UNIVERSITY COLLEGE OF ENGINEERING NAGERCOIL

(A CONSTITUENT COLLEGE OF ANNA UNIVERSITY)
KONAM, NAGERCOIL – 629 004

RECORD NOTE BOOK

CS8582 – Object Oriented Analysis and Design Laboratory

NAME : **ABISHEK J**

REGISTER NO : **962818205004**

UNIVERSITY COLLEGE OF ENGINEERING NAGERCOIL

(ANNA UNIVERSITY CONSTITUENT COLLEGE)

KONAM, NAGERCOIL

Register No: 962818205004

Certified that, that is the bonafide record of work done by Mr./ ~~Ms~~. ***ABISHEK J*** *of VI Semester in Information Technology of this college, in the Object Oriented Analysis and Design Laboratory (CS8582) during academic year 2020 - '21 in partial fulfillment of the requirements of the B.Tech. Degree course of Anna University Chennai.*

Staff-in-charge **Head of the Department**

This record is submitted for the University Practical Examination held on ……10.08.2021……

Internal Examiner **External Examiner**

LIST OF EXPERIMENTS

S. No.	Date	Name of the Experiments	Pg. No.	Marks Awarded	Sign
13	17-03-2021	BPO Management System	106		
14	17-03-2021	Library Management System	114		
15	17-03-2021	Student Information System	122		

Ex. No: 1	PASSPORT AUTOMATION SYSTEM
Date:09-03-2021	

AIM:

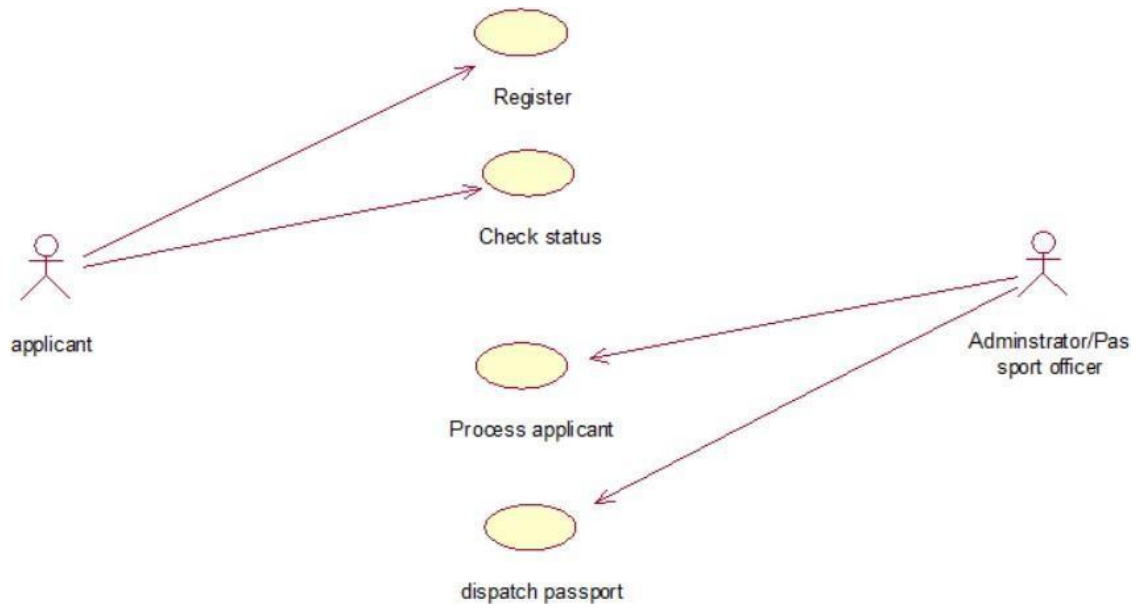
To create an automated system to perform the Passport Process.

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.

USECASE DIAGRAM:

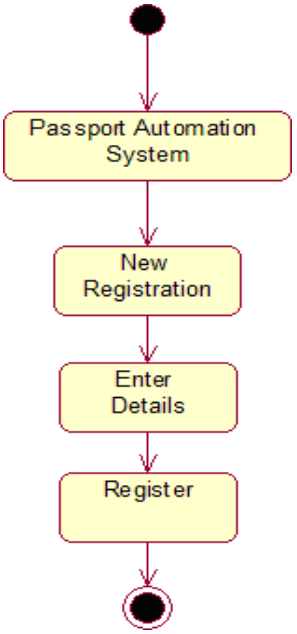
The functionality of a system can be described in a number of different use-cases, each of which represents a specific flow of events in a system. It is a graph of actors, a set of use-cases enclosed in a boundary, communication, associations between the actors and the use-cases, and generalization among the use-cases.



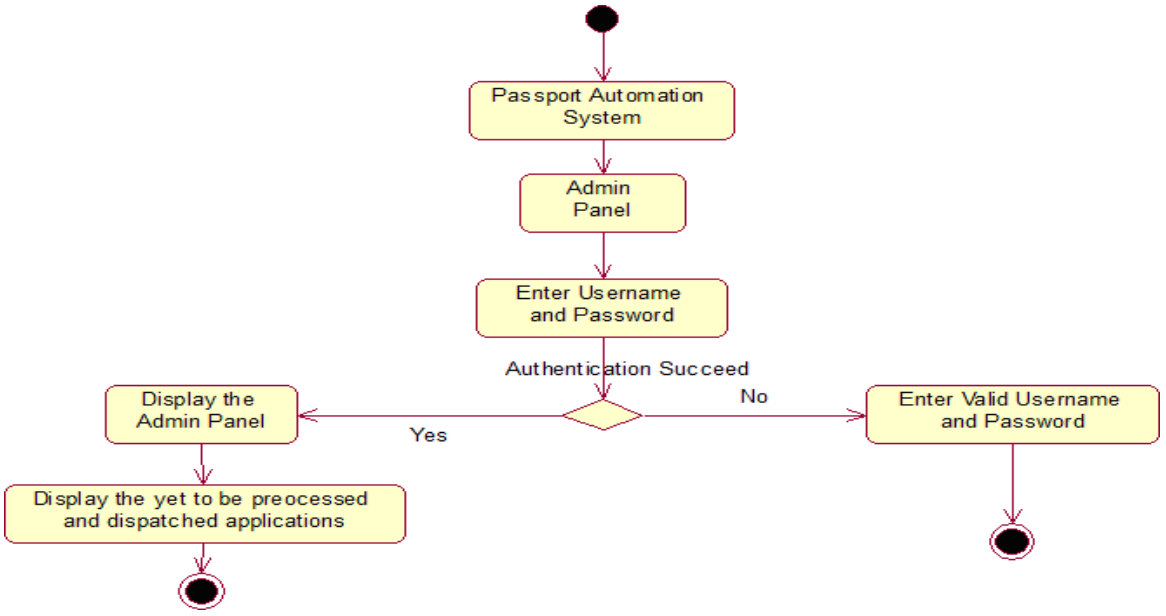
ACTIVITY DIAGRAM:

It shows organization and their dependence among the set of components. These diagrams are particularly useful in connection with workflow and in describing behavior that has a lot of parallel processing. An activity is a state of doing something: either a real-world process, or the execution of a software routine.

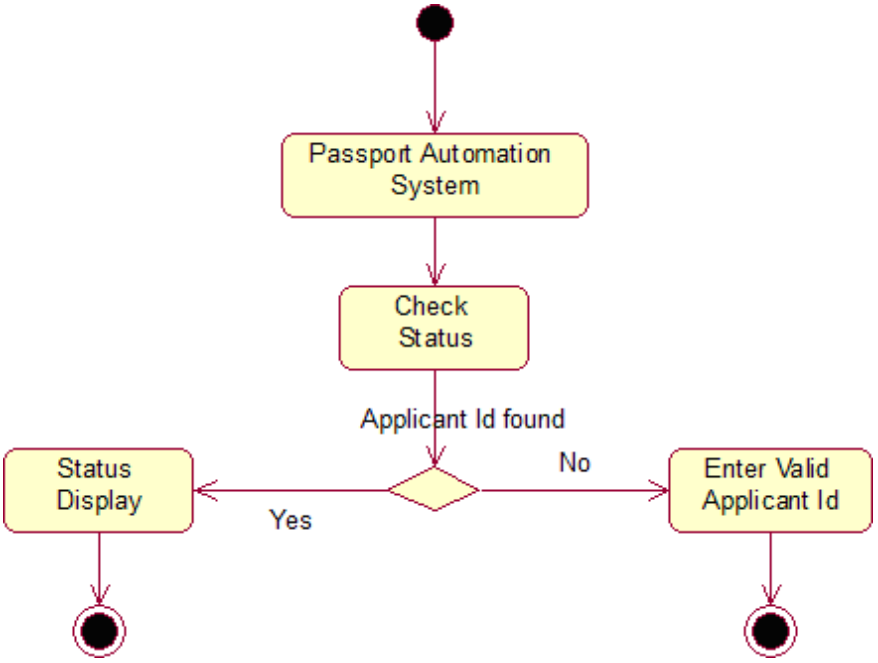
ACTIVITY DIAGRAM FOR REGISTER:



ACTIVITY DIAGRAM FOR ADMINISTRATION:



ACTIVITY DIAGRAM FOR CHECKING STATUS:

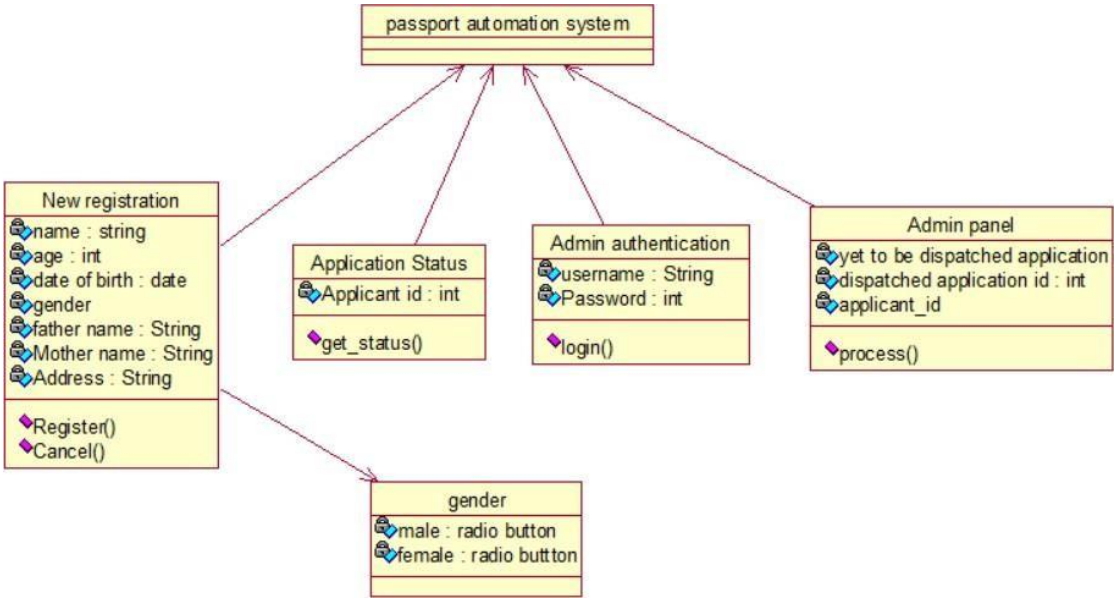


CLASS DIAGRAM:

The class diagram, also referred to as object modeling is the main static analysis diagram. The main task of object modeling is to graphically show what each object will do in the problem domain. The problem domain describes the structure and the relationships among objects.

The Passport Automation system class diagram consists of four classes Passport Automation System

1. New registration
2. Gender
3. Application Status
4. Admin authentication
5. Admin Panel



INTERACTION DIAGRAM:

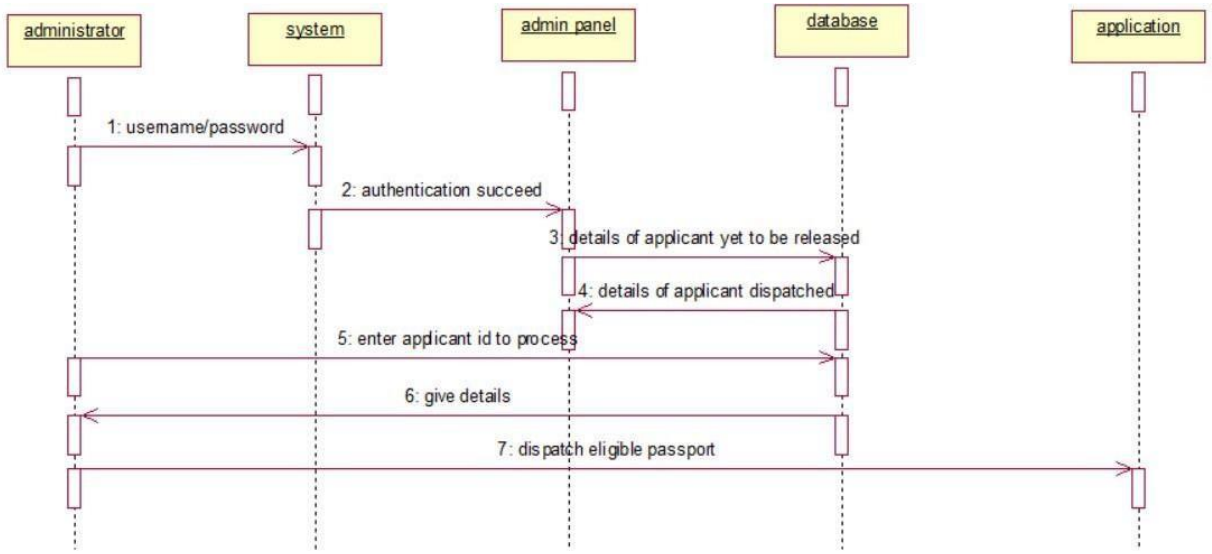
It is the combination of sequence and collaboration diagram. It is used to depict the flow of events in the system over a timeline. The interaction diagram is a dynamic model which shows how the system behaves during dynamic execution.

SEQUENCE DIAGRAM:

A sequence diagram represents the sequence and interactions of a given USE-CASE or scenario. Sequence diagrams can capture most of the information about the system. Most object to object interactions and operations are considered events and events include signals, inputs, decisions, interrupts, transitions and actions to or from users or external devices.

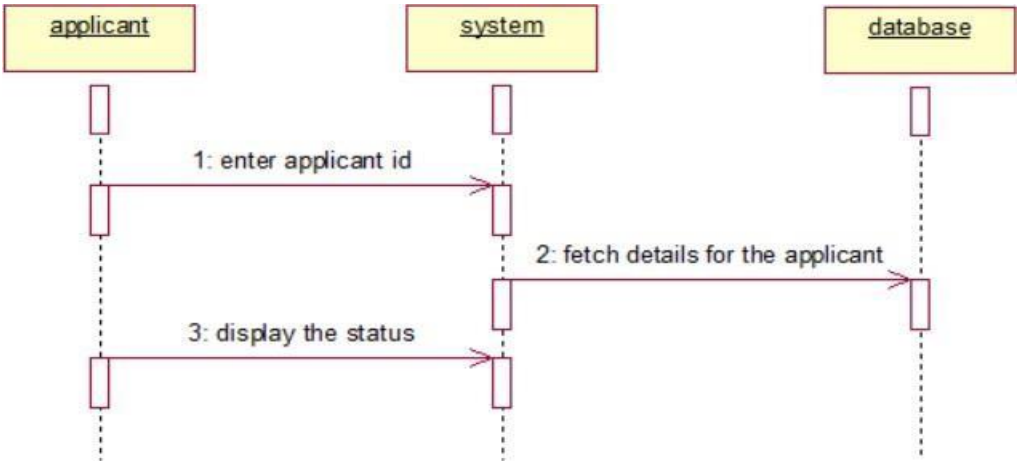
SEQUENCE DIAGRAM FOR ADMINISTRATOR:

The diagram show the process done by the administrator to the Passport Automation system. The applicant has to enter his details. The details entered are verified by the administrator and the applicant is approved if the details match then the passport is dispatch, otherwise an appropriate error message is displayed.



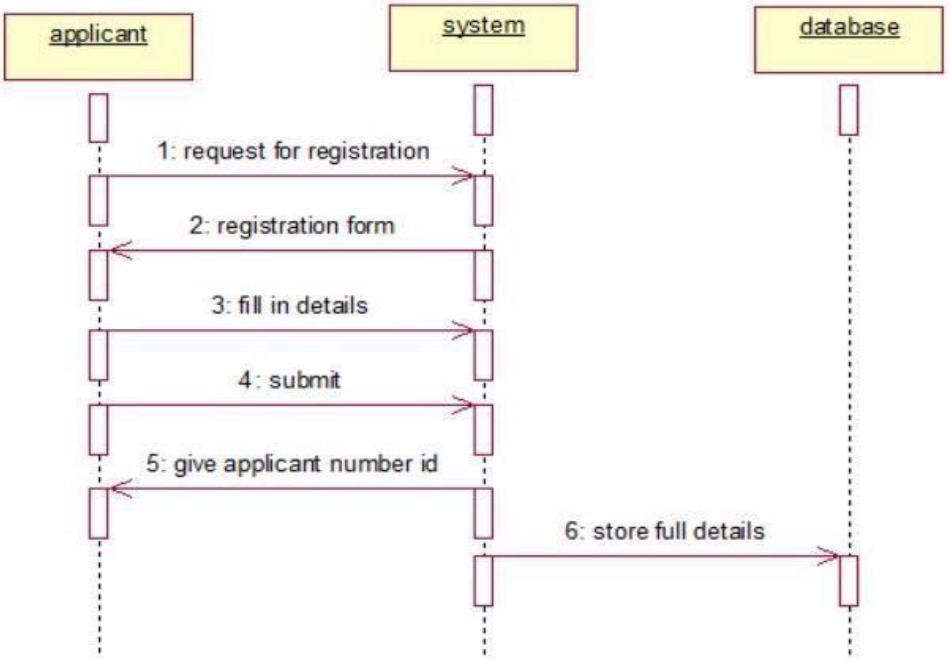
SEQUENCE DIAGRAM FOR CHECKING STATUS:

The diagram show the applicant enters his id and the system fetch the details from the database and display the status.



SEQUENCE DIAGRAM FOR NEW REGISTRATION:

The diagram show the applicant request the system for registration and the system provide the register form and applicant fill the form and submit and the system give the applicant id. The database stores the full details



COLLABORATION DIAGRAM:

COLLABORATION DIAGRAM FOR ADMINISTRATOR:

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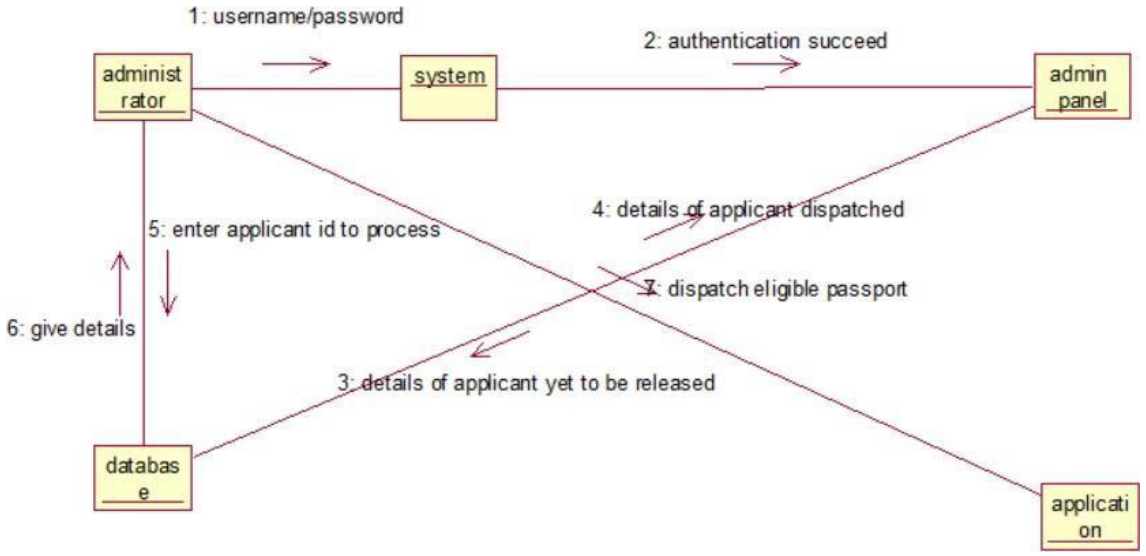

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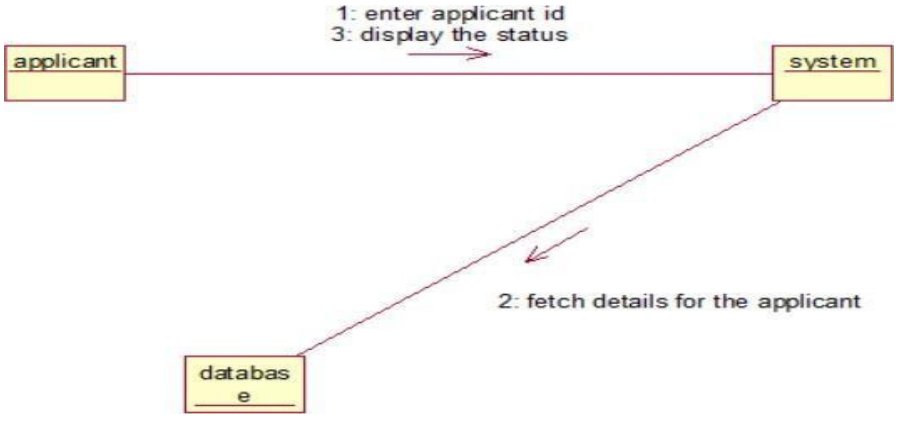

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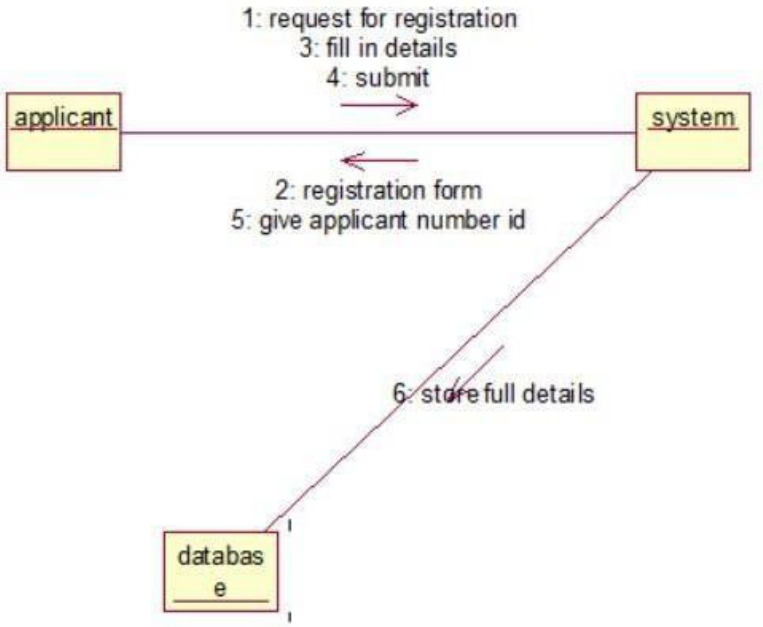
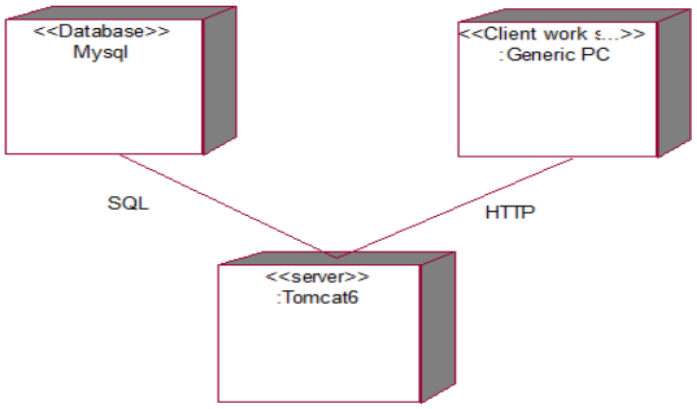


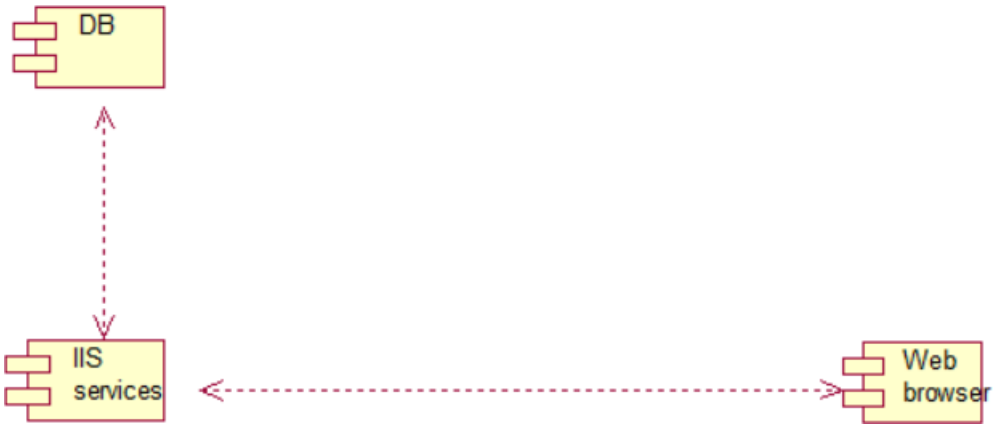
DEPLOYMENT DIAGRAM:

Deployment diagrams are used to visualize the topology of the physical components of a system where the software components are deployed.



COMPONENT DIAGRAM:

Component diagrams are used to visualize the organization and relationship among components in system



RESULT:

Thus the mini project for passport automation system has been executed successfully and the output is verified.

Ex. No: 2	BOOK BANK SYSTEM
Date:09-03-2021	

AIM:

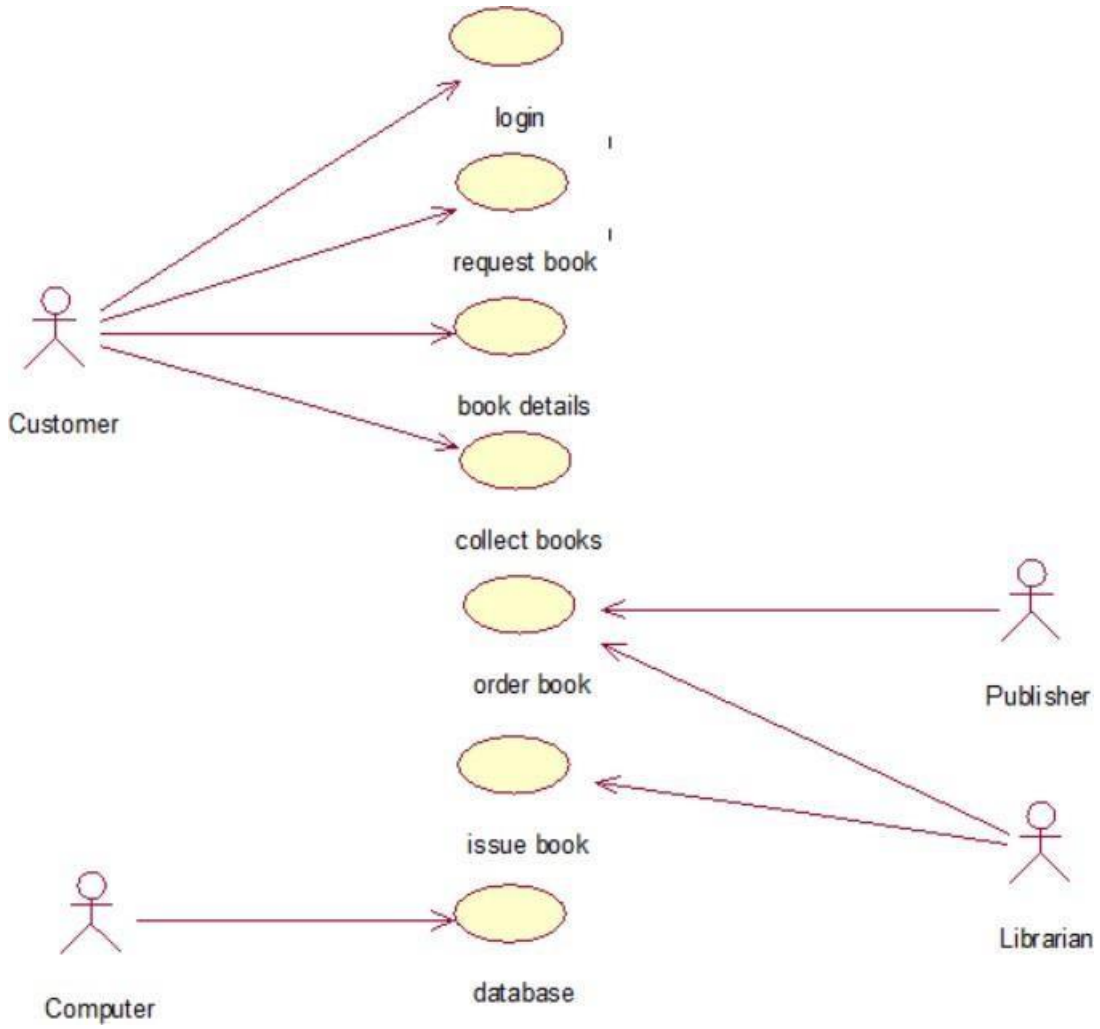
To create a system to perform book bank operation

PROBLEM STATEMENT:

A Book Bank lends books and magazines to member, who is registered in the system. Also it handles the purchase of new titles for the Book Bank. Popular titles are brought into multiple copies. Old books and magazines are removed when they are out or date or poor in condition. A member can reserve a book or magazine that is not currently available in the book bank, so that when it is returned or purchased by the book bank, that person is notified. The book bank can easily create, replace and delete information about the tiles, members, loans and reservations from the system.

USE-CASE DIAGRAM:

The functionality of a system can be described in a number of different use-cases, each of which represents a specific flow of events in a system. It is a graph of actors, a set of use-cases enclosed in a boundary, communication, associations between the actors and the use-cases, and generalization among the use-cases.



ACTIVITY DIAGRAM:

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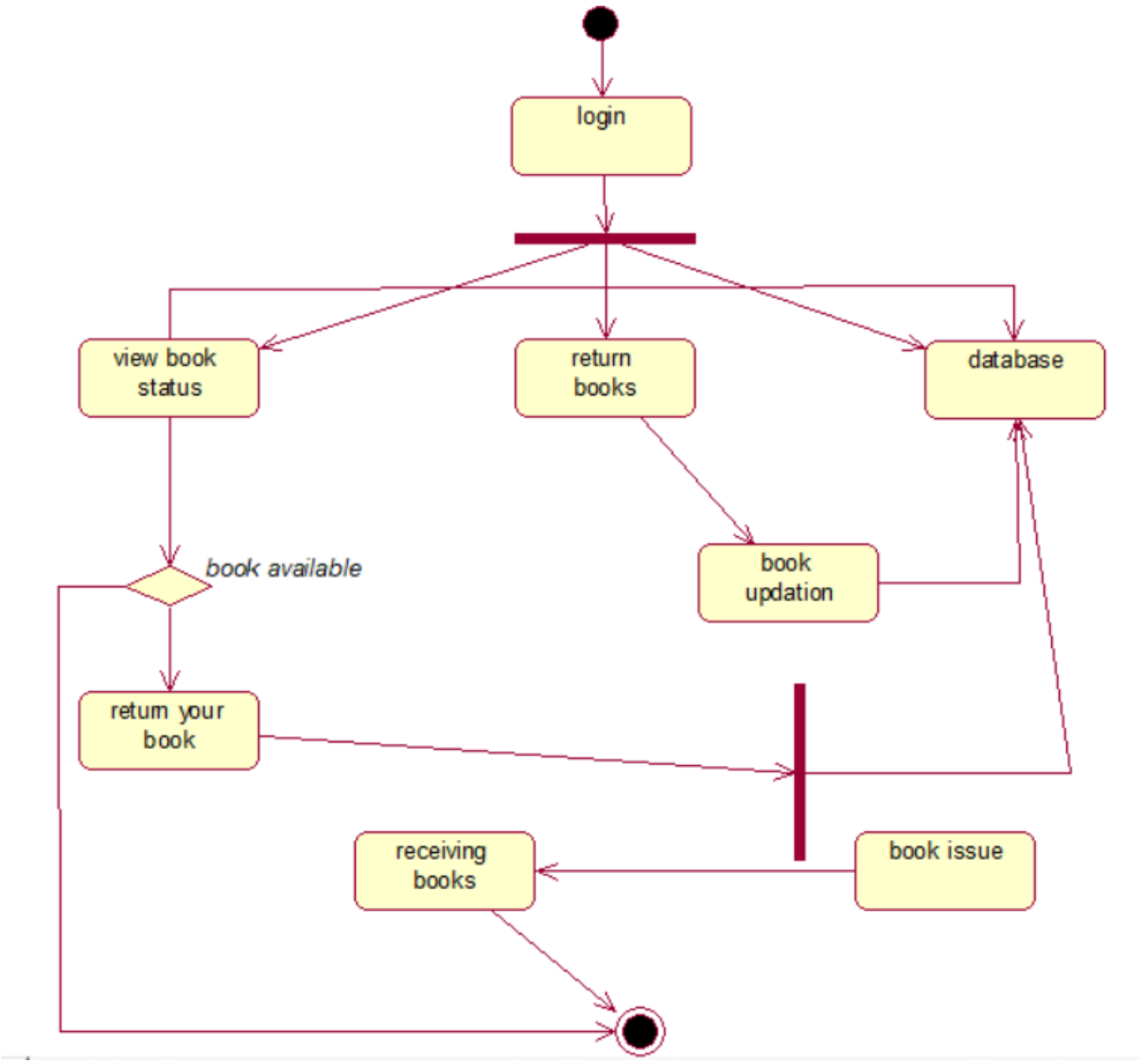

CLASS DIAGRAM:

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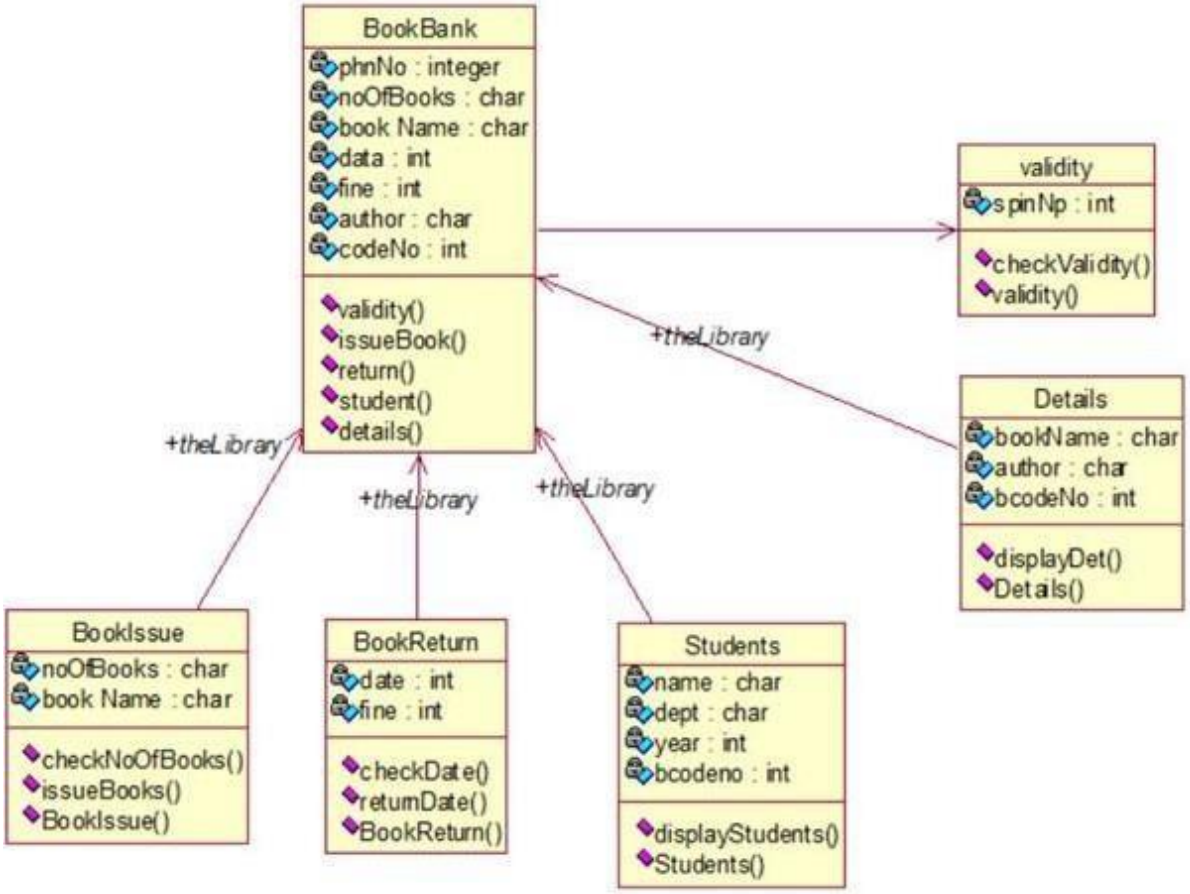


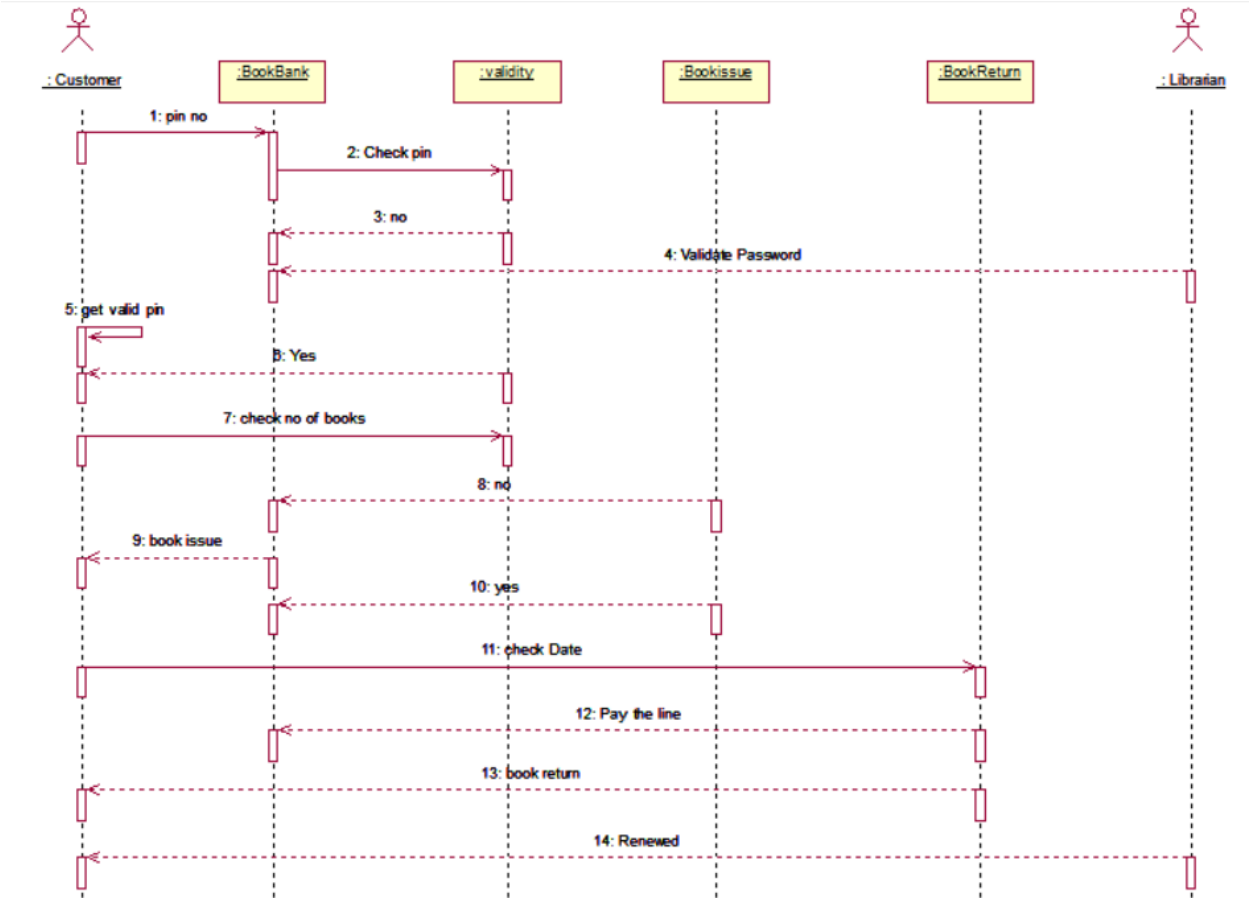
INTERACTION DIAGRAM:

It is the combination of sequence and collaboration diagram. It is used to depict the flow of events in the system over a timeline. The interaction diagram is a dynamic model which shows how the system behaves during dynamic execution.

SEQUENCE DIAGRAM:

A sequence diagram represents the sequence and interactions of a given USE-CASE or scenario. Sequence diagrams can capture most of the information about the system. Most object to object interactions and operations are considered events and events include signals, inputs, decisions, interrupts, transitions and actions to or from users or external devices.

The diagrams show the pin no is entered and check the pin .Get no and validate password check the condition based on condition book issue and return are done. Pay the online and renewed.



COLLABORATION DIAGRAM:

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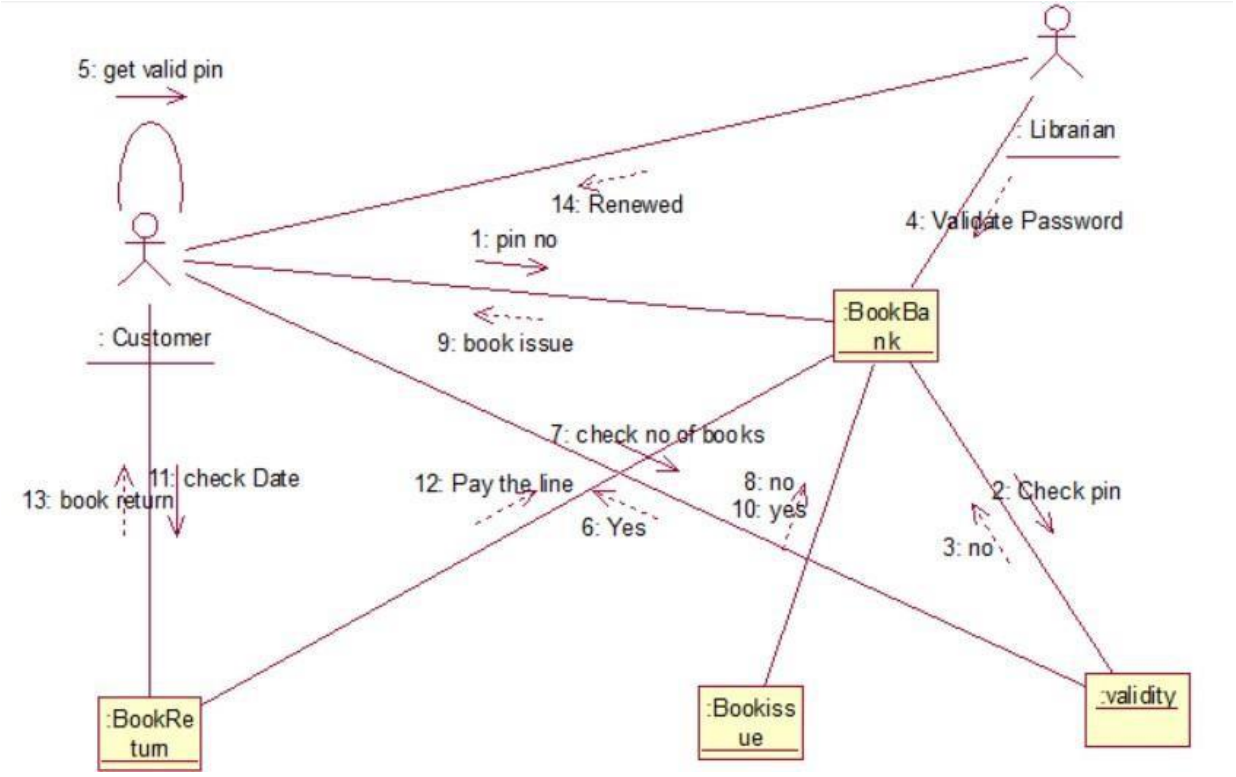
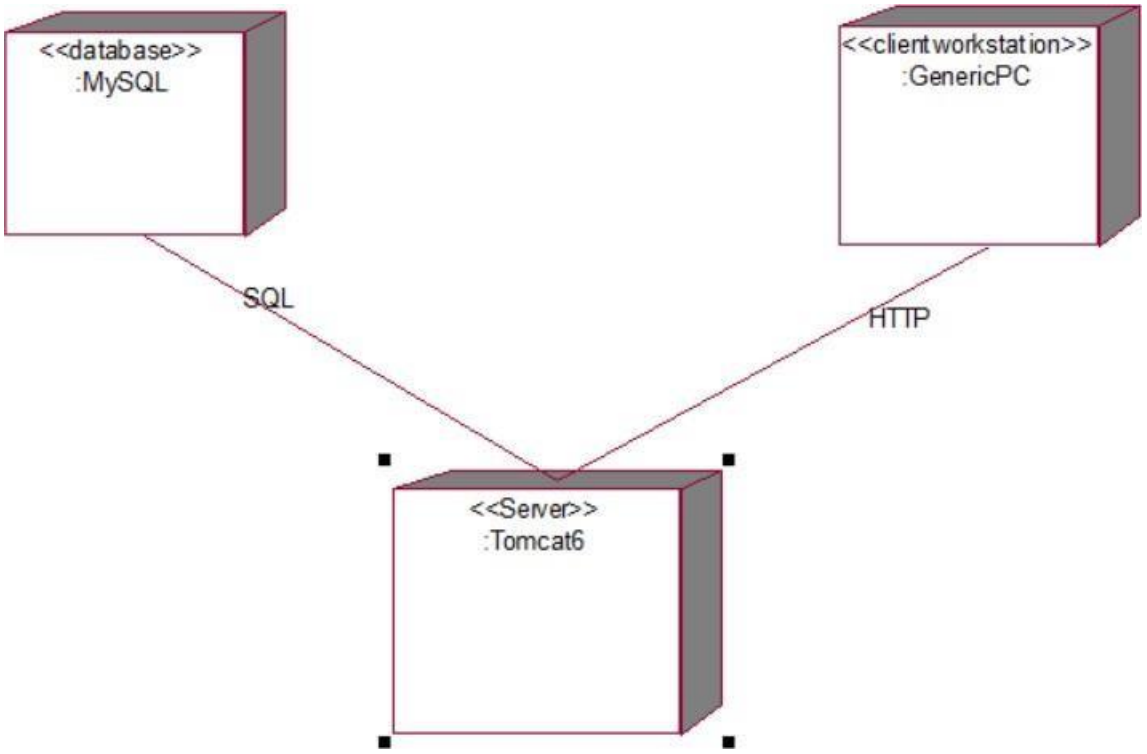


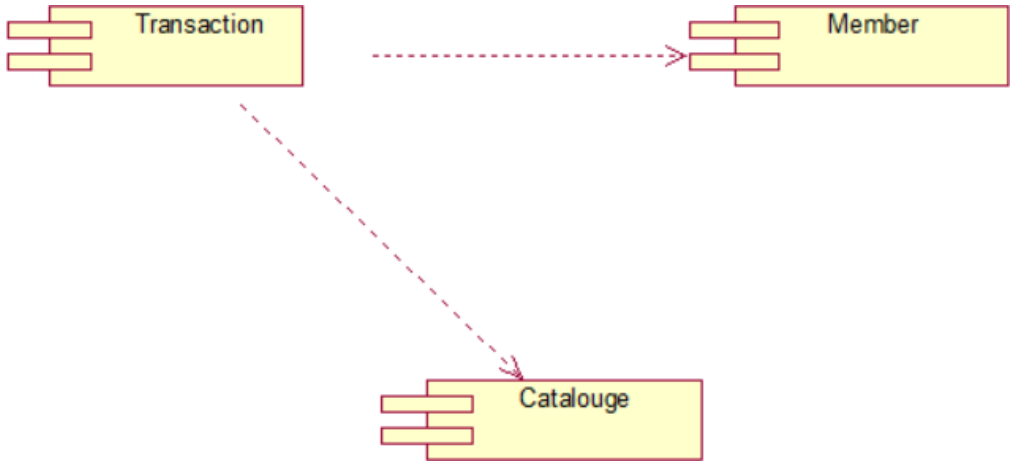
DEPLOYMENT DIAGRAM:

Deployment diagrams are used to visualize the topology of the physical components of a system where the software components are deployed.



COMPONENT DIAGRAM:

Component diagrams are used to visualize the organization and relationships.



RESULT:

Thus the mini project for Book Bank System has been executed successfully and the output is verified.

Ex. No: 3	EXAM REGISTRATION SYSTEM
Date:12-03-2021	

AIM:

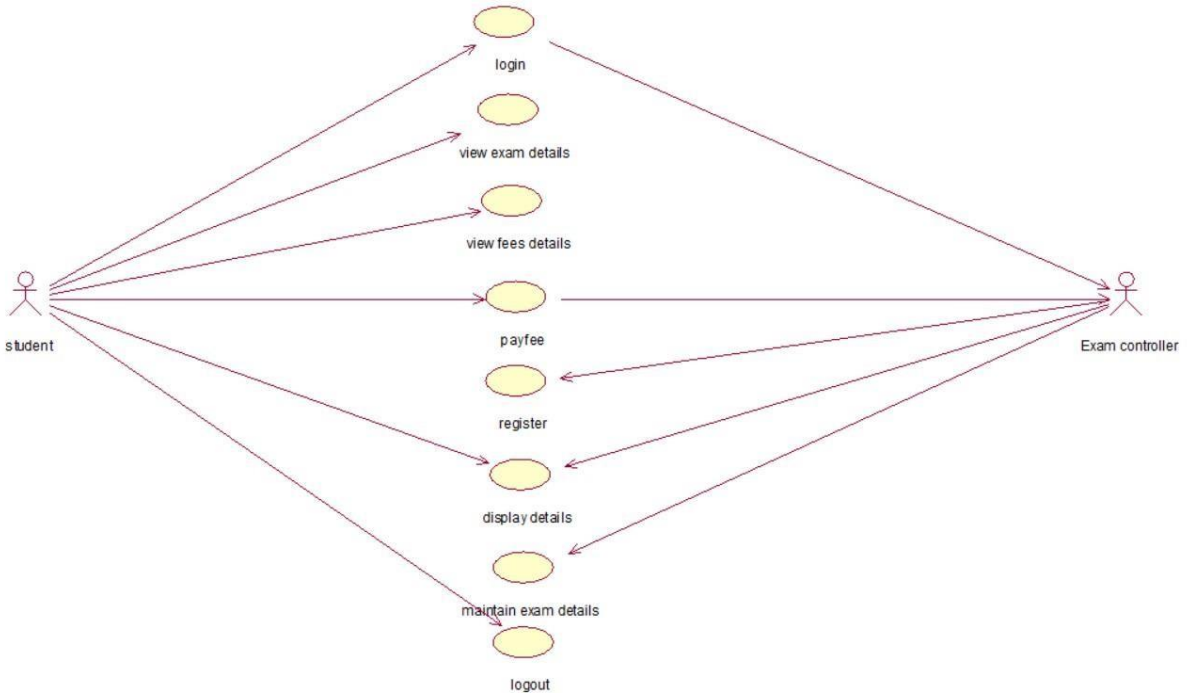
To create a system to perform the Exam Registration system.

PROBLEM STATEMENT:

Exam Registration system.is used in the effective dispatch of registration form to all of the students. 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, reg.no etc.,) filled by the student whose testament is verified for its genuineness by the Exam Registration System with respect to the already existing information in the database.

USE-CASE DIAGRAM:

The functionality of a system can be described in a number of different use-cases, each of which represents a specific flow of events in a system. It is a graph of actors, a set of use-cases enclosed in a boundary, communication, associations between the actors and the use-cases, and generalization among the use-cases.



ACTIVITY DIAGRAM:

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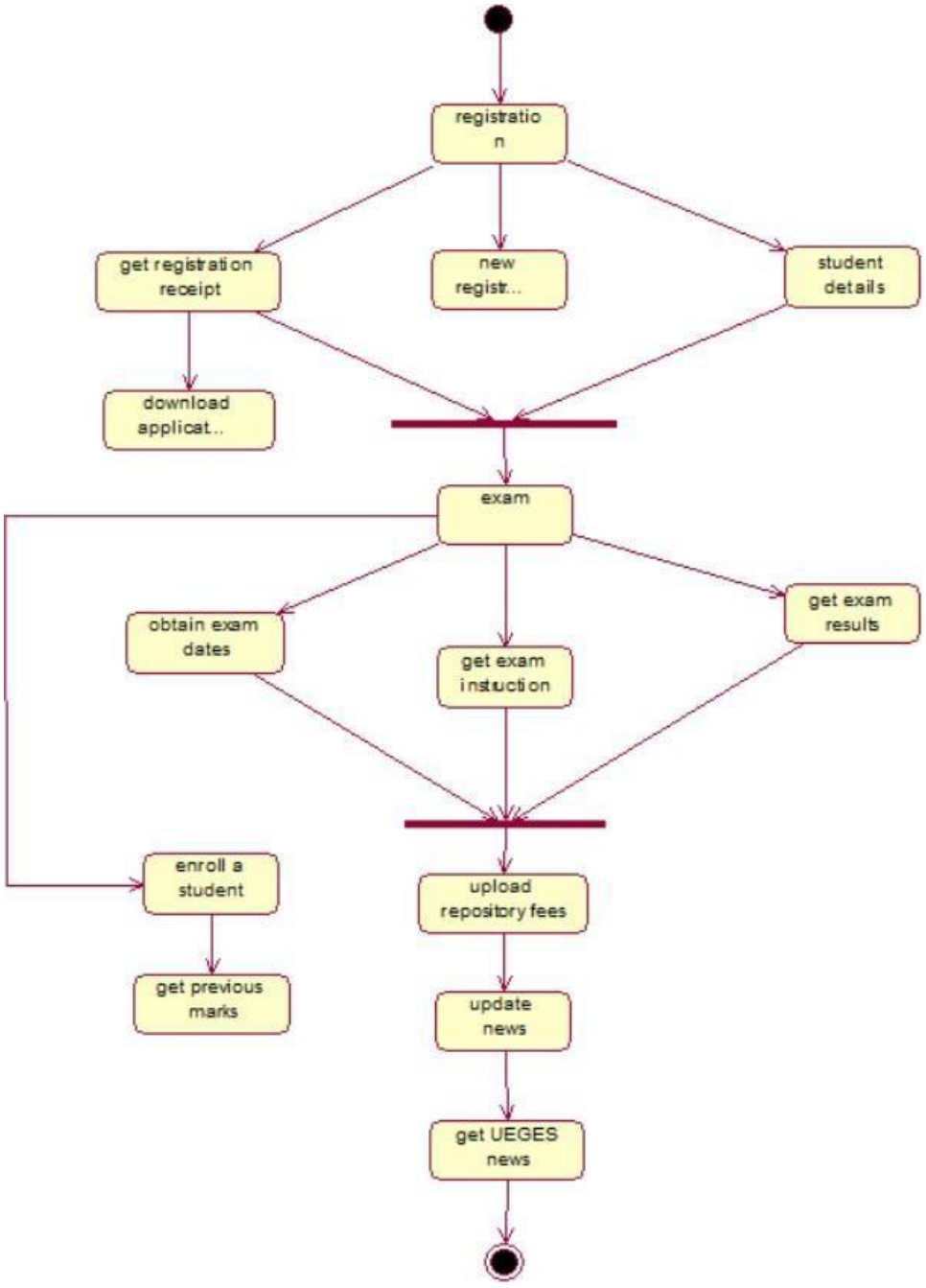


CLASS DIAGRAM:

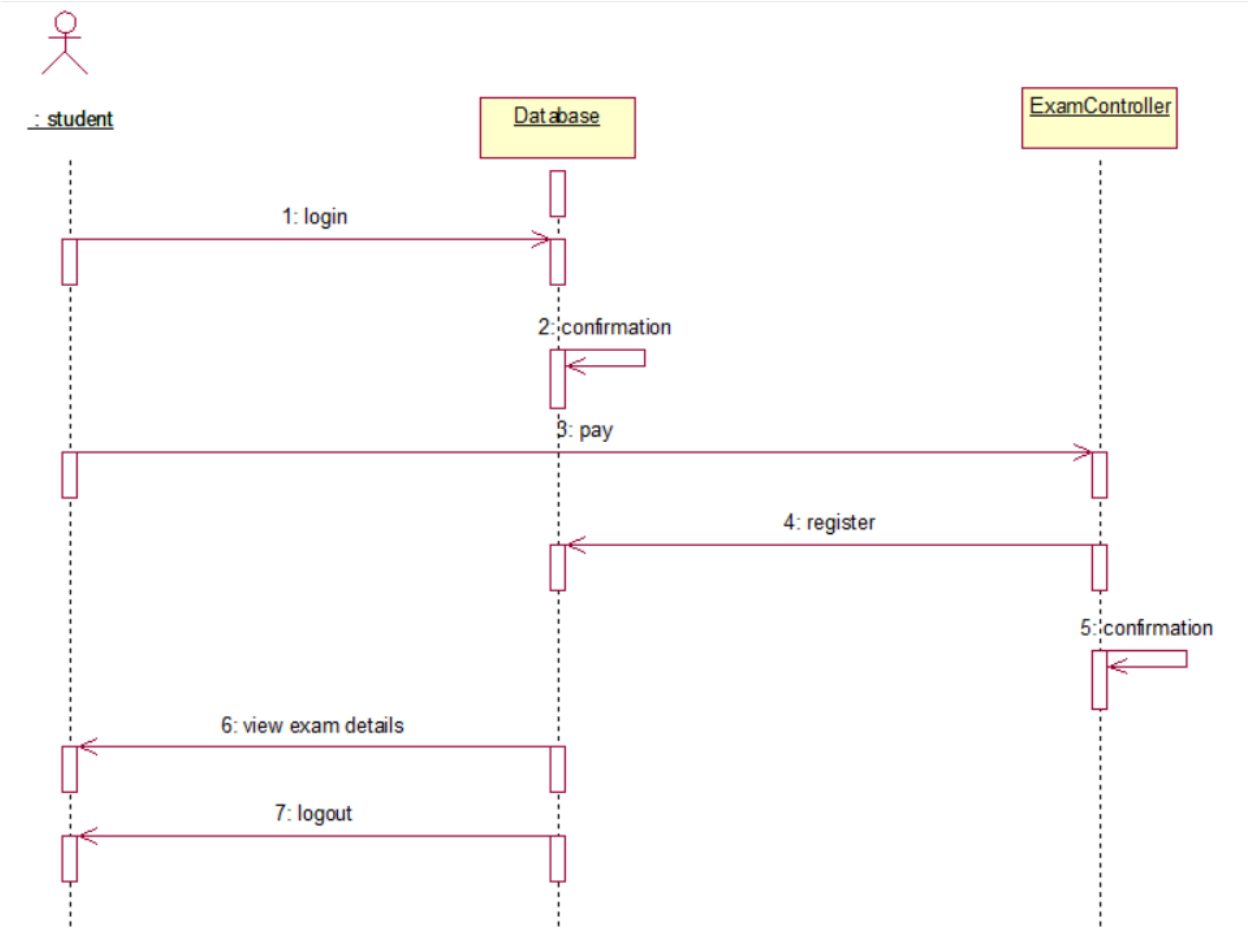
The class diagram, also referred to as object modeling is the main static analysis diagram. The main task of object modeling is to graphically show what each object will do in the problem domain. The problem domain describes the structure and the relationships among objects.

INTERACTION DIAGRAM:

It is the combination of sequence and collaboration diagram. It is used to depict the flow of events in the system over a timeline. The interaction diagram is a dynamic model which shows how the system behaves during dynamic execution.

SEQUENCE DIAGRAM:

A sequence diagram represents the sequence and interactions of a given USE-CASE or scenario. Sequence diagrams can capture most of the information about the system. Most object to object interactions and operations are considered events and events include signals, inputs, decisions, interrupts, transitions and actions to or from users or external devices.



COLLABORATION DIAGRAM:

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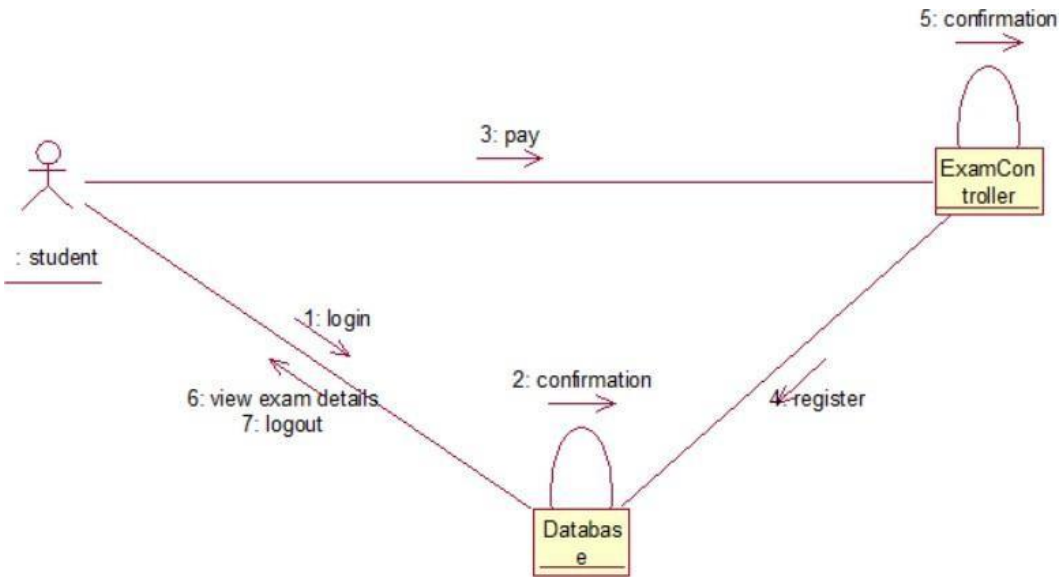
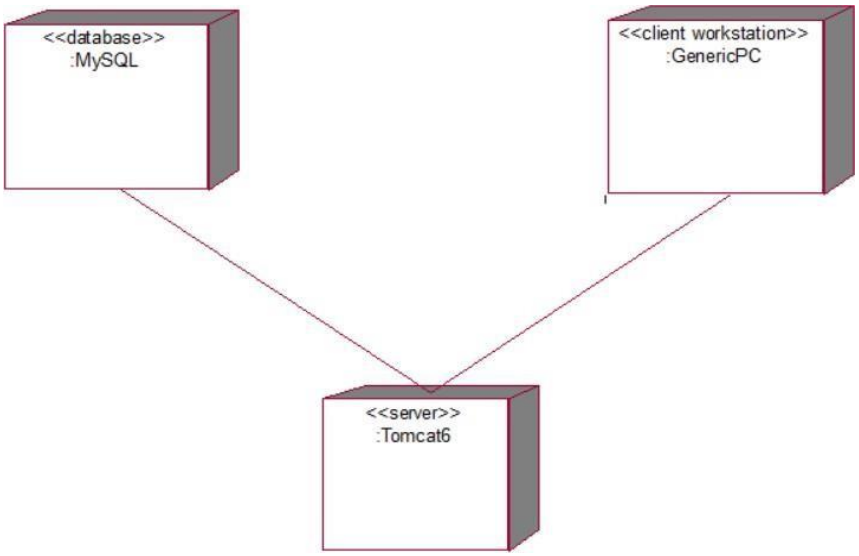


DEPLOYMENT DIAGRAM:

Deployment diagrams are used to visualize the topology of the physical components of a system where the software components are deployed.



COMPONENT DIAGRAM

Component diagrams are used to visualize the organization and relationships among components in a system.

RESULT:

Thus the mini project for Exam Registration system has been executed successfully and the output is verified.

Ex. No: 4	STOCK MAINTENANCE SYSTEM
Date:12-03-2021	

AIM:

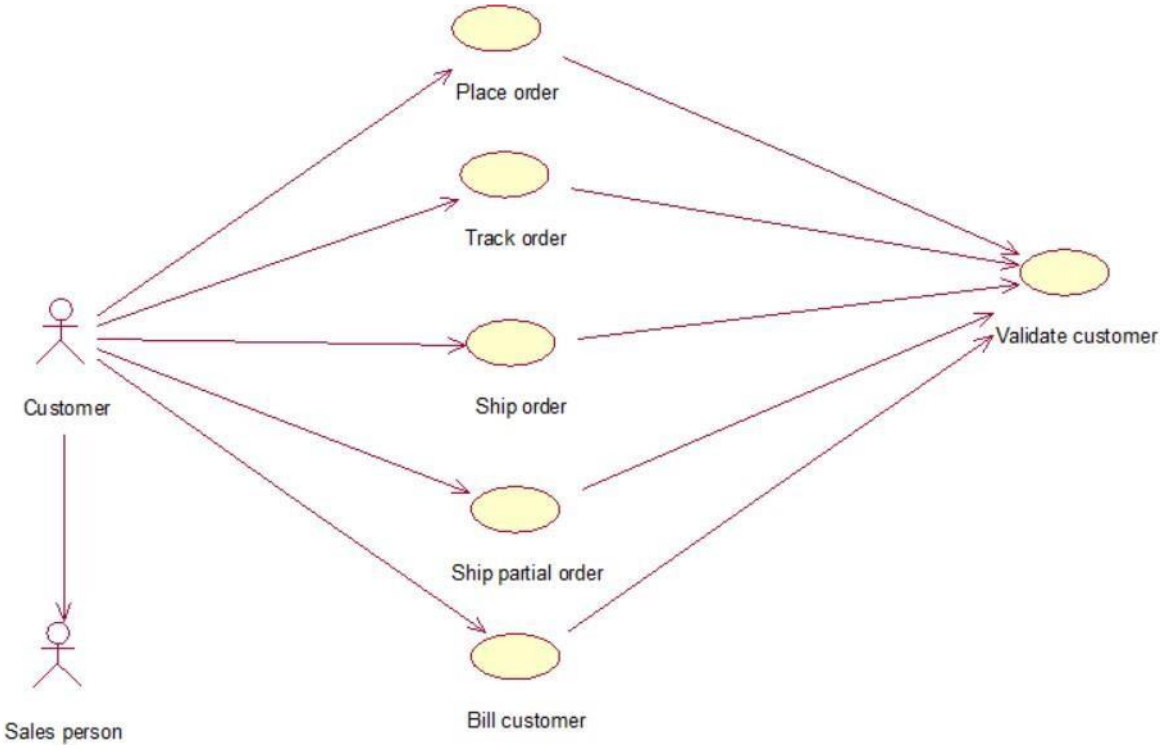
To create a system to perform the Stock maintenance.

PROBLEM STATEMENT:

The stock maintenance system must take care of sales information of the company and must analyze the potential of the trade. It maintains the number of items that are added or removed.The sales person initiates this Use case. The sales person is allowed to update information and view the database.

USE-CASE DIAGRAM:

The functionality of a system can be described in a number of different use-cases, each of which represents a specific flow of events in a system. It is a graph of actors, a set of use-cases enclosed in a boundary, communication, associations between the actors and the use-cases, and generalization among the use-cases.



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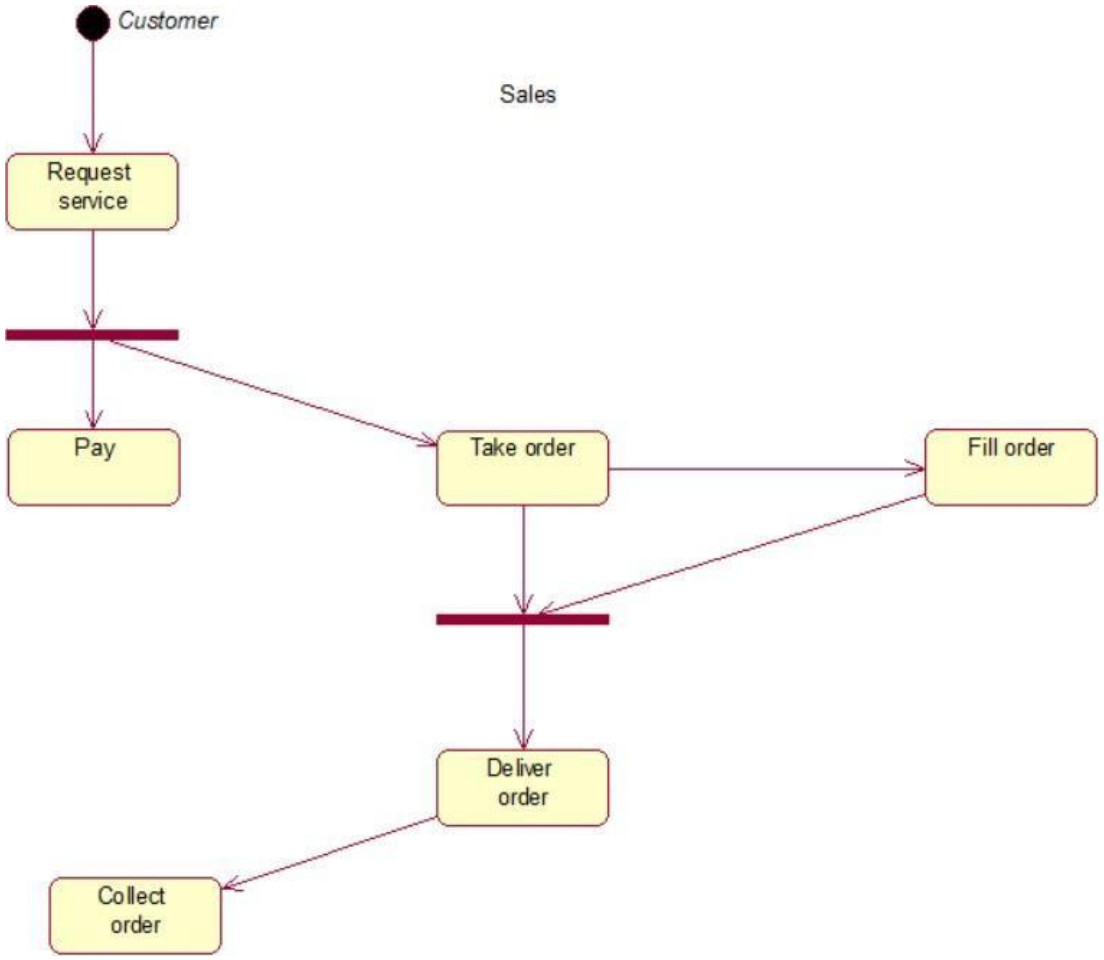

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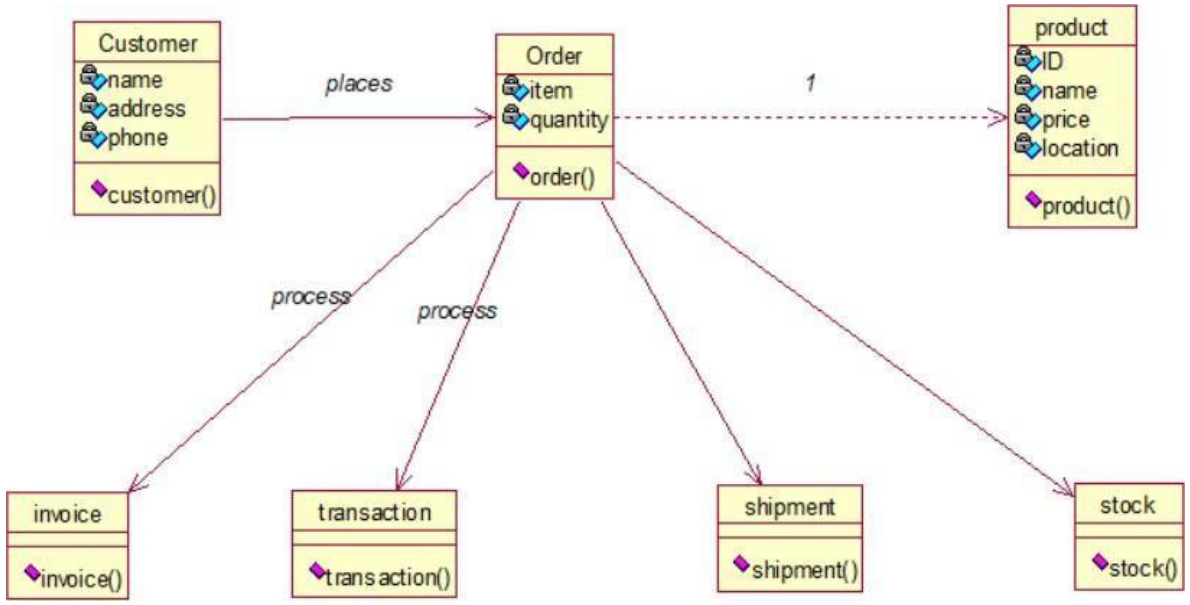

INTERACTION DIAGRAM:

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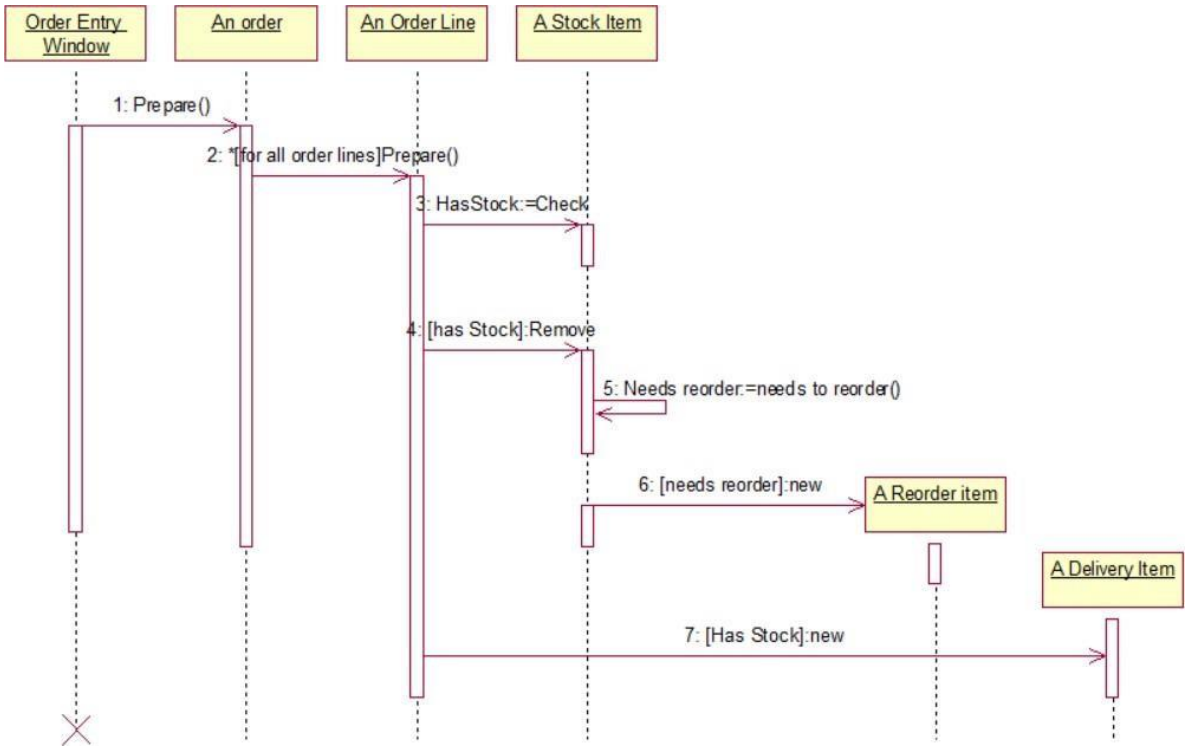

COLLABORATION DIAGRAM:

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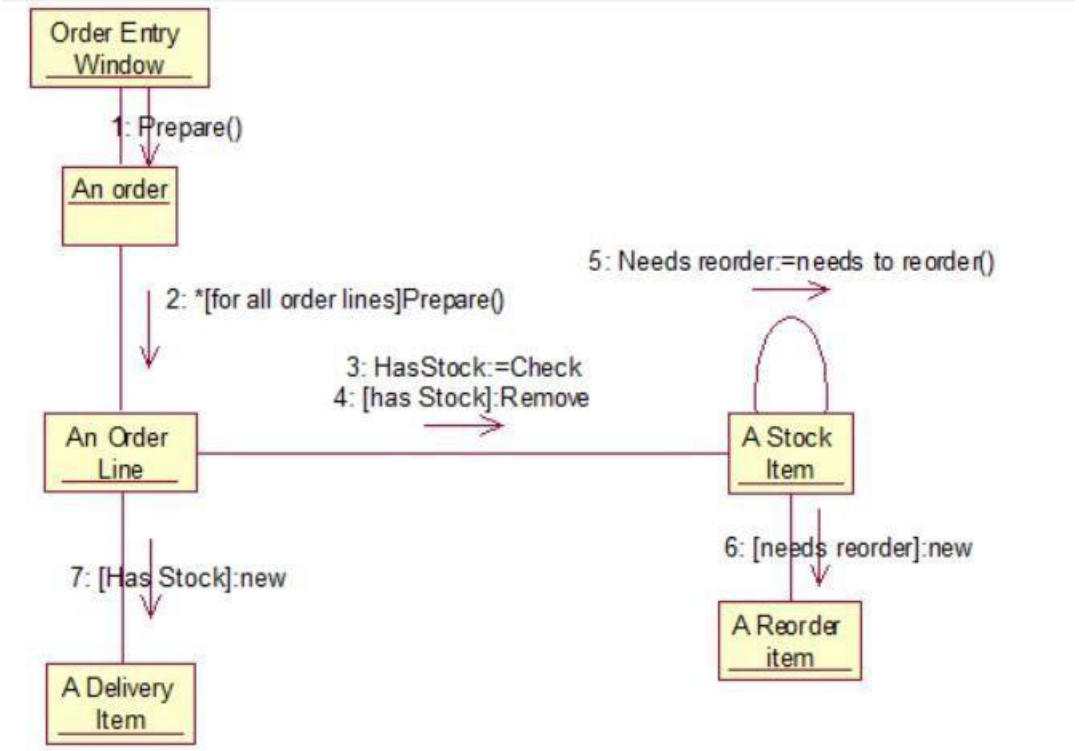

DEPLOYMENT DIAGRAM:

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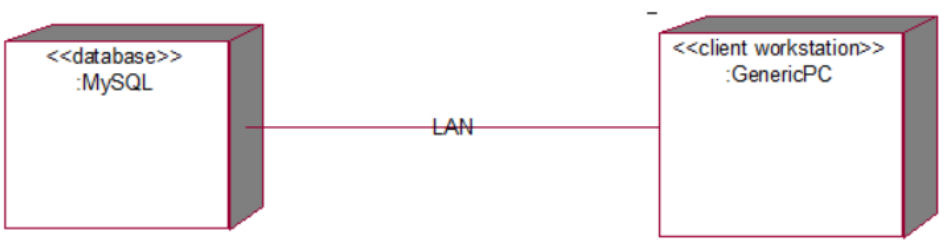

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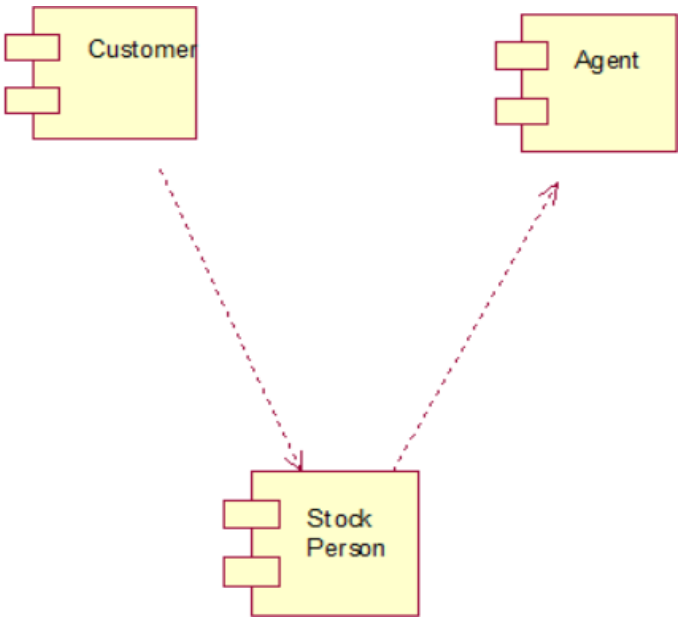


RESULT:

Thus the mini project for stock maintenance system has been executed successfully and the output is verified.

Ex. No: 5	ONLINE COURSE RESERVATION SYSTEM
Date:13-03-2021	

AIM:

To design an object oriented model for course reservation system.

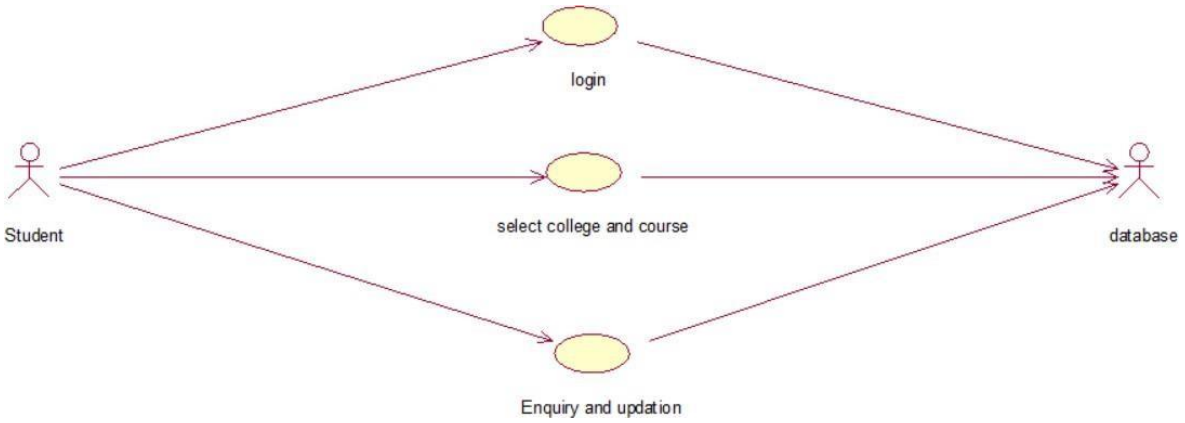
PROBLEM STATEMENT:

a. Whenever the student comes to join the course he/she should be provided with the list of course available in the college.

b. The system should maintain a list of professor who is teaching the course. At the end of the course the student must be provided with the certificate for the completion of the course.

USE-CASE DIAGRAM:

The functionality of a system can be described in a number of different use-cases, each of which represents a specific flow of events in a system. It is a graph of actors, a set of use-cases enclosed in a boundary, communication, associations between the actors and the use-cases, and generalization among the use-cases.



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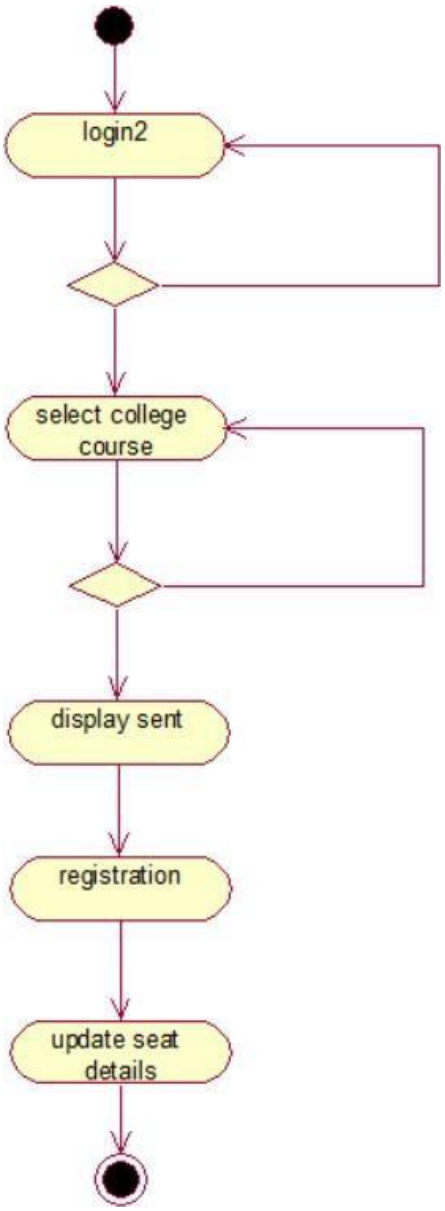
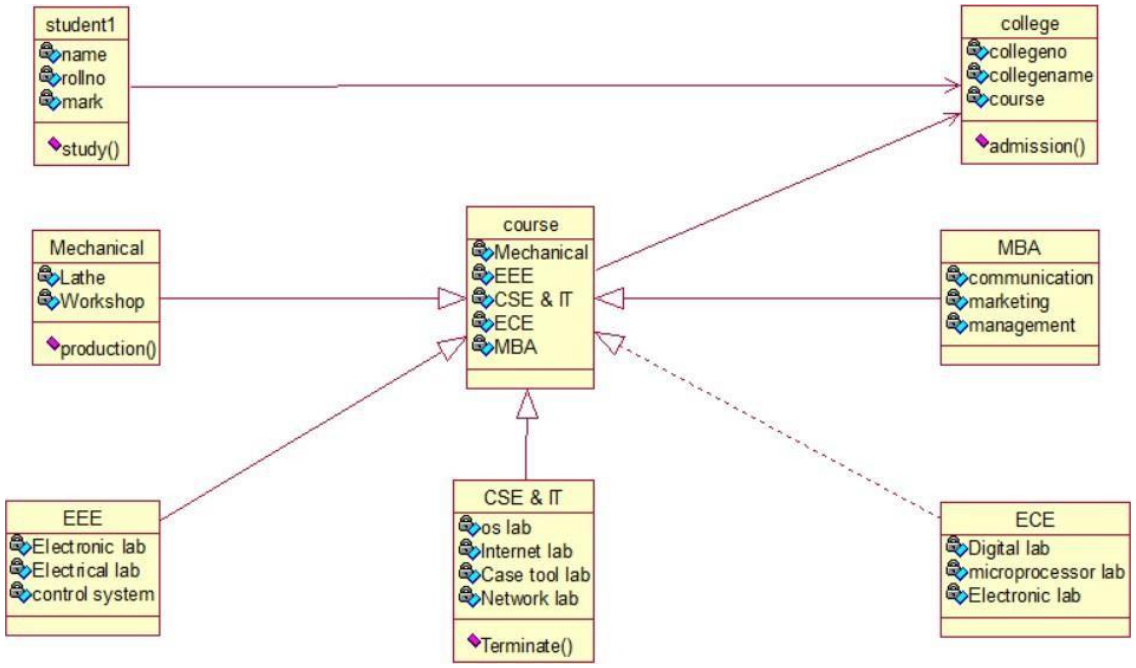


CLASS DIAGRAM:

The class diagram, also referred to as object modeling is the main static analysis diagram. The main task of object modeling is to graphically show what each object will do in the problem domain. The problem domain describes the structure and the relationships among objects.



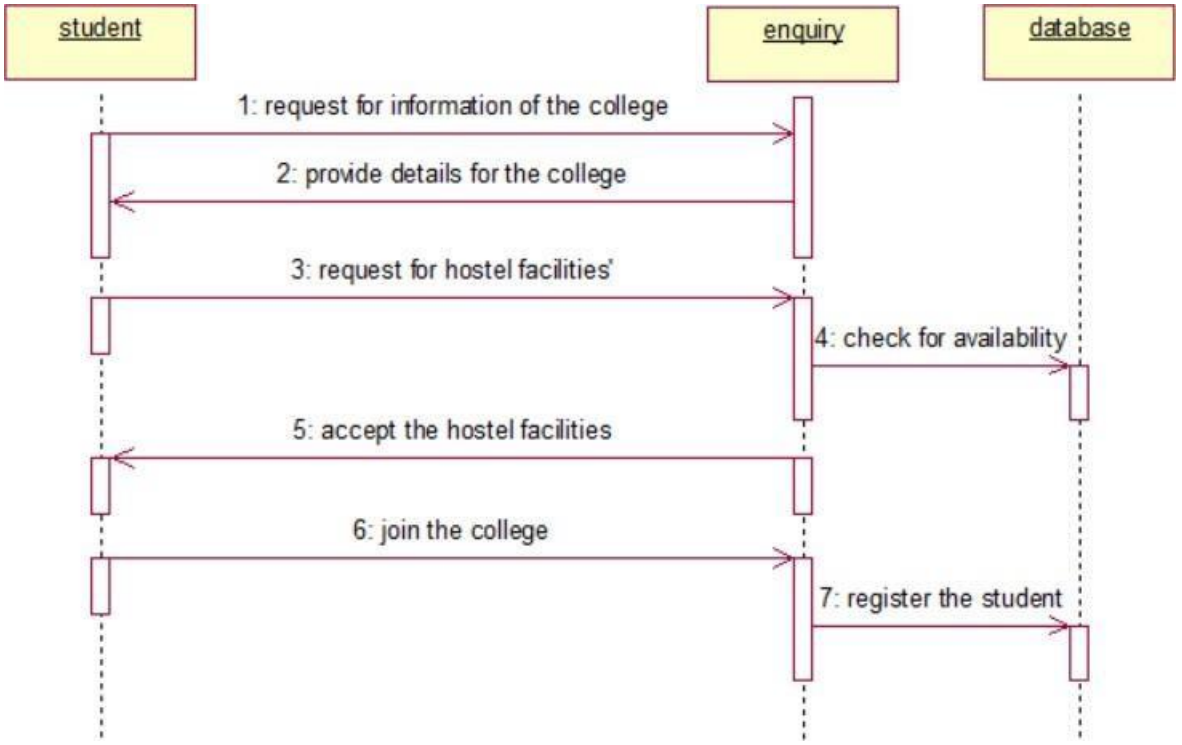
INTERACTION DIAGRAM:

It is the combination of sequence and collaboration diagram. It is used to depict the flow of events in the system over a timeline. The interaction diagram is a dynamic model which shows how the system behaves during dynamic execution.

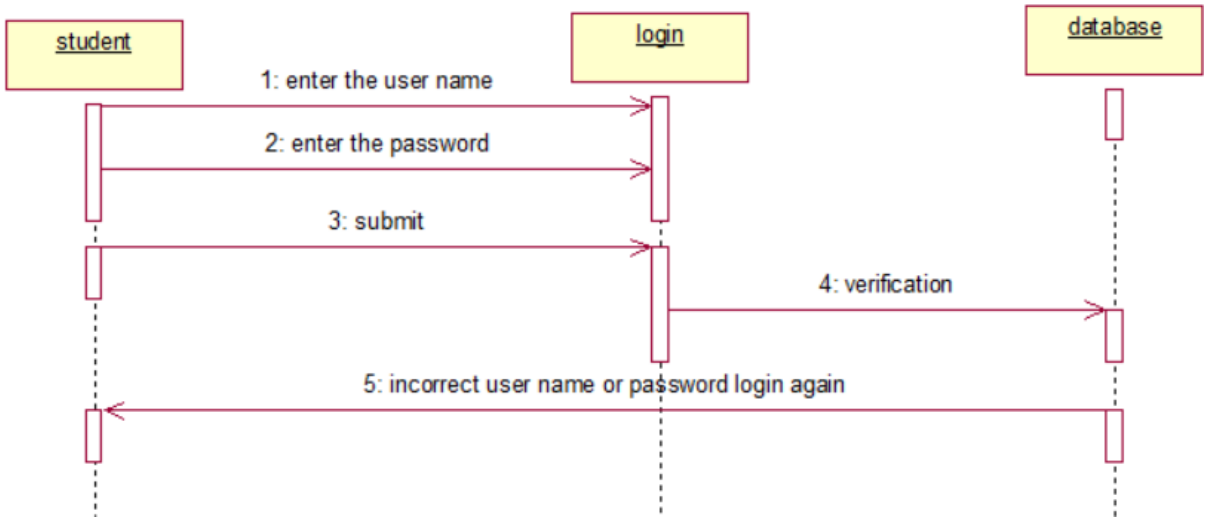
SEQUENCE DIAGRAM:

A sequence diagram represents the sequence and interactions of a given USE-CASE or scenario. Sequence diagrams can capture most of the information about the system. Most object to object interactions and operations are considered events and events include signals, inputs, decisions, interrupts, transitions and actions to or from users or external devices.

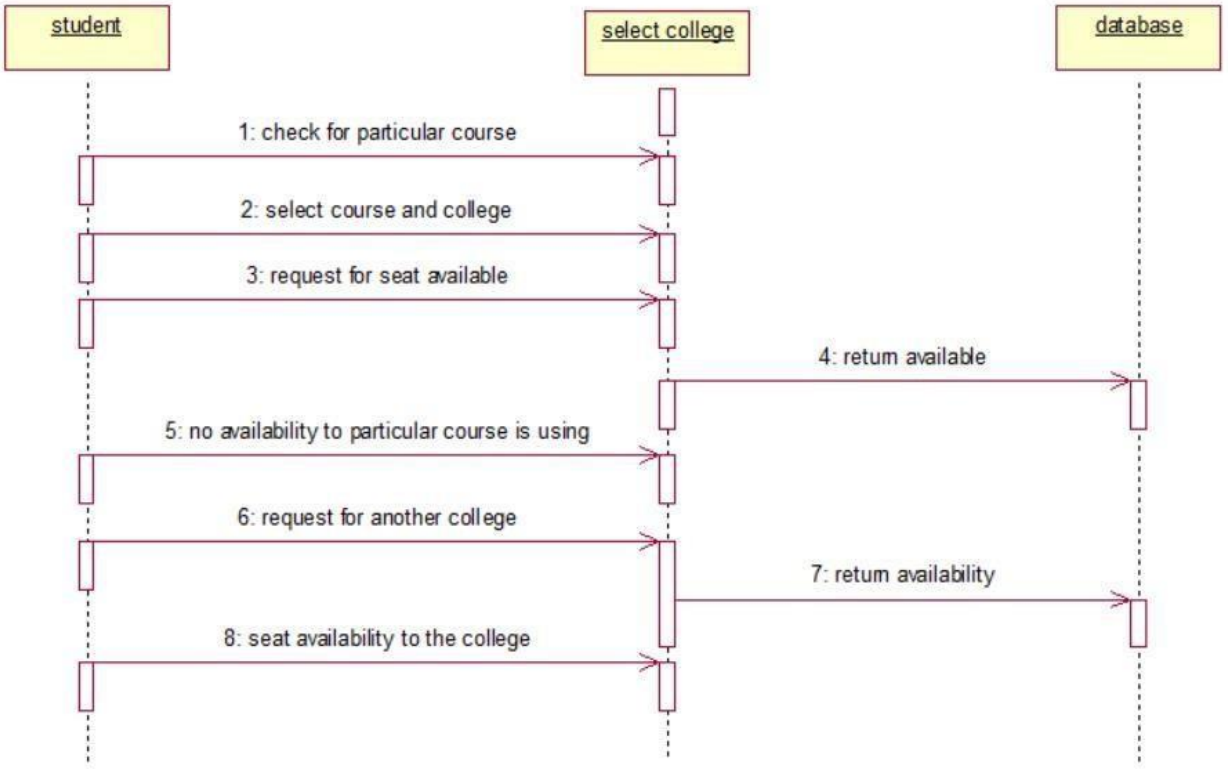
SEQUENCE DIAGRAM FOR ENQUIRY:



SEQUENCE DIAGRAM FOR LOGIN:



SEQUENCE DIAGRAM FOR SELECT COLLEGE:



COLLABORATION DIAGRAM:

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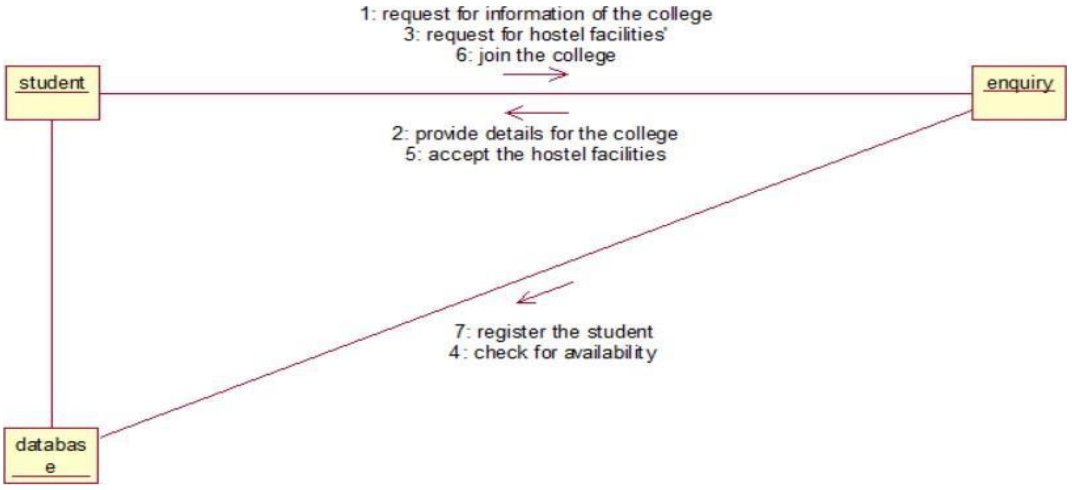
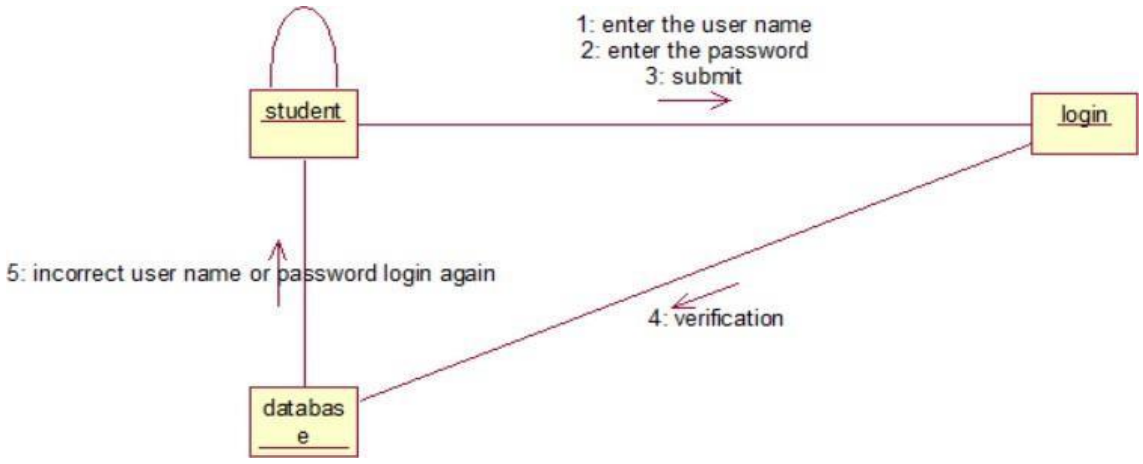
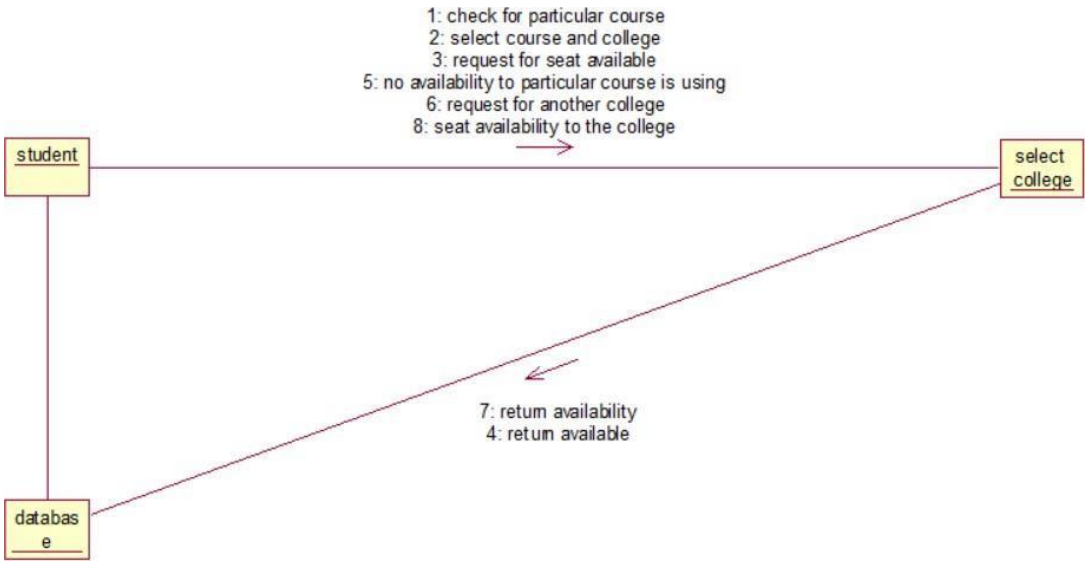
COLLABORATION DIAGRAM FOR ENQUIRY:



COLLABORATION DIAGRAM FOR LOGIN:

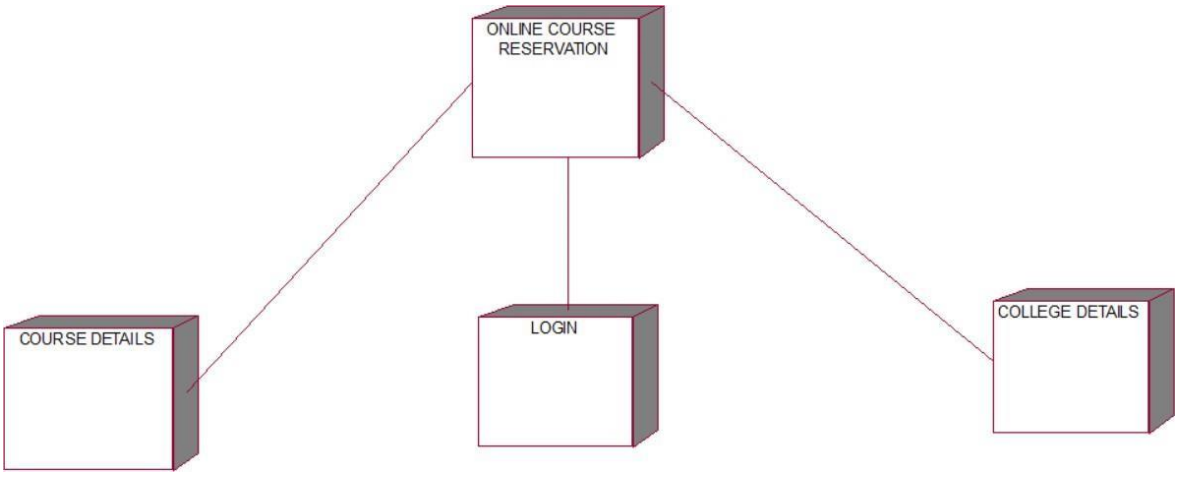


COLLABORATION DIAGRAM FOR SELECT COLLEGE:



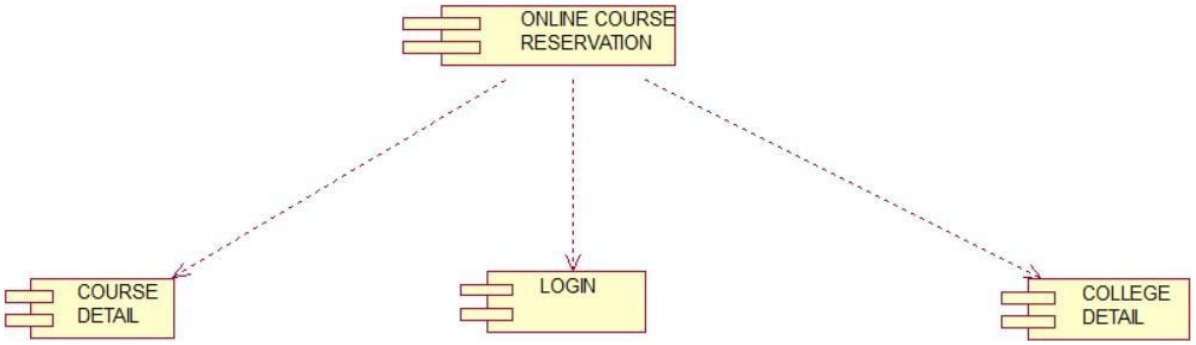
DEPLOYMENT DIAGRAM:

Deployment diagrams are used to visualize the topology of the physical components of a system where the software components are deployed.



COMPONENT DIAGRAM:

Component diagrams are used to visualize the organization and relationships.



RESULT:

Thus the mini project for online course reservation system has been executed successfully and the output is verified.

Ex. No: 6	AIRLINE/RAILWAY RESERVATION SYSTEM
Date:13-03-2021	

AIM:

To develop the Airline/Railway reservation System using RationalRose Software.

