

# **CASE TOOLS & TESTING LAB**

## **LABORATORY MANUAL**

CLASS : III B.SC (CS)

SEMESTER : VI SEM

SUBJECT COD:SE261



**DEPARTMENT OF COMPUTER SCIENCE**

**ST.JOSEPH'S COLLEGE (ARTS & SCIENCE)**

**KOVUR,CHENNAI-128**

## **SYLLABUS**

Using UML tools produce analysis and design models for

- a. Library Management System
- b. Automatic Teller Machine
- c. Student Information Management
- d. Matrimony Service
- e. Stock Management System

2. Study of Open source testing tool (eg. Selenium, WATIS, Apache JMeter, TestNG )

## **CASE TOOLS AND TESTING LAB**

### **OBJECTIVES:**

- To get familiarized to the usage of UML tool kit.
- To understand the requirements of the software and to map them appropriately to subsequent phases of the software development
- To develop the ability to verify and validate their designs
- To enhance internal & external Engagement
- To achieve continual improvement in Quality Management System

Effectiveness

### **Vision:**

To become the world's most trusted and largest QA and software testing company.

### **Mission:**

- Help clients solve complex testing problems using our technology expertise.
- Build in-house QA Intellectual Property to provide the best solutions to our clients.

### **PROGRAM OUTCOMES:**

- Students must be able to analyze and design the problem at hand.
- Students should be able to use UML tools for the designing the software and test the correctness and soundness of their software through testing tools.

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**EX.NO:1**

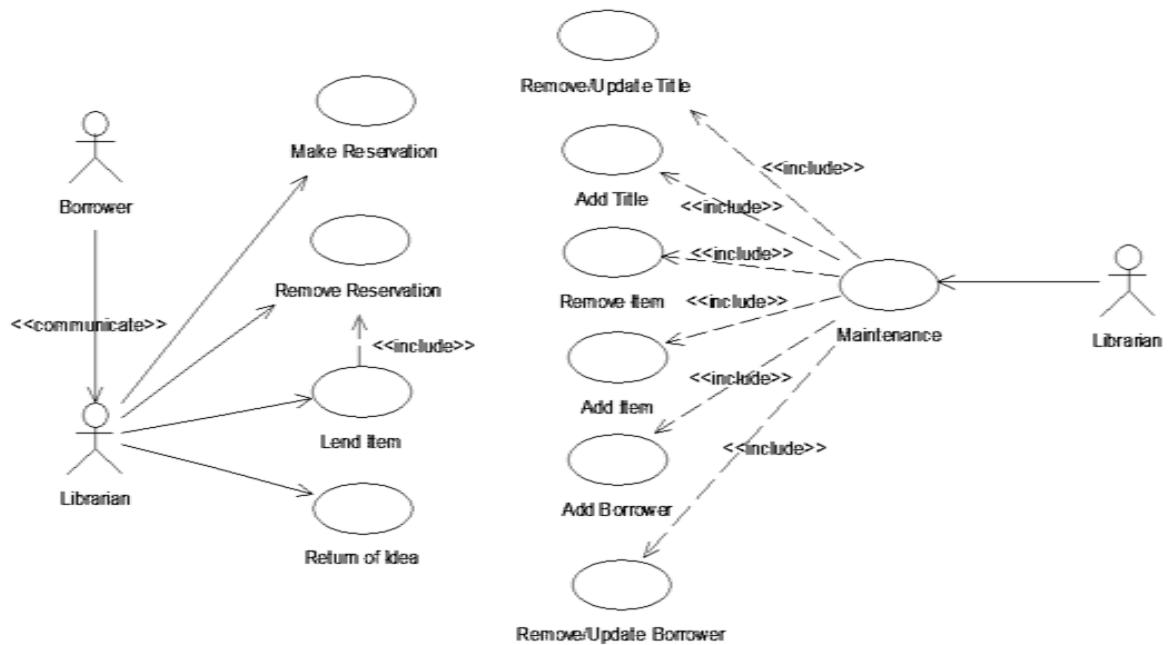
**1. LIBRARY MANAGEMENT SYSTEM**

## AIM:

