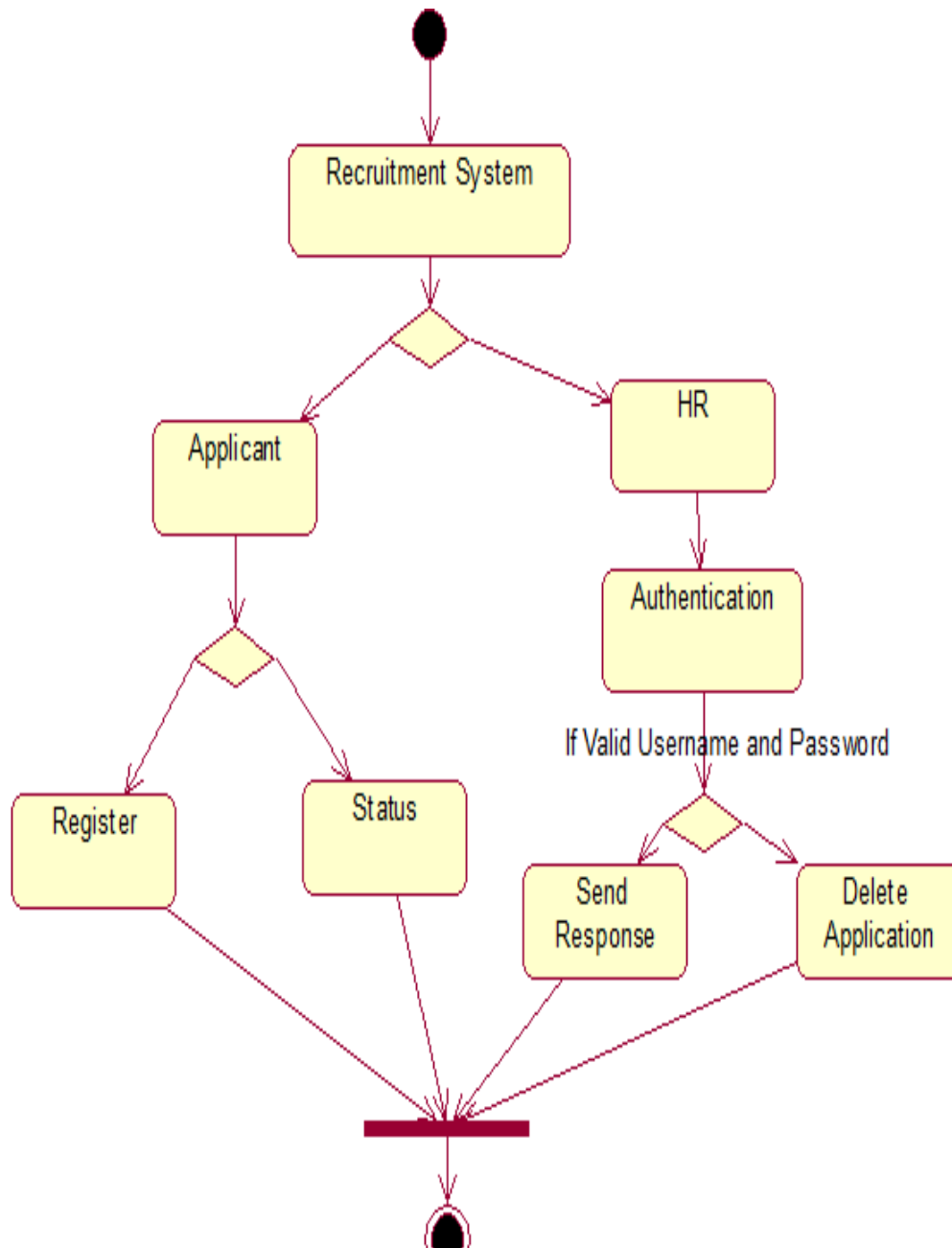The employee uses the use case are denoted by the arrow
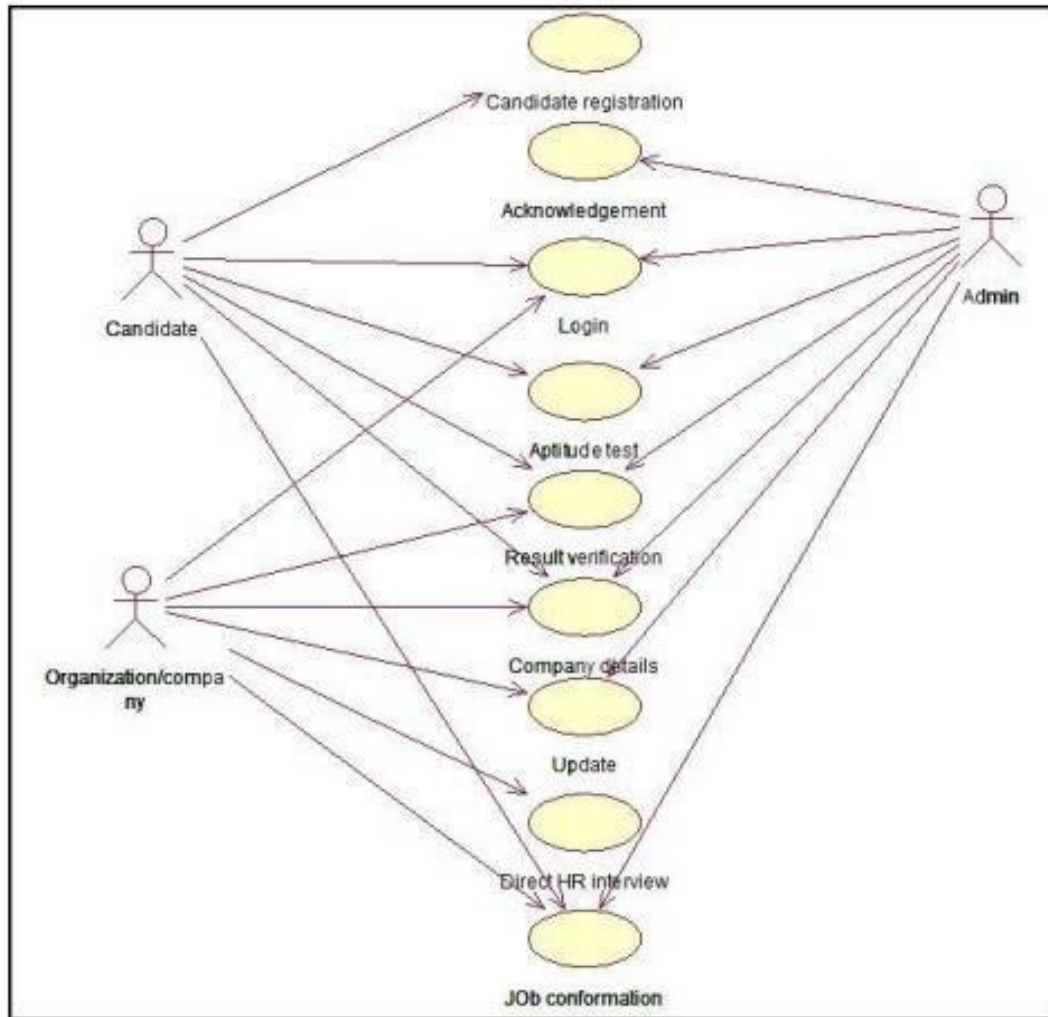
CLASS DIAGRAM:

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.
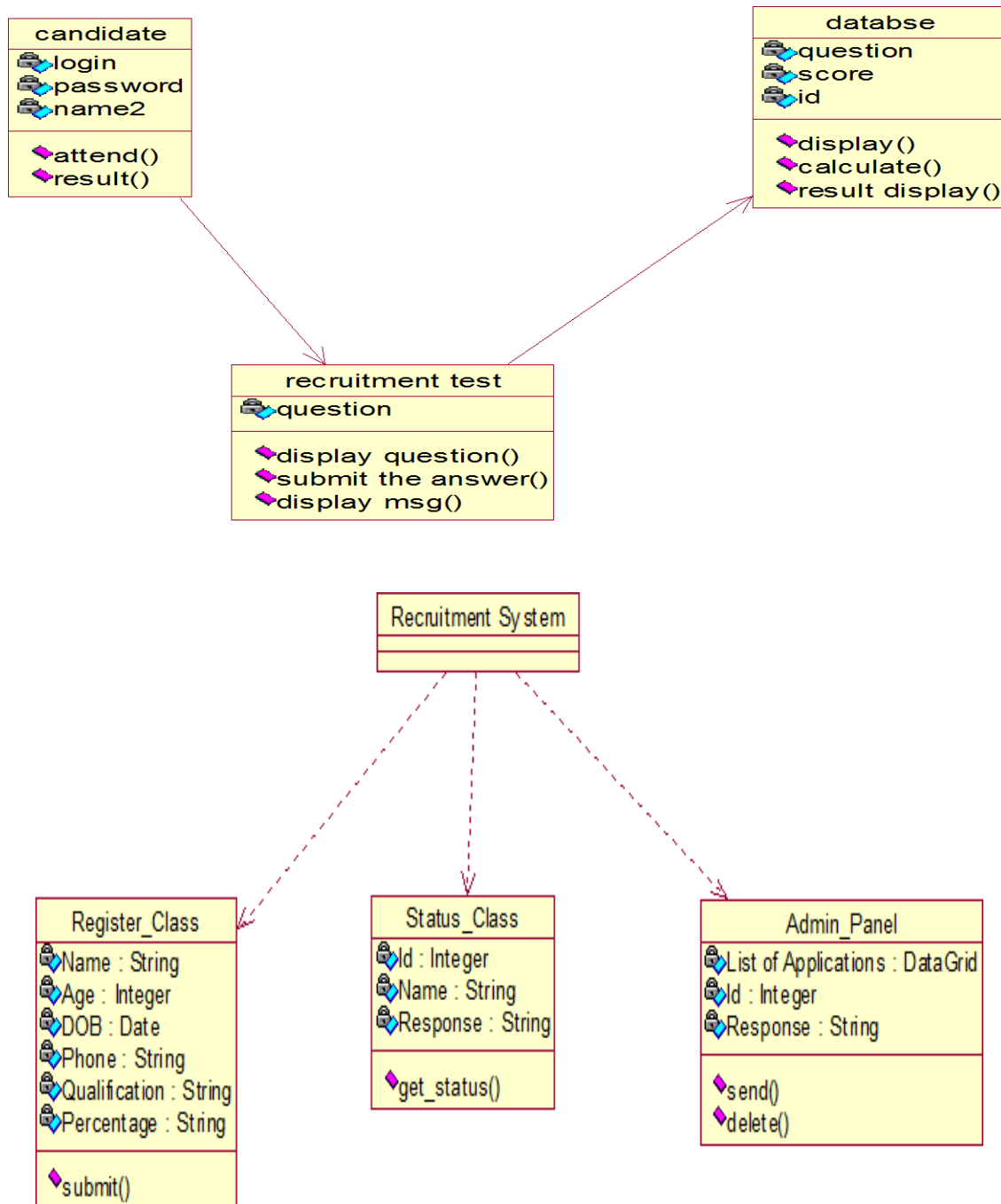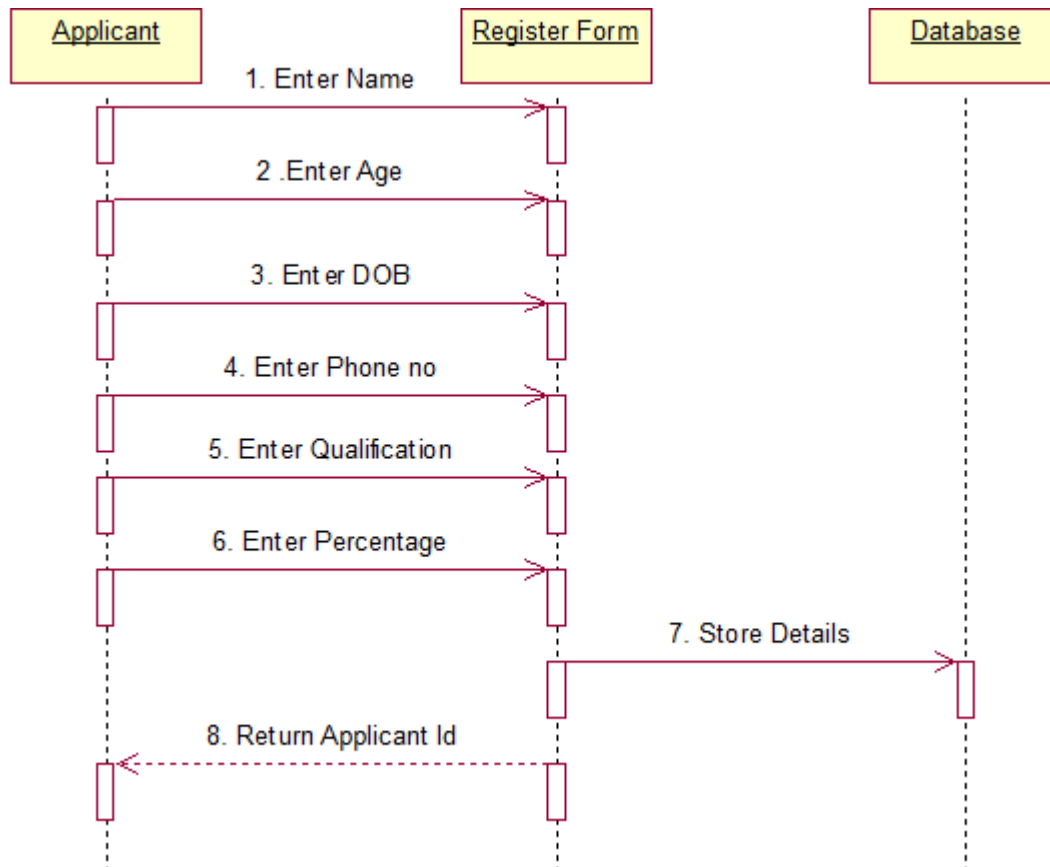
ACTIVITY DIAGRAM:

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. It selects the employee and chooses the main topic. Then it chooses the sub topic

SEQUENCE DIAGRAM.

Sequence Diagram for 'Register'

Applicant	Register Form	Database

1. Enter Name

2. Enter Age

3. Enter DOB

4. Enter Phone no

5. Enter Qualification

6. Enter Percentage

7. Store Details

8. Return Applicant Id

Sequence Diagram for 'Status'

Applicant	Status Form	Database

1. Enter Applicant Id

2. Enter Name

3. Get Response for that Id

4. Return Response

Sequence Diagram for 'Admin Panel'

HR	Admin Panel	Database

1. Enter Id

2. Enter Response

3. Store the Response
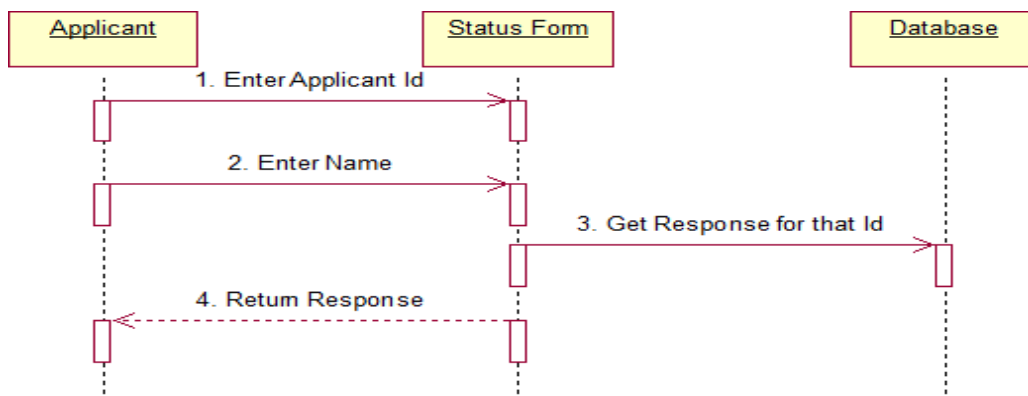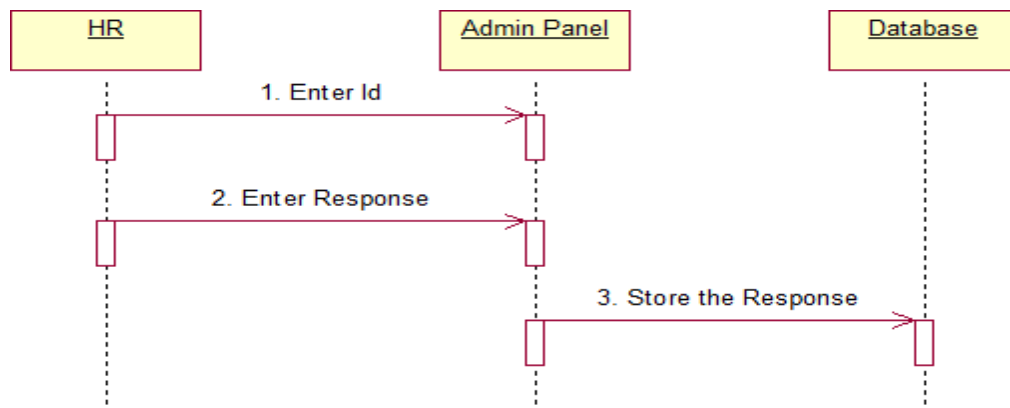
COLLABORATION DIAGRAM
Collaboration Diagram for 'Register'

1: 1. Enter Name
2: 2 .Enter Age
3: 3. Enter DOB
4: 4. Enter Phone no
5: 5. Enter Qualification
6: 6. Enter Percentage

Applicant ──────────────────────────────► Register Form

8: 8. Return Applicant Id

7: 7. Store Details

Database
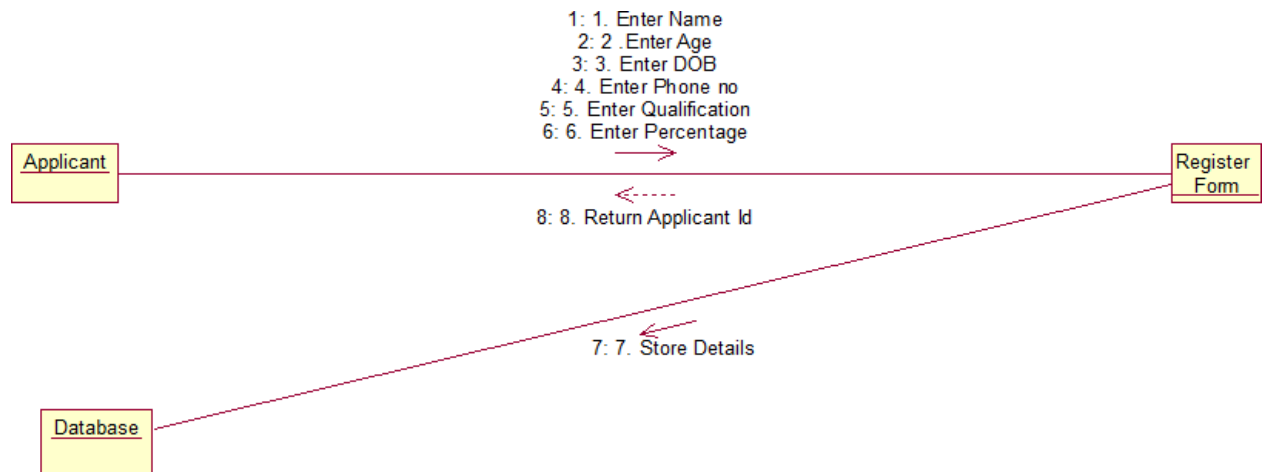
Collaboraion Diagram for 'Status'
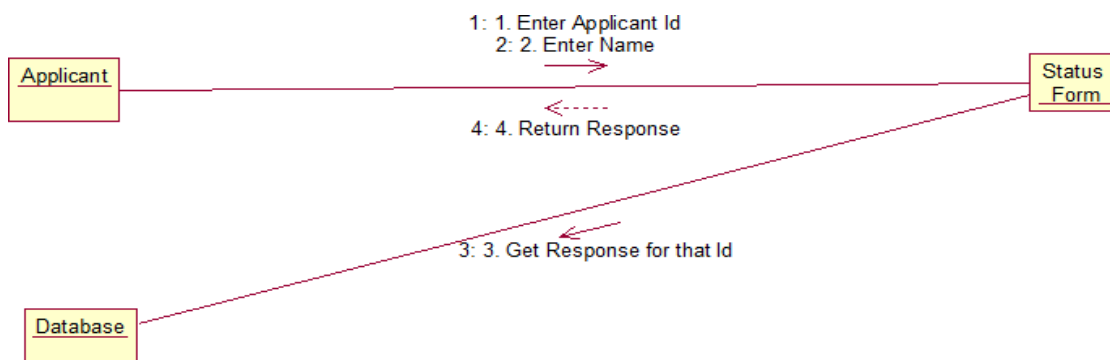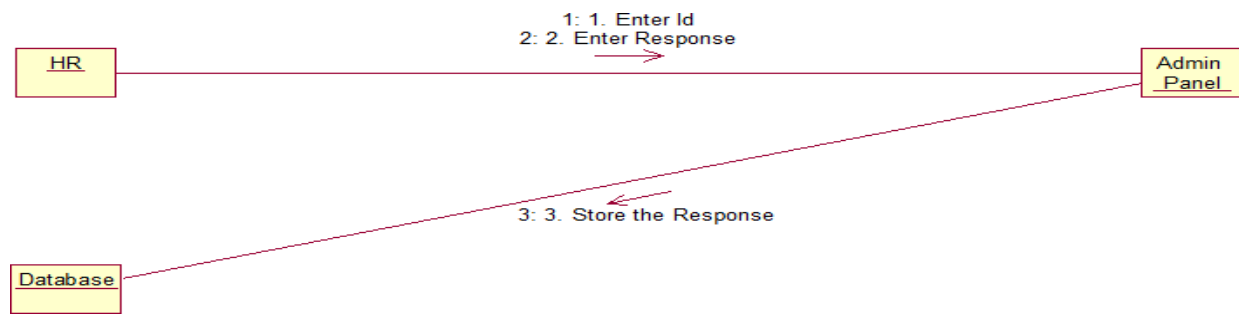
1: 1. Enter Applicant Id
2: 2. Enter Name

Applicant ──────────────────────────────► Status Form

4: 4. Return Response

3: 3. Get Response for that Id

Database

Collaboration Diagram for 'Admin Panel'


```
                                    1: 1. Enter Id
                                  2: 2. Enter Response
   ┌────────┐                          ──────▶                    ┌────────┐
   │   HR   │──────────────────────────────────────────────────  │ Admin  │
   └────────┘                                                     │ Panel  │
                                                                  └────────┘
                                      ◀──────
                                 3: 3. Store the Response

   ┌──────────┐
   │ Database │
   └──────────┘
```

STATECHART 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.
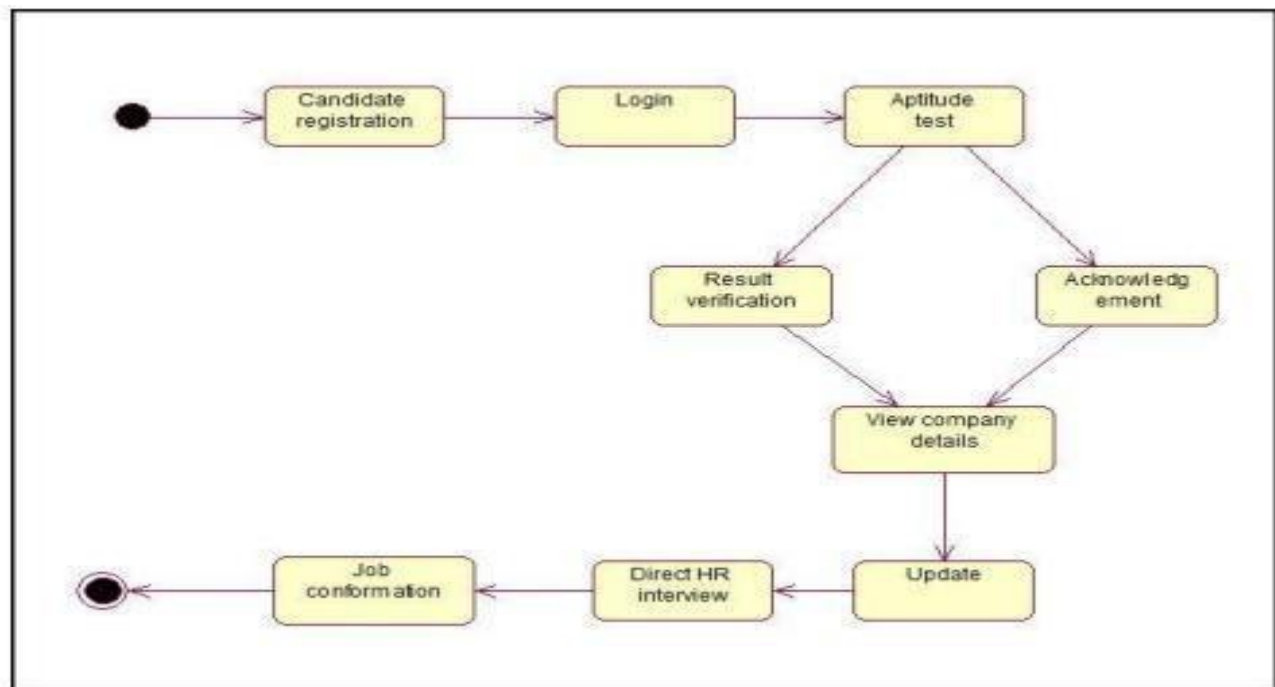
COMPONENT DIAGRAM
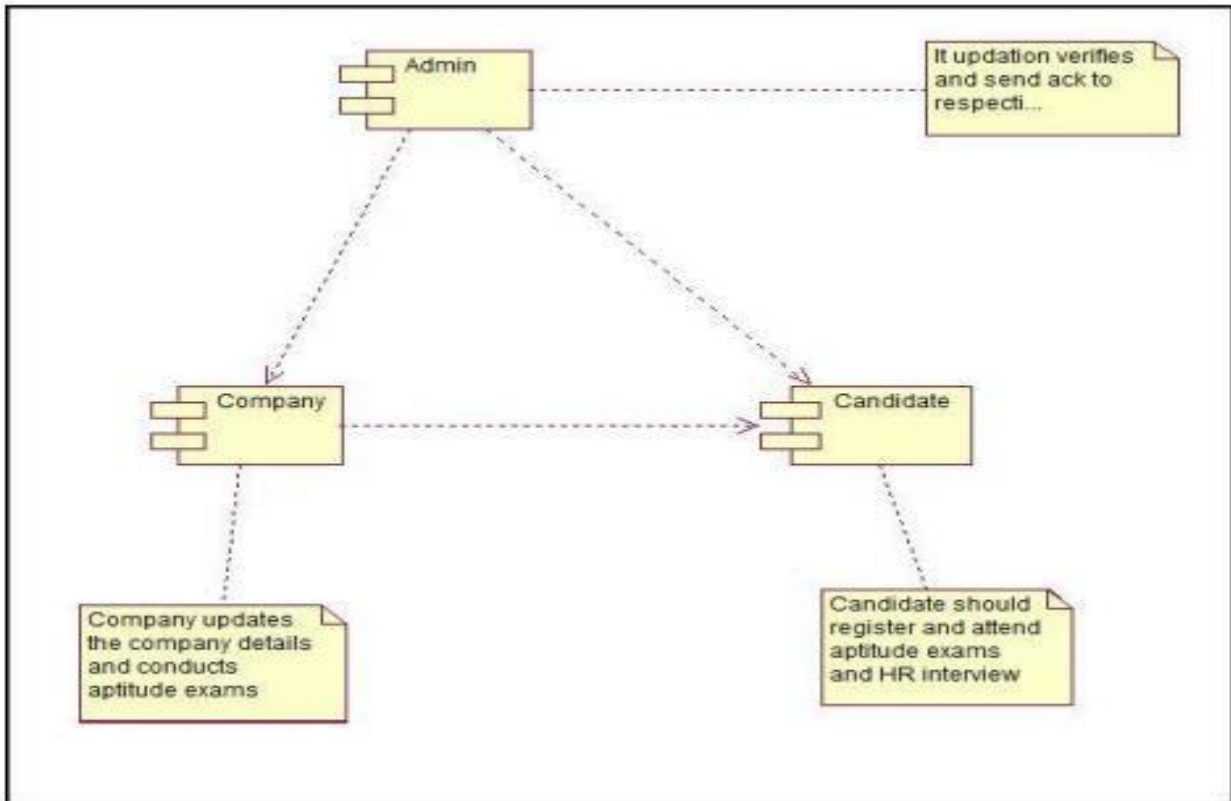
DEPLOYMENT DIAGRAM:

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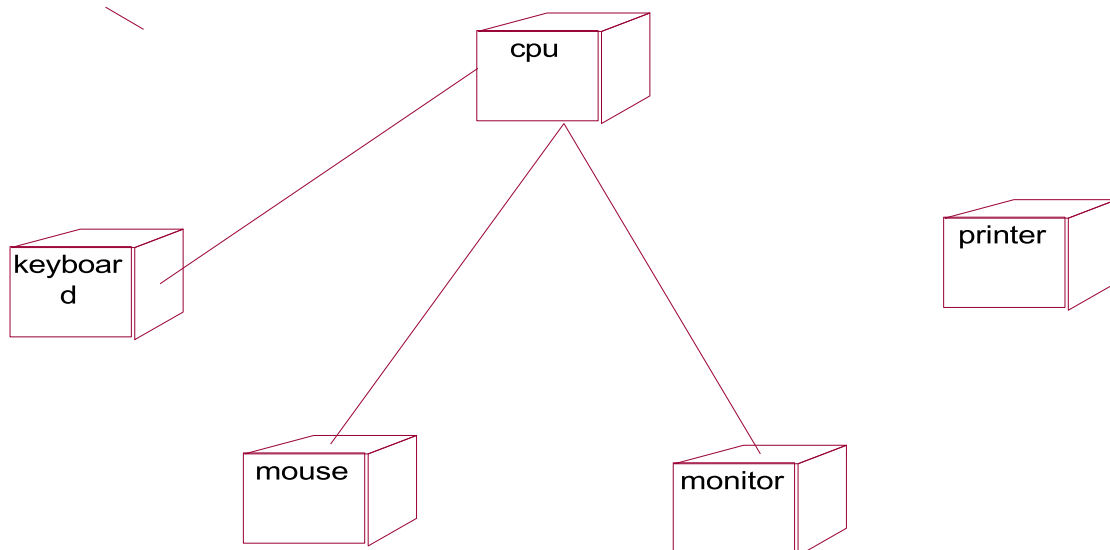
RESULT :

Thus the Recruitment Processing   System is successfully done and the UML diagram are implemented by using the Rational rose.

EX.NO: 11	**FOREIGN TRADING SYSTEM**
DATE:	

AIM

To develop the Foreign Trading System using rational rose tools, visual basic and MS access.

PROBLEM ANALYSIS AND PROJECT PLANNING

➢ The login is given for the customer for secure trading. Initial requirement from the customer are got through the agreement.

➢ The details about the products and delivery will be collected by the seller from the customer. The seller will get the permission from the authority person.

➢ The products are going too delivered through the ship to the customer. The products will be delivered to the customer.

➢ Then the cash will be paid by the customer. The Cash Payment details are updated in Database for further reference.

PROBLEM STATEMENT

➢ The trader should give the login for secure trading.

➢ The trader must establish the agreement for trading.

➢ The agreement must be verified before accepting it .

➢ The trader should get the permission from the authority(ship) for delivering the products through ship.

➢ After the permission is given the products will be delivered to the customer.

➢ The customer has to settle the payment.

SOFTWARE REQUIREMENTS SPECIFICATION

S. no	Software Requirement Specification
1.0	Introduction
1.1	Purpose
1.2	Scope
1.3	Definition, Acronyms and Abbreviation

1.4	Reference
1.5	Tools to be used
1.6	Overview
1.7	Overall description
1.8	Productive description
2.0	Software interface
2.1	Hardware interface
2.2	System function
2.3	User characteristics
2.4	Constraints

GANTT CHART
FOREIGN TRADING SYSTEM GANTT CHART
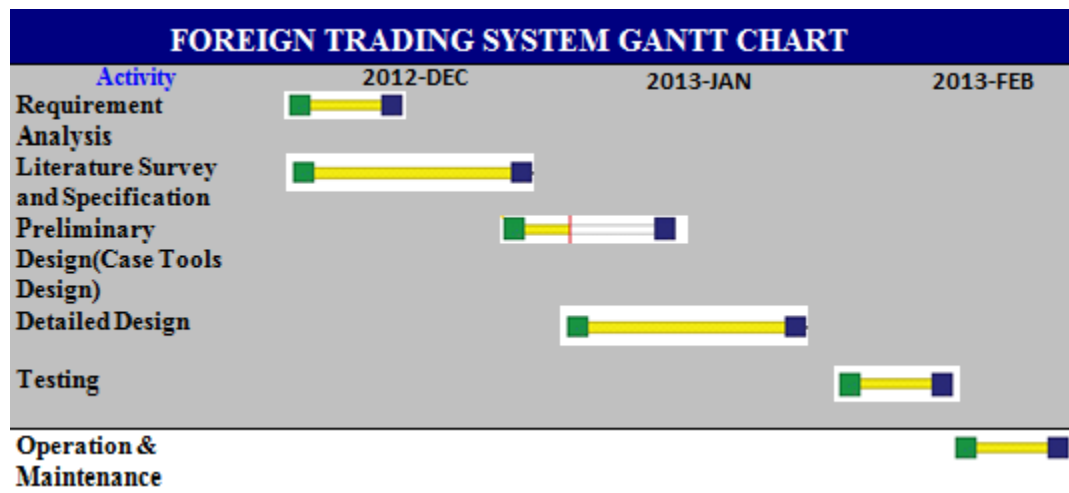
1.0 INTRODUCTION

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.

1.1 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.

1.2 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.

1.3 DEFINITIONS, ACRONYMS AND THE ABBREVIATIONS

Customer Person who is seeking information. Supplier People who receives the query. Database Collection of all information monitored by the BPO system. Software requirement specification A document that completely describes all the functions of a proposed system and the constrains under which it must operate. User Customer Authority Person who giving permission for the trading through ship.

1.4 REFERENCES

IEEE Software Requirement Specification Format.

1.5 TOOLS TO BE USED

Rational Rose tool (for developing UML Patterns)

1.6 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.

1.7 OVERALL DESCRIPTION

When a center 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 reffered.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.

FUNCTIONALITY

Many 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.

USABILITY

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

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.

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 updating must be done periodically.

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.

PRODUCT PERSPECTIVE

The FTS acts as an interface between the 'Customer' and the 'Supplier'. 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 to involve in the Trading.

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 User 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

customer

They are the people who desires to obtain in the Trading and submit the information to the database.

Supplier

He has the certain privileges to add the trading status.

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.

UML DIAGRAMS

1	Use Case diagram
2	Class diagram
3	Sequence diagram
4	Collaboration diagram
5	State Chart diagram
6	Activity diagram
7	Component diagram
8	Deployment diagram
9	Package diagram

USE CASE DIAGRAM

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. **Customer**

A customer is the most important person in any business. A customer does us a favour 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.