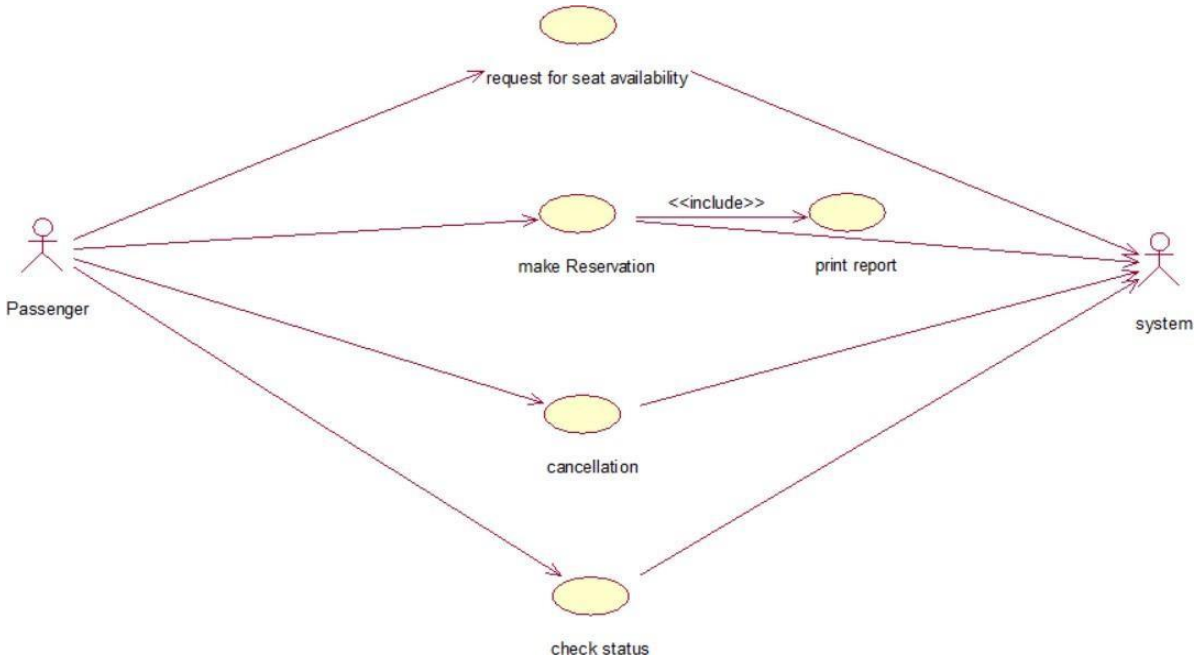
PROBLEM STATEMENT:

In the Airline/Railway reservation System the main process is a applicant have to login the database then the database verifies that particular username and password then the user must fill the details about their personal details then selecting the flight and the database books the ticket then send it to the applicant then searching the flight or else cancelling the process.

USE-CASE DIAGRAM:

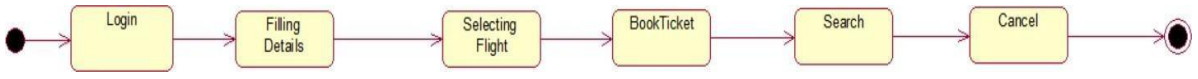
The functionality of a system can be described in a number of different use-cases, each of which represents a specific flow of events in a system. It is a graph of actors, a set of use-cases enclosed in a boundary, communication, associations between the actors and the use-cases, and generalization among the use-cases.

The passenger can view the status of the reserved tickets. So the passenger can confirm his/her travel.



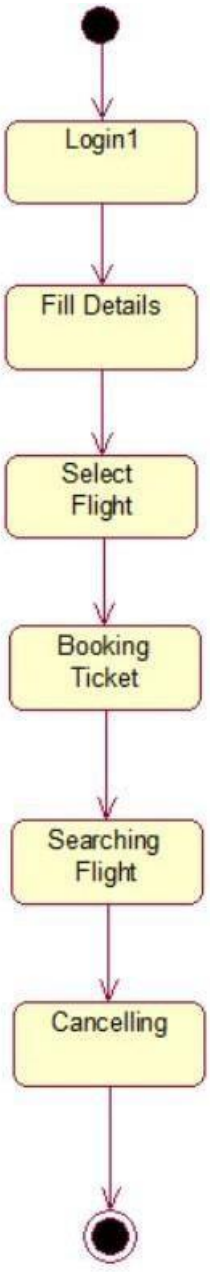
STATE CHART DIAGRAM:

The purpose of state chart diagram is to understand the algorithm involved in performing a method. It is also called as state diagram. A state is represented as a round box, which may contain one or more compartments. An initial state is represented as small dot. A final state is represented as circle surrounding a small dot.



ACTIVITY DIAGRAM:

It shows organization and their dependence among the set of components. These diagrams are particularly useful in connection with workflow and in describing behavior that has a lot of parallel processing. An activity is a state of doing something: either a real-world process, or the execution of a software routine.

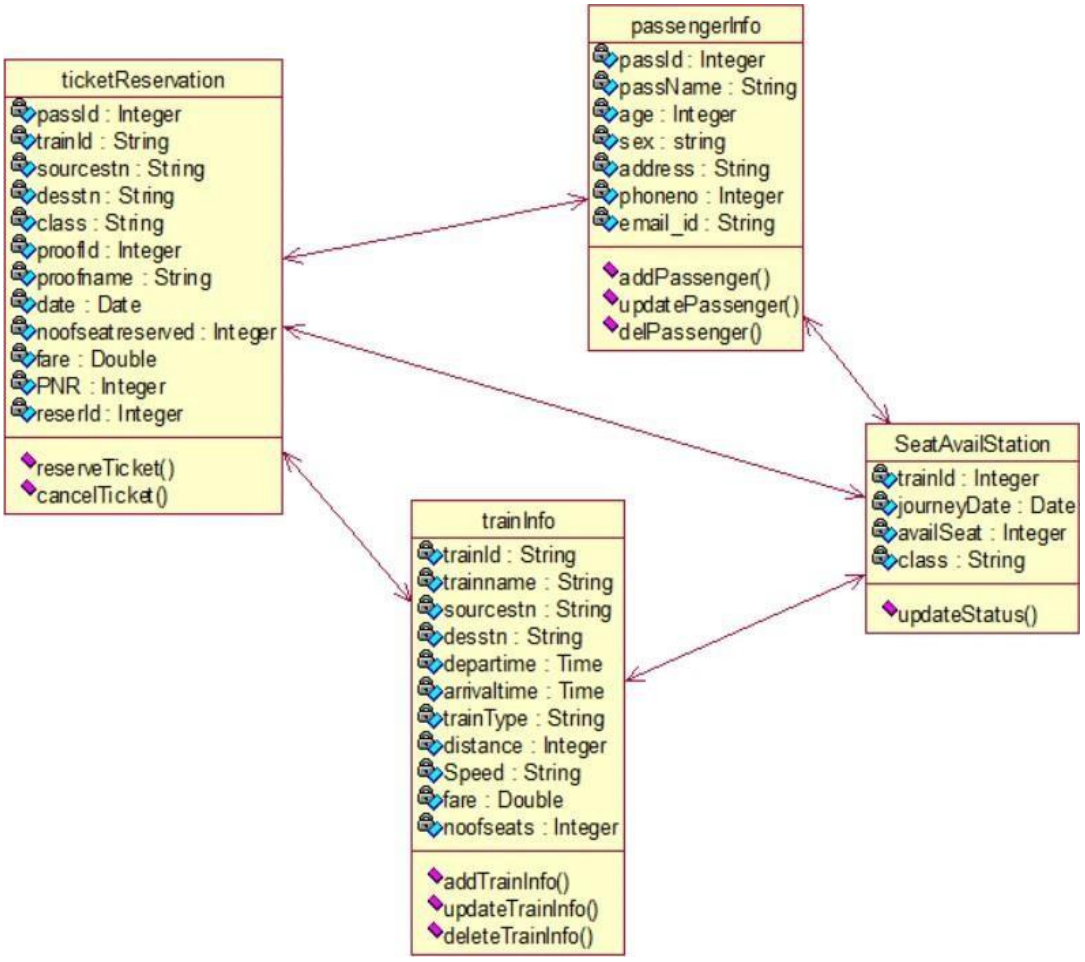


CLASS DIAGRAM:

The class diagram, also referred to as object modeling is the main static analysis diagram. The main task of object modeling is to graphically show what each object will do in the problem domain. The problem domain describes the structure and the relationships among objects.

The online ticket reservation system makes use of the

following classes: 1.ticketReservation
2.trainInfo
3.passengerIn
fo
4.seatAvailSt
atus

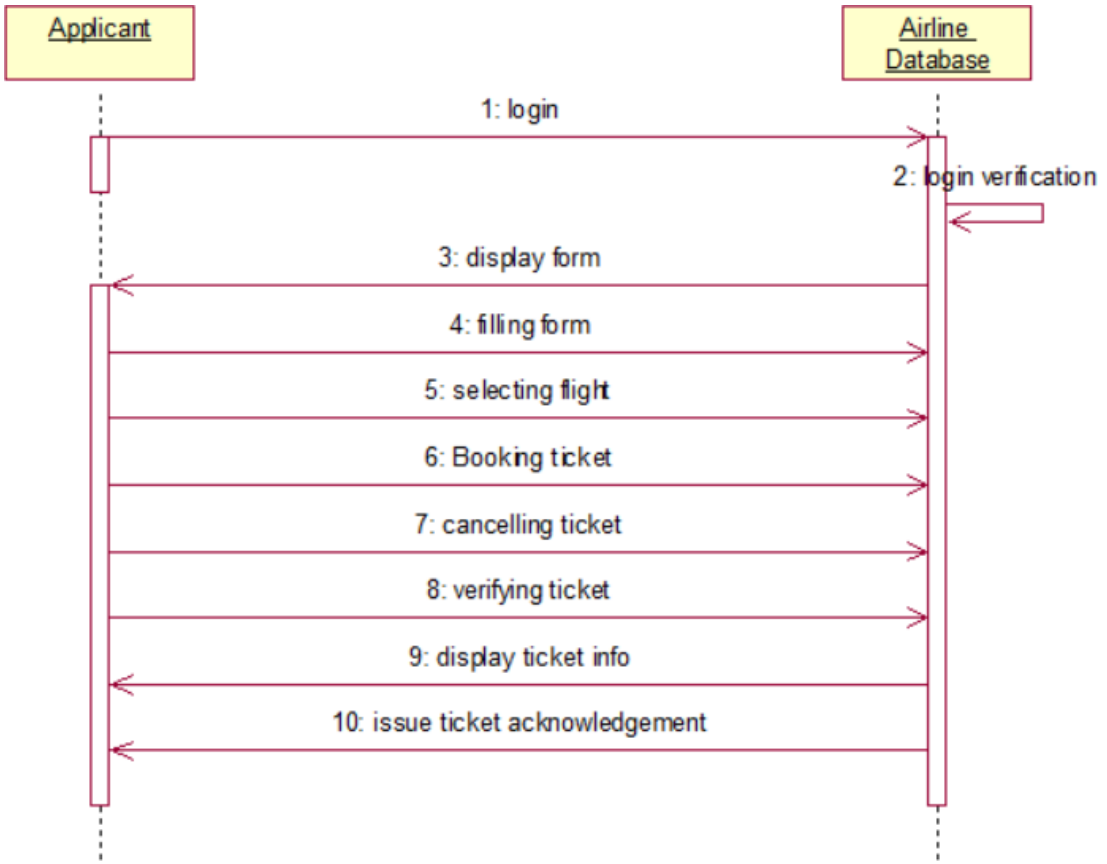


INTERACTION DIAGRAM:

It is the combination of sequence and collaboration diagram. It is used to depict the flow of events in the system over a timeline. The interaction diagram is a dynamic model which shows how the system behaves during dynamic execution.

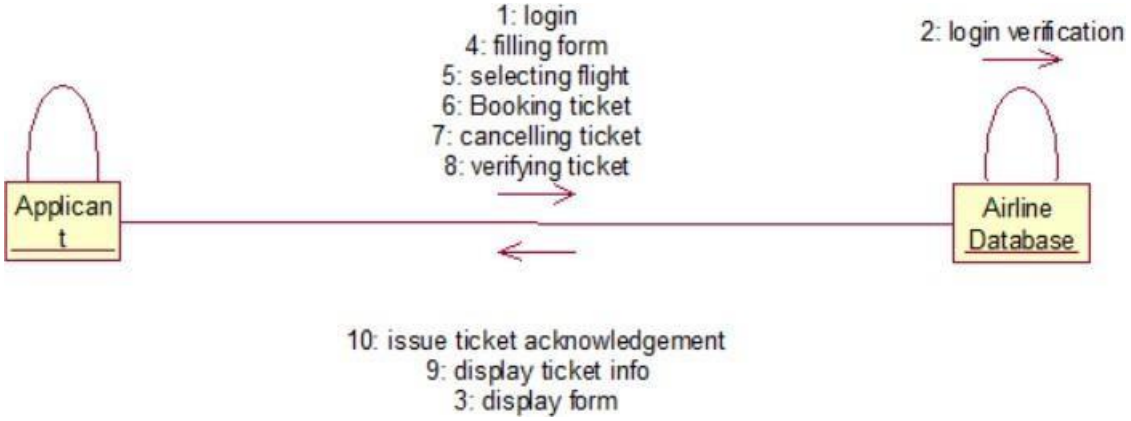
SEQUENCE DIAGRAM:

A sequence diagram represents the sequence and interactions of a given USE-CASE or scenario. Sequence diagrams can capture most of the information about the system. Most object to object interactions and operations are considered events and events include signals, inputs, decisions, interrupts, transitions and actions to or from users or external devices.



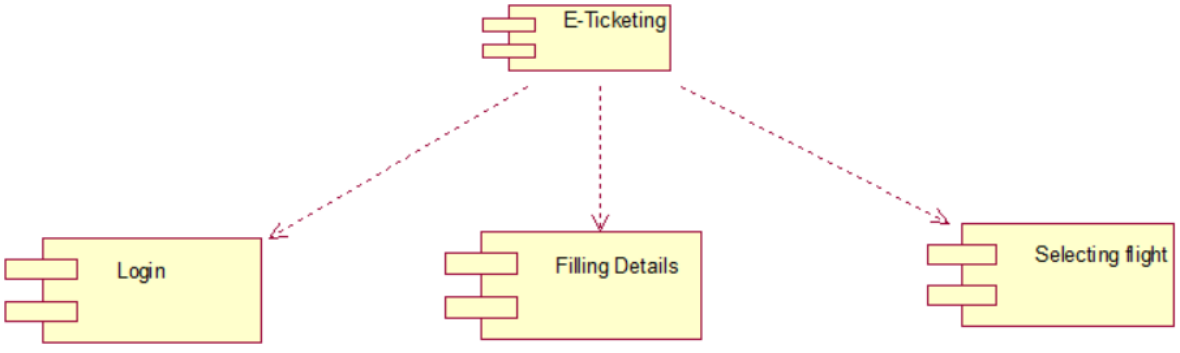
COLLABORATION DIAGRAM:

A collaboration diagram is an interaction diagram that shows the order of messages that implement an operation or a transaction. Collaboration diagram is an interaction diagram that shows the order of messages that implement an operation or a transaction.



COMPONENT DIAGRAM:

Component diagrams are used to visualize the organization and relationships.



RESULT:

Thus the mini project for Airline/Railway reservation System has been executed successfully and the output is verified.

Ex. No: 7	SOFTWARE PERSONNEL MANAGEMENT SYSTEM
Date:13-03-2021	

AIM:

To implement a software for software personnel management system.

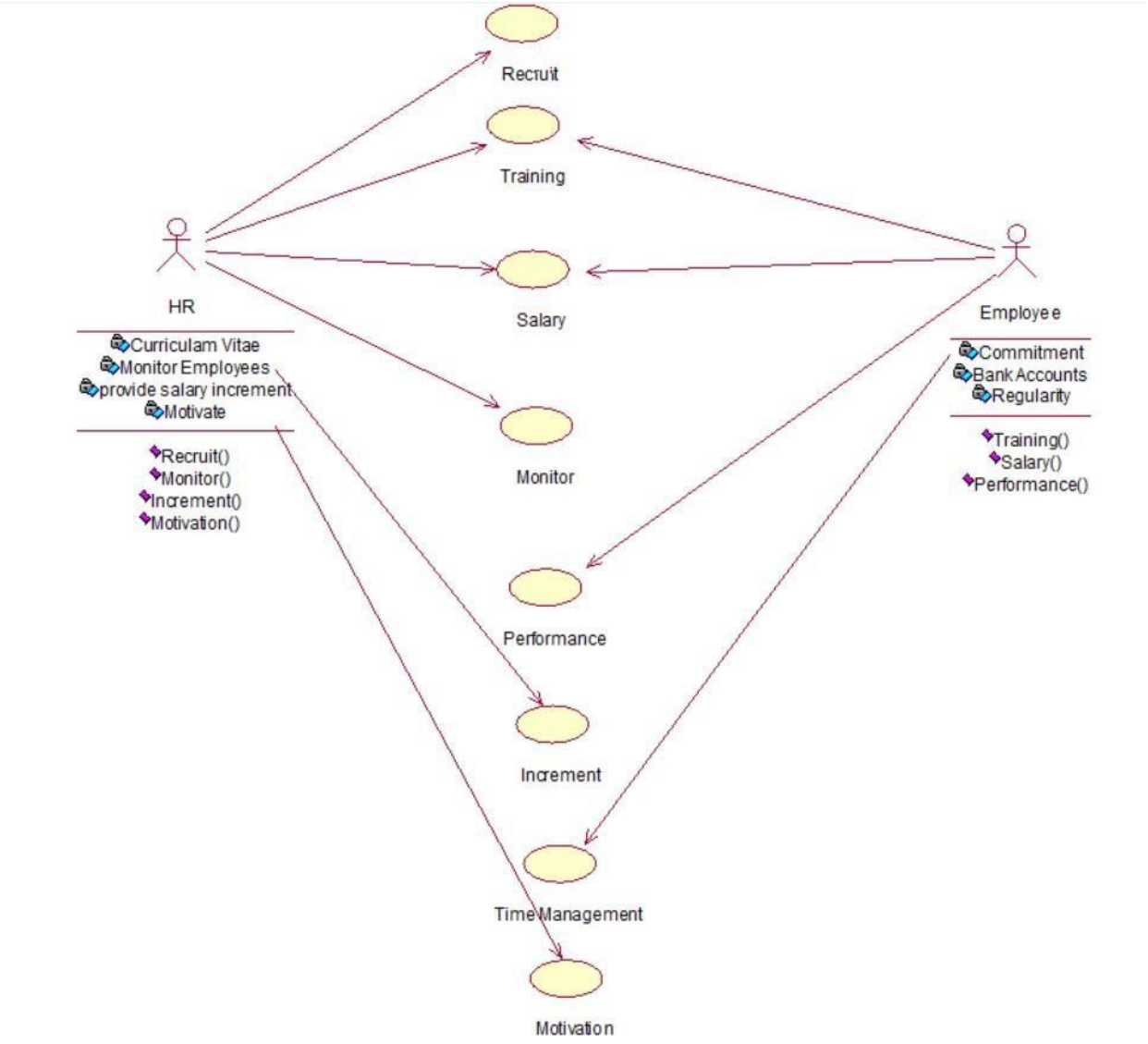
PROBLEM STATEMENT:

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

USE-CASE DIAGRAM:

The functionality of a system can be described in a number of different use-cases, each of which represents a specific flow of events in a system. It is a graph of actors, a set of use-cases enclosed in a boundary, communication, associations between the actors and the use-cases, and generalization among the use-cases.

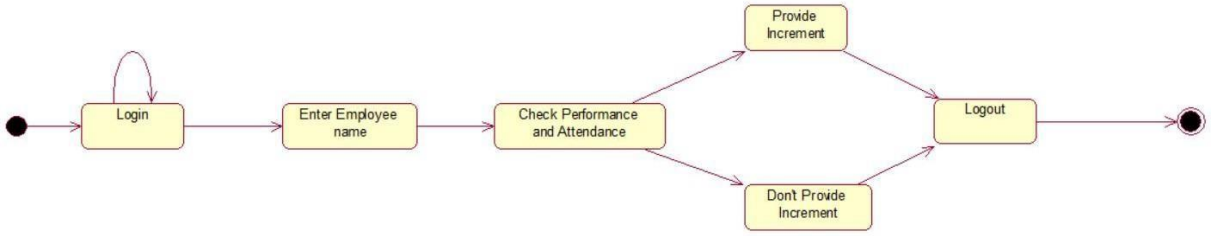
The HR of an organization involves recruitment training, monitoring and motivation of an employee. The HR also involves gives salary as observed in the payroll sheet. The employee undergoes training, receives the salary , gives the expected performance and manages time in order to complete a given task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



STATE CHART DIAGRAM:

The purpose of state chart diagram is to understand the algorithm involved in performing a method. It is also called as state diagram. A state is represented as a round box, which may contain one or more compartments. An initial state is represented as small dot. A final state is represented as circle surrounding a small dot.

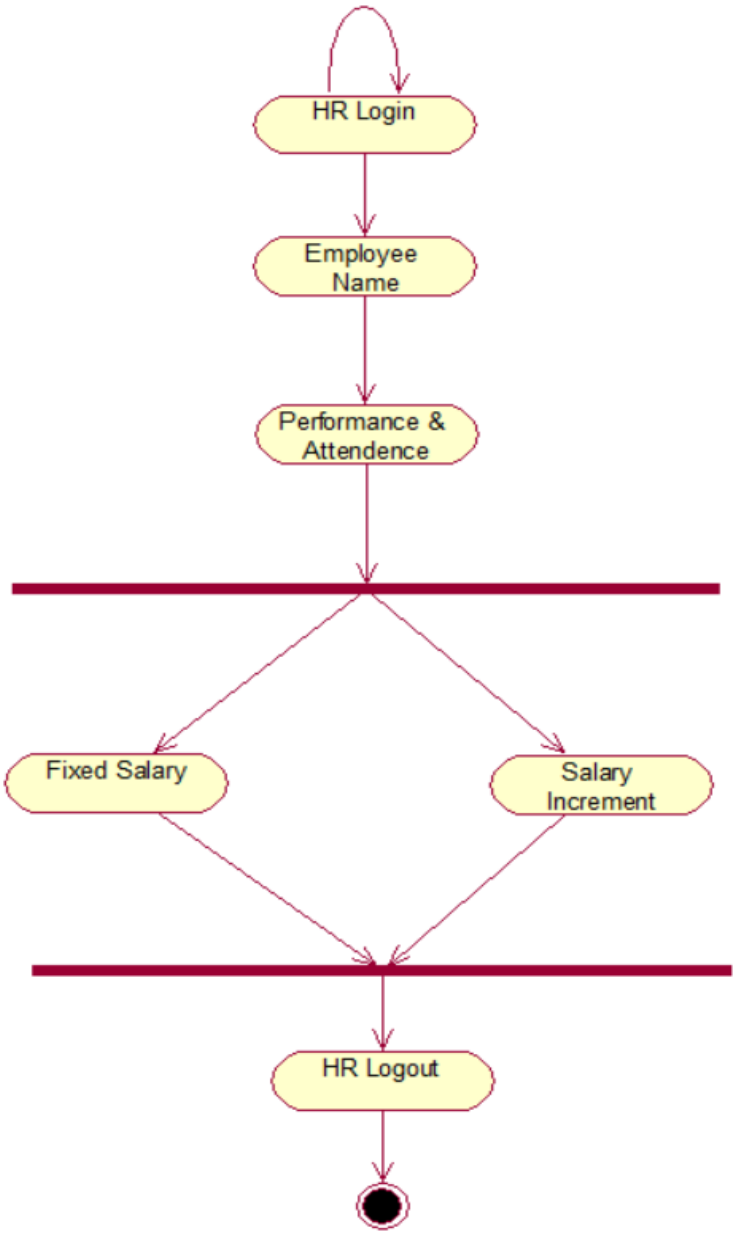
States of object are represented as rectangle with round corner, the transaction between the different states. A transition is a relationship between two state that indicates that when an event occur the object moves from the prior state to the subsequent.



ACTIVITY DIAGRAM:

It shows organization and their dependence among the set of components. These diagrams are particularly useful in connection with workflow and in describing behavior that has a lot of parallel processing. An activity is a state of doing something: either a real-world process, or the execution of a software routine.

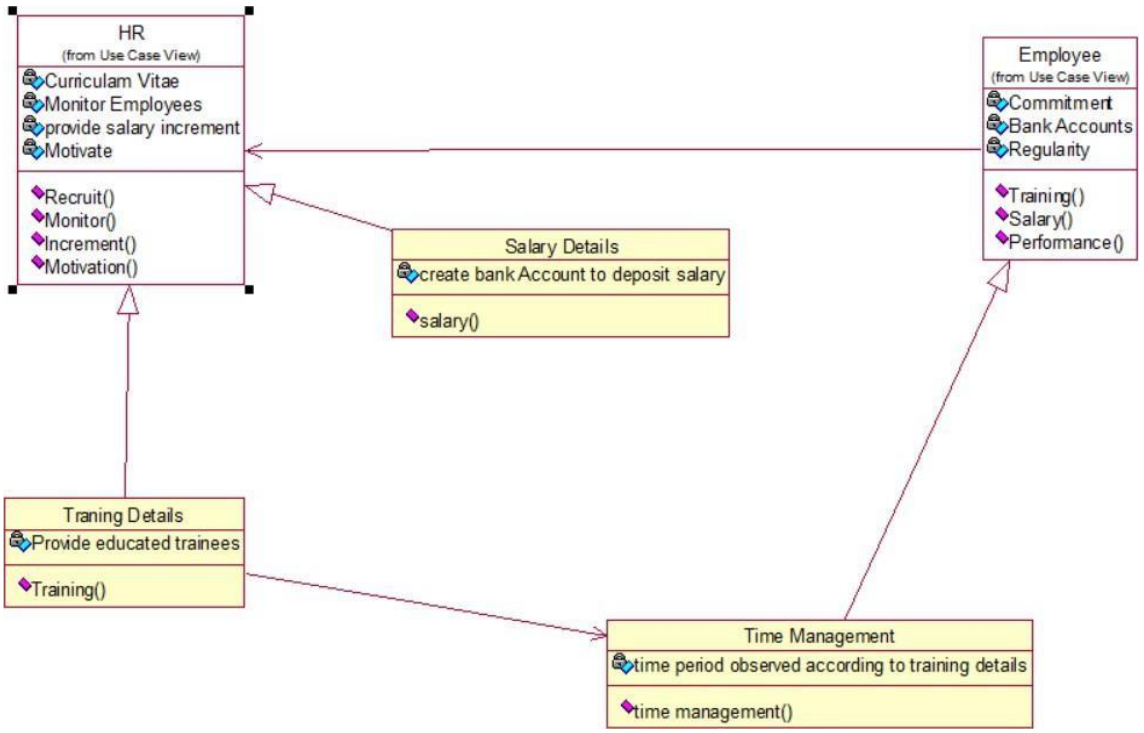
The activity diagram notation is an action, partition, fork join and object node. Most of the notation is self explanatory, two subtle points.



Once an action finished, there is an automatic outgoing transaction. The diagram can show both control flow and data flow.

CLASS DIAGRAM:

The class diagram, also referred to as object modeling is the main static analysis diagram. The main task of object modeling is to graphically show what each object will do in the problem domain. The problem domain describes the structure and the relationships among objects.

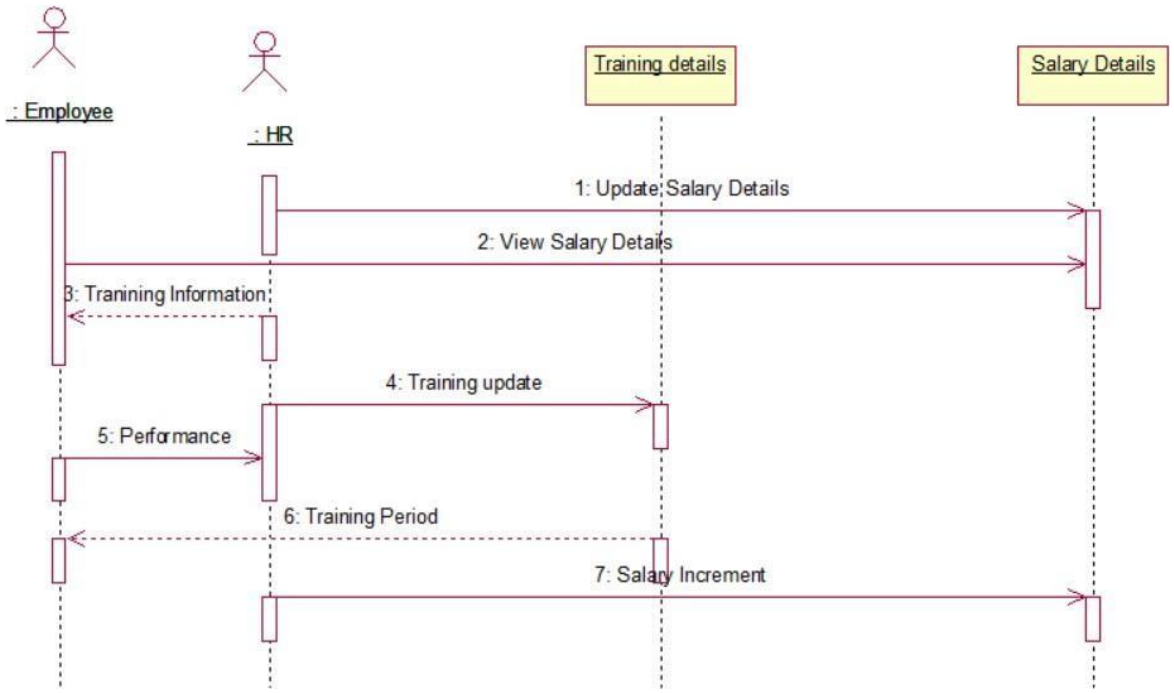


INTERACTION DIAGRAM:

It is the combination of sequence and collaboration diagram. It is used to depict the flow of events in the system over a timeline. The interaction diagram is a dynamic model which shows how the system behaves during dynamic execution.

SEQUENCE DIAGRAM:

A sequence diagram represents the sequence and interactions of a given USE-CASE or scenario. Sequence diagrams can capture most of the information about the system. Most object to object interactions and operations are considered events and events include signals, inputs, decisions, interrupts, transitions and actions to or from users or external devices.



COLLABORATION DIAGRAM:

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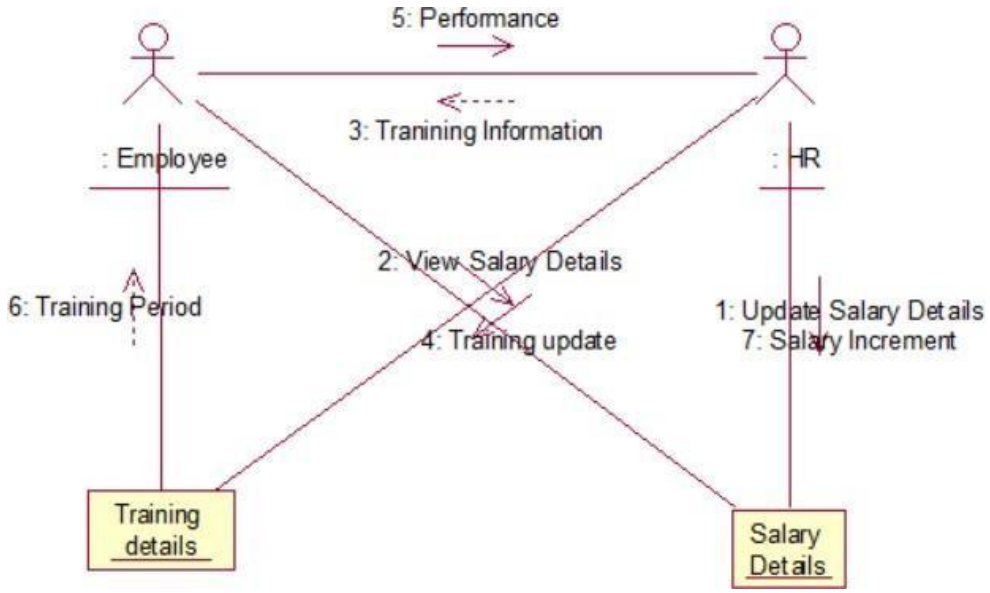
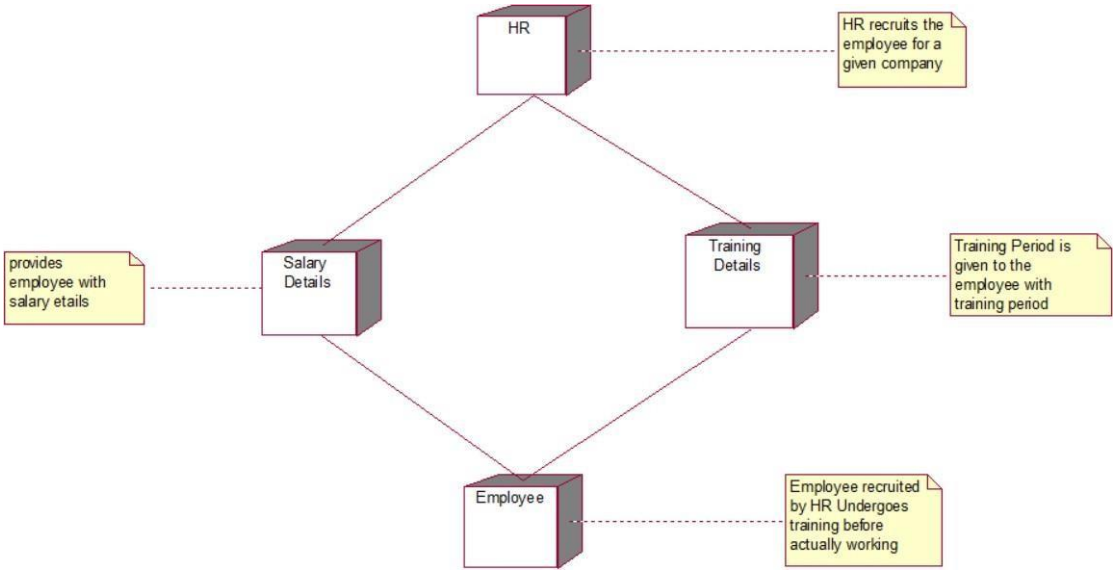


DEPLOYMENT DIAGRAM:

Deployment diagrams are used to visualize the topology of the physical components of a system where the software components are deployed.

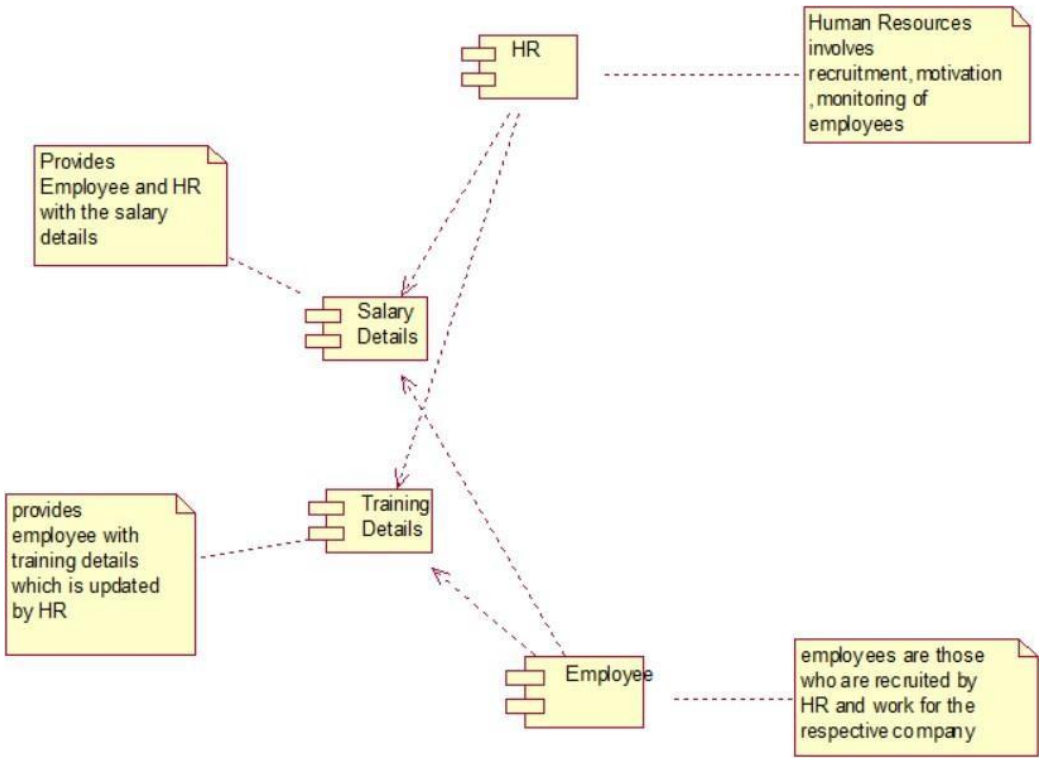
HR recruits employee for a company employee recruited by HR goes under training before actually working. Training period is given to the employee with the training details. The salary details for the employee are provided.



COMPONENT DIAGRAM:

Component diagrams are used to visualize the organization and relationships.

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



RESULT:

Thus the mini project for software personnel management system has been executed successfully and the output is verified.

Ex. No: 8	CREDIT CARD PROCESSING
Date:14-03-2021	

AIM:

To create a system to perform the credit card processing

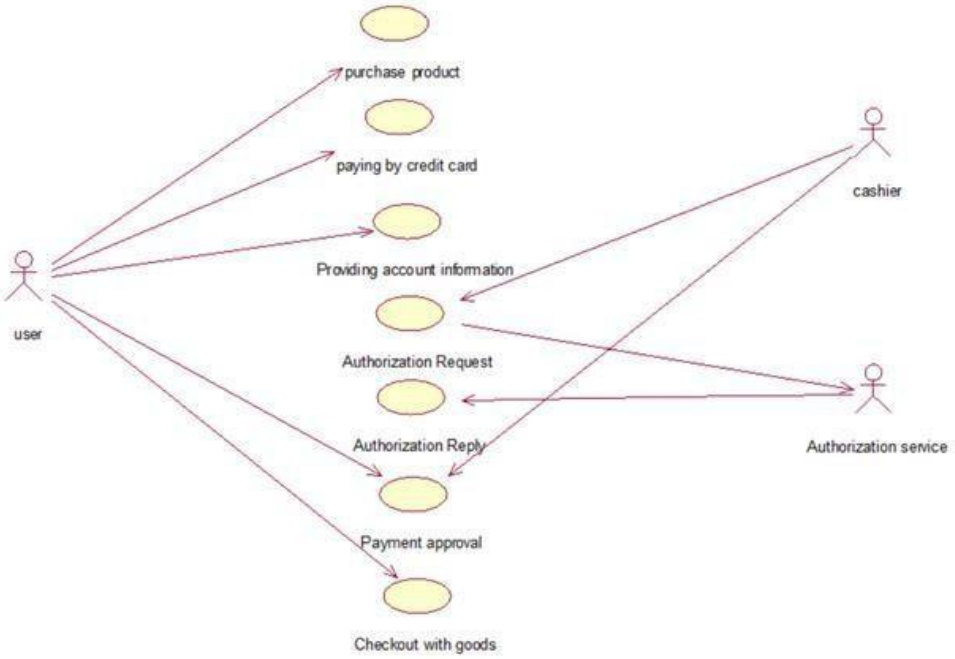
PROBLEM STATEMENT:

Credit card processing through offline involves the merchant collecting order information (including credit card numbers), storing this in a database on your site, and entering it using their on-site merchant credit card processing system. Takes time to manually enter credit card information for each order.

USE-CASE DIAGRAM:

The functionality of a system can be described in a number of different use-cases, each of which represents a specific flow of events in a system. It is a graph of actors, a set of use-cases enclosed in a boundary, communication, associations between the actors and the use-cases, and generalization among the use-cases.

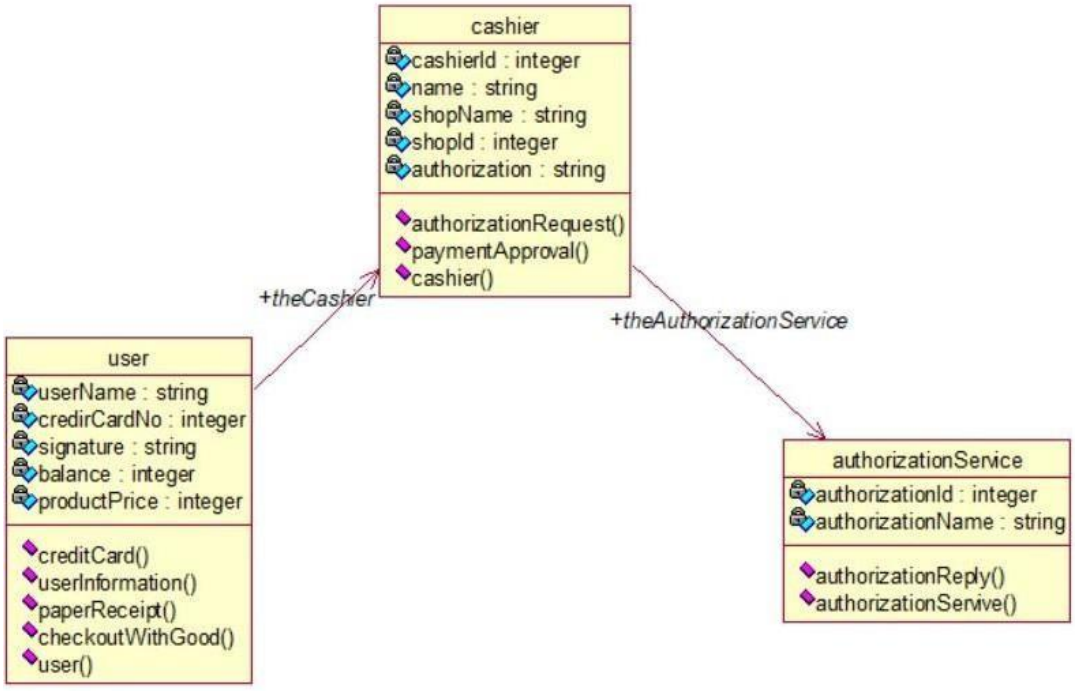
The transaction details are recorded by the credit card processor and results are securely relayed to the merchant. Merchant's site receives transaction result and does appropriate actions (e.g. saves the order & showsmessage).



CLASS DIAGRAM:

The class diagram, also referred to as object modeling is the main static analysis diagram. The main task of object modeling is to graphically show what each object will do in the problem domain. The problem domain describes the structure and the relationships among objects.

The Credit Card Processing system class diagram consists of three classes.They are Cashier
User
Authorization Service



INTERACTION DIAGRAM:

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SEQUENCE DIAGRAM:

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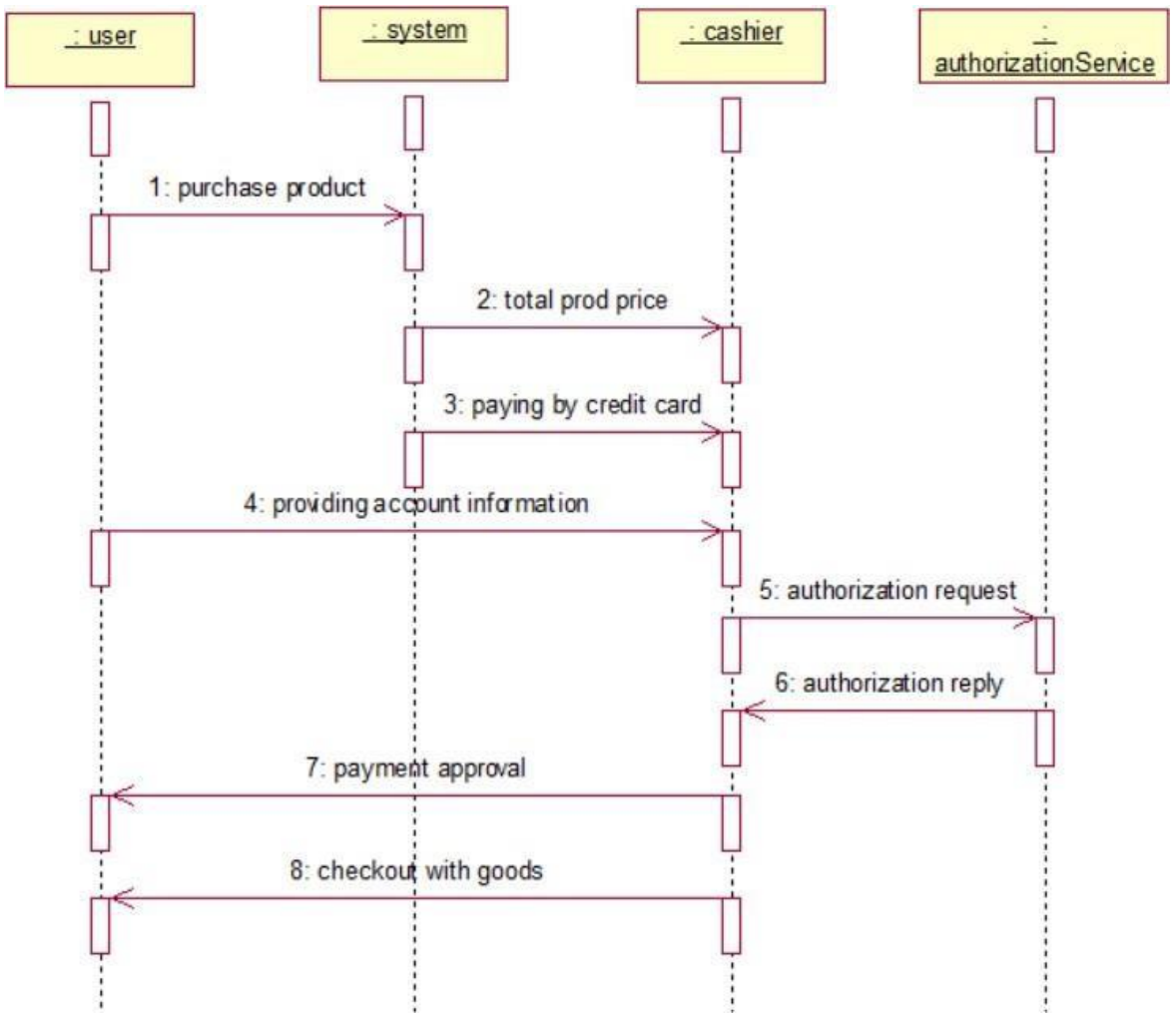

COLLABORATION DIAGRAM:

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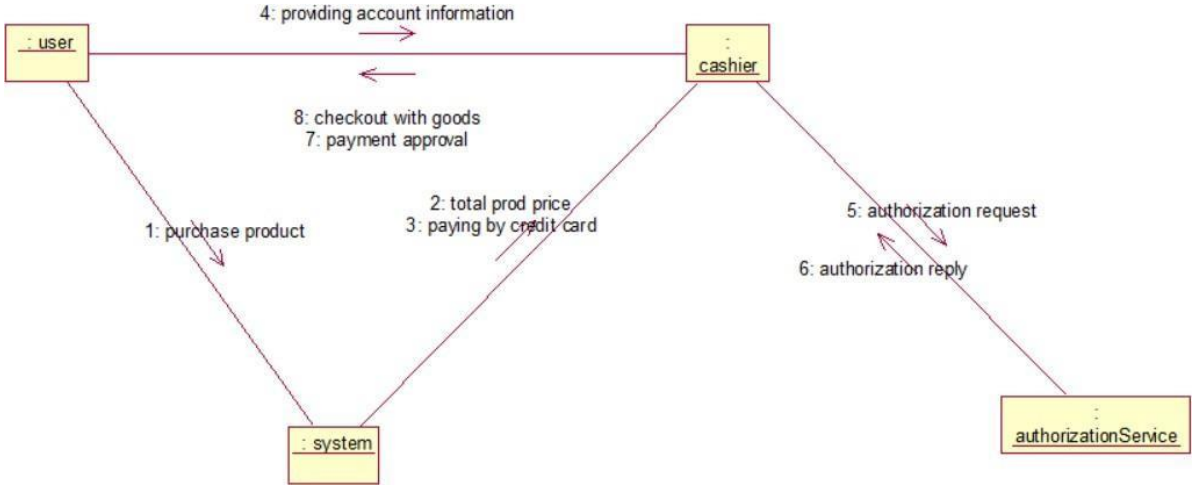
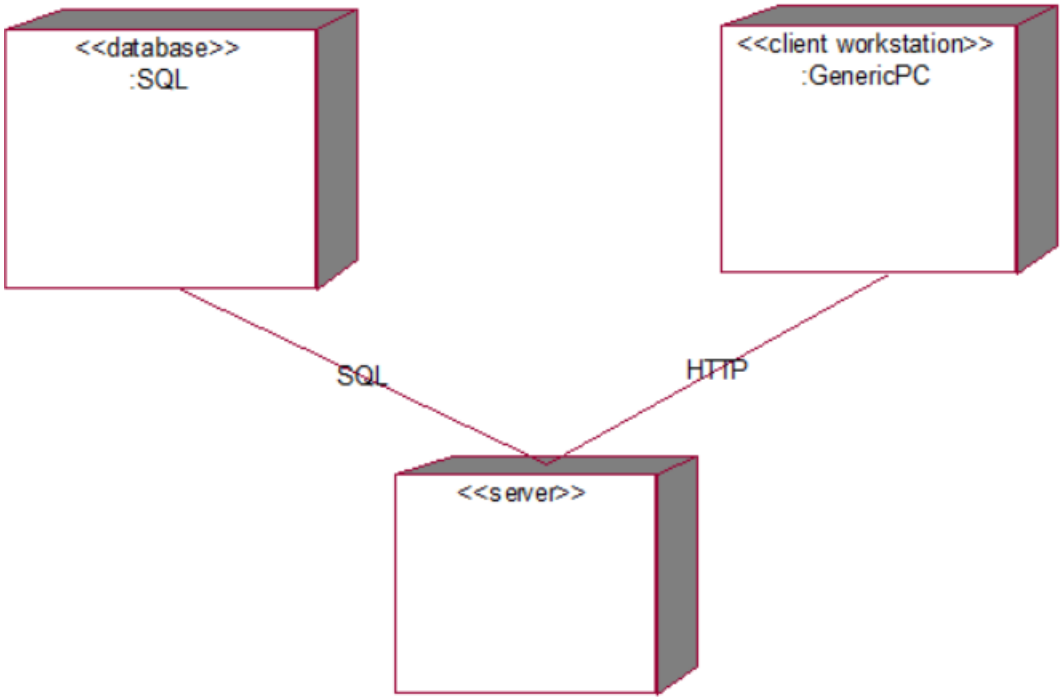


DEPLOYMENT DIAGRAM:

Deployment diagrams are used to visualize the topology of the physical components of a system where the software components are deployed.



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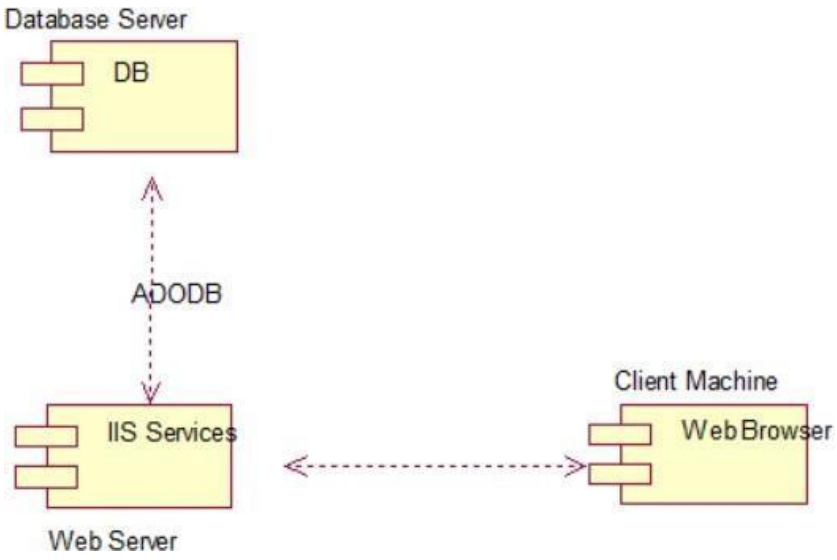


RESULT:

Thus the mini project for credit card processing system has been executed successfully and the output is verified.

Ex. No: 9	EBOOK MANAGEMENT SYSTEM
Date:14-03-2021	

AIM:

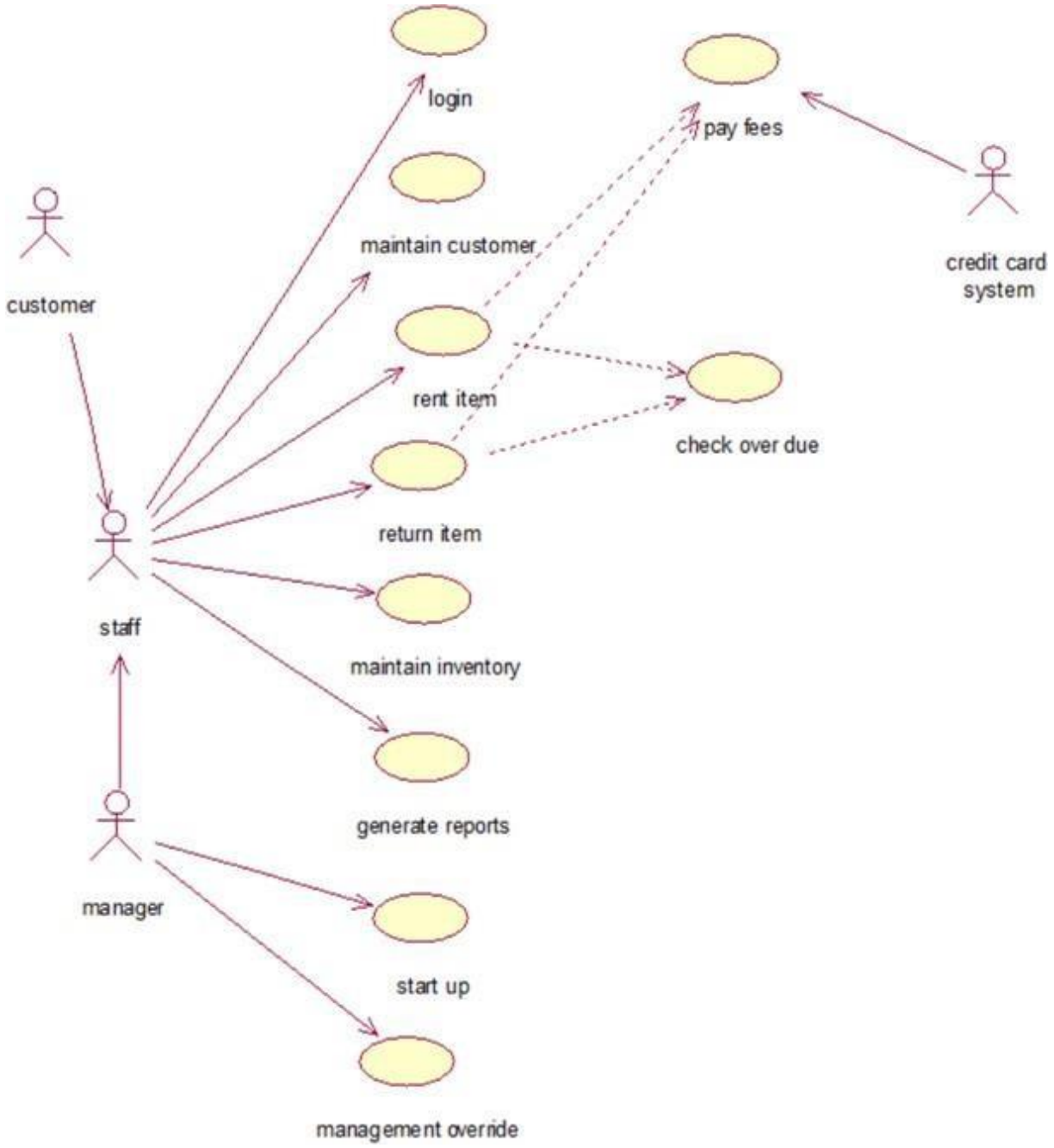
To create a system to perform E- book Management System.

PROBLEM STATEMENT:

An E- Book lends books and magazines to member, who is registered in the system. Also it handles the purchase of new titles for the Book Bank. Popular titles are brought into multiple copies. Old books and magazines are removed when they are out or date or poor in condition. A member can reserve a book or magazine that is not currently available in the book bank, so that when it is returned or purchased by the book bank, that person is notified. The book bank can easily create, replace and delete information about the tiles, members, loans and reservations from the system.

USE-CASE DIAGRAM:

The functionality of a system can be described in a number of different use-cases, each of which represents a specific flow of events in a system. It is a graph of actors, a set of use-cases enclosed in a boundary, communication, associations between the actors and the use-cases, and generalization among the use-cases.



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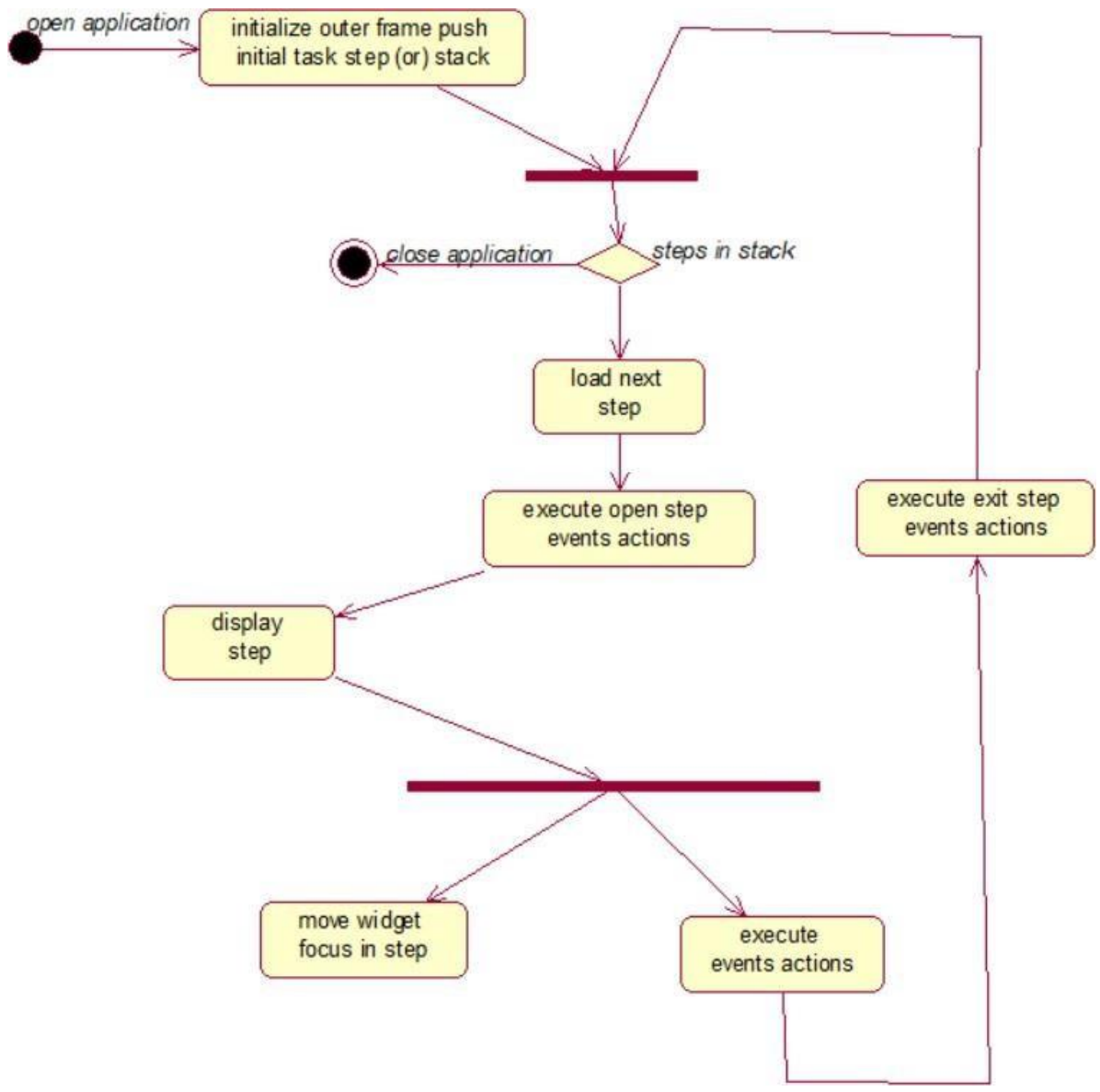

CLASS DIAGRAM:

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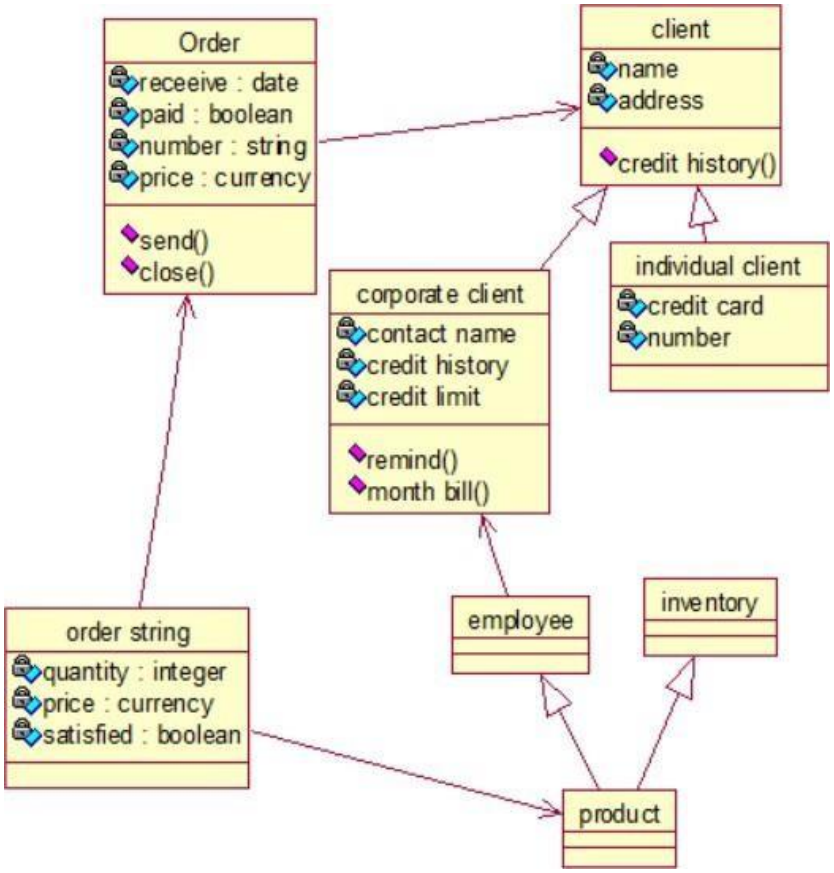

INTERACTION DIAGRAM:

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SEQUENCE DIAGRAM:

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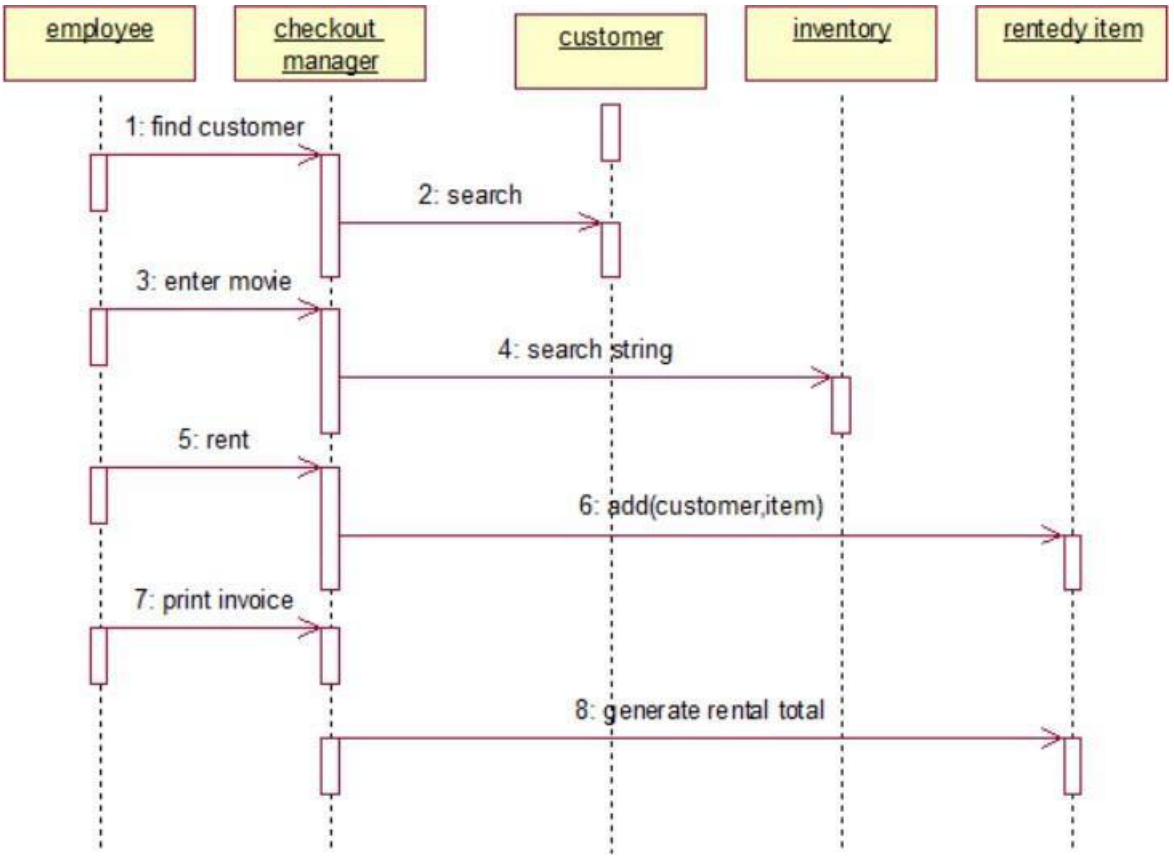

COLLABORATION DIAGRAM:

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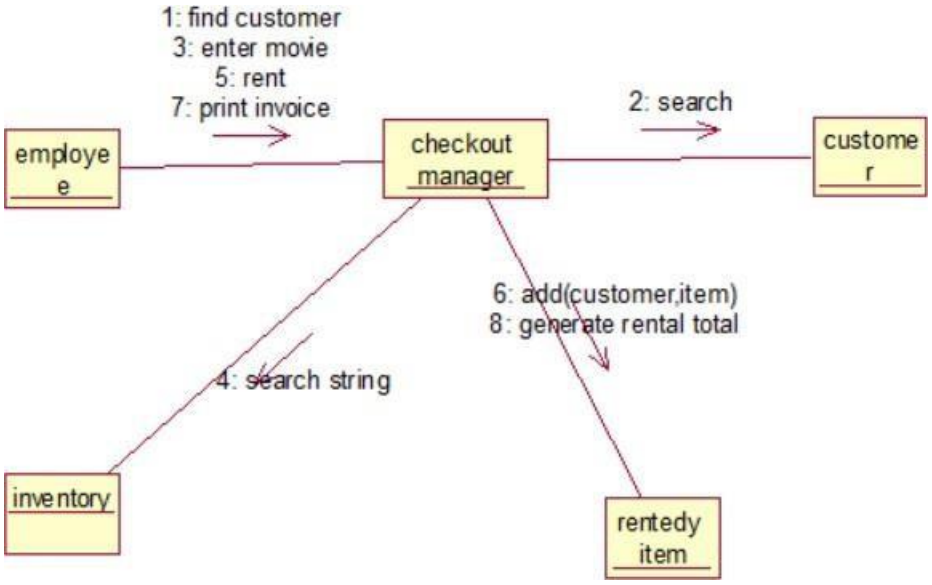
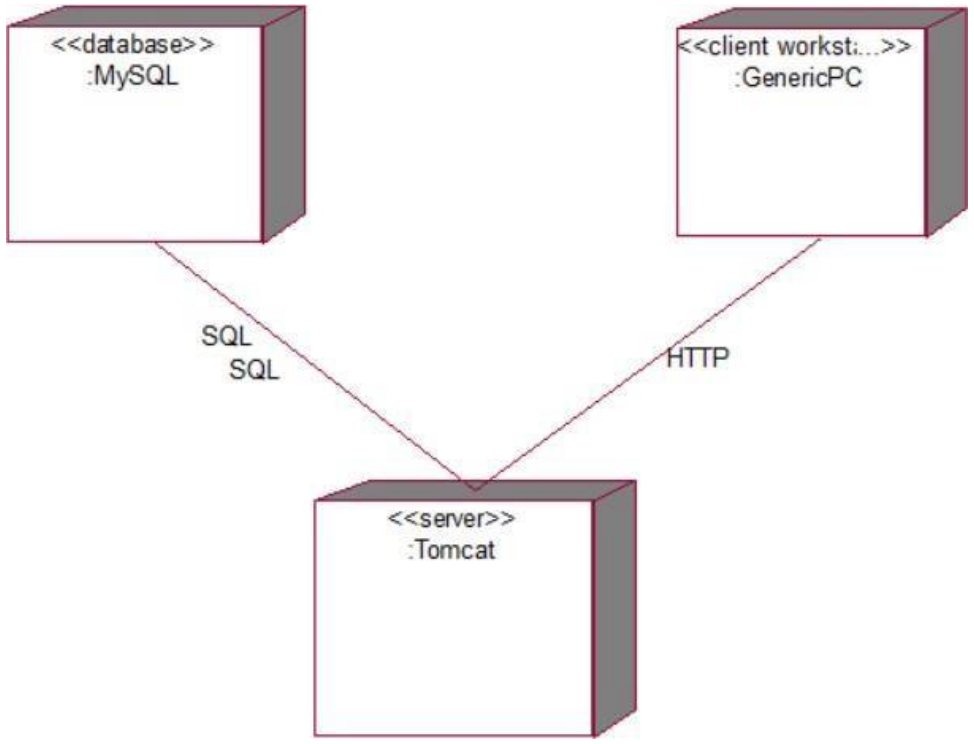


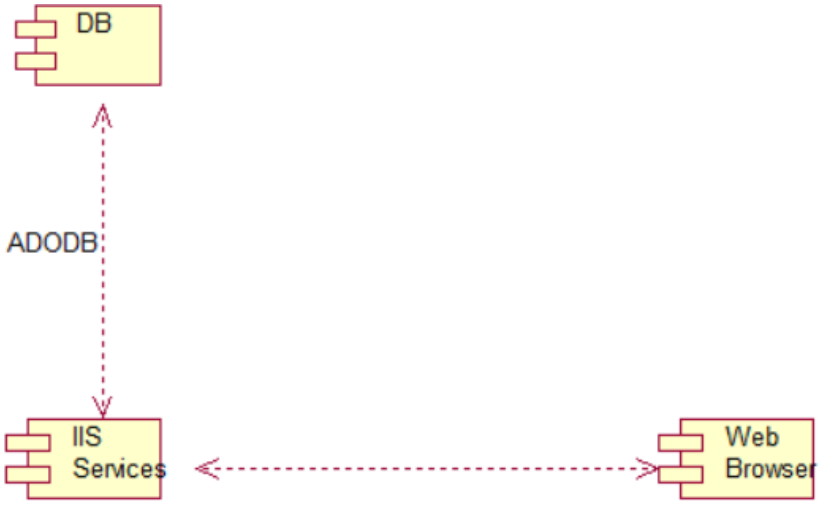
DEPLOYMENT DIAGRAM:

Deployment diagrams are used to visualize the topology of the physical components of a system where the software components are deployed.



COMPONENT DIAGRAM:

Component diagrams are used to visualize the organization and relationships.



RESULT:

Thus the mini project for E-Book System has been executed successfully and the output is verified.

Ex. No: 10	RECRUITMENT SYSTEM
Date:14-03-2021	

AIM:

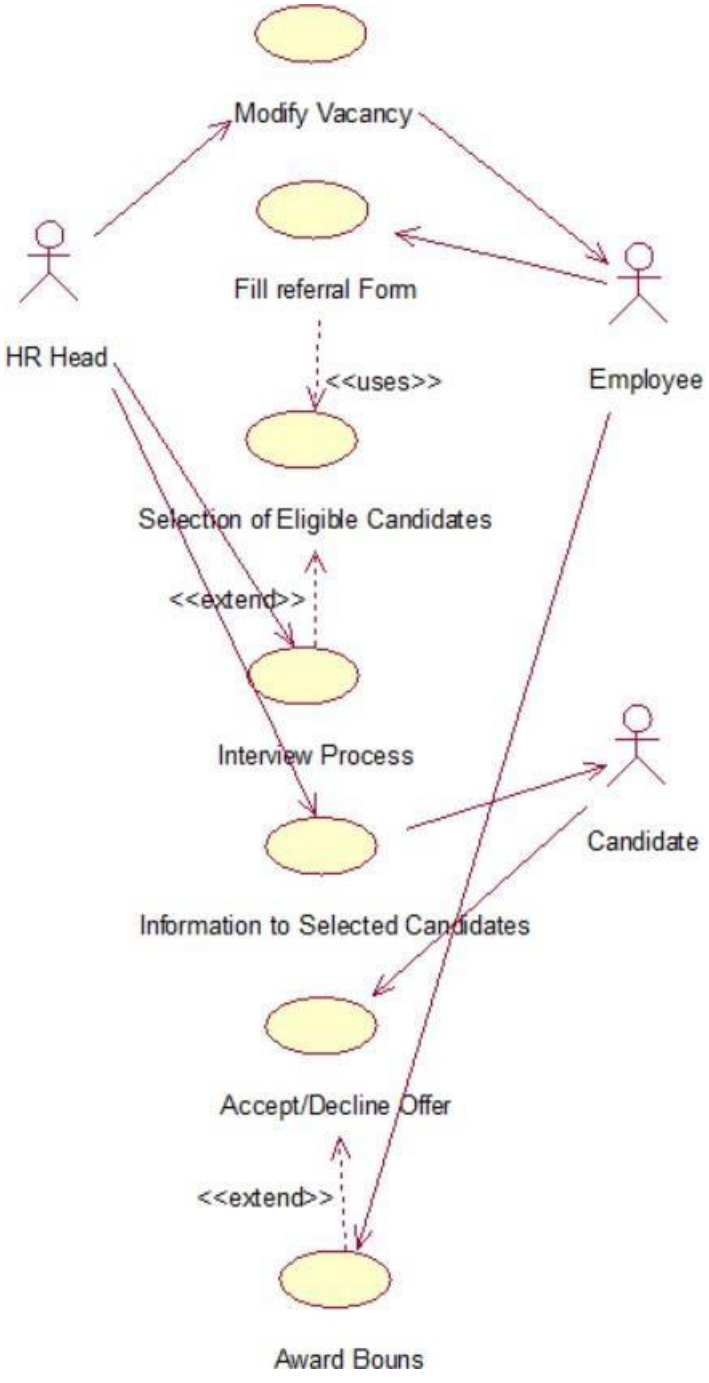
To create an automated system to perform the Recruitment System Process.

PROBLEM STATEMENT:

The recruitment system allows the job seekers to enroll their names through the process of registration. The employee also can get the list of available candidates and shortlist for their company requirement. Once the applicant enrolls he receives an id, which helps him in further Correspondence. A fees amount is received from the job seekers for enrollment. This system makes the task of the job seeker easier rather than waiting in queue for enrollment. This also reduces the time consumption for both for the job seeker and employee.

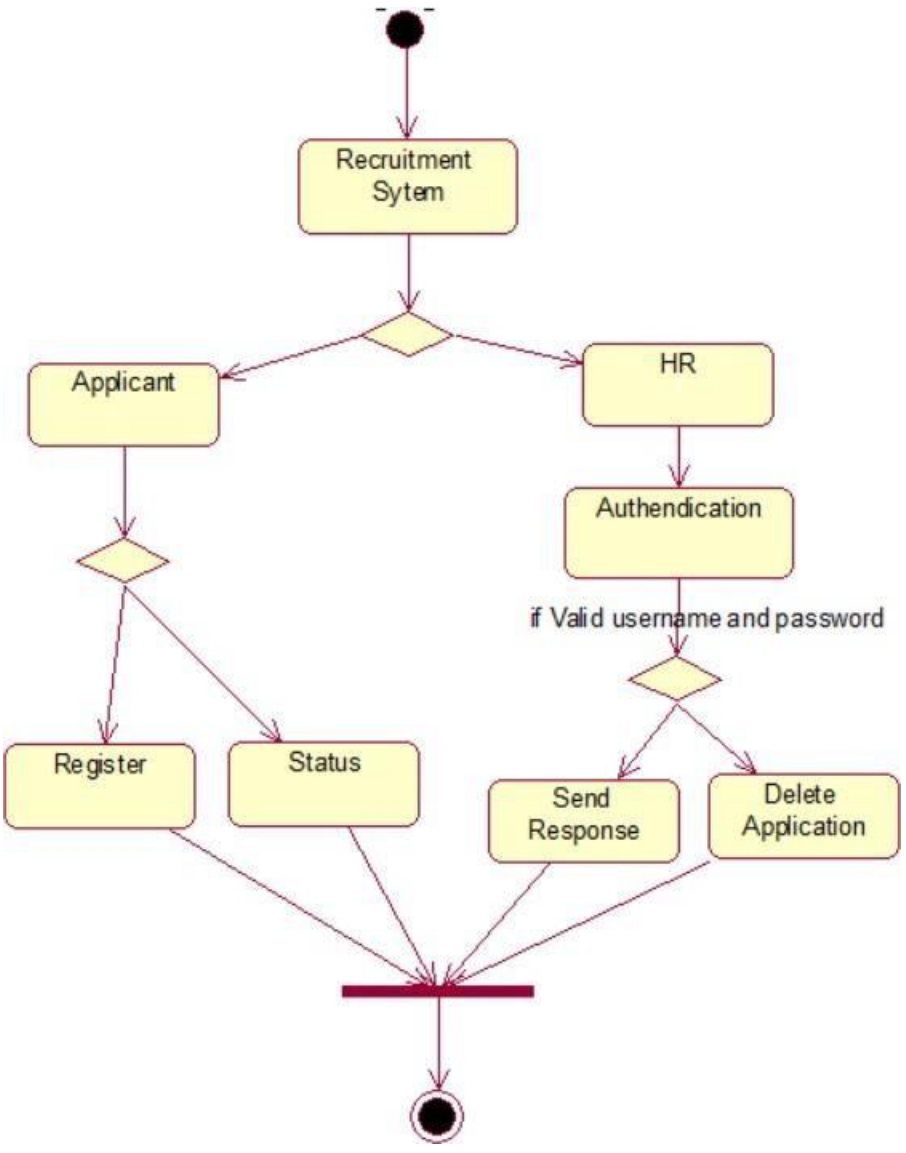
USE-CASE DIAGRAM:

The functionality of a system can be described in a number of different use-cases, each of which represents a specific flow of events in a system. It is a graph of actors, a set of use-cases enclosed in a boundary, communication, associations between the actors and the use-cases, and generalization among the use-cases.



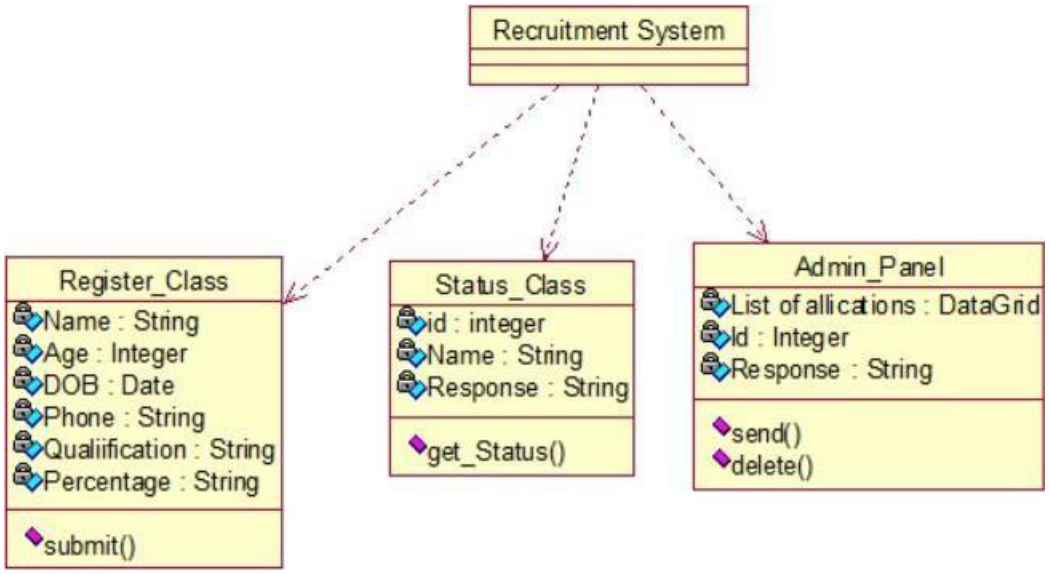
ACTIVITY DIAGRAM:

It shows organization and their dependence among the set of components. These diagrams are particularly useful in connection with workflow and in describing behavior that has a lot of parallel processing. An activity is a state of doing something: either a real-world process, or the execution of a software routine.



CLASS DIAGRAM:

The class diagram, also referred to as object modeling is the main static analysis diagram. The main task of object modeling is to graphically show what each object will do in the problem domain. The problem domain describes the structure and the relationships among objects.



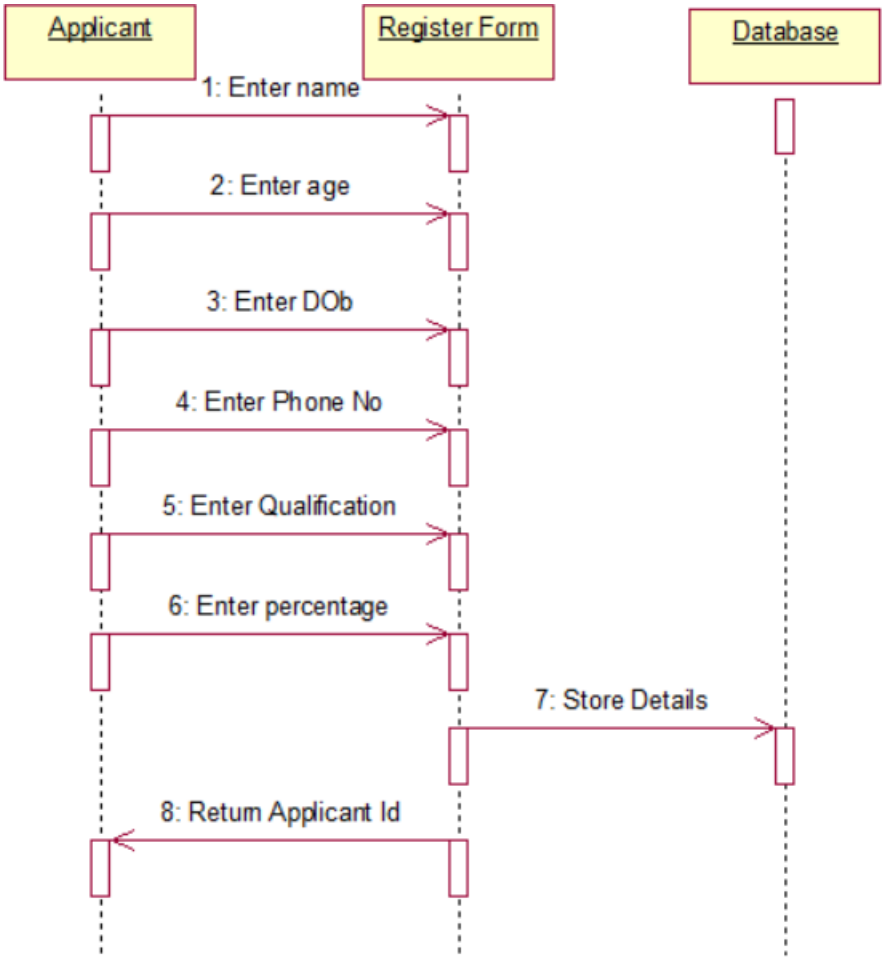
INTERACTION DIAGRAM:

It is the combination of sequence and collaboration diagram. It is used to depict the flow of events in the system over a timeline. The interaction diagram is a dynamic model which shows how the system behaves during dynamic execution.

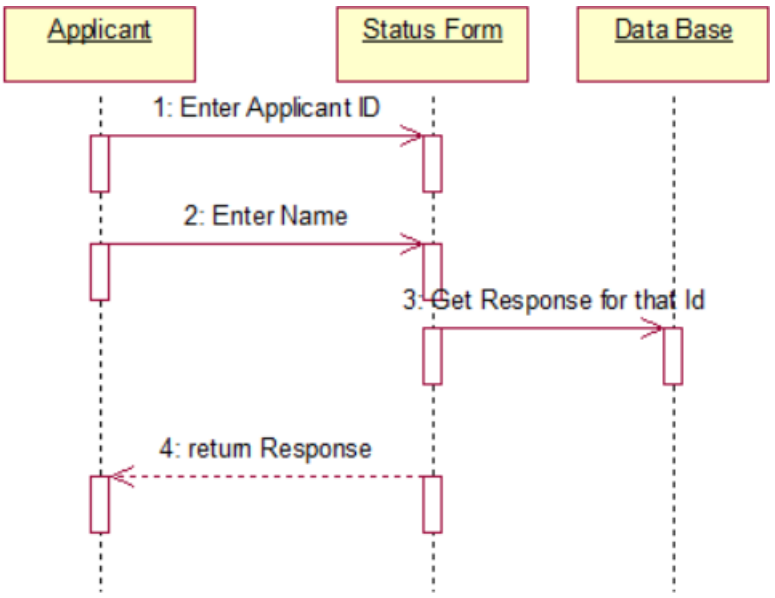
SEQUENCE DIAGRAM:

A sequence diagram represents the sequence and interactions of a given USE-CASE or scenario. Sequence diagrams can capture most of the information about the system. Most object to object interactions and operations are considered events and events include signals, inputs, decisions, interrupts, transitions and actions to or from users or external devices.

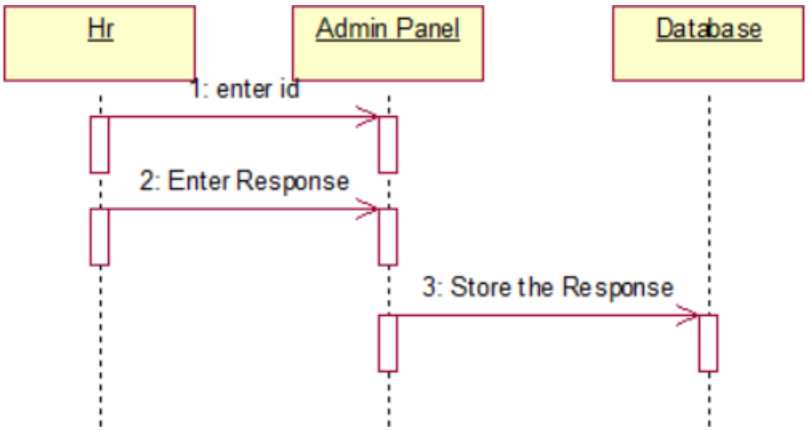
SEQUENCE DIAGRAM FOR REGISTER:



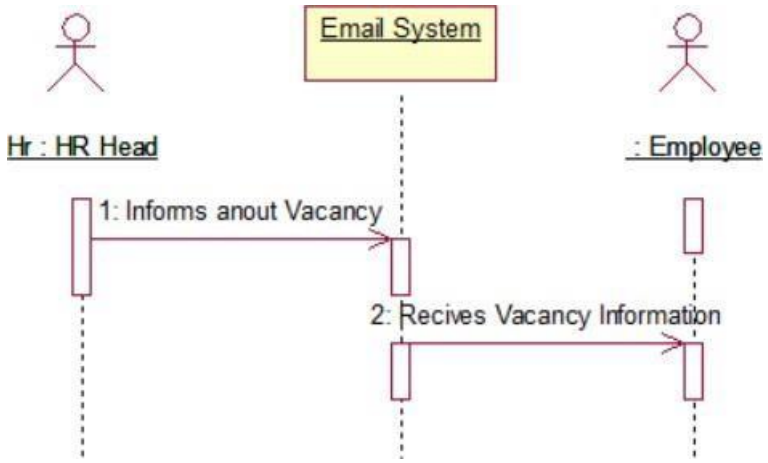
SEQUENCE DIAGRAM FOR STATUS:



SEQUENCE DIAGRAM FOR ADMIN:



SEQUENCE DIAGRAM FOR NOTIFY VACANCY:



COLLABORATION DIAGRAM:

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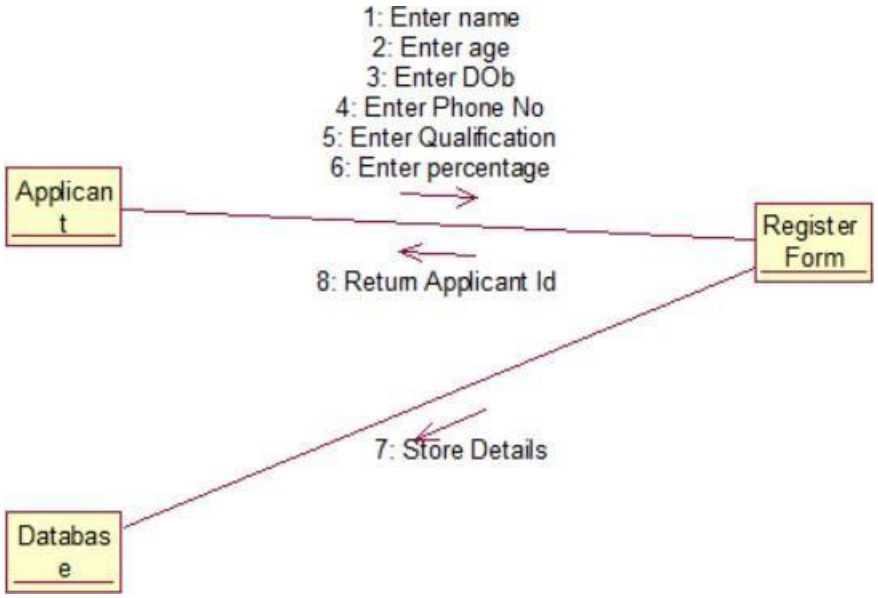
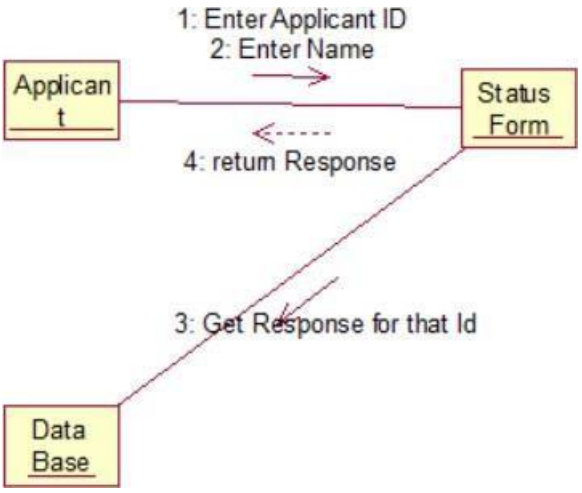
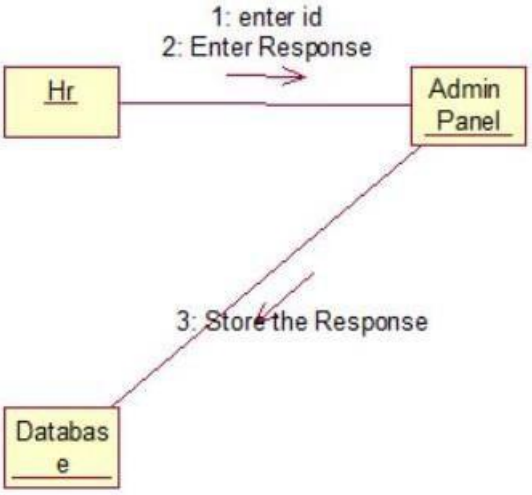
COLLABORATION DIAGRAM FOR REGISTER:



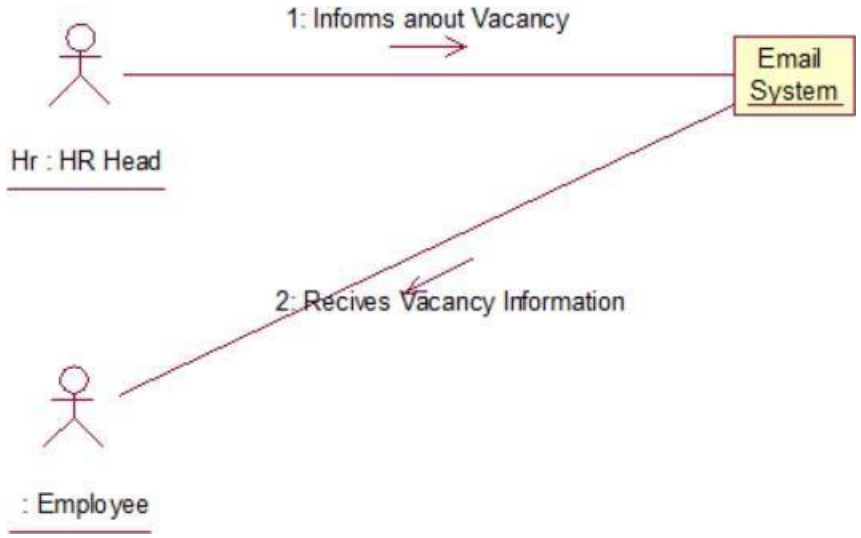
COLLABORATION DIAGRAM FOR STATUS:



COLLABORATION DIAGRAM FOR ADMIN:



COLLABORATION DIAGRAM FOR NOTIFY VACANCY:



DEPLOYMENT DIAGRAM:

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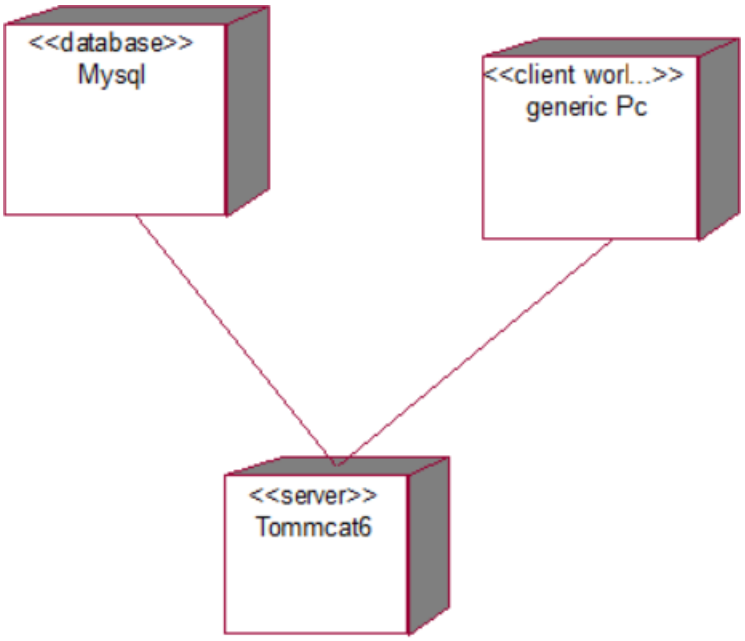


COMPONENT DIAGRAM:

Component diagrams are used to visualize the organization and relationships.

RESULT:

Thus the mini project for recruitment system has been executed successfully and the output is verified.

Ex. No: 11	FOREIGN TRADING SYSTEM
Date:15-03-2021	

AIM:

To design a project Foreign Trading System using Rational Rose Software and to implement the software in Visual Basic.

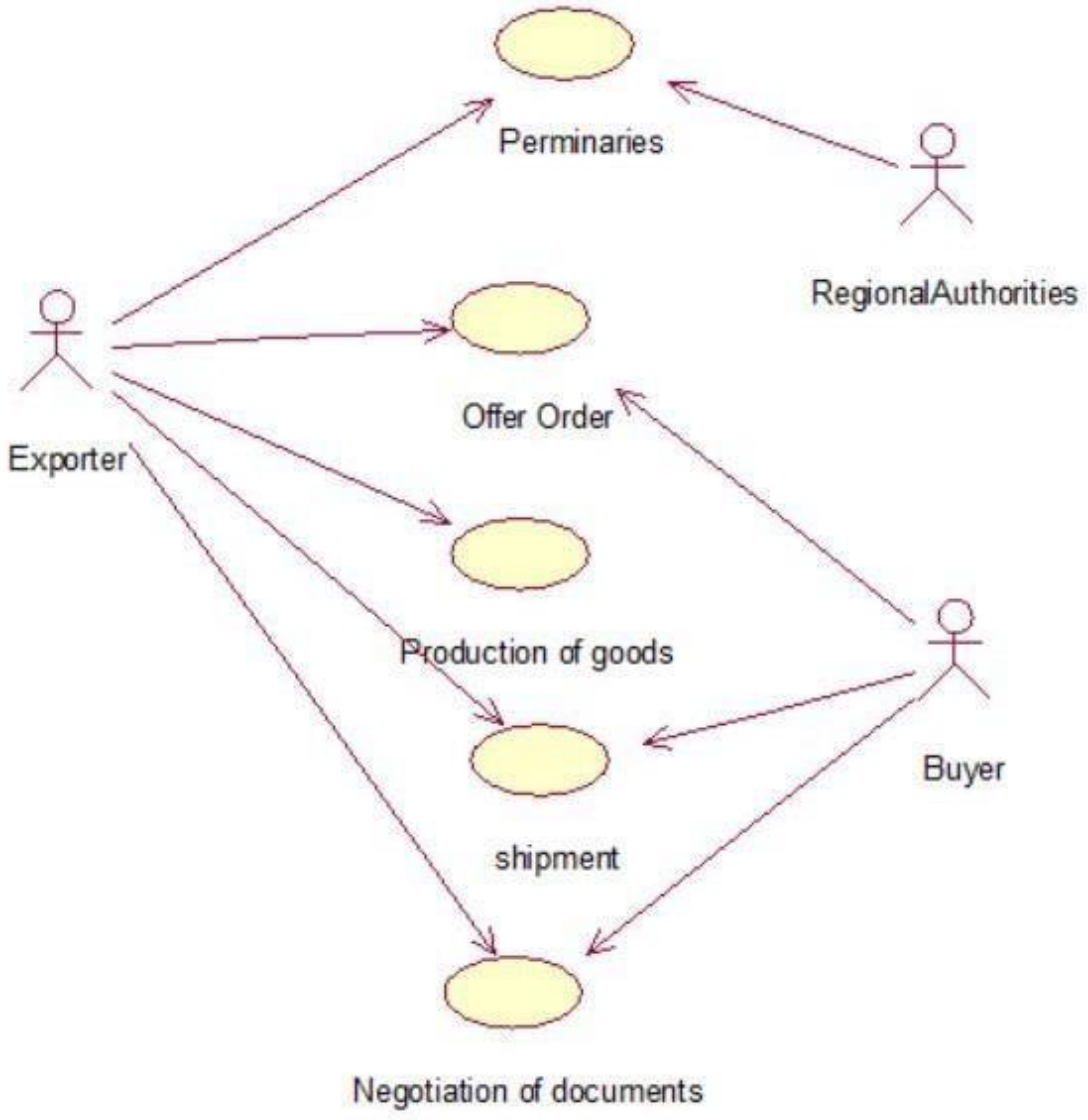
PROBLEM STATEMENT:

The steps involved in Foreign Trading System are:

The forex system begins its process by getting the username and password from the trader. After the authorization permitted by the administrator, the trader is allowed to perform the sourcing to know about the commodity details.After the required commodities are chosen, the trader places the order.The administrator checks for the availability for the required commodities and updates it in the database. After the commodities are ready for the trade, the trader pays the amount to the administrator.The administrator in turn provides the bill by receiving the amount and updates it in the database.The trader logouts after the confirmation message has been received.

USE-CASE DIAGRAM:

The functionality of a system can be described in a number of different use-cases, each of which represents a specific flow of events in a system. It is a graph of actors, a set of use-cases enclosed in a boundary, communication, associations between the actors and the use-cases, and generalization among the use-cases.



CLASS DIAGRAM:

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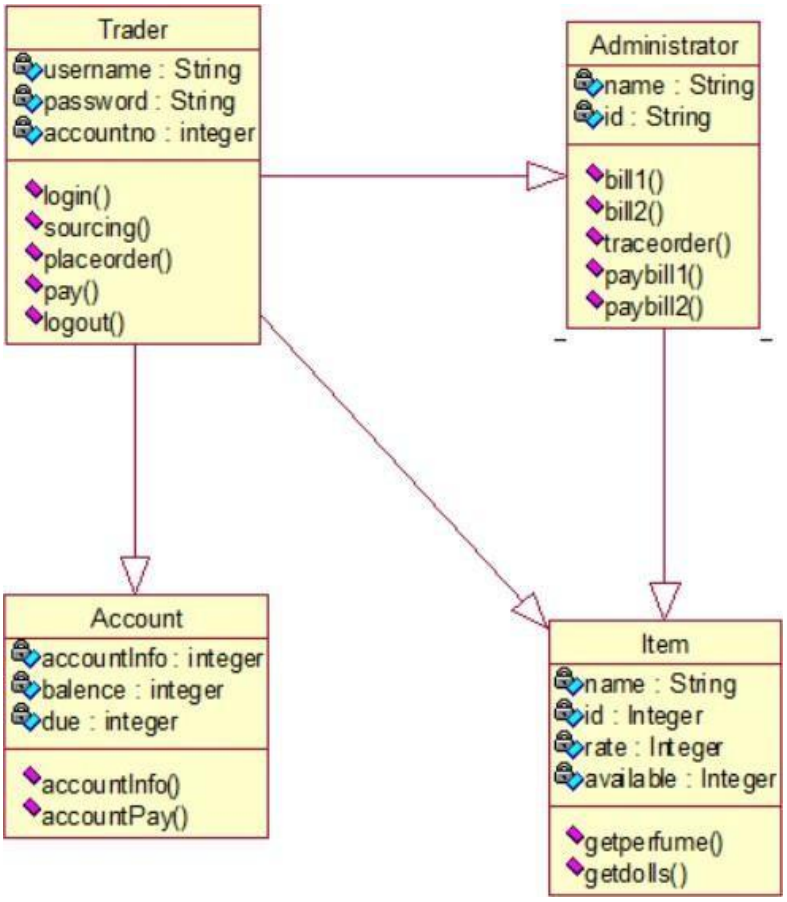
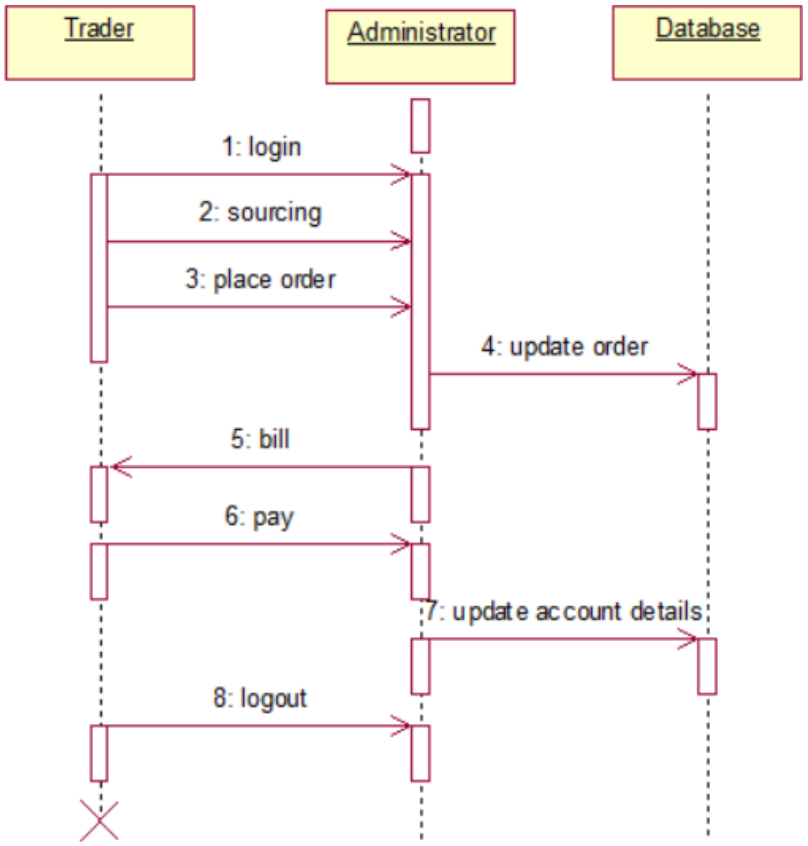


INTERACTION DIAGRAM:

It is the combination of sequence and collaboration diagram. It is used to depict the flow of events in the system over a timeline. The interaction diagram is a dynamic model which shows how the system behaves during dynamic execution.

SEQUENCE DIAGRAM:

A sequence diagram represents the sequence and interactions of a given USE-CASE or scenario. Sequence diagrams can capture most of the information about the system. Most object to object interactions and operations are considered events and events include signals, inputs, decisions, interrupts, transitions and actions to or from users or external devices.



COLLABORATION DIAGRAM:

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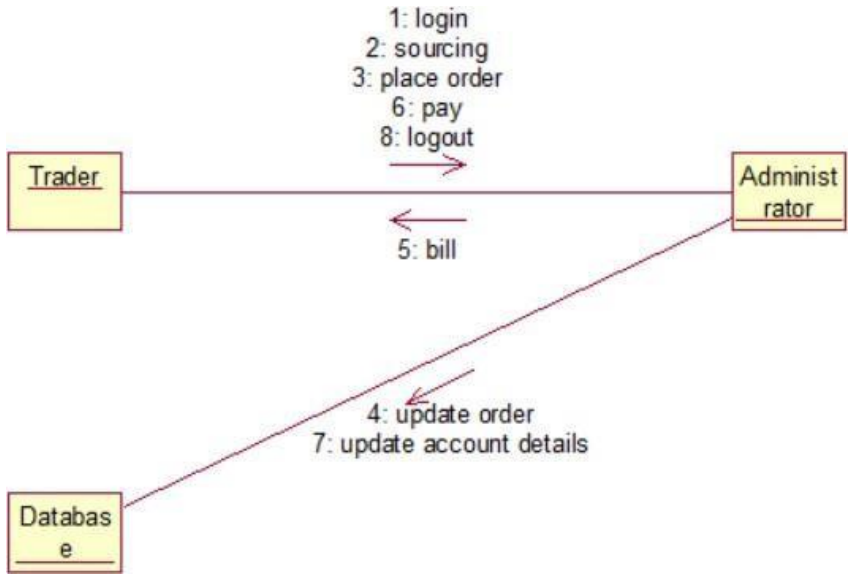
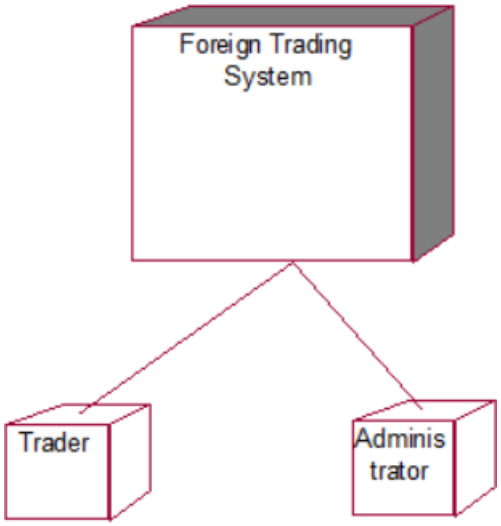


DEPLOYMENT DIAGRAM:

Deployment diagrams are used to visualize the topology of the physical components of a system where the software components are deployed.



COMPONENT DIAGRAM:

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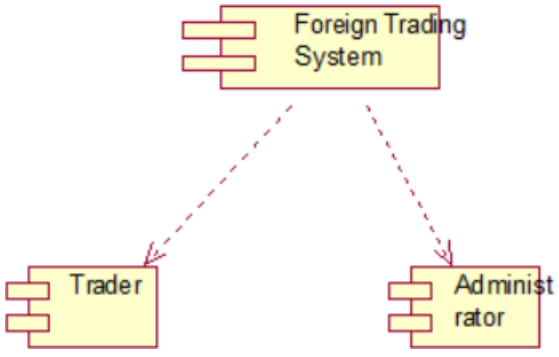


RESULT:

Thus the mini project for foreign trading system has been executed successfully and the output is verified.

Ex. No: 12	CONFERENCE MANAGEMENT SYSTEM
Date:15-03-2021	

AIM:

To develop a project on Conference management system using Rational Rose Software.

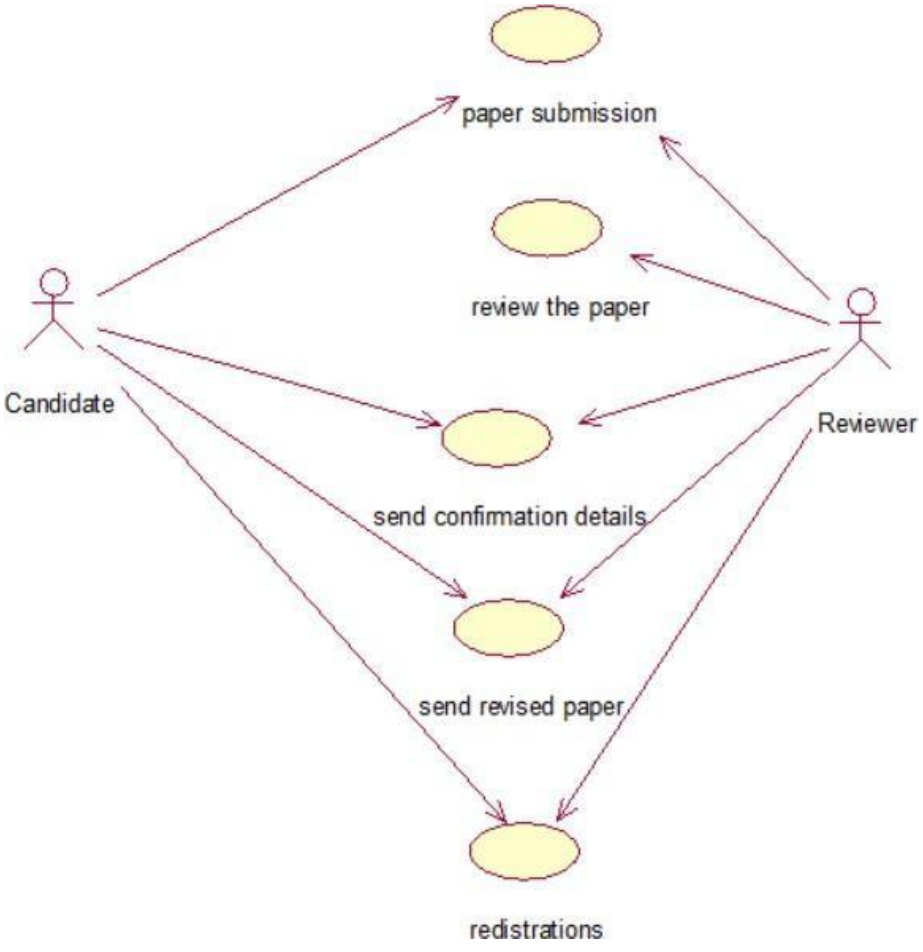
PROBLEM STATEMENT:

The process of the candidates is to login the conference system and submit the paper through online. Then the reviewer reviews the paper and sends the acknowledgement to the candidate either paper selected or rejected. This process of on conference management system are described sequentially through following steps,

- The candidate login to the conference management system.
- The paper title is submitted.
- The paper is been reviewed by the reviewer.
- The reviewer sends acknowledgement to the candidate.
- Based on the selection, the best candidate is selected.
- Finally the candidate registers all details.

USE-CASE DIAGRAM:

The functionality of a system can be described in a number of different use-cases, each of which represents a specific flow of events in a system. It is a graph of actors, a set of use-cases enclosed in a boundary, communication, associations between the actors and the use-cases, and generalization among the use-cases.



CLASS DIAGRAM:

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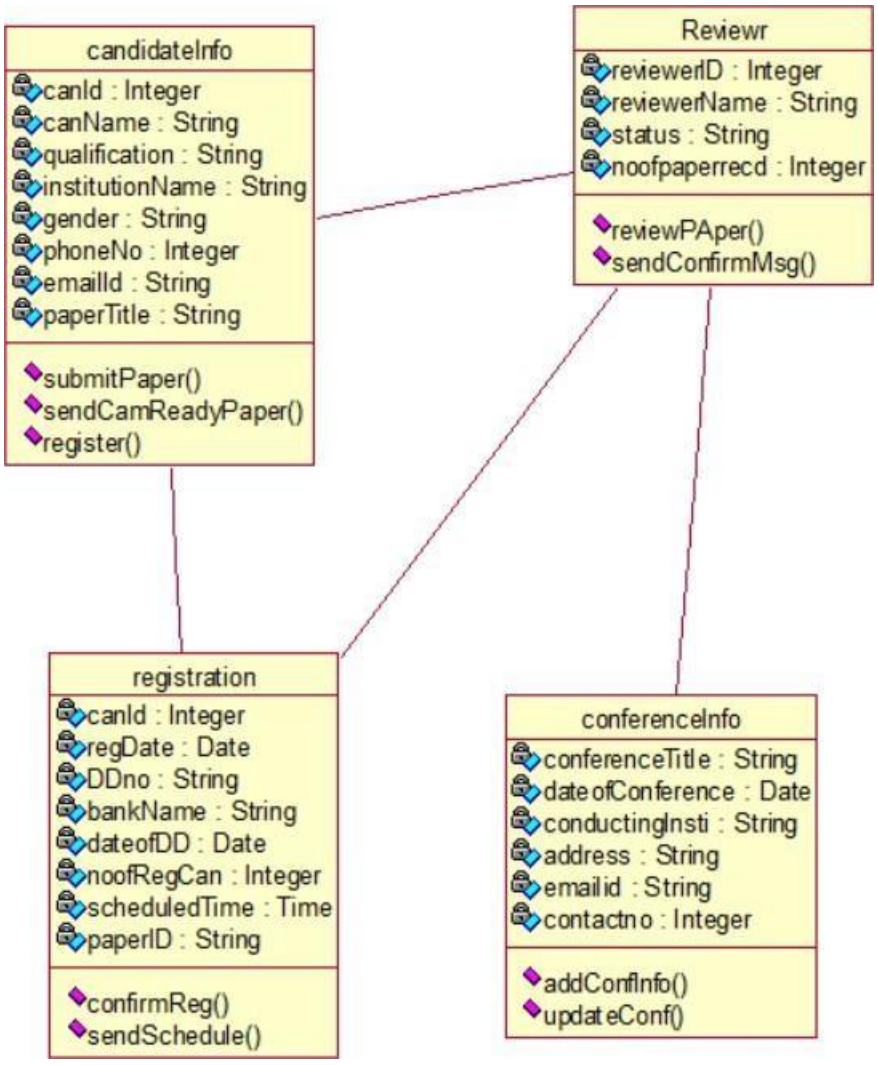

INTERACTION DIAGRAM:

It is the combination of sequence and collaboration diagram. It is used to depict the flow of events in the system over a timeline. The interaction diagram is a dynamic model which shows how the system behaves during dynamic execution.

SEQUENCE DIAGRAM:

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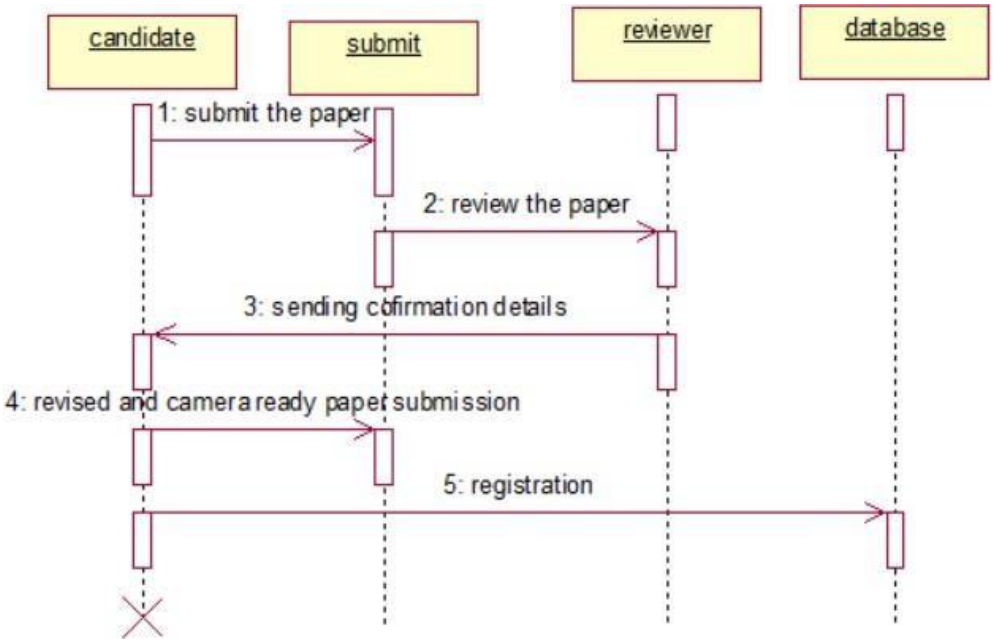

COLLABORATION DIAGRAM:

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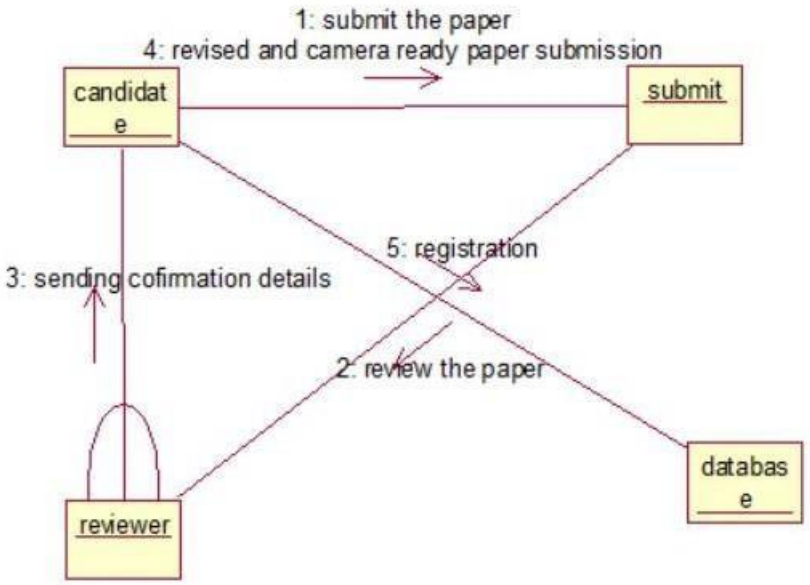

DEPLOYMENT DIAGRAM:

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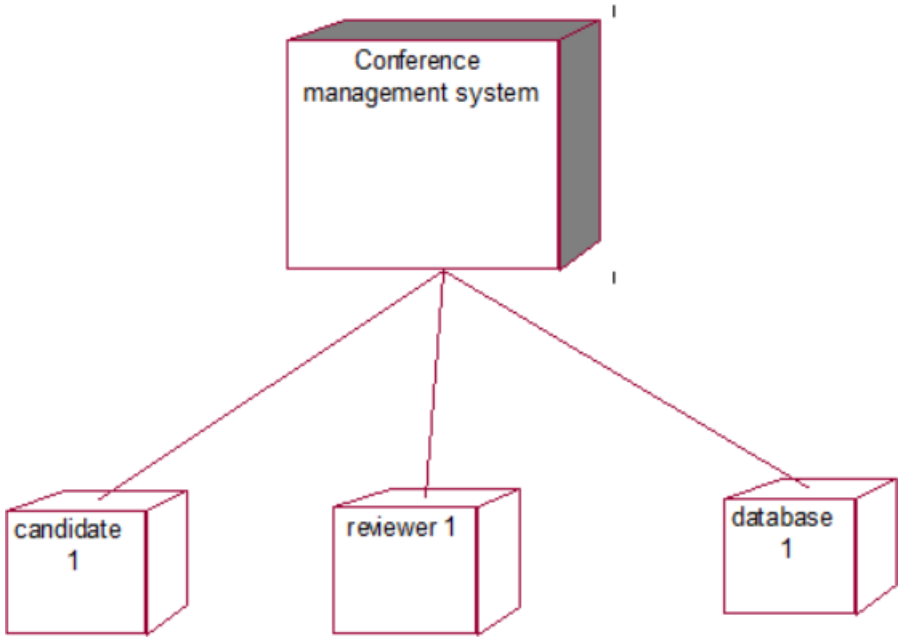

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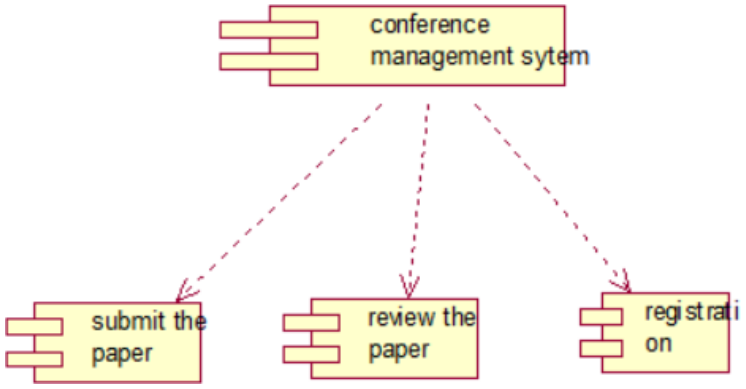


RESULT:

Thus the mini project for Conference management system has been executed successfully and the output is verified.

Ex. No: 13	BPO MANAGEMENT SYSTEM
Date:17-03-2021	

AIM:

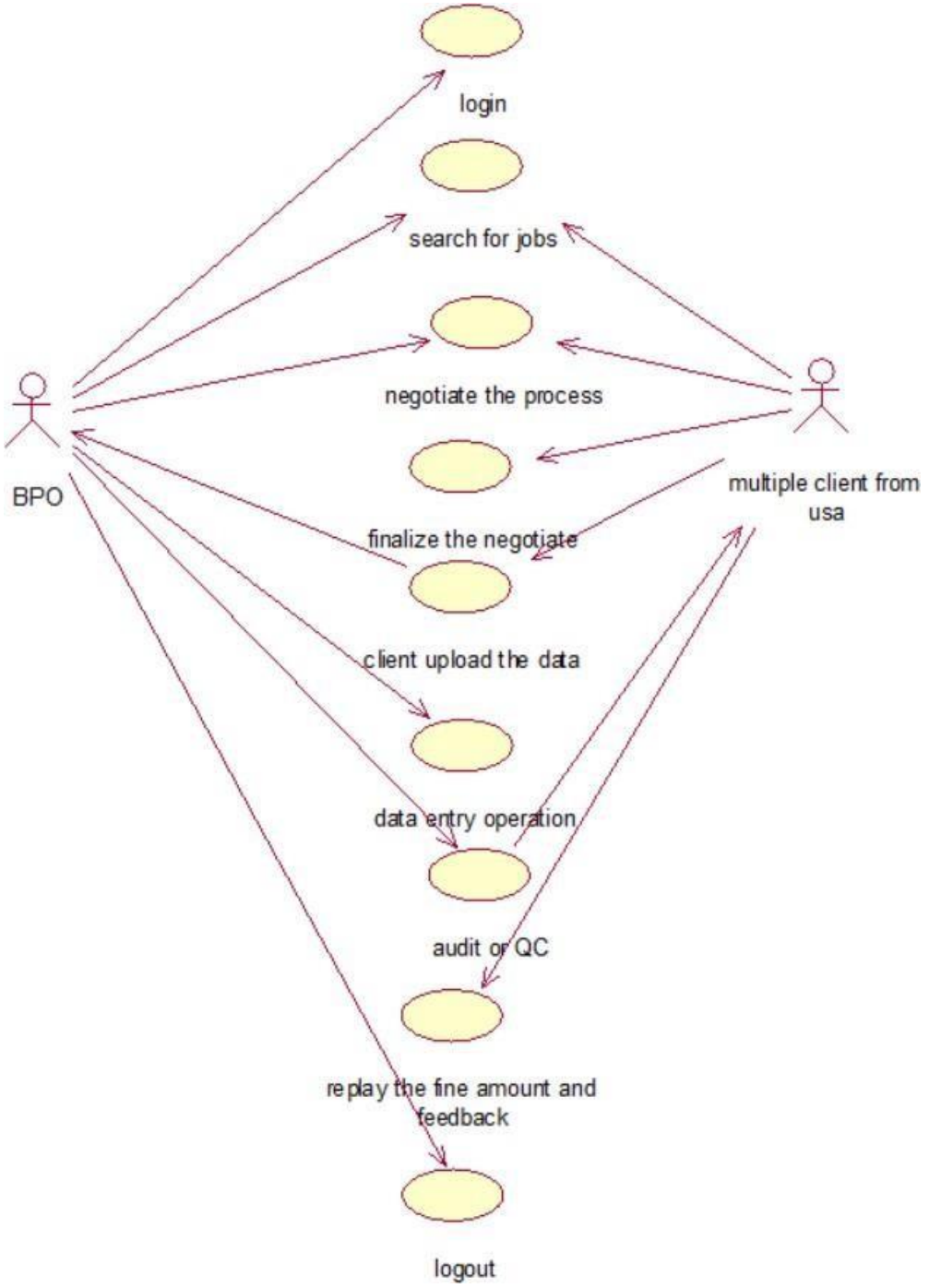
To implement a software for BPO management system.

PROBLEM STATEMENT:

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

USE-CASE DIAGRAM:

The functionality of a system can be described in a number of different use-cases, each of which represents a specific flow of events in a system. It is a graph of actors, a set of use-cases enclosed in a boundary, communication, associations between the actors and the use-cases, and generalization among the use-cases.



CLASS DIAGRAM:

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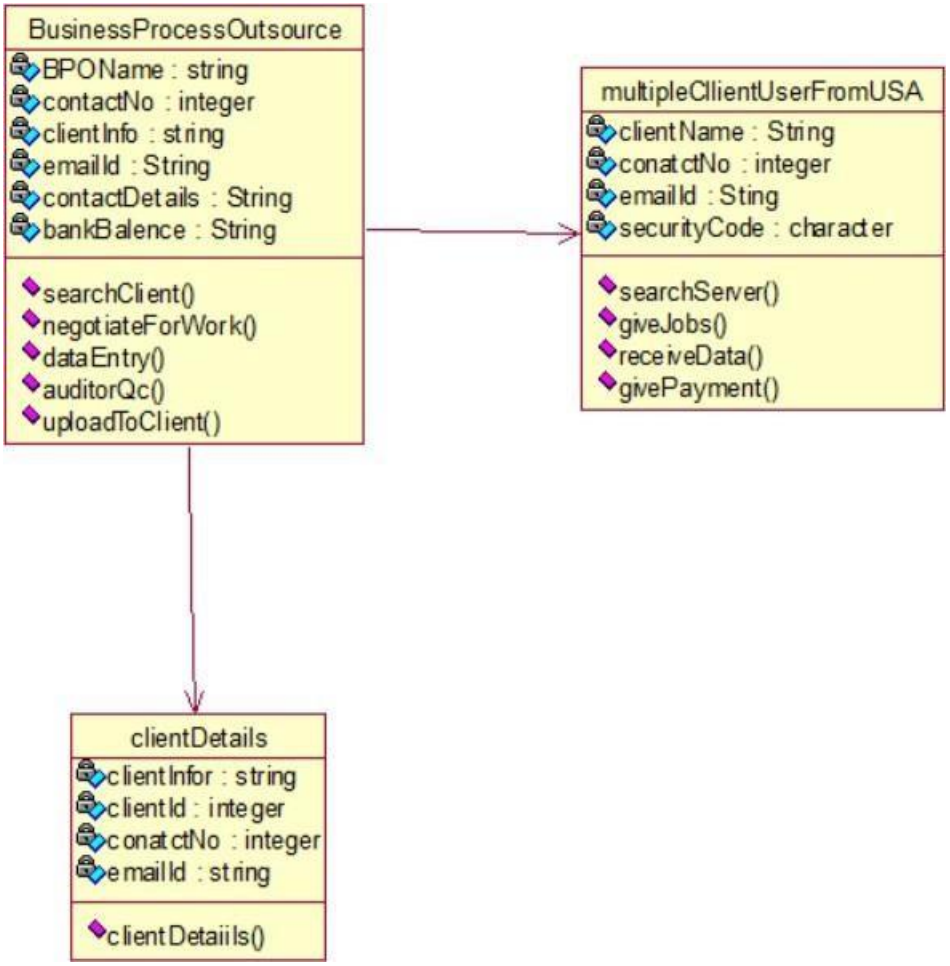

INTERACTION DIAGRAM:

It is the combination of sequence and collaboration diagram. It is used to depict the flow of events in the system over a timeline. The interaction diagram is a dynamic model which shows how the system behaves during dynamic execution.

SEQUENCE DIAGRAM:

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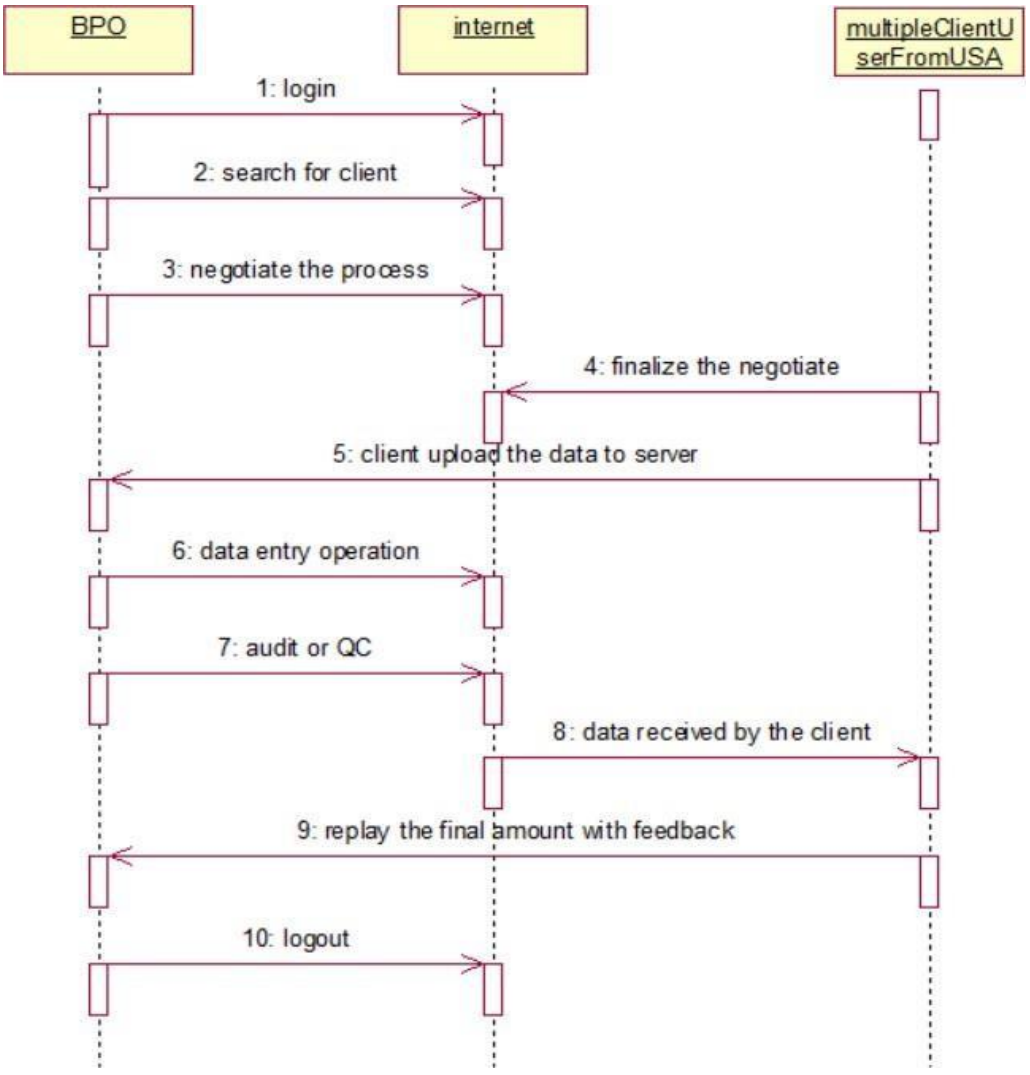

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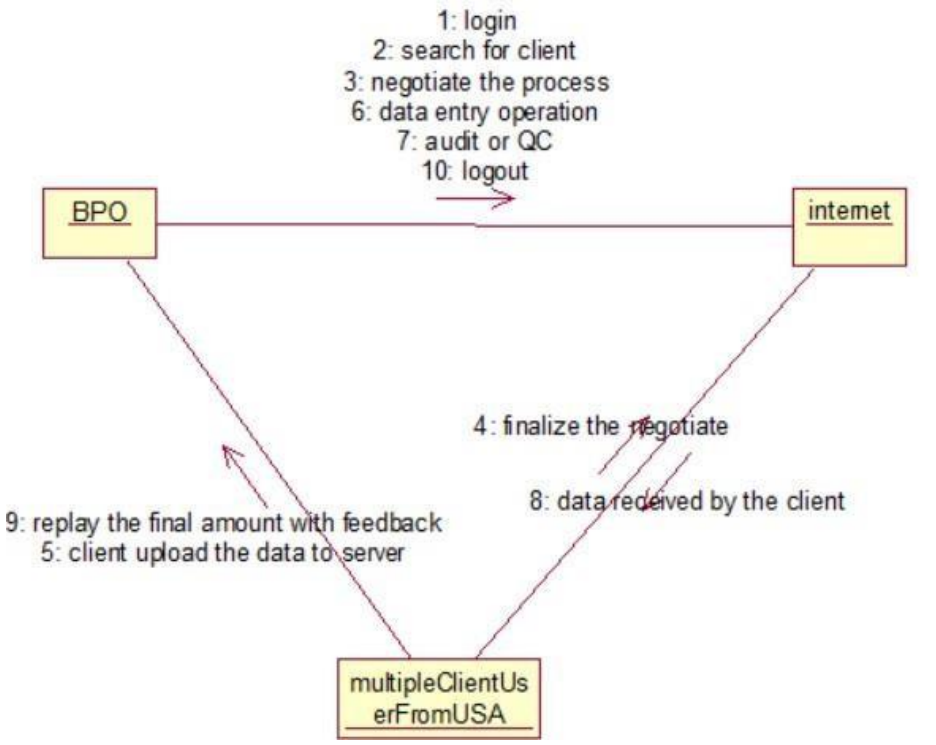
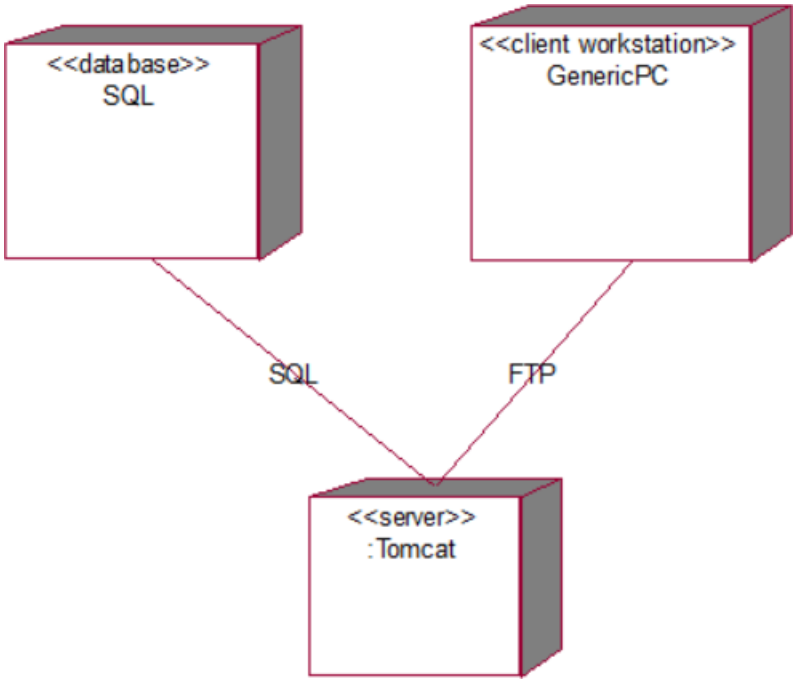


DEPLOYMENT DIAGRAM:

Deployment diagrams are used to visualize the topology of the physical components of a system where the software components are deployed.



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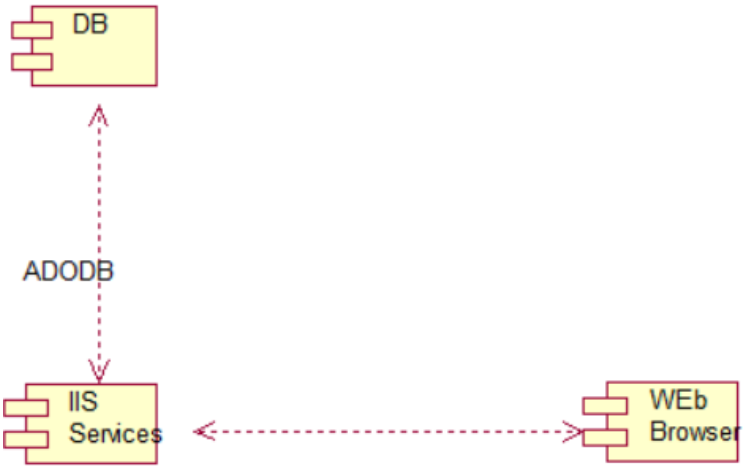


RESULT:

Thus the mini project for BPO management system has been executed successfully and the output is verified.

Ex. No: 14	LIBRARY MANAGEMENT SYSTEM
Date:17-03-2021	

AIM:

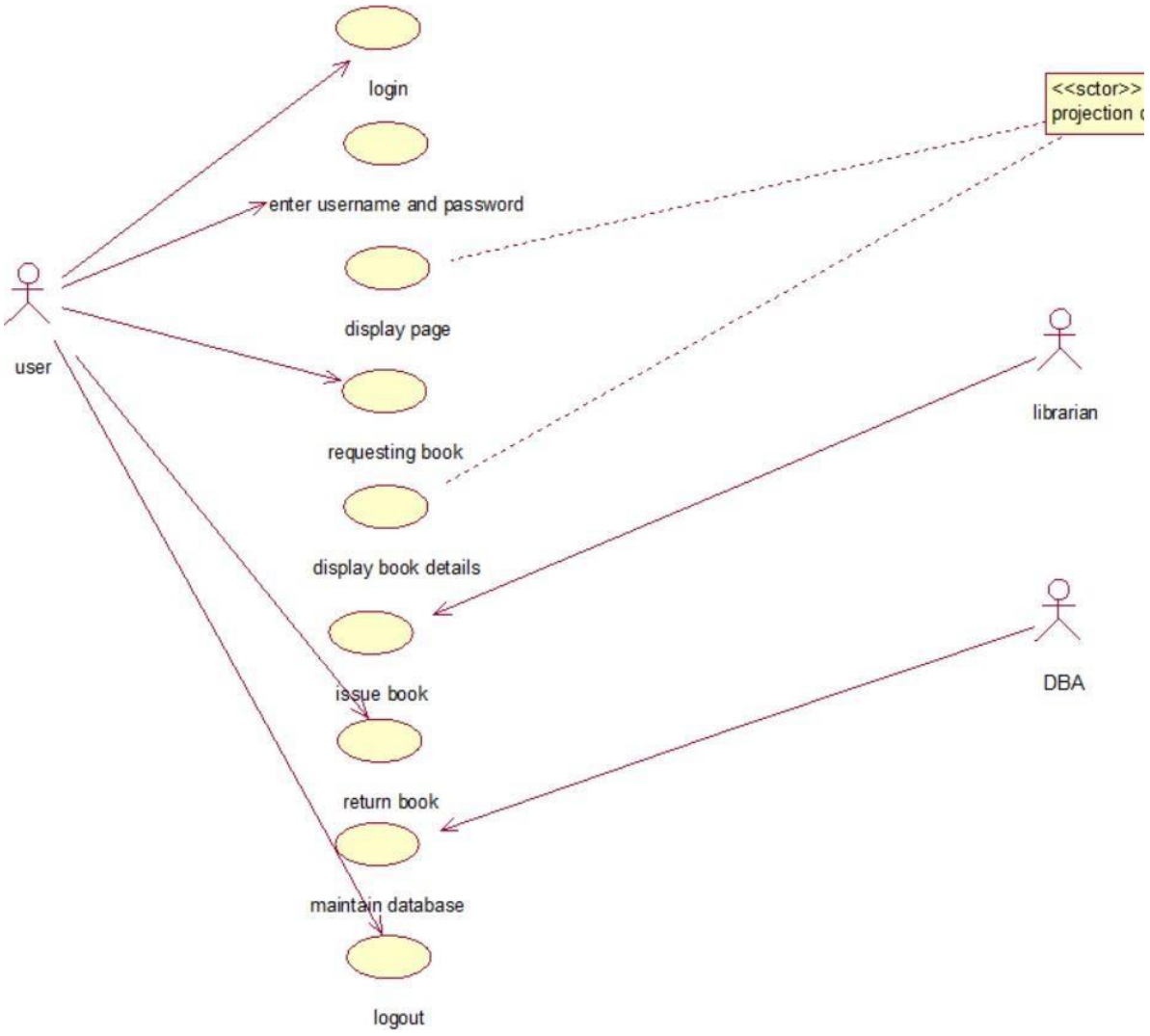
To design an object oriented model for Library Management System using Rational Rose software and to implement it using Java.

PROBLEM STATEMENT:

The library management system is a software system that issues books and magazines to registered students only. The student has to login after getting registered to the system. The borrower of the book can perform various functions such as searching for desired book, get the issued book and return the book.