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.
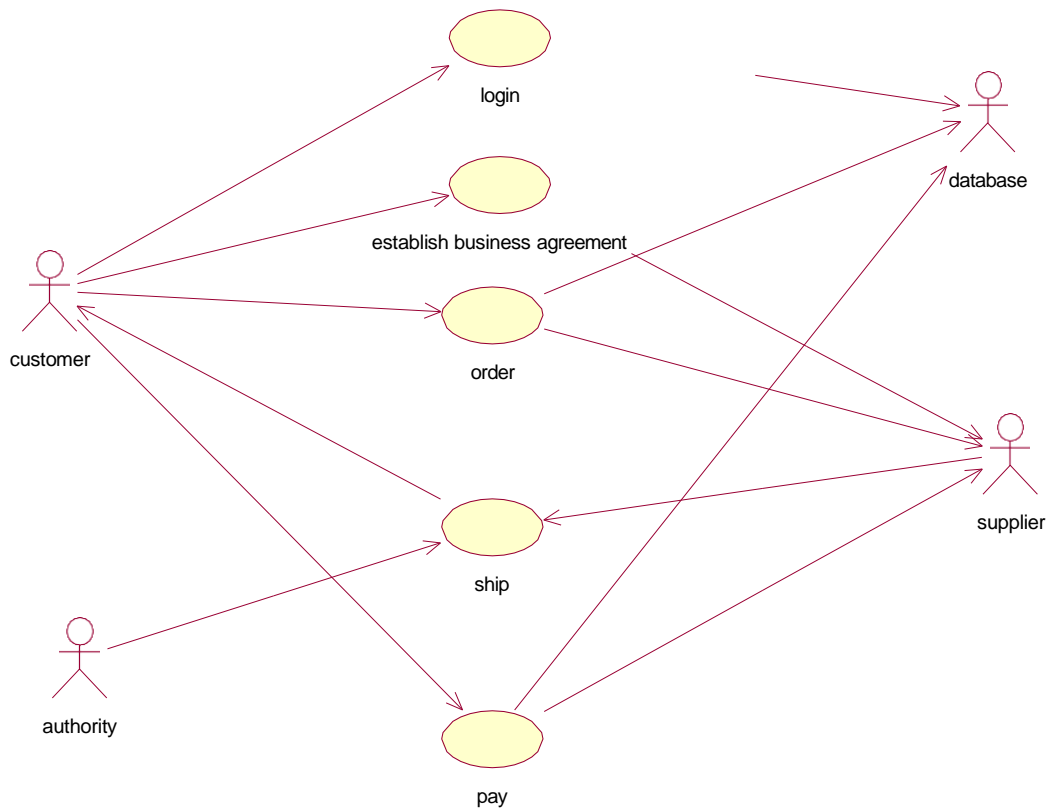
CLASS DIAGRAM

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.

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.
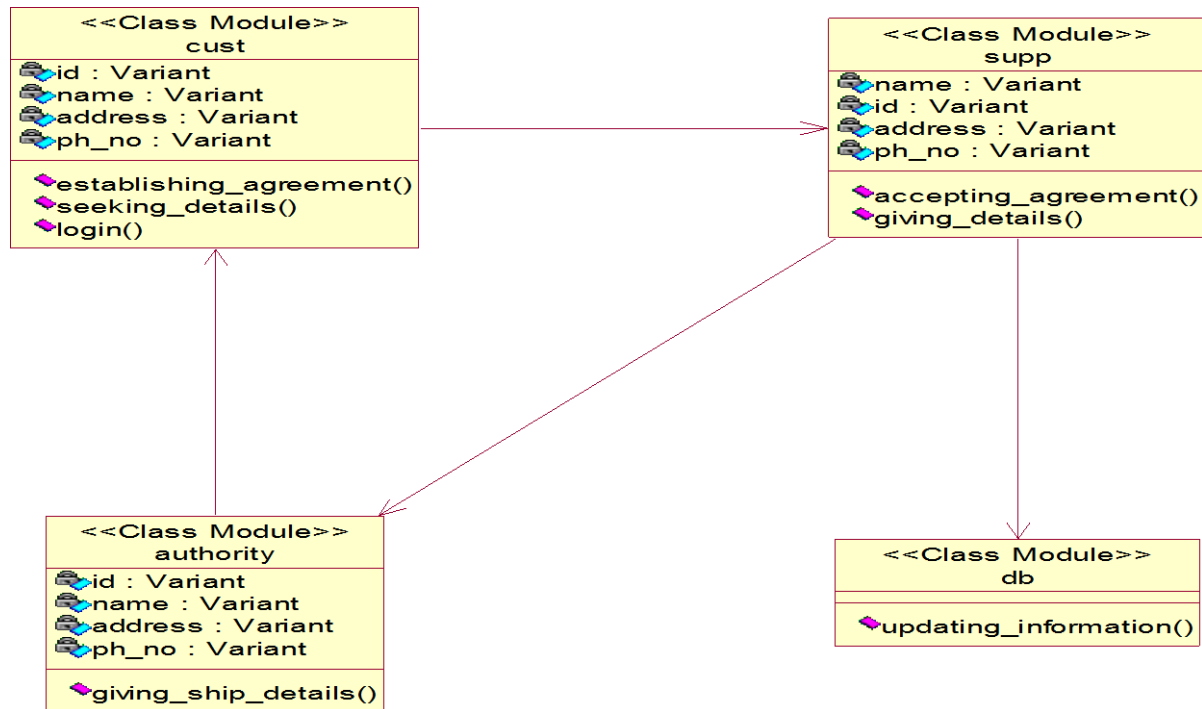
SEQUENCE DIAGRAM

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

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.

customer supplier authority database

login

establishing agreemant

verifying agreement

accepting agreement

placing orders

verifying the products

seeking permission

giving permission

placing products in ship

giving ship details

deliver the products

payment

update database
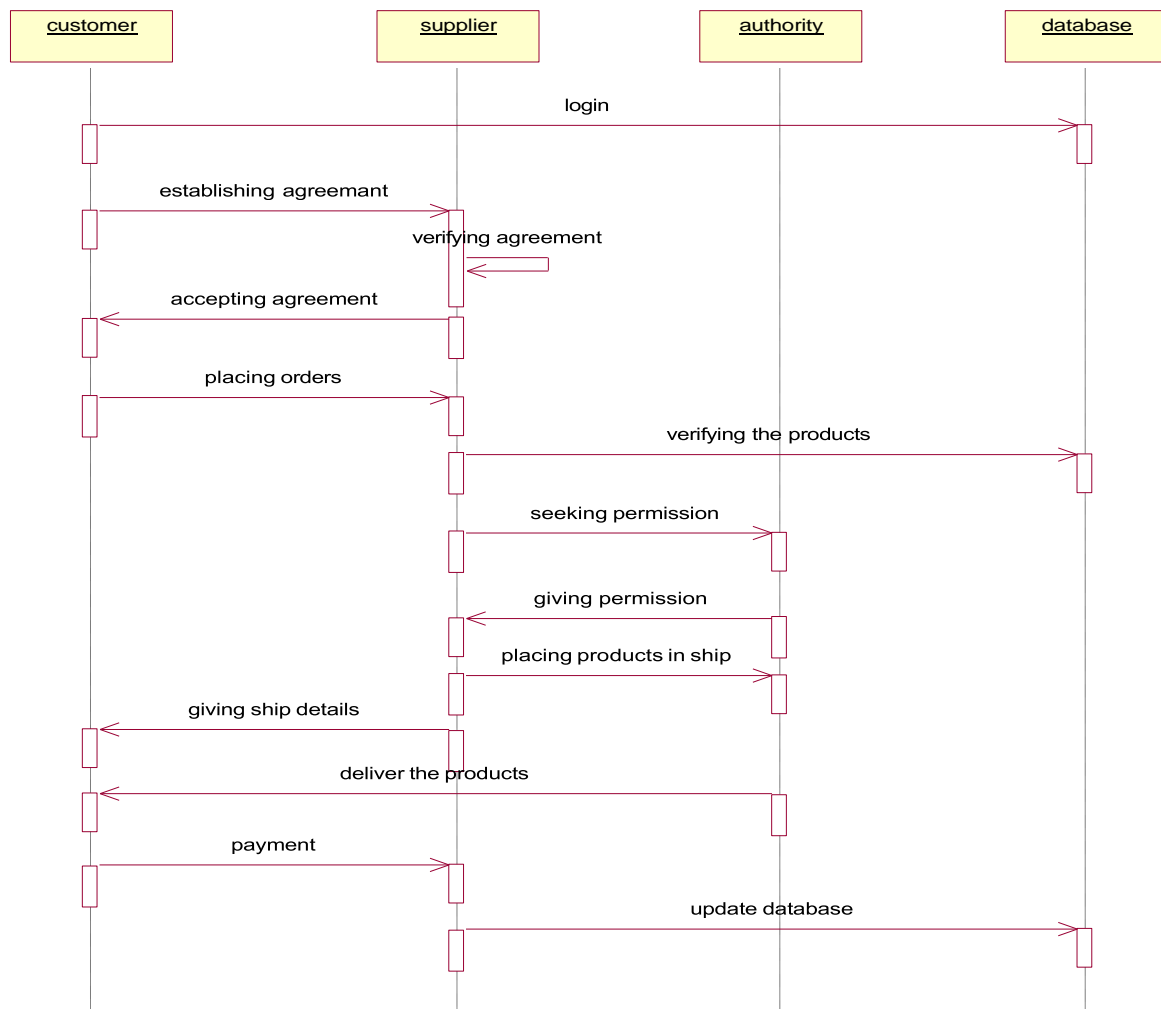
COLLABORATION DIAGRAM

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

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.
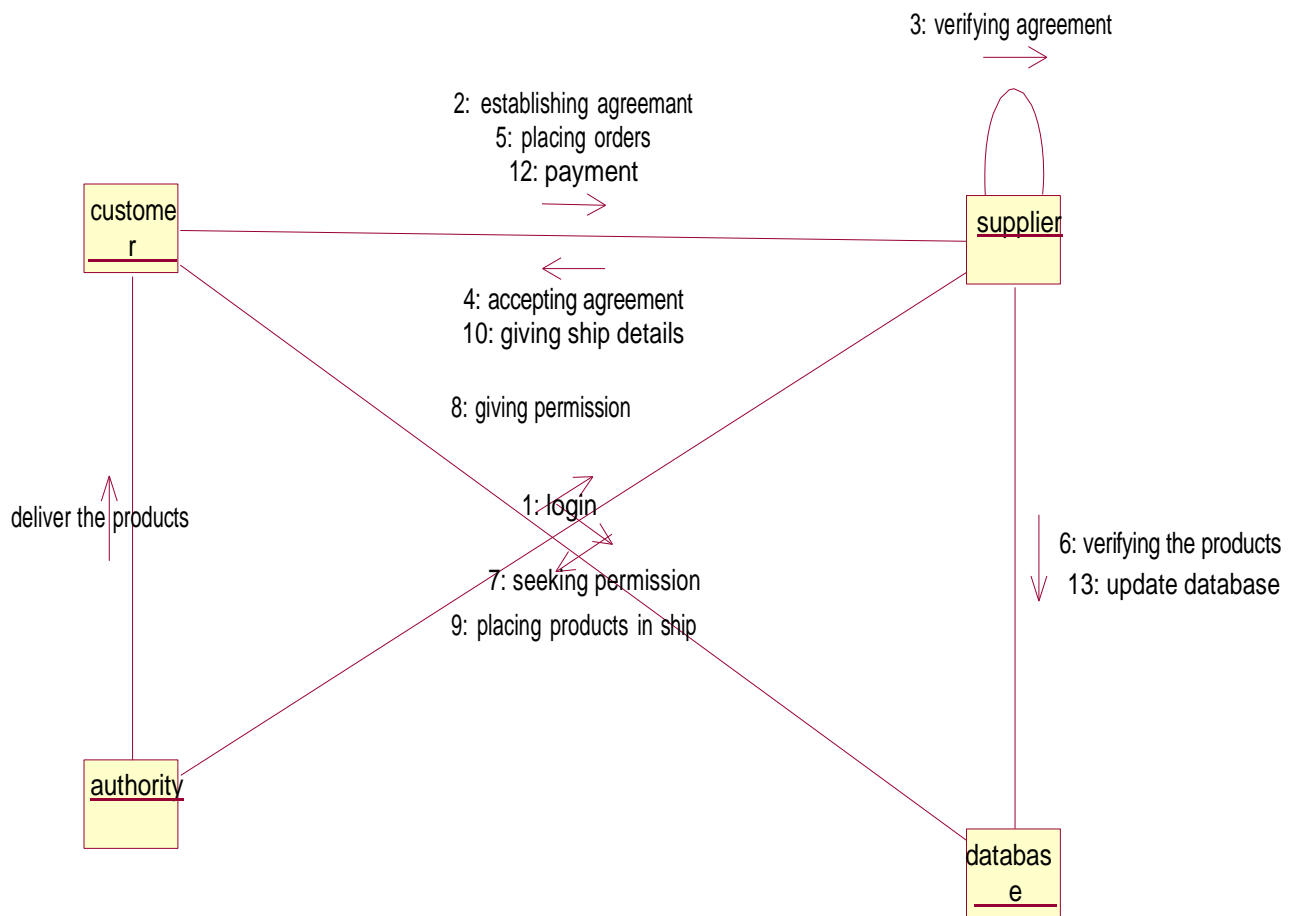
3: verifying agreement

2: establishing agreemant
5: placing orders
12: payment

customer

supplier

4: accepting agreement
10: giving ship details

8: giving permission

deliver the products

1: login

6: verifying the products
13: update database

7: seeking permission
9: placing products in ship

authority

database

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.

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.
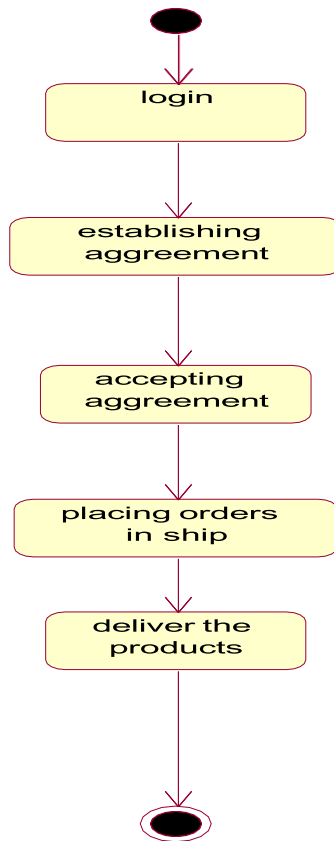
ACTIVITY DIAGRAM

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.

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
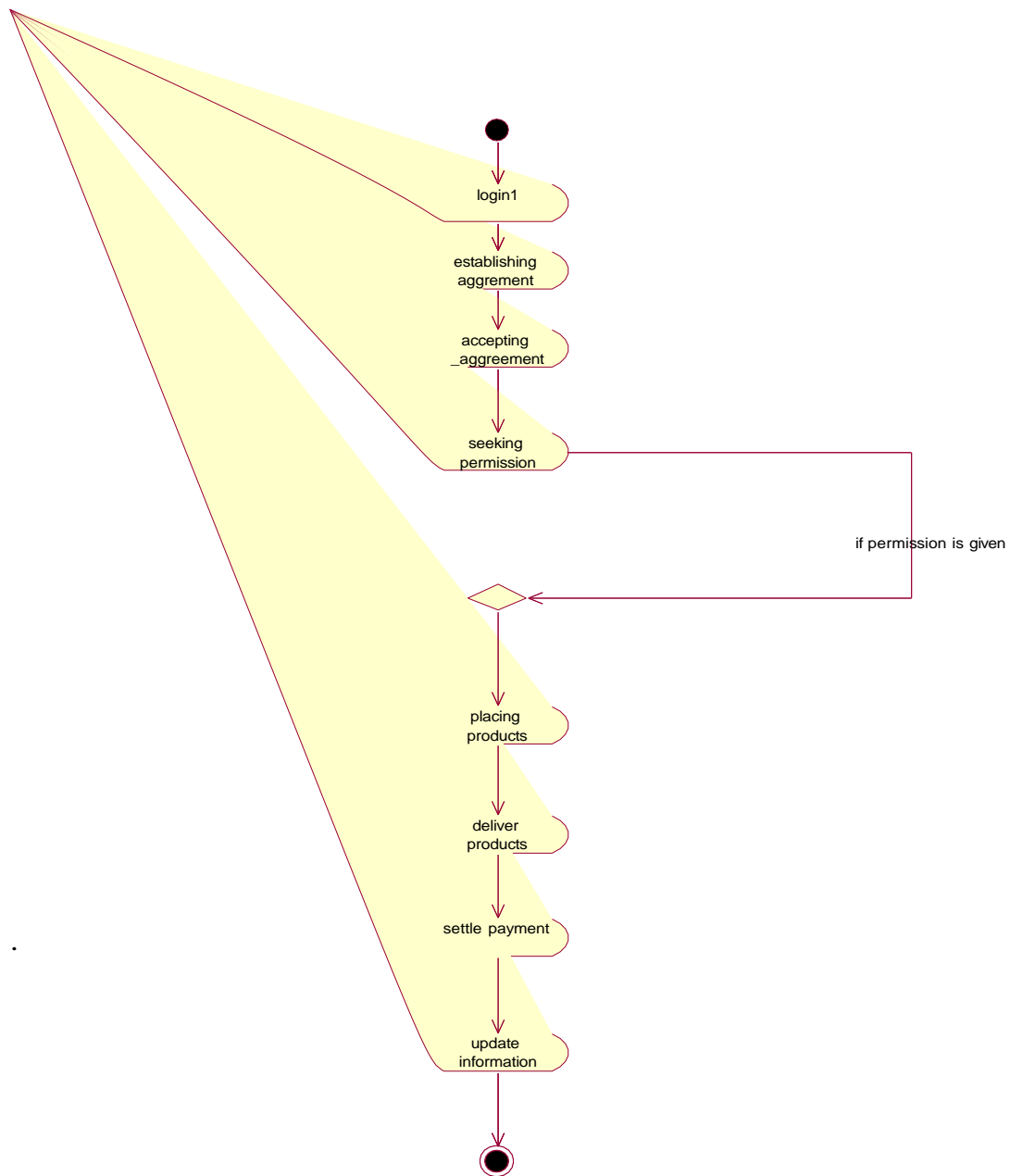
COMPONENT DIAGRAM

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

The agreement will be established. It is verified.