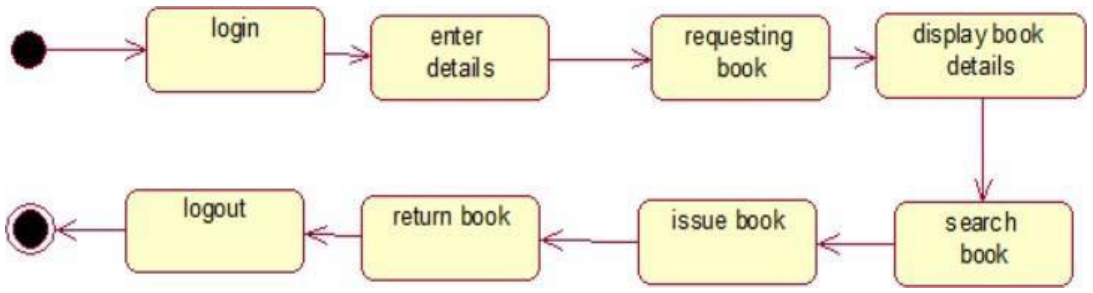
USE-CASE DIAGRAM:

The functionality of a system can be described in a number of different use-cases, each of which represents a specific flow of events in a system. It is a graph of actors, a set of use-cases enclosed in a boundary, communication, associations between the actors and the use-cases, and generalization among the use-cases.



STATE CHART DIAGRAM:

The purpose of state chart diagram is to understand the algorithm involved in performing a method. It is also called as state diagram. A state is represented as a round box, which may contain one or more compartments. An initial state is represented as small dot. A final state is represented as circle surrounding a small dot. The state chart diagram involves eight stages such as login, enter details, requesting for book, display book details, search book, issue book, return book and logout.



CLASS DIAGRAM:

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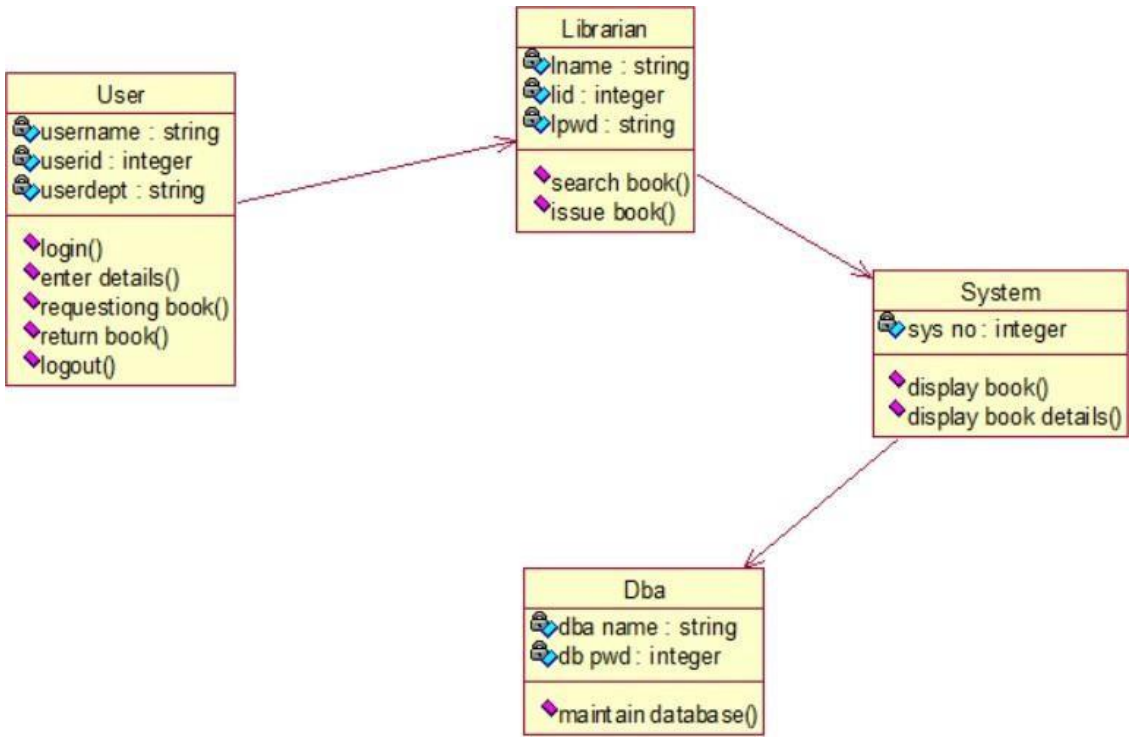

INTERACTION DIAGRAM:

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SEQUENCE DIAGRAM:

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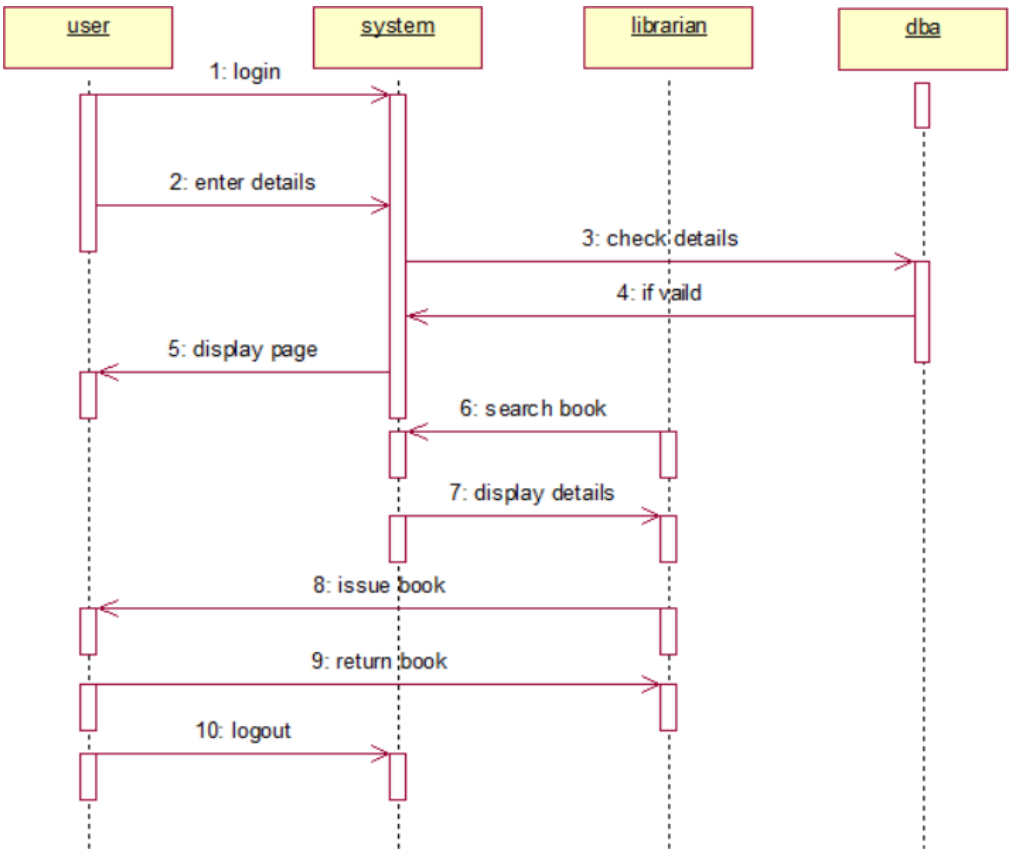
Here the sequence starts with interaction between user and the system followed by database. Once the book have been selected the next half of sequence starts between librarian and user followed by database.



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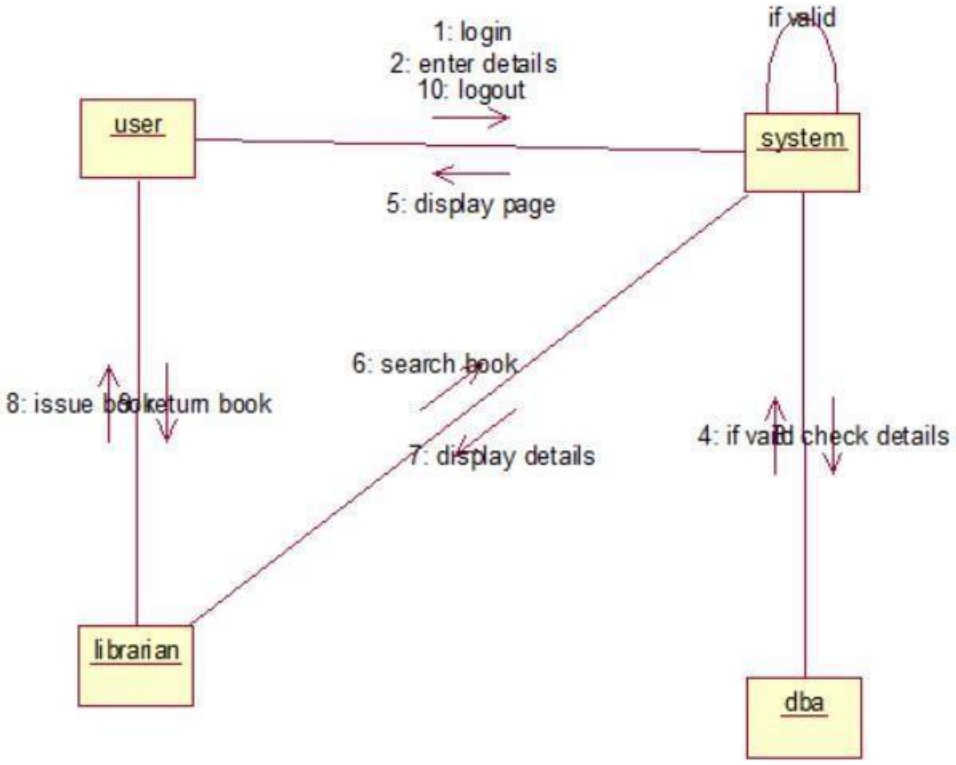
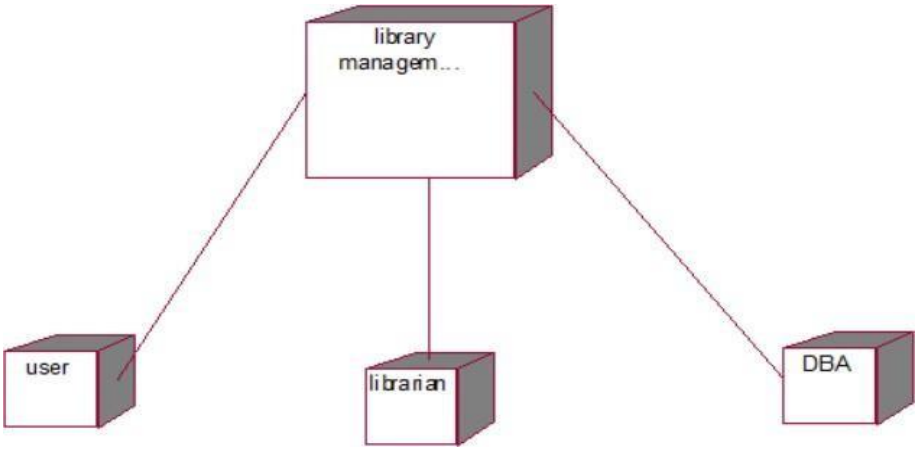


DEPLOYMENT DIAGRAM:

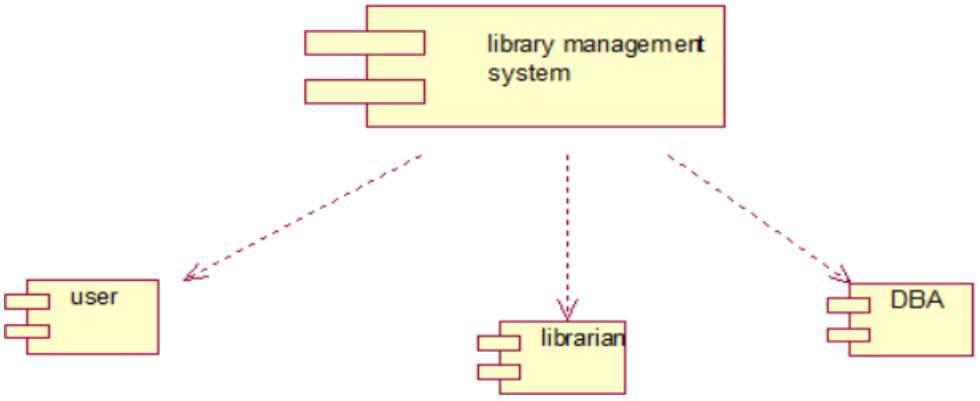
Deployment diagrams are used to visualize the topology of the physical components of a system where the software components are deployed. The device node is library management system and execution environment nodes are user, librarian, system and DBA.



COMPONENT DIAGRAM:

Component diagrams are used to visualize the organization and relationships.

Component diagram carries the most important living actors of the system i.e, user, librarian and DBA.



RESULT:

Thus the various UML diagrams for library management system were drawn successfully and the output is verified.

Ex. No: 15	STUDENT INFORMATION SYSTEM
Date:17-03-2021	

AIM:

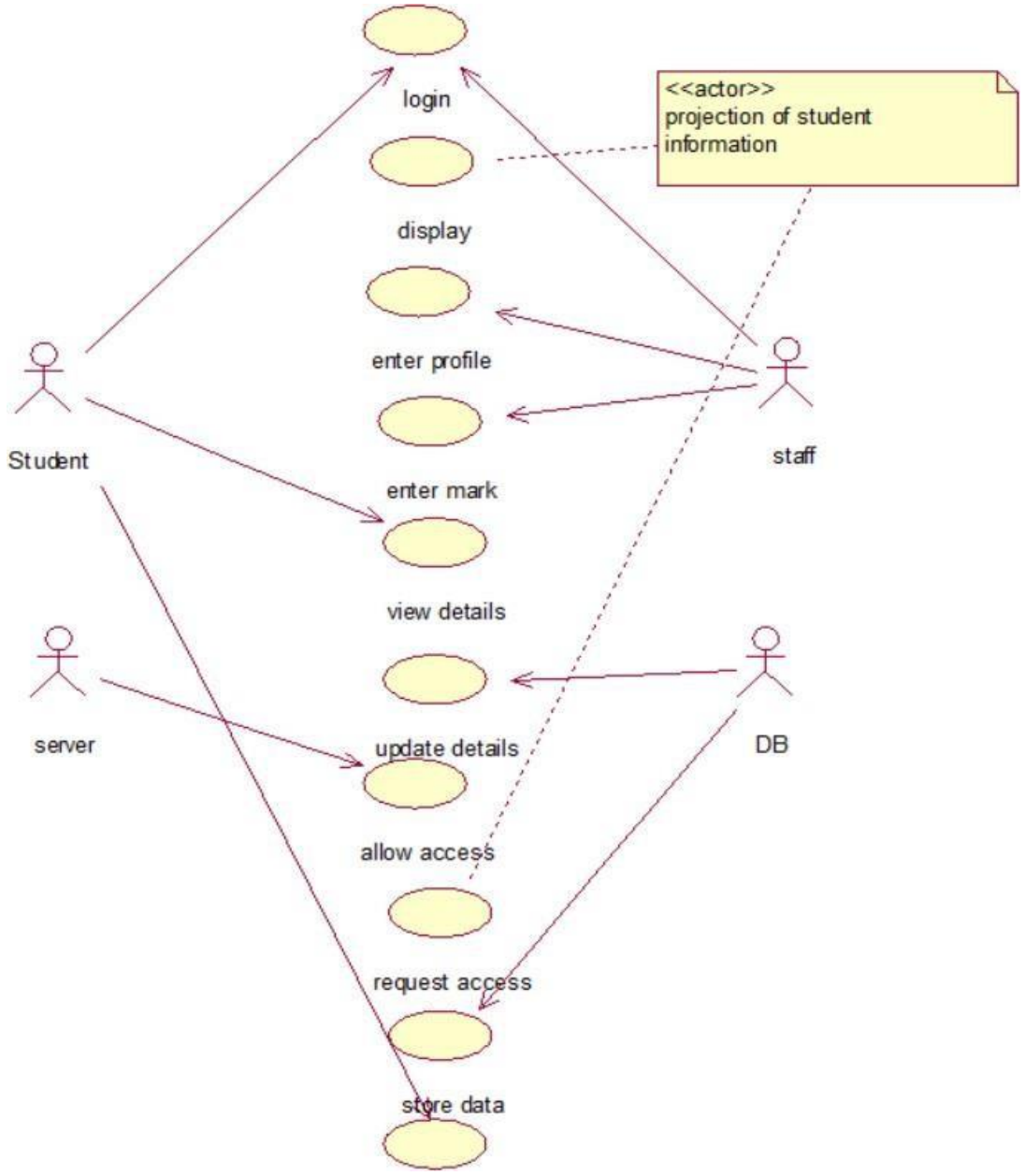
To design an object oriented model for Student information system using Rational Rose software.

PROBLEM STATEMENT:

The student must register by entering the name and password to login the form. The admin select the particular student to view the details about that student and maintaining the student details. This process of student information system is described sequentially through following steps. The student registers the system. The admin login to the student information system. He/she search for the list of students. Then select the particular student. Then view the details of that student. After displaying the student details then logout.

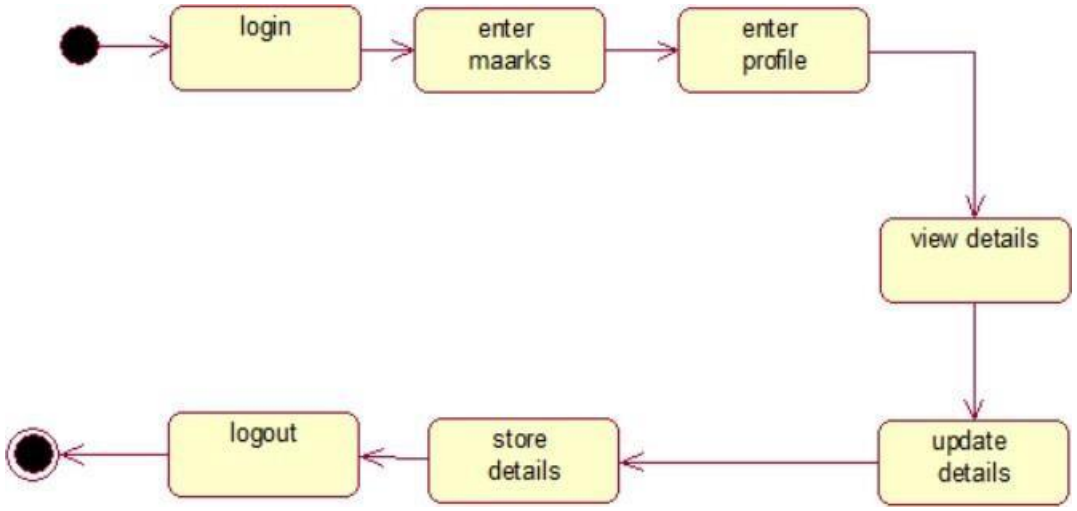
USE-CASE DIAGRAM:

The functionality of a system can be described in a number of different use-cases, each of which represents a specific flow of events in a system. It is a graph of actors, a set of use-cases enclosed in a boundary, communication, associations between the actors and the use-cases, and generalization among the use-cases. The use case diagram consists of various functionality like login, display, enter profile, enter mark, view details, update details, allow access, request access, store details, logout.



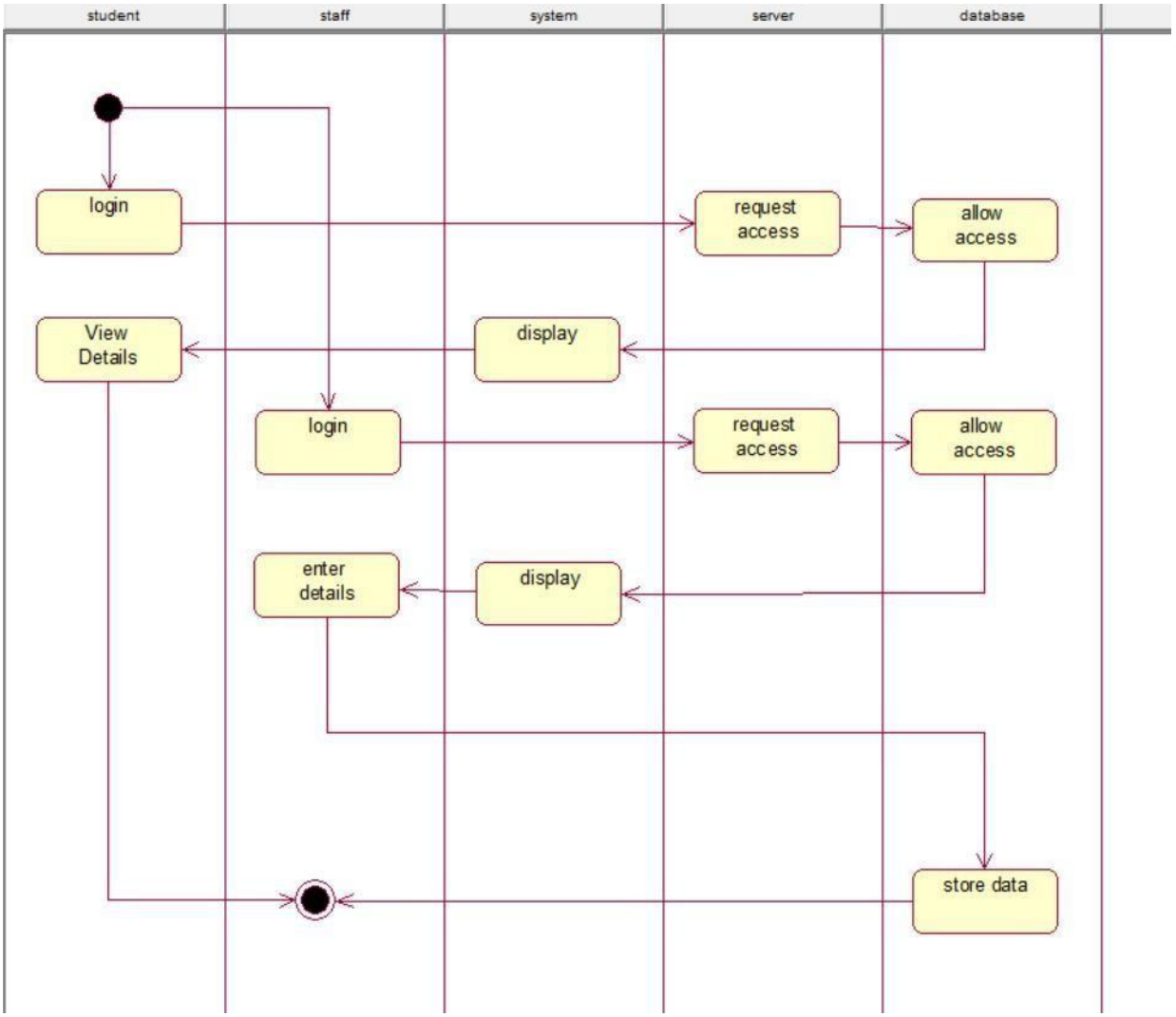
STATE CHART DIAGRAM:

The purpose of state chart diagram is to understand the algorithm involved in performing a method. It is also called as state diagram. A state is represented as a round box, which may contain one or more compartments. An initial state is represented as small dot. A final state is represented as circle surrounding a small dot. The state chart involves six stages such as login, enter mark, enter profile, view details, provide details, update details, store details and logout.



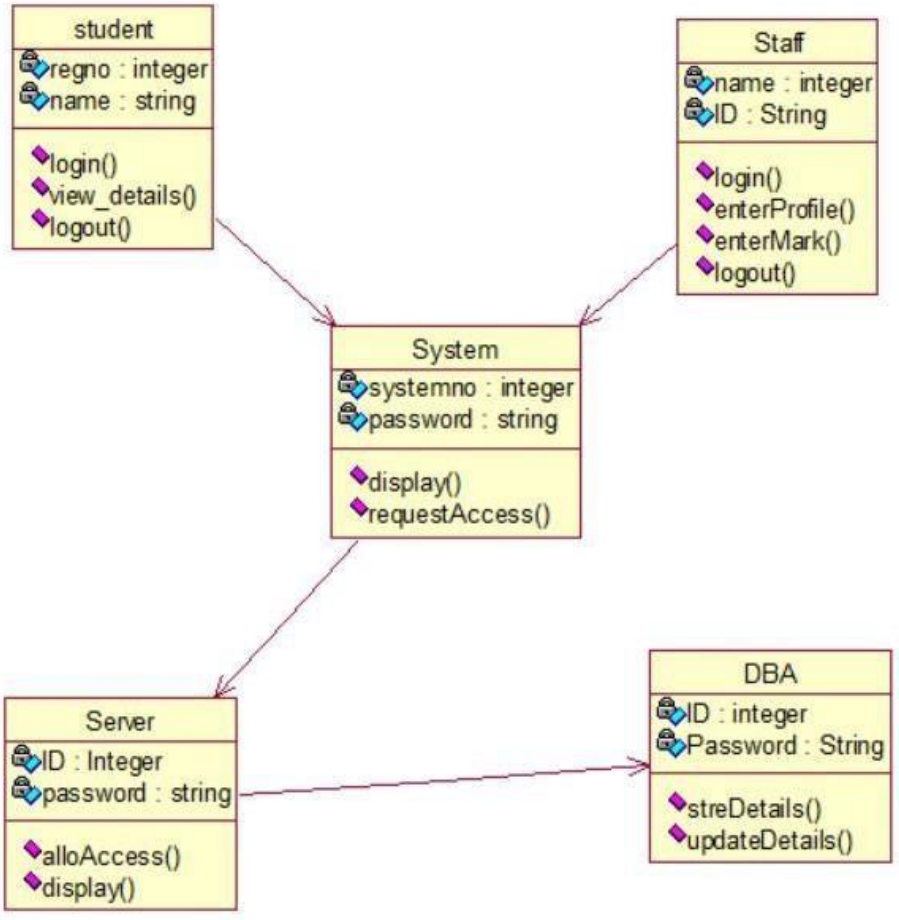
ACTIVITY DIAGRAM:

It shows organization and their dependence among the set of components. These diagrams are particularly useful in connection with workflow and in describing behavior that has a lot of parallel processing. An activity is a state of doing something: either a real-world process, or the execution of a software routine. Here in the activity diagram the student login to the system and view the details of the student. The staff login to the system for entering the student details and update the details in the database. The final interaction is the DBA store the details of the student.



CLASS DIAGRAM:

The class diagram, also referred to as object modeling is the main static analysis diagram. The main task of object modeling is to graphically show what each object will do in the problem domain. The problem domain describes the structure and the relationships among objects. The student information system makes use of the following classes like student, staff, system, DBA and server.

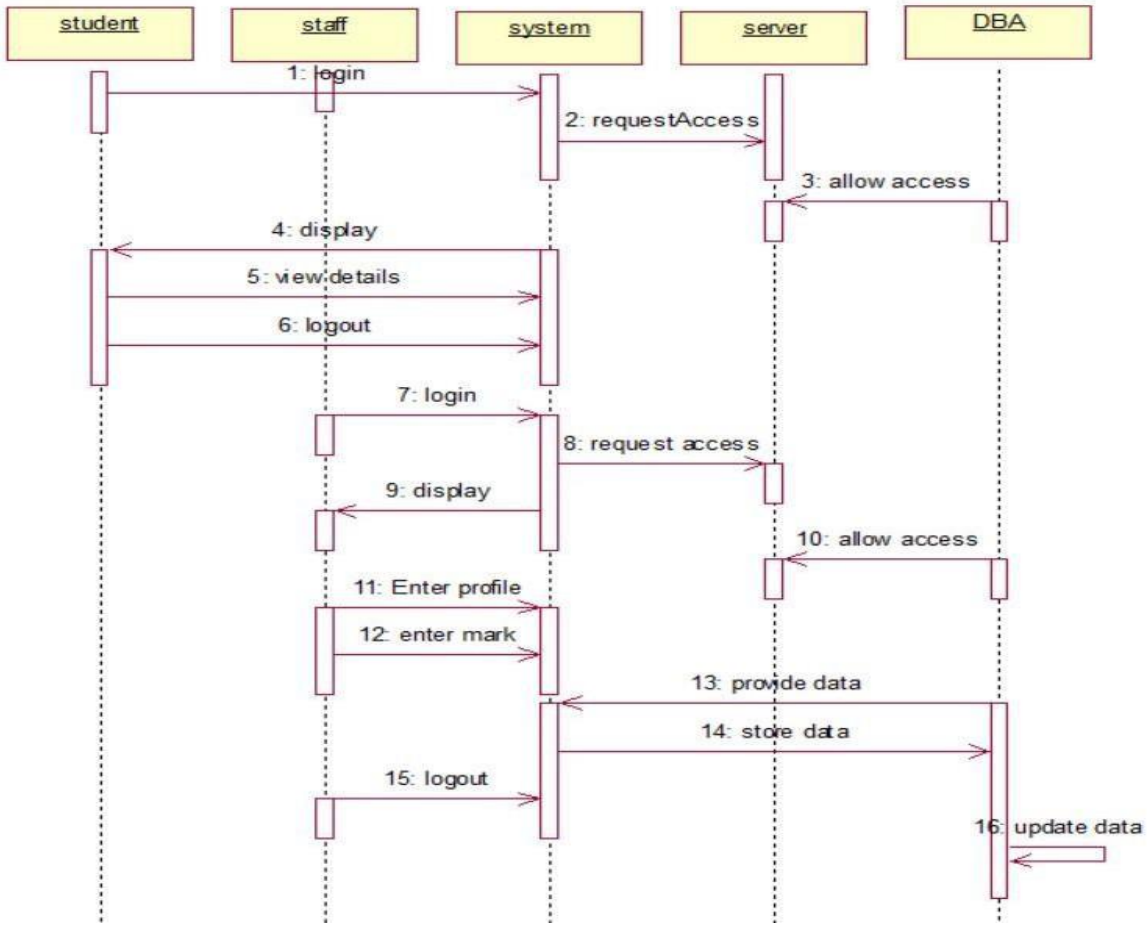


INTERACTION DIAGRAM:

It is the combination of sequence and collaboration diagram. It is used to depict the flow of events in the system over a timeline. The interaction diagram is a dynamic model which shows how the system behaves during dynamic execution.

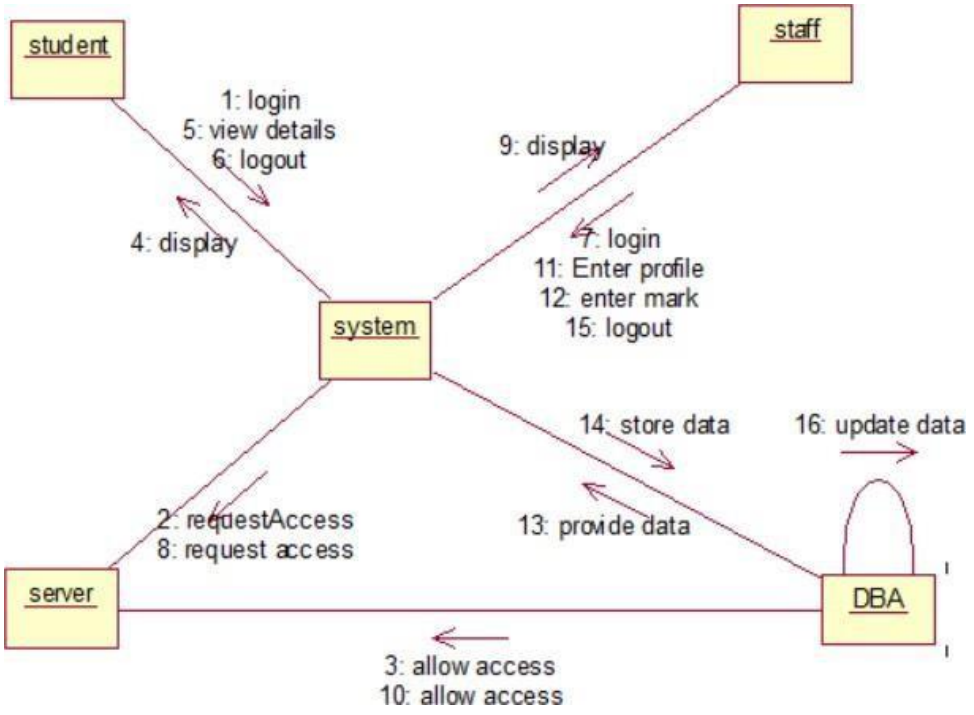
SEQUENCE DIAGRAM:

A Sequence diagram represent the sequence and interaction of a given use case or scenario. Sequence diagram capture most of the information about the system. Here the sequence starts between the student and the system. The second half of interaction takes place between staff and system then by police and followed by database. The student first login to the system and then views the details of the details. Staff login to the system enter mark and enter the details of the student. DBA store and update the details of the student.



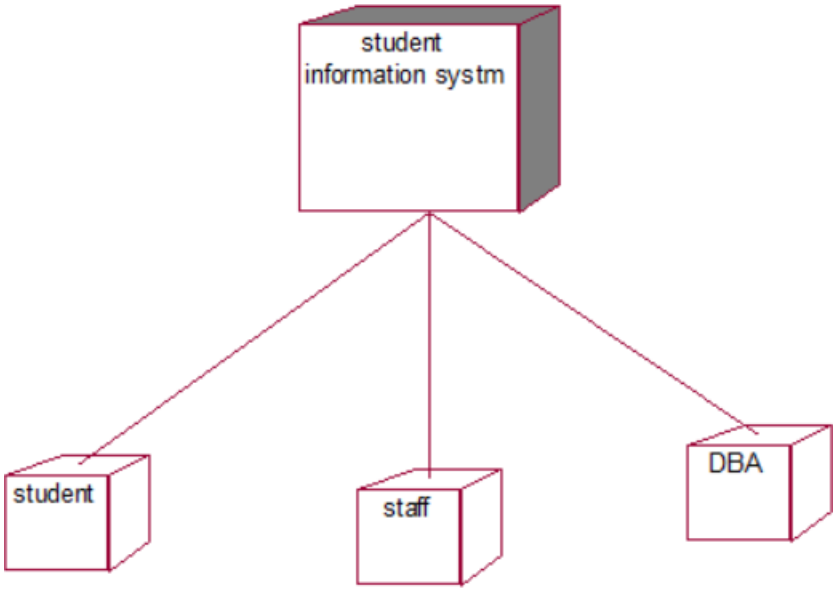
COLLABORATION DIAGRAM:

A collaboration diagram is an interaction diagram that shows the order of messages that implement an operation or a transaction. Collaboration diagram is an interaction diagram that shows the order of messages that implement an operation or a transaction. In collaboration, the sequence is indicated by numbering the message several numbering schemes are available. Login, request access, allow access, display, view details, logout, login, request access, allow access, display, enter profile, enter mark, provide data, logout, store data, update data.



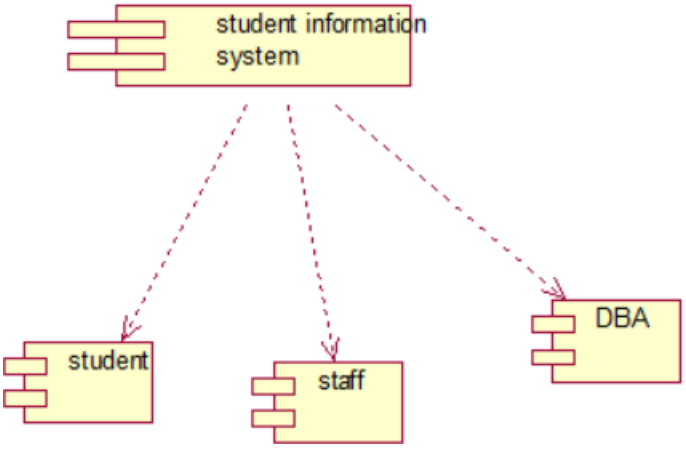
DEPLOYMENT DIAGRAM:

Deployment diagrams are used to visualize the topology of the physical components of a system where the software components are deployed.



COMPONENT DIAGRAM:

Component diagrams are used to visualize the organization and relationships. The main component of the system is student information system and the other components of the system are student, staff and DBA.



RESULT:

Thus the various UML diagrams for student information system were drawn successfully and the output is verified