The product will be delivered through ship.

The amount will be paid.
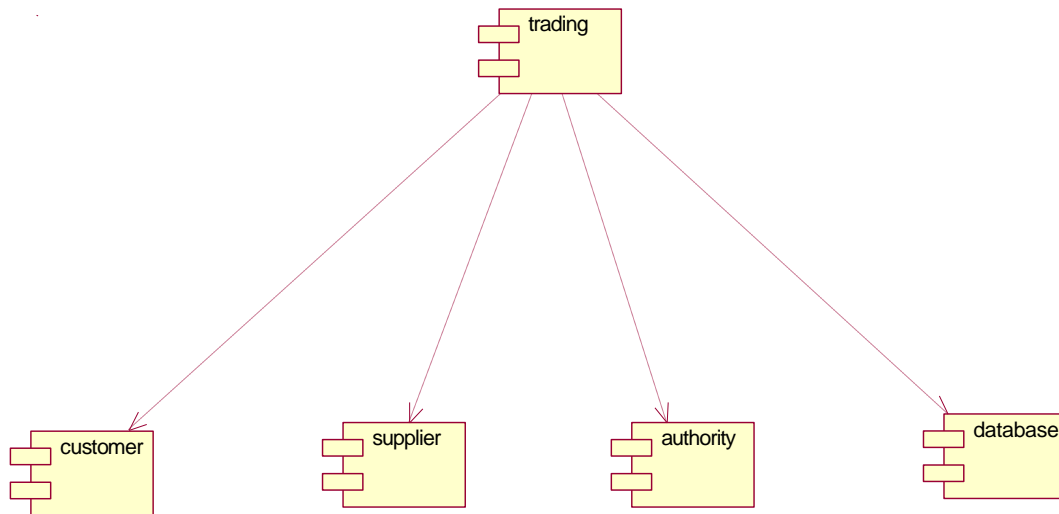
DEPLOYMENT DIAGRAM

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.
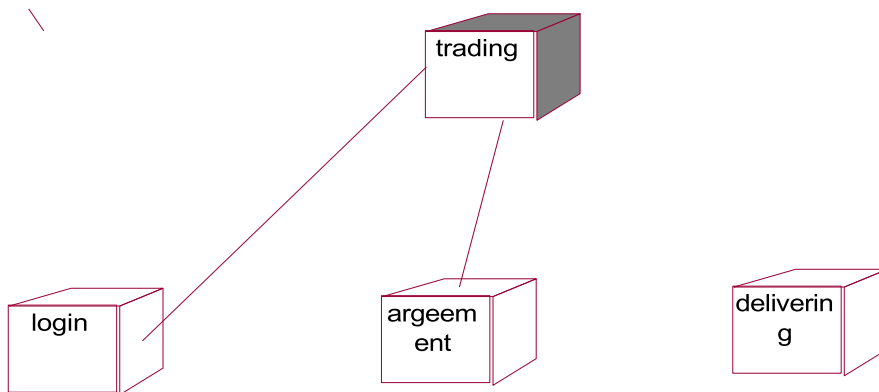
RESULT:

Thus the Foreign Trading   System is successfully done and the UML diagram are implemented by using the Rational rose.

EX.NO: 12	
DATE:	**CONFERENCE MANAGEMENT SYSTEM**

AIM

To develop the using Conference Management System using rational rose tools, visual basic and MS access.

PROBLEM ANALYSIS AND PROJECT PLAN

➢ To simplify the process of applying Conference Management, software has been created by designing through rational rose tool, using visual basic as a front end and Microsoft access as a back end.

➢ The applicant applies Conference Management in the online, and the Conference Management is started. During verification process the status of the verification process is displayed.

➢ The applicant can view their Management System status. Then the Management process completed successfully.

PROBLEM STATEMENT:

➢ This project deals with the conference management system. As a User or Admin members are required to view the details of conference is going to conduct in various colleges or institutions and to attend the conference to gain knowledge from the conferences.

➢ Administrator will add the details about the various conferences available to attend for various department students and staff members.

➢ User will enter into the system by giving the username and password and selection form will be displayed for the user from that department should be selected and depending up on the department.

➢ The conference management system will show the details of the conferences in various place using Ms Access and Visual basic 6.0.

SOFTWARE REQUIREMENTS SPECIFICATION

S. no	Software Requirement Specification
1.0	Introduction
1.1	Purpose
1.2	Scope
1.3	Definition, Acronyms and Abbreviation
1.4	Reference
1.6	Tools to be used
1.7	Overview
1.8	Overall description
1.9	Productive description
2.0	Software interface
2.1	Hardware interface
2.2	System function
2.3	User characteristics
2.4	Constraints

GANTT CHART
CONFERENCE MANAGEMENT SYSTEM GANTT CHART
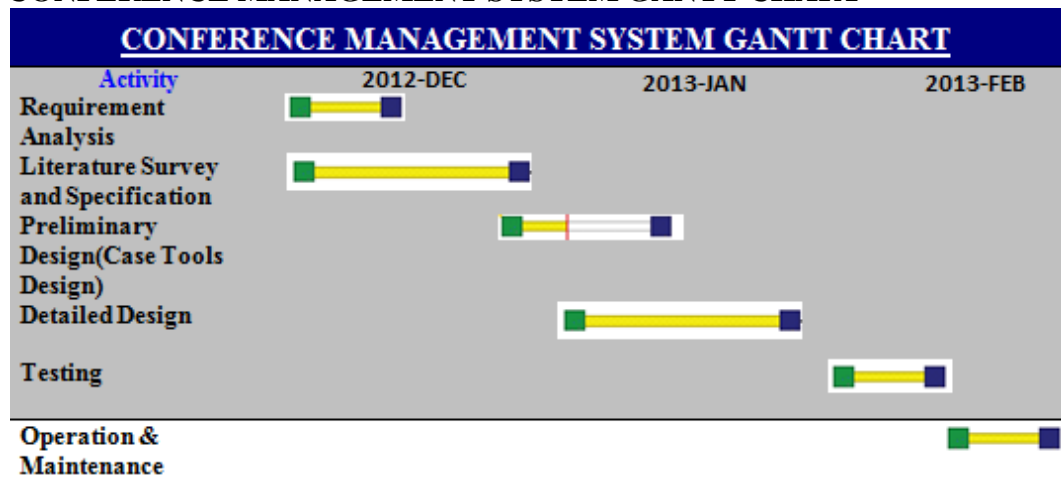
1.0 INTRODUCTION

Conference Management System is an interface between the Administrator and the User involving in the Conference. It aims at improving the efficiency of the User and reduces the complexities involved in it to the maximum possible extent.

1.1 PURPOSE

If the entire process of 'Conference Management' is done in a manual manner then it would take several process to involve. Considering the fact that the number of Users for Conference 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 conference 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 Staff and the Student 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 Conference Management System.

Applicant

One who wishes to obtain the Conference.

CMS

Refers to this Conference Management System.

1.4 REFERENCES

IEEE Software Requirement Specification format.

1.5 TOOLS TO BE USED

Rational Rose tool (for developing UML Patterns)

1.6 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.

1.7 OVERALL DESCRIPTION

Authenticate the user and administrator.

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

About the conference.

This form contains the details about the conferences is conducting by various

Institutions and we can see the date and time for the conference.

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.

2.0 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 User 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

User

They are the people who desires to obtain in the Conference and submit the information to

the database.

Administrator

He has the certain privileges to add the conference status. He may contain a group of

persons under him to verify the documents and give suggestions.

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.

UML DIAGRAMS

1	Use Case diagram
2	Class diagram
3	Sequence diagram
4	Collaboration diagram
5	State Chart diagram
6	Activity diagram
7	Component diagram
8	Deployment diagram

USE CASE DIAGRAM:

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

The actors in use case diagram are Admin and User.

The use cases are view details, add details, enquiry and login

The actors uses the use case are denoted by the arrow
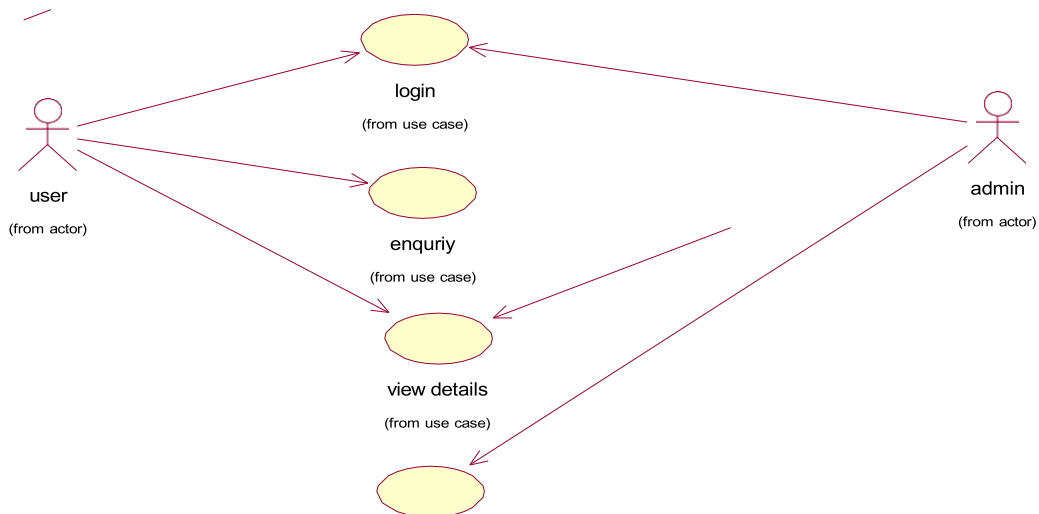
CLASSDIAGRAM

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.

The classes are Administrator and User.

The Administrator has attribute such as name and password.

The User has attribute name, password and department.
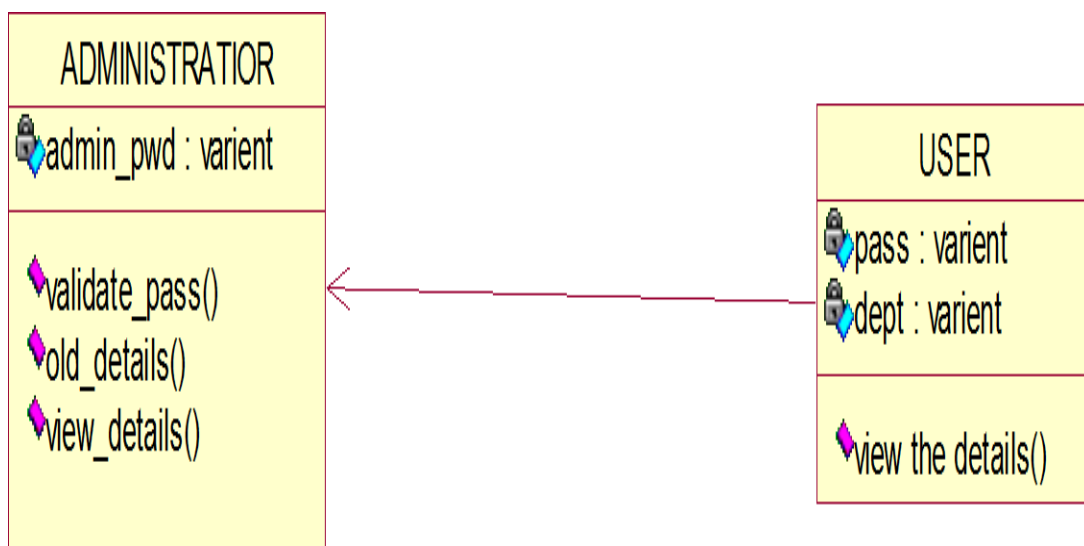
SEQUENCE DIAGRAM

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.

The User login the database and give his details and database store the details.

The Administrator get the details from the database and do verification.

The User selects the Department.

The Administrator view the user name and password and verifies the details of the department selected by the user.

user	department	administrator	database

1:enter the user name and password

2:verify user name & password

3:display the section of department

4:select the department

5:verify the department

6:view the details
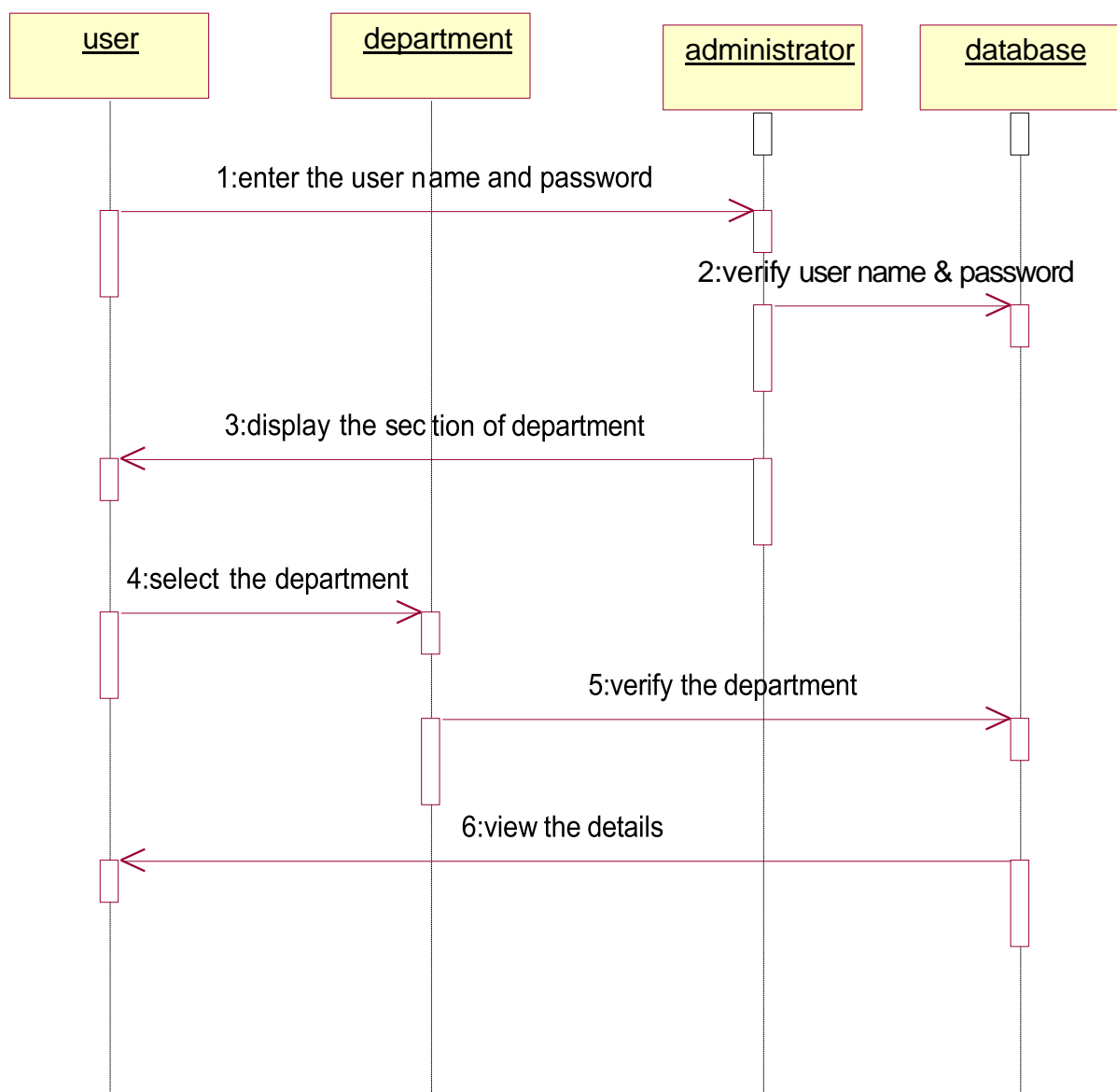
COLLABORATION DIAGRAM

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.

The Administrator and User details are shown in the sequence number

The Administrator view the user name and password and verifies the details of the department selected by the user.

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.

In this diagram, the activities taken place are enter id, select department, view details and exit.

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 the user involves in the Conference management.
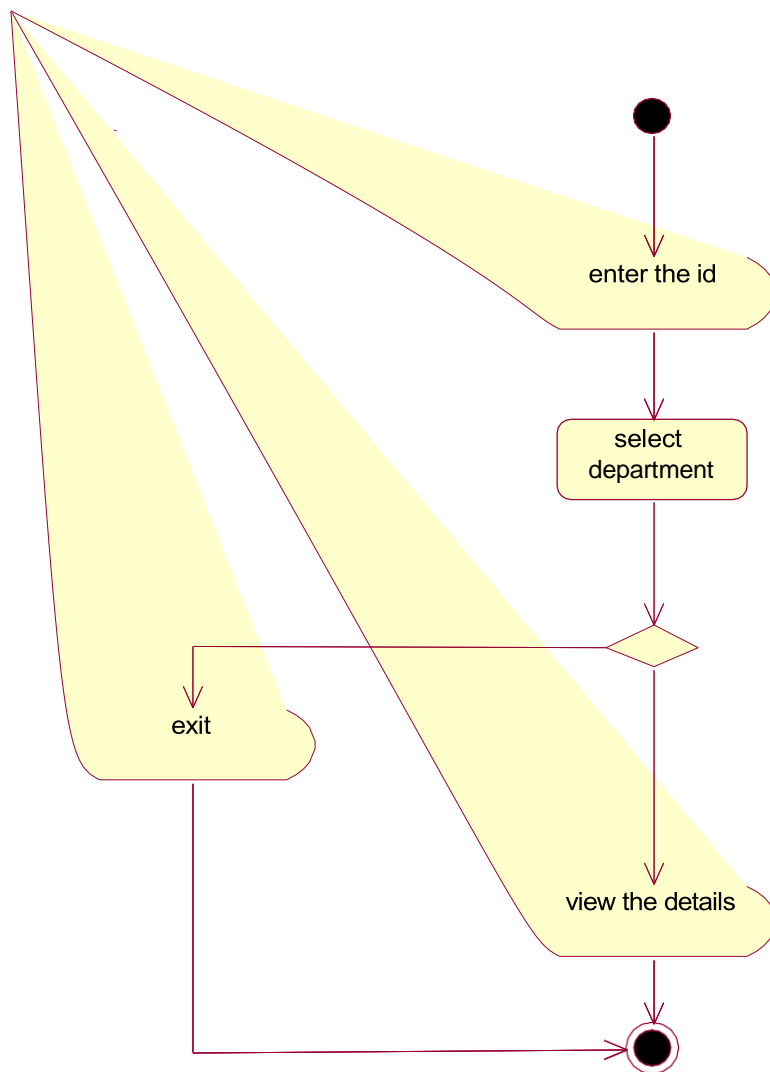
enter the id

select
department

exit

view the details

COMPONENT DIAGRAM

The component diagram is represented by figure dependency and it is a graph of design of figure dependency. The modules in the component diagram are administrator, database, display and student of the Conference Management System.
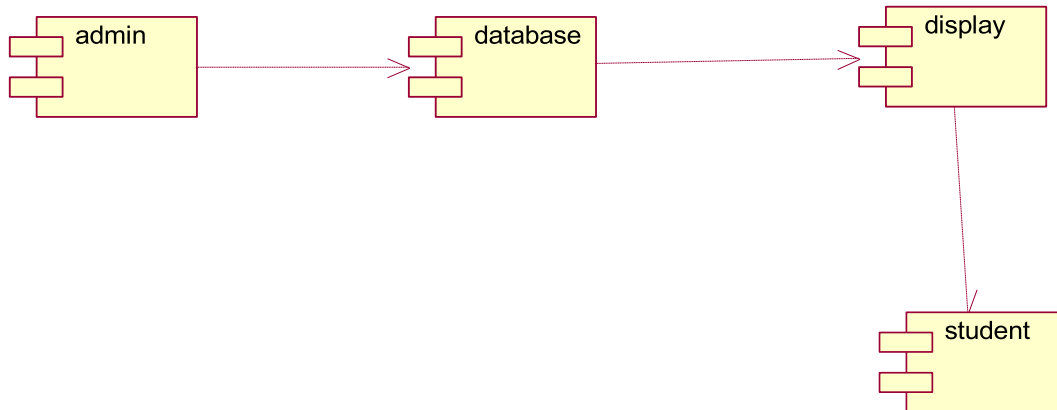
DEPLOYMENT DIAGRAM

It is a graph of nodes connected by communication association. It is represented by a three dimensional box. The modules in the deployment diagram are database, admin, user and display.
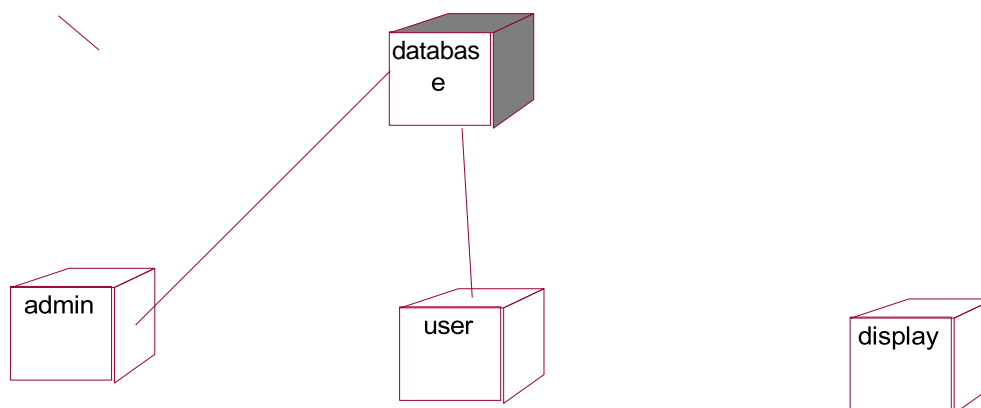
RESULT:

   Thus the Conference Management System is successfully done and the UML diagram are implemented by using the Rational rose.

EX.NO: 13 DATE:	BPO MANAGEMENT SYSTEM

AIM

   To BPO Management System using rational rose tools, visual basic and MS access

PROBLEM ANALYSIS AND PROJECT PLAN

➤ It is to give details about the queries which are going to be asked by the client.

➤ The Client makes the call and wait for the Response from BPO System.

➤ The Operator attends the calls form the client and connects it to the supporter.

➤ The Supporter gets the question from the client then the search the answer for the Client call.

➤ After some moments, he reply to the Client

PROBLEM STATEMENT

➤ A call center or call center (see spelling differences) is a centralized office used for the purpose of receiving and transmitting a large volume of request by telephone

➤ A BPO is operated by a company to administer product support or information inquiries from customers. Outgoing calls for telemarketing, client and dept collection are also made. In addition to a calls for center, collective handling of letters, faxes, and e-mails at one location is known as a contact centre.

➤ A BPO is often operated through an extensive open workspace for call center agents, with work stations that include a computer for each agent, a telephone set/headset connected to a telecom switch, and one or more supervisor stations. It can be independently operated or networked with additional centers, often linked to a corporate computer network, including mainframes, microcomputers and LANs. Increasingly, the voice and data pathways into the centre are linked through a set of new technologies called Computer Telephony Integration (CTI).

➤ Most major business use call centers to interact with their customers. Examples include utility companies, mail order catalogue firms, and customer support for computer hardware and software. Some business even service internal functions through call centers.

SOFTWARE REQUIREMENTS SPECIFICATION

S. no	Software Requirement Specification
1.0	Introduction
1.1	Purpose
1.2	Scope
1.3	Definition, Acronyms and Abbreviation
1.4	Reference
1.6	Tools to be used
1.7	Overview
1.8	Overall description
1.9	Productive description
2.0	Software interface
2.1	Hardware interface
2.2	System function
2.3	User characteristics
2.4	Constraints

GANTT CHART
BPO MANAGEMENT SYSTEM GANTT CHART _
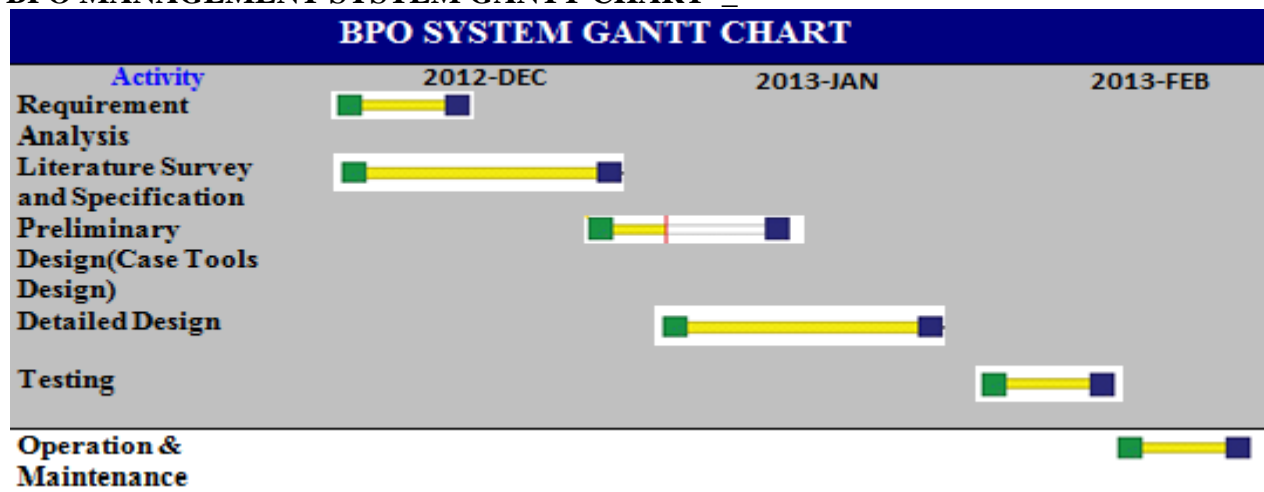
1.0 INTRODUCTION

BPO Management System is an interface between the Client, Operator and the Supporter.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 'BPO Management' is done in a manual manner then it would take several processes for the details to reach the Client. Considering the fact that the number of clients 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.

1.2 SCOPE

The System provides an online interface to the client where they can fill in their personal details.
Provide a communication platform between the client and the Operator.

Transfer of conversation between the client and the operator for verification of applicant's information.

1.3 DEFINITIONS, ACRONYMS AND THE ABBREVIATIONS

Client:
The Client who makes the call and ask the question.

Operator:
The Operator who receives the call the connect it to the Supporter.

Supporter:
The Supporter who search for the answers and reply to the Client.

1.4 REFERENCES

IEEE Software Requirement Specification format.

1.5 TOOLS TO BE USED

Rational Rose tool (for developing UML Patterns)

1.6 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.

1.7 PRODUCT PERSPECTIVE

The BMS acts as an interface between the 'client' and the 'operator'. 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

         This use case in initiated by the client when the client needs any information.

         The call will be activate only when the operator is free.

         Call will be connected when the operator is free and this use case get activated when client needs any information.

         Make call for the Respective BPO's centre.

         This use case is initiated by the Operator when they receives a call from the Client.

         When the operation is busy he atten a call.

         The call will be activated.

         After received the call, the system do any other service.

         When he is busy, the call will be on waiting.

         This use case is initiated by Supporter after the call get connected.

         The Supporter search for the client questions.

         The Supporter search for the answer.

         The Supporter who is free response the client.

         This use case is initiated by the Supporter.

         The supporter reply to the client.

         If the Supporter has a correct answer about Client question

2.3 USER CHARACTERISTICS

        Client: The Client who makes the call and ask the question.
        Operator: The Operator who receives the call the connect it to the Supporter.
        Supporter: The Supporter who search for the answers and reply to the Client.

2.4 CONSTRAINTS

         The user 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.

UML DIAGRAMS

1	Use Case diagram
2	Class diagram
3	Sequence diagram
4	Collaboration diagram
5	State Chart diagram
6	Activity diagram
7	Component diagram
8	Deployment diagram

USE CASE DIAGRAM:

Use case is shown as an ellipse containing the name of use case .An actor is shown as a stick figure with the name below it. Use case diagram is a graph of actors.   The actors in use case diagram are Client, Supporter and operator.

The uses cases are make call, attend call, do search, return call.

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.

Client:

The class contains name and address of the Client.

Operator:

This class contains name, Phone no details of the Client.

Supporter:

This class contains problem of the Client and solution to the client.

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.

The client calls the operator. The operator asks help from supporter.

Then operator passes information to the client.

Finally client gets the information.

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.

The client calls the operator. The operator asks help from supporter.

Then operator passes information to the client.

Finally client gets the information.

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.

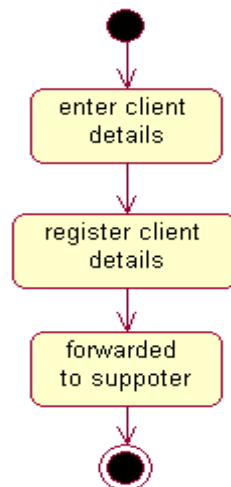In this diagram, the activities taken place are make a call, do search, return call and take call.

The client calls the operator. The operator asks help from supporter.

Finally client gets the information.

MAKE A CALL
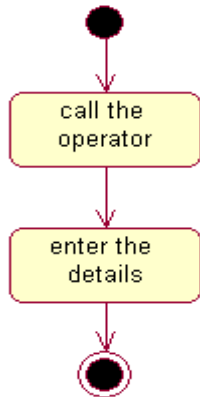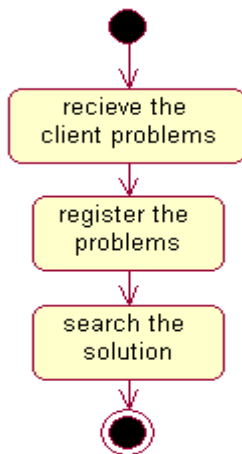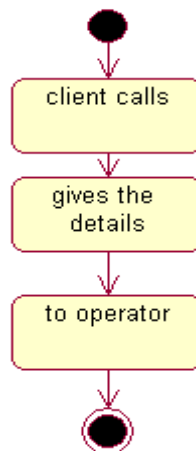
call the operator

enter the details

DO RESEARCH

enter client details

register client details

forwarded to suppoter

RETURN CALL

recieve the client problems

register the problems

search the solution

TAKE A CALL

client calls

gives the details

to operator

COMPONENT DIAGRAM

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

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
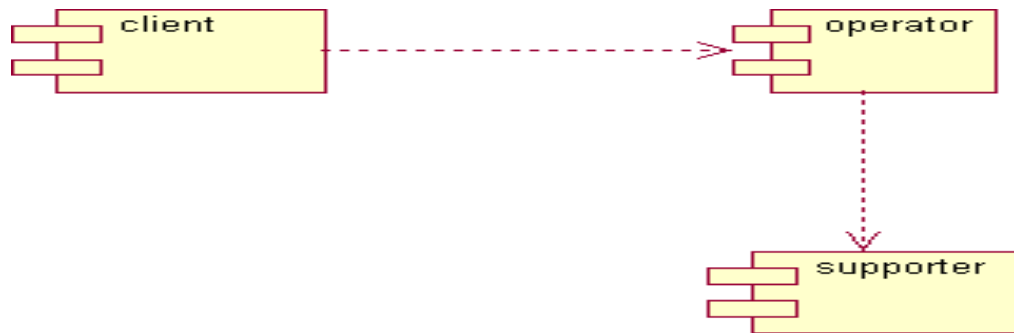
DEPLOYMENT DIAGRAM

It is a graph of nodes connected by communication association. It is represented by a three dimensional box. The modules in the deployment diagram are BPO system and Printer.
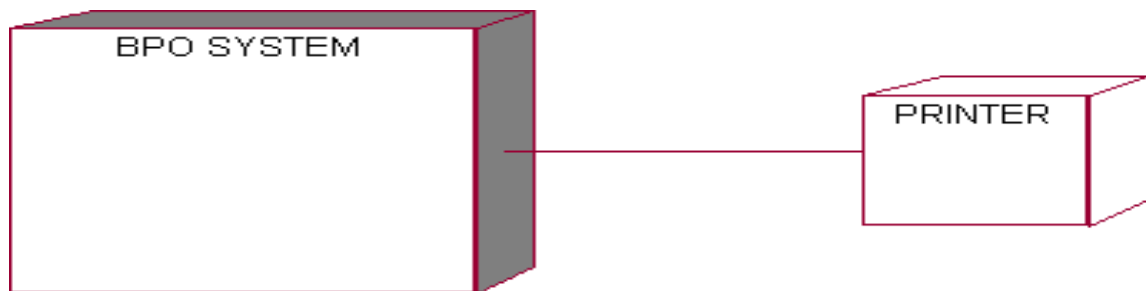
RESULT:

Thus the BPO Management System is successfully done and the UML diagram are implemented by using the Rational rose.

EX.NO: 14 DATE:	LIBRARY MANAGEMENT SYSTEM

AIM

    To Library Management System using rational rose tools, visual basic and MS access

PROBLEM ANALYSIS AND PROJECT PLAN

- ➢ It is to give details about the queries which are going to be asked by the client.
- ➢ The Client makes the call and wait for the Response from Library System.
- ➢ The Operator attends the calls form the client and connects it to the supporter.
- ➢ The Supporter gets the question from the client then the search the answer for the Client call.
- ➢ After some moments, he reply to the Client

PROBLEM STATEMENT

- ➢ A call center or call center (see spelling differences) is a centralized office used for the purpose of receiving and transmitting a large volume of request by telephone
- ➢ A Library is operated by a company to administer product support or information inquiries from customers. Outgoing calls for telemarketing, client and dept collection are also made. In addition to a calls for center, collective handling of letters, faxes, and e-mails at one location is known as a contact centre.
- ➢ A Library is often operated through an extensive open workspace for call center agents, with work stations that include a computer for each agent, a telephone set/headset connected to a telecom switch, and one or more supervisor stations. It can be independently operated or networked with additional centers, often linked to a corporate computer network, including mainframes, microcomputers and LANs. Increasingly, the voice and data pathways into the centre are linked through a set of new technologies called Computer Telephony Integration (CTI).
- ➢ Most major business use call centers to interact with their customers. Examples include utility companies, mail order catalogue firms, and customer support for computer hardware and software. Some business even service internal functions through call centers.

SOFTWARE REQUIREMENTS SPECIFICATION

S. no	Software Requirement Specification
1.0	Introduction
1.1	Purpose
1.2	Scope
1.3	Definition, Acronyms and Abbreviation
1.4	Reference
1.6	Tools to be used
1.7	Overview
1.8	Overall description
1.9	Productive description
2.0	Software interface
2.1	Hardware interface
2.2	System function
2.3	User characteristics
2.4	Constraints

GANTT CHART
LIBRARY MANAGEMENT SYSTEM GANTT CHART _
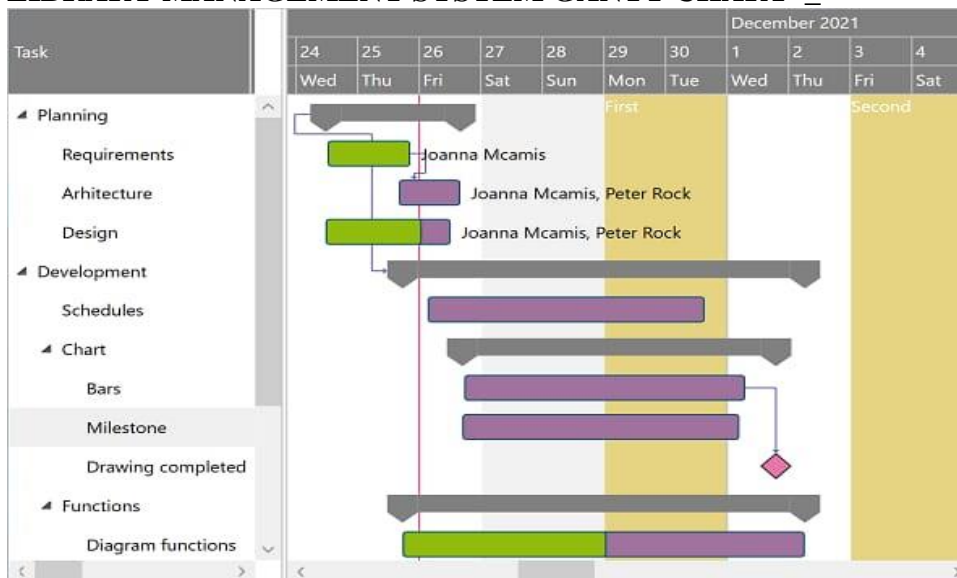
1.0   INTRODUCTION

Library Management System is an interface between the Client, Operator and the Supporter. 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 'Library Management' is done in a manual manner then it would take several processes for the details to reach the Client. Considering the fact that the number of clients 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.

1.2 SCOPE

The System provides an online interface to the client where they can fill in their personal details.
Provide a communication platform between the client and the Operator.
Transfer of conversation between the client and the operator for verification of applicant's information.

1.3 DEFINITIONS, ACRONYMS AND THE ABBREVIATIONS

Client:
The Client who makes the call and ask the question.

Operator:
The Operator who receives the call the connect it to the Supporter.

Supporter:
The Supporter who search for the answers and reply to the Client.

1.4 REFERENCES
IEEE Software Requirement Specification format.

1.5 TOOLS TO BE USED
Rational Rose tool (for developing UML Patterns)

1.6 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.

1.7 PRODUCT PERSPECTIVE

The BMS acts as an interface between the 'client' and the 'operator'. 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.

1.8 SOFTWARE INTERFACE

Back End
    MS Access database.

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

2.0 SYSTEM FUNCTIONS
    This use case in initiated by the client when the client needs any information.

    The call will be activate only when the operator is free.

    Call will be connected when the operator is free and this use case get activated when client needs any information.

    Make call for the Respective Libraries centre.

    This use case is initiated by the Operator when they receives a call from the Client.

    When the operation is busy he attend a call.

    The call will be activated.

    After received the call, the system do any other service.

    When he is busy, the call will be on waiting.

    This use case is initiated by Supporter after the call get connected.

    The Supporter search for the client questions.

    The Supporter search for the answer.

    The Supporter who is free response the client.

    This use case is initiated by the Supporter.

    The supporter reply to the client.

    If the Supporter has a correct answer about Client question

2.1 USER CHARACTERISTICS
Client:
    The Client who makes the call and ask the question.

Operator:
    The Operator who receives the call the connect it to the Supporter.

Supporter:
    The Supporter who search for the answers and reply to the Client.
2.2 CONSTRAINTS
    The user 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.
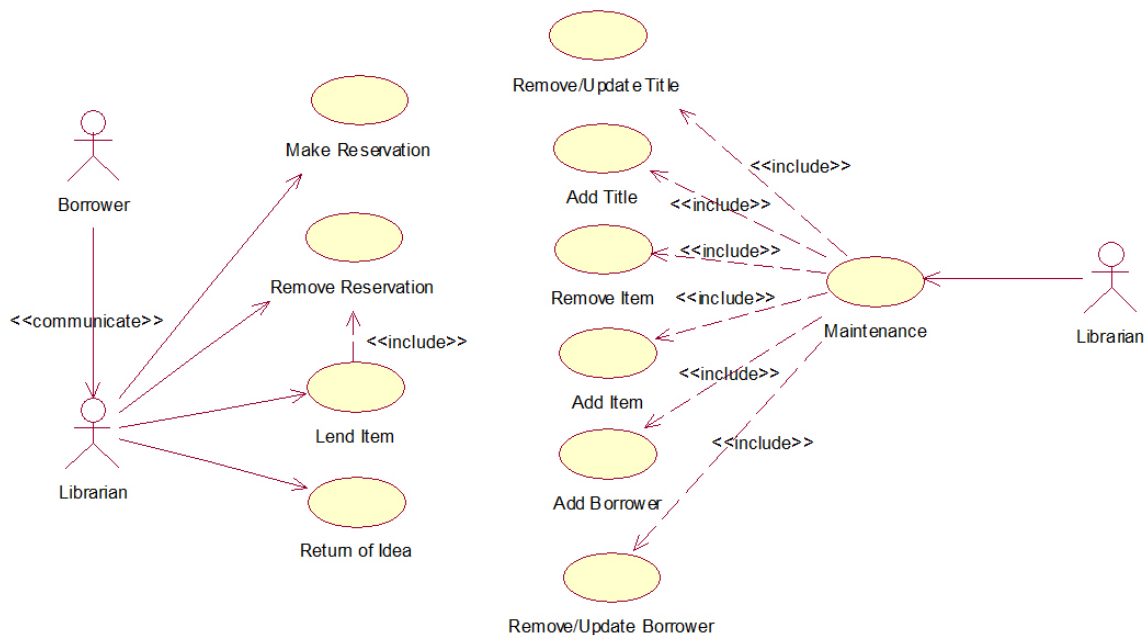
UML DIAGRAMS

1	Use Case diagram
2	Class diagram
3	Sequence diagram
4	Collaboration diagram
5	State Chart diagram
6	Activity diagram
7	Component diagram
8	Deployment diagram

USE CASE DIAGRAM:

Use case is shown as an ellipse containing the name of use case .An actor is shown as a stick figure with the name below it. Use case diagram is a graph of actors.   The actors in use case diagram are Client, Supporter and operator.

The uses cases are make call, attend call, do search, return call.

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.

Client:The class contains name and address of the Client.

Operator:

This class contains name, Phone no details of the Client.

Supporter:

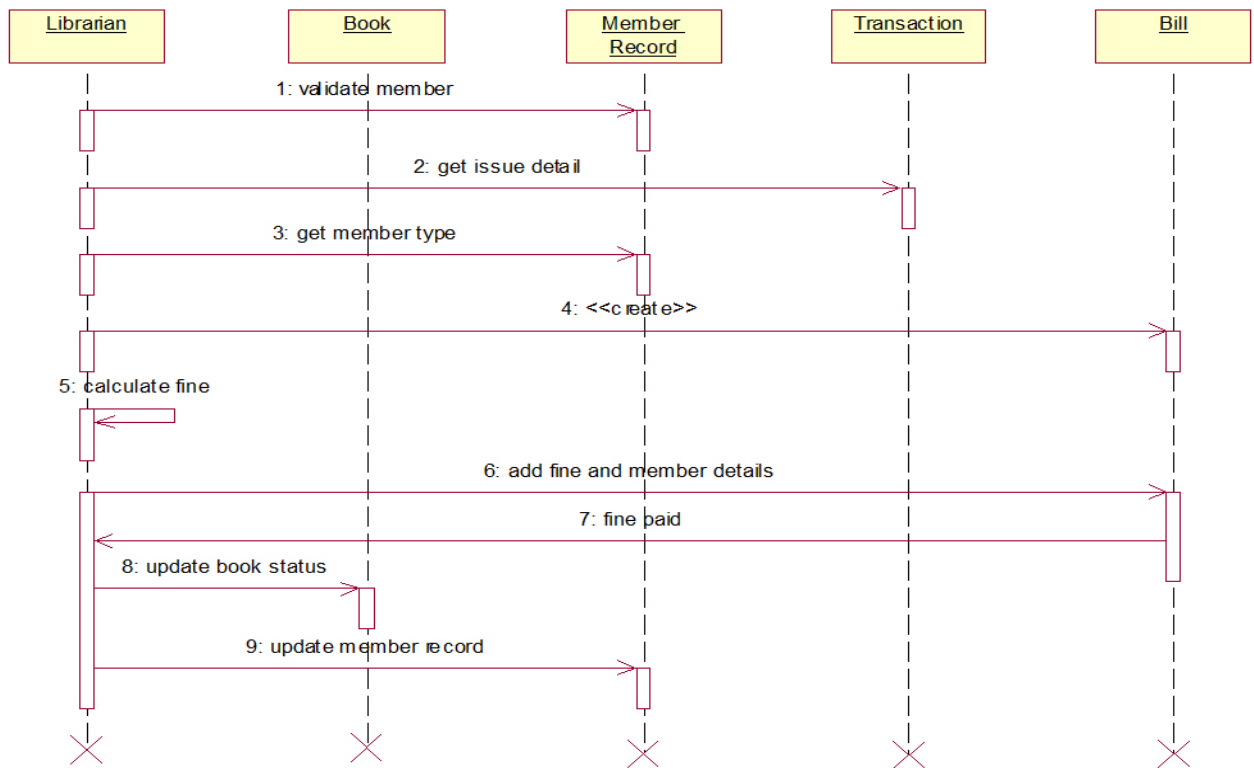This class contains problem of the Client and solution to the client.

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.

The client calls the operator. The operator asks help from supporter.

Then operator passes information to the client.
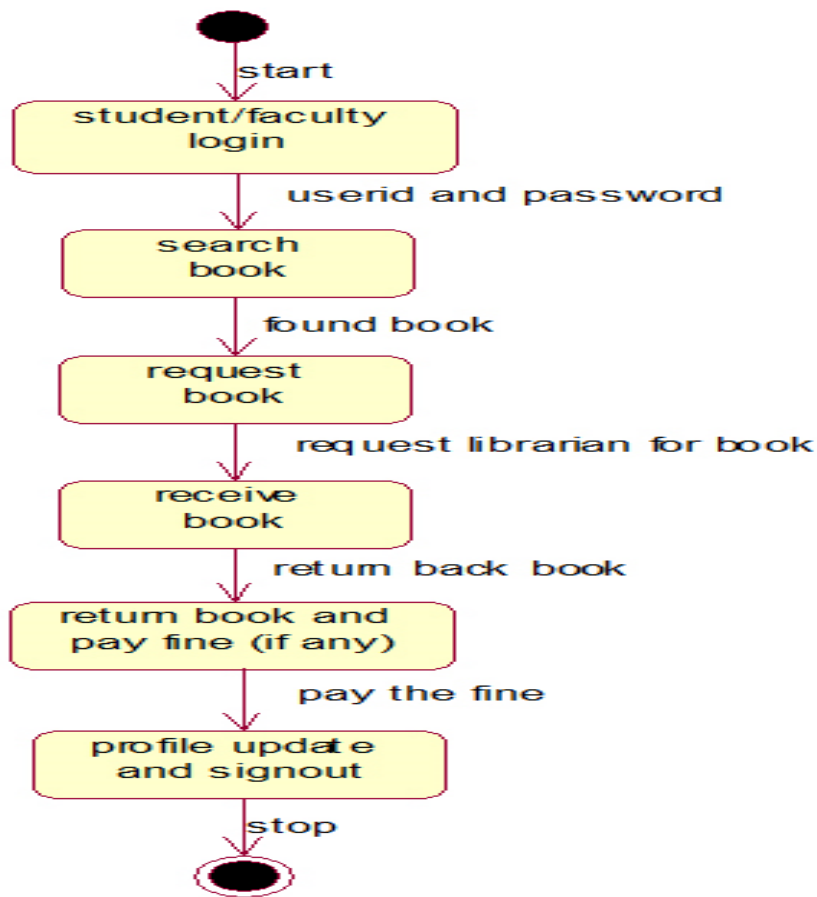
Finally client gets the information.

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.

The client calls the operator. The operator asks help from supporter.

Then operator passes information to the client.

Finally client gets the information

Diagram labels:
5: calculate fine
Book
8: update book status
1: validate member
3: get member type
9: update member record
Librarian
Member Record
4: <<create>>
6: add fine and member details
2: get issue detail
7: fine paid
Bill
Transaction

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.

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 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. .In this diagram, the activities taken place are make a call, do search, return call and take call.
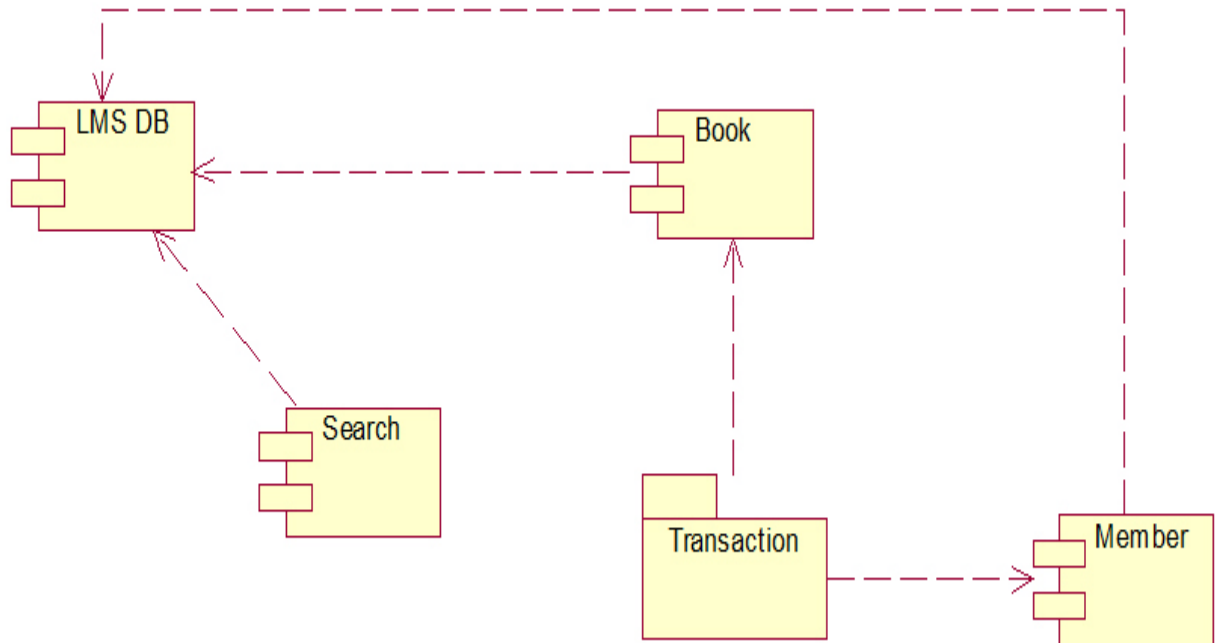
The client calls the operator. The operator asks help from supporter.
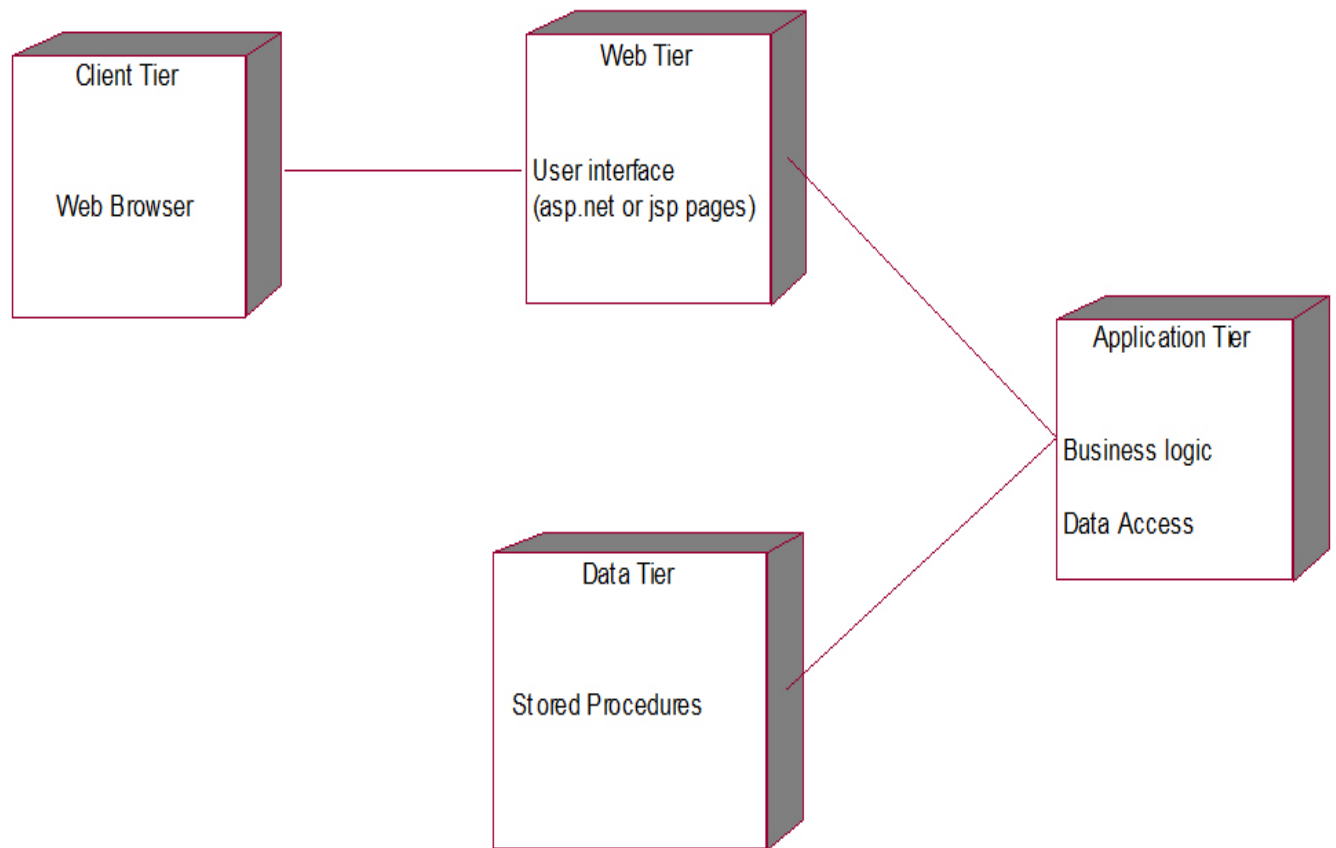
COMPONENT DIAGRAM

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

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

DEPLOYMENT DIAGRAM

It is a graph of nodes connected by communication association. It is represented by a three dimensional box. The modules in the deployment diagram are Library system and Printer.

Client Tier

Web Browser

Web Tier

User interface
(asp.net or jsp pages)

Application Tier

Business logic

Data Access

Data Tier

Stored Procedures

RESULT:

Thus the Library Management System is successfully done and the UML diagram are implemented by using the Rational rose.

EX.NO: 15	STUDENT INFORMATION SYSTEM
DATE:	

AIM

      To Student Information System using rational rose tools, visual basic and MS access

PROBLEM ANALYSIS AND PROJECT PLAN

➢ It is to give details about the queries which are going to be asked by the client.

➢ The Client makes the call and wait for the Response from Student System.

➢ The Operator attends the calls form the client and connects it to the supporter.

➢ The Supporter gets the question from the client then the search the answer for the Client call.

➢ After some moments, he reply to the Client

PROBLEM STATEMENT

➢ A call center or call center (see spelling differences) is a centralized office used for the purpose of receiving and transmitting a large volume of request by telephone

➢ A Library is operated by a company to administer product support or information inquiries from customers. Outgoing calls for telemarketing, client and dept collection are also made. In addition to a calls for center, collective handling of letters, faxes, and e-mails at one location is known as a contact centre.

➢ A Library is often operated through an extensive open workspace for call center agents, with work stations that include a computer for each agent, a telephone set/headset connected to a telecom switch, and one or more supervisor stations. It can be independently operated or networked with additional centers, often linked to a corporate computer network, including mainframes, microcomputers and LANs. Increasingly, the voice and data pathways into the centre are linked through a set of new technologies called Computer Telephony Integration (CTI).

➢ Most major business use call centers to interact with their customers. Examples include utility companies, mail order catalogue firms, and customer support for computer hardware and software. Some business even service internal functions through call centers.

SOFTWARE REQUIREMENTS SPECIFICATION

S. no	Software Requirement Specification
1.0	Introduction
1.1	Purpose
1.2	Scope
1.3	Definition, Acronyms and Abbreviation
1.4	Reference
1.6	Tools to be used
1.7	Overview
1.8	Overall description
1.9	Productive description
2.0	Software interface
2.1	Hardware interface
2.2	System function
2.3	User characteristics
2.4	Constraints

GANTT CHART
STUDENT INFORMATION SYSTEM GANTT CHART

SDLC ACTIVITIES	January				February				March			
	1	2	3	4	1	2	3	4	1	2	3	4
Planning	■											
Analysis		■										
Design			■	■								
Coding					■	■	■					
Testing								■	■			
Implementation										■	■	
Maintenance												■

1.0   INTRODUCTION

Student Information System is an interface between the Client, Operator and the Supporter.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 'Student Management' is done in a manual manner then it would take several processes for the details to reach the Client. Considering the fact that the number of clients 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.

1.2 SCOPE

The System provides an online interface to the client where they can fill in their personal details.
Provide a communication platform between the client and the Operator.
Transfer of conversation between the client and the operator for verification of applicant's information.

1.3 DEFINITIONS, ACRONYMS AND THE ABBREVIATIONS
Client:
The Client who makes the call and ask the question.

Operator:
The Operator who receives the call the connect it to the Supporter.

Supporter:
The Supporter who search for the answers and reply to the Client.

1.4 REFERENCES
IEEE Software Requirement Specification format.

1.5 TOOLS TO BE USED
Rational Rose tool (for developing UML Patterns)

1.6 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.

1.7 PRODUCT PERSPECTIVE

The BMS acts as an interface between the 'client' and the 'operator'. 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.

1.8 SOFTWARE INTERFACE

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

Back End
  MS Access database.

1..9 HARDWARE INTERFACE

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

2.0 SYSTEM FUNCTIONS

This use case in initiated by the client when the client needs any information.

The call will be activate only when the operator is free.

Call will be connected when the operator is free and this use case get activated when client needs any information.

Make call for the Respective Student's centre.

This use case is initiated by the Operator when they receives a call from the Client.

When the operation is busy he attend a call.

The call will be activated.

After received the call, the system do any other service.

When he is busy, the call will be on waiting.

This use case is initiated by Supporter after the call get connected.

The Supporter search for the client questions.

The Supporter search for the answer.

The Supporter who is free response the client.

This use case is initiated by the Supporter.

The supporter reply to the client.

If the Supporter has a correct answer about Client question

2.1 USER CHARACTERISTICS

Client:
  The Client who makes the call and ask the question.

Operator:
  The Operator who receives the call the connect it to the Supporter.

Supporter:
  The Supporter who search for the answers and reply to the Client.

2.2 CONSTRAINTS

The user 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.
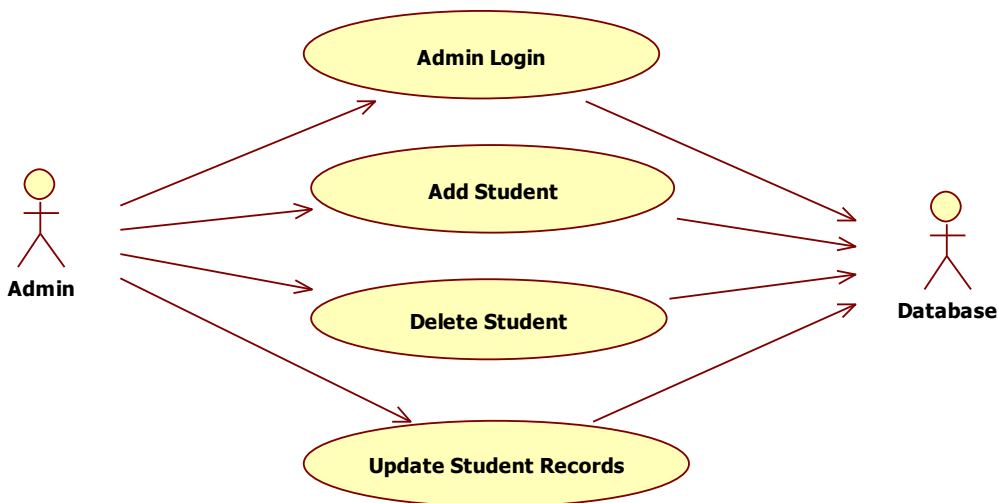
UML DIAGRAMS

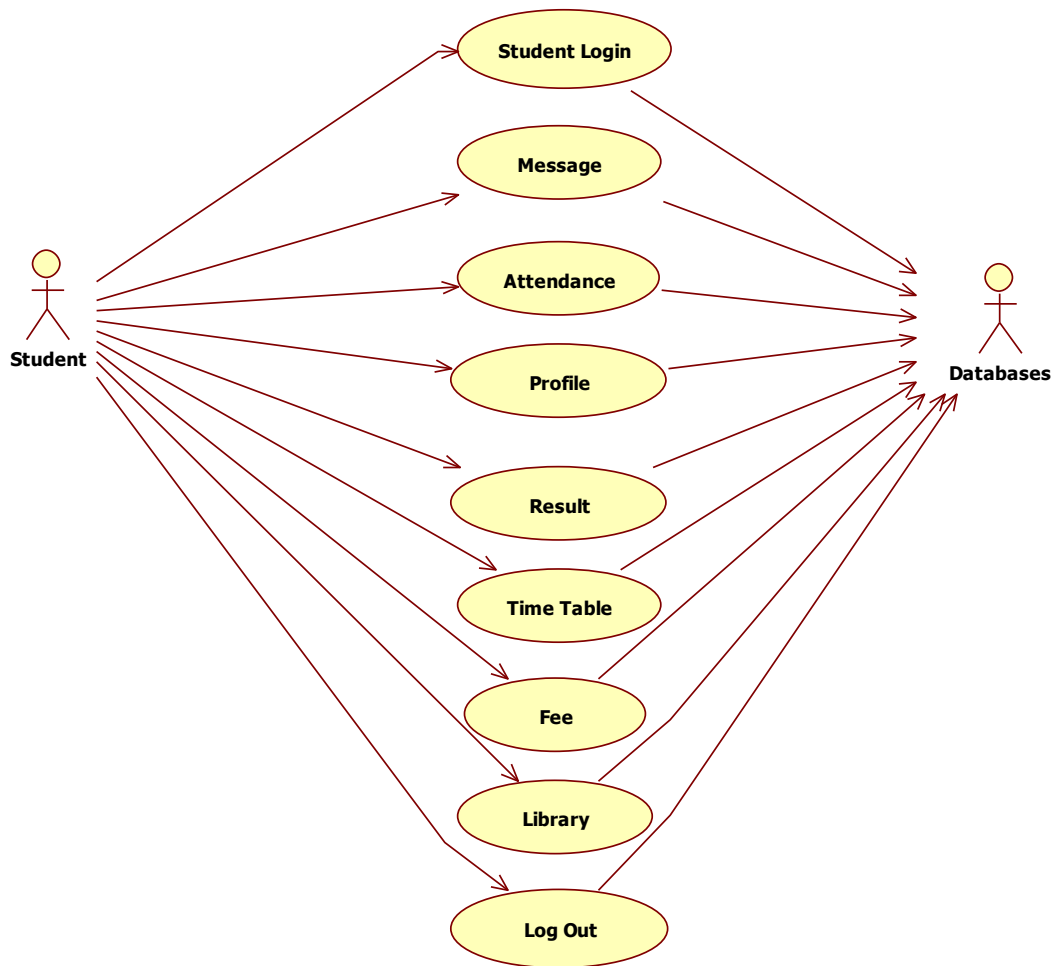|	
1	Use Case diagram
2	Class diagram
3	Sequence diagram
4	Collaboration diagram
5	State Chart diagram
6	Activity diagram
7	Component diagram
8	Deployment diagram

USE CASE DIAGRAM:

Use case is shown as an ellipse containing the name of use case .An actor is shown as a stick figure with the name below it. Use case diagram is a graph of actors.   The actors in use case diagram are Client, Supporter and operator.

The uses cases are make call, attend call, do search, return call.

The actors uses the use case are denoted by the arrow

CLASS DIAGRAM:

A class diagram in the unified modeling language (UML) is a type of static structure diagram that describes the structure of a system by showing the system's classes, their attributes, and the relationships between the classes. It s represented using a rectangle with three compartments. Top compartment have the class name, middle compartment the attributes and the bottom compartment with operations.
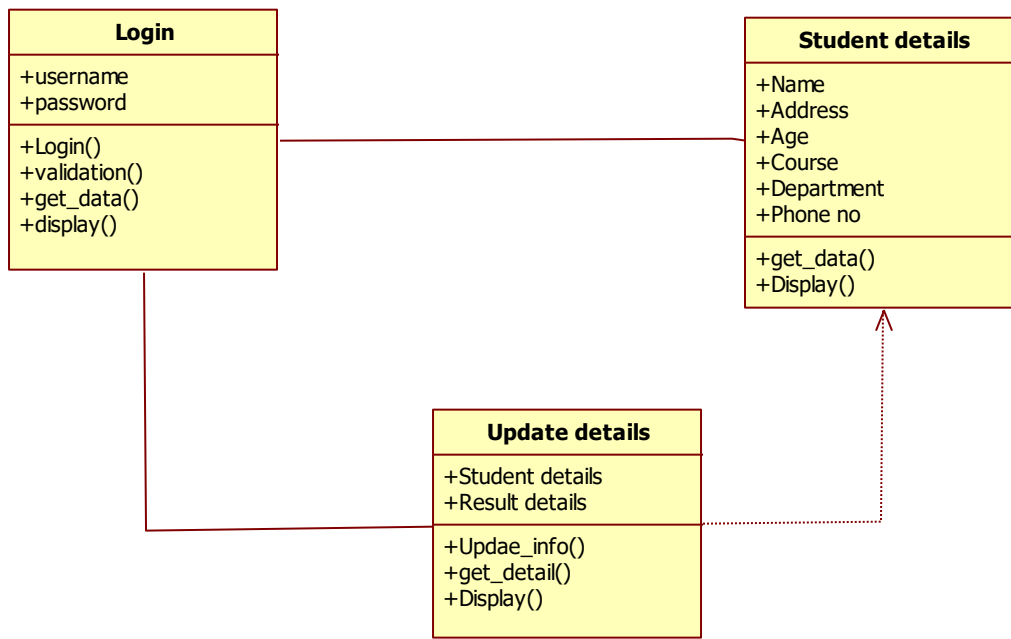
SEQUENCE DIAGRAM:

A sequence diagram in Unified Modeling Language (UML) is a kind of interaction diagram that shows how processes operate with one another and in what order. It is a construct of a Message Sequence Chart. There are two dimensions.

　　1. Veritcal dimension-represent time.
　　2. Horizontal dimension-represent different objects.

## For Validity:
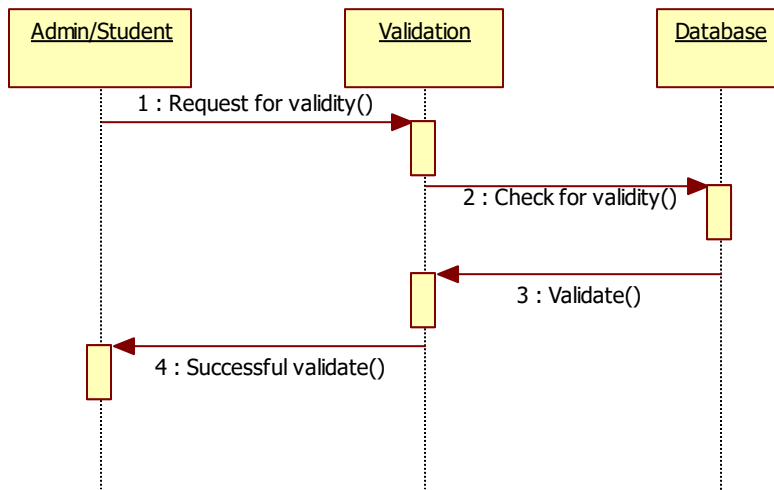
For Administrator:
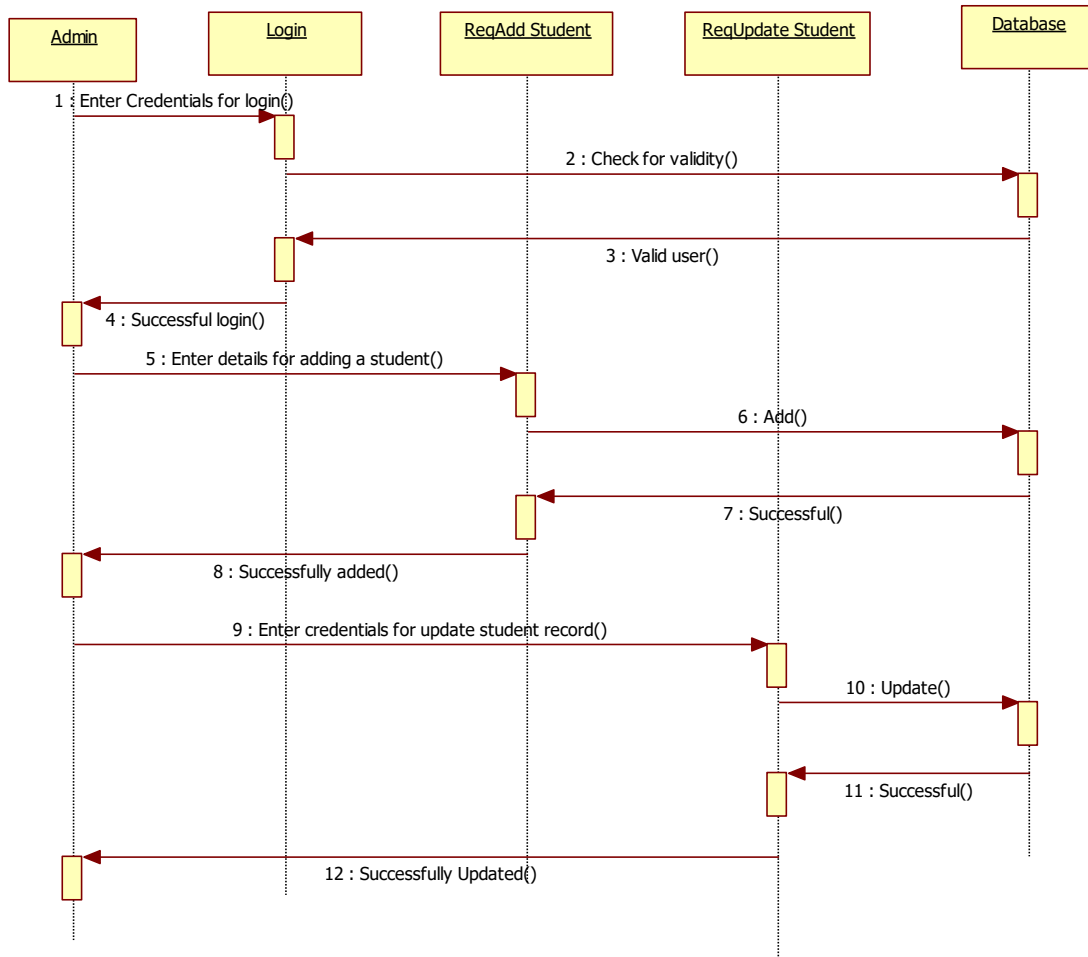
For Student:
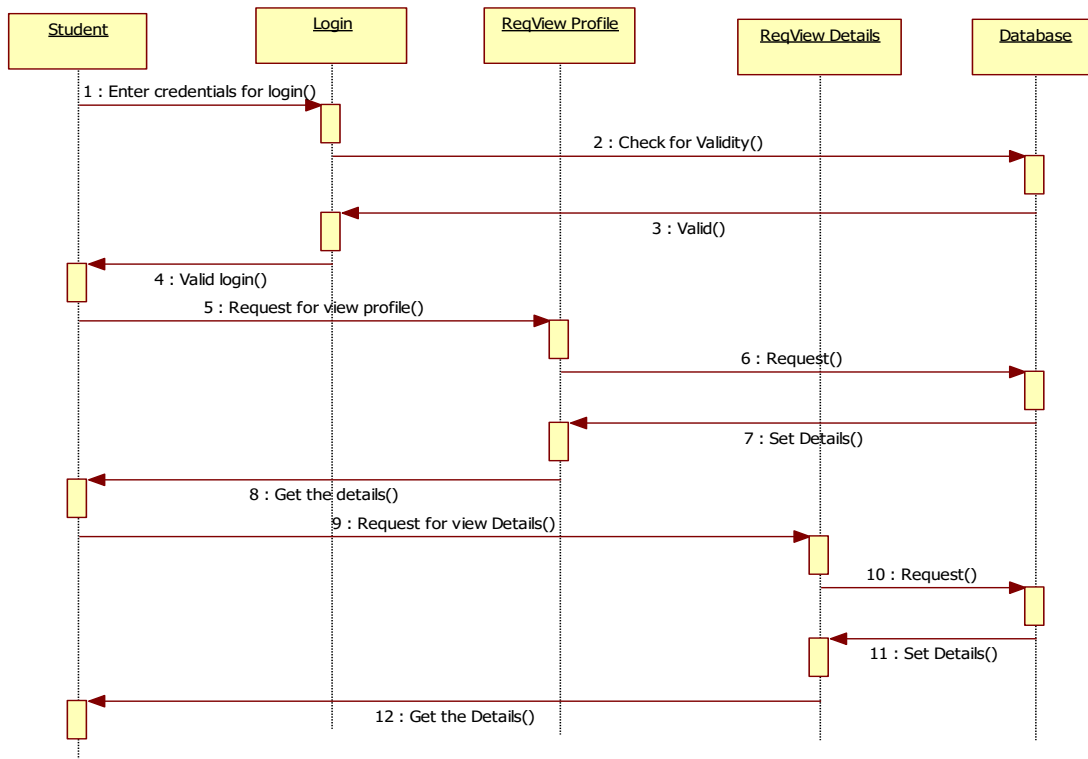
COLLABRATION DIAGRAM:

A collaboration diagram, also called a communication diagram or interaction diagram,. A sophisticated modeling tool can easily convert a collaboration diagram into a sequence diagram and the vice. A collaboration diagram resembles a flowchart that portrays the roles, functionality and behavior of individual objects as well as the overall operation of the system in real time
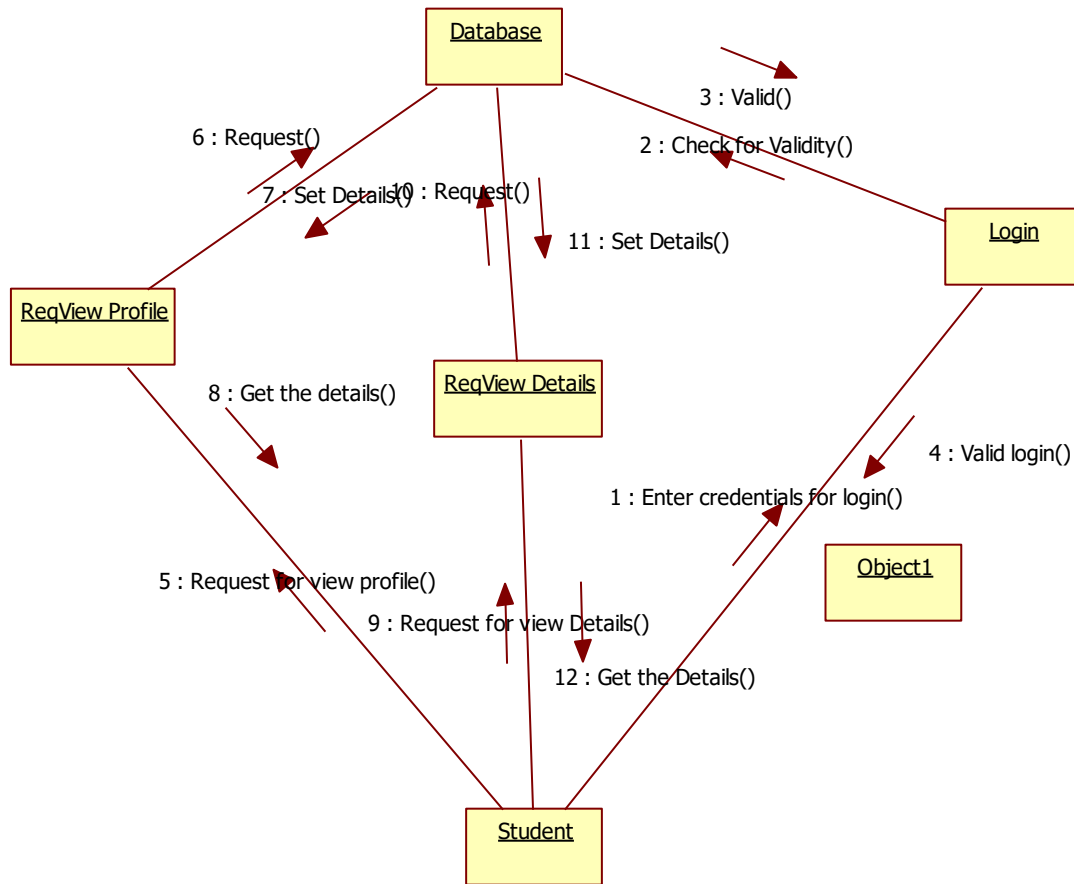
## For Validity:
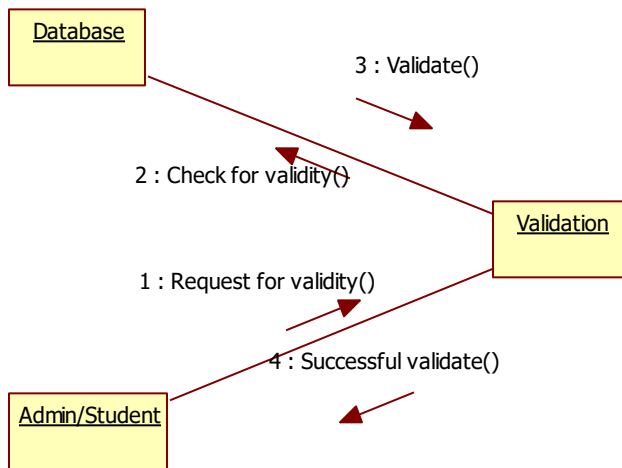
For Administrator:
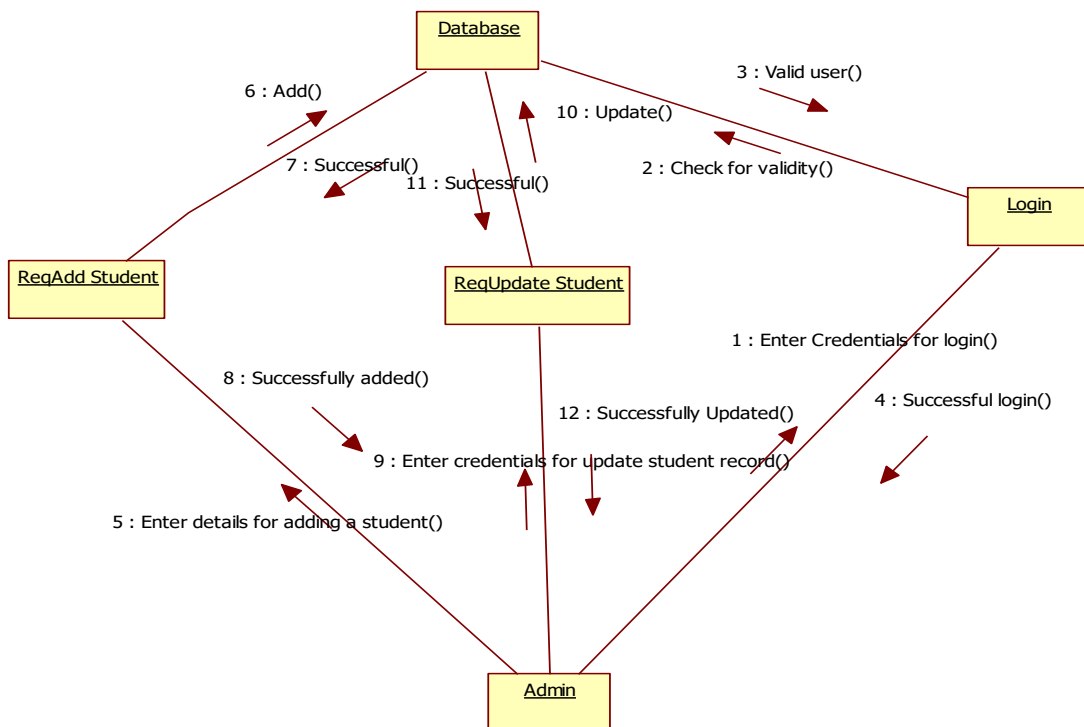
For Student:

ACTIVITY DIAGRAM:

Activity diagrams are graphical representations of workflows of stepwise activities and actions with support for choice, iteration and concurrency. In the Unified Modeling Language, activity diagrams can be used to describe the business and operational step-by-step workflows of components in a system. An activity diagram shows the overall flow of control. An activity is shown as an rounded box containing the name of the operation.
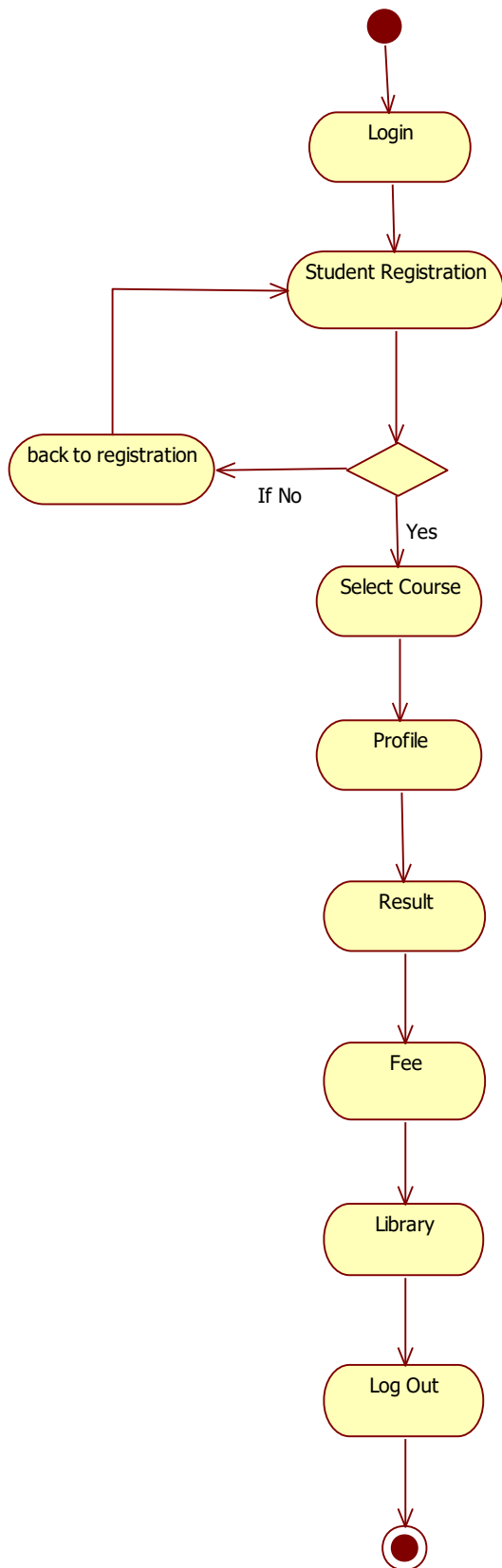
COMPONENT DIAGRAM:

The component diagram's main purpose is to show the structural relationships between the components of a system. It is represented by boxed figure. Dependencies are represented by communication association.
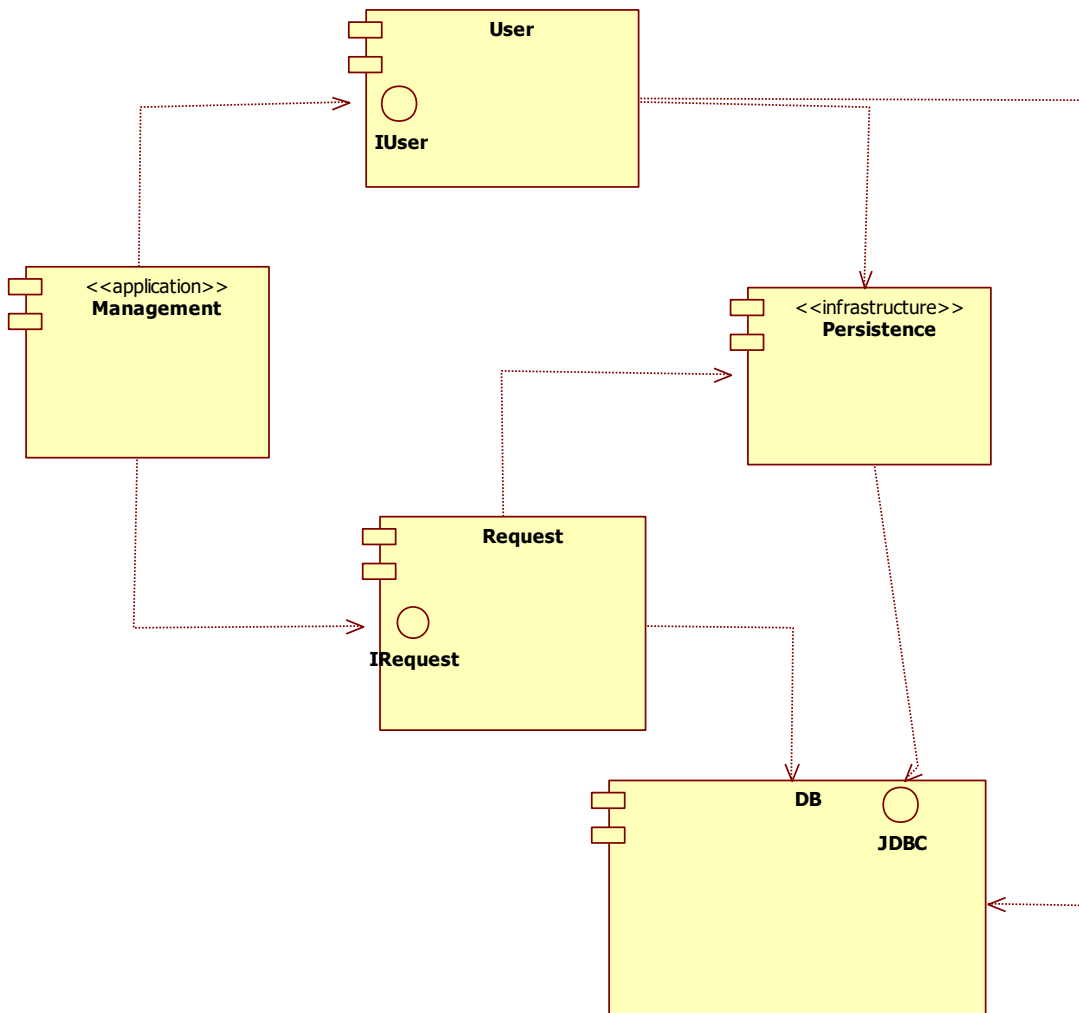
DEPLOYMENT DIAGRAM:

A deployment diagram in the unified modeling language serves to model the physical deployment of artifacts on deployment targets. Deployment Diagrams show "the allocation of artifacts to nodes according to the Deployments defined between them. It is represented by 3-dimentional box. Dependencies are represented by communication association.

Student Information System

Administrator

Student

Access Database
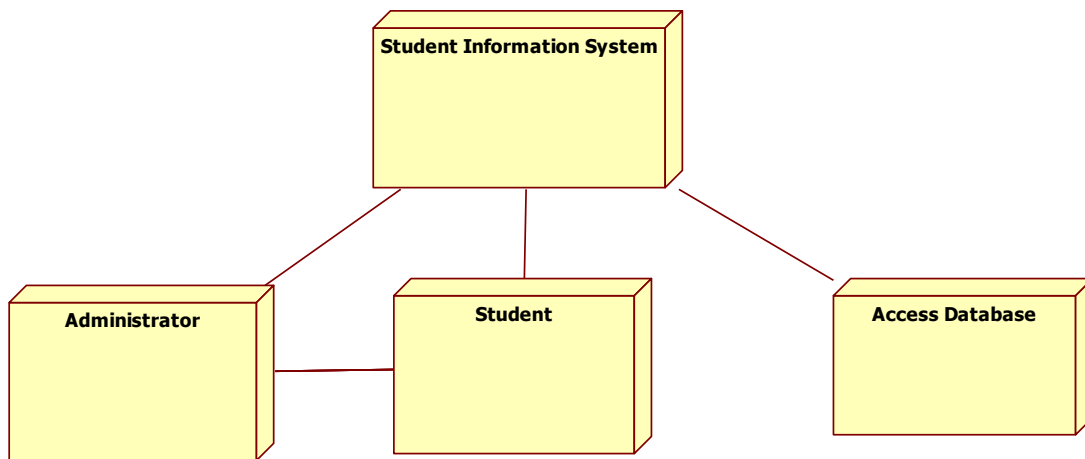
RESULT:

Thus the Student Information System is successfully done and the UML diagram are implemented by using the Rational rose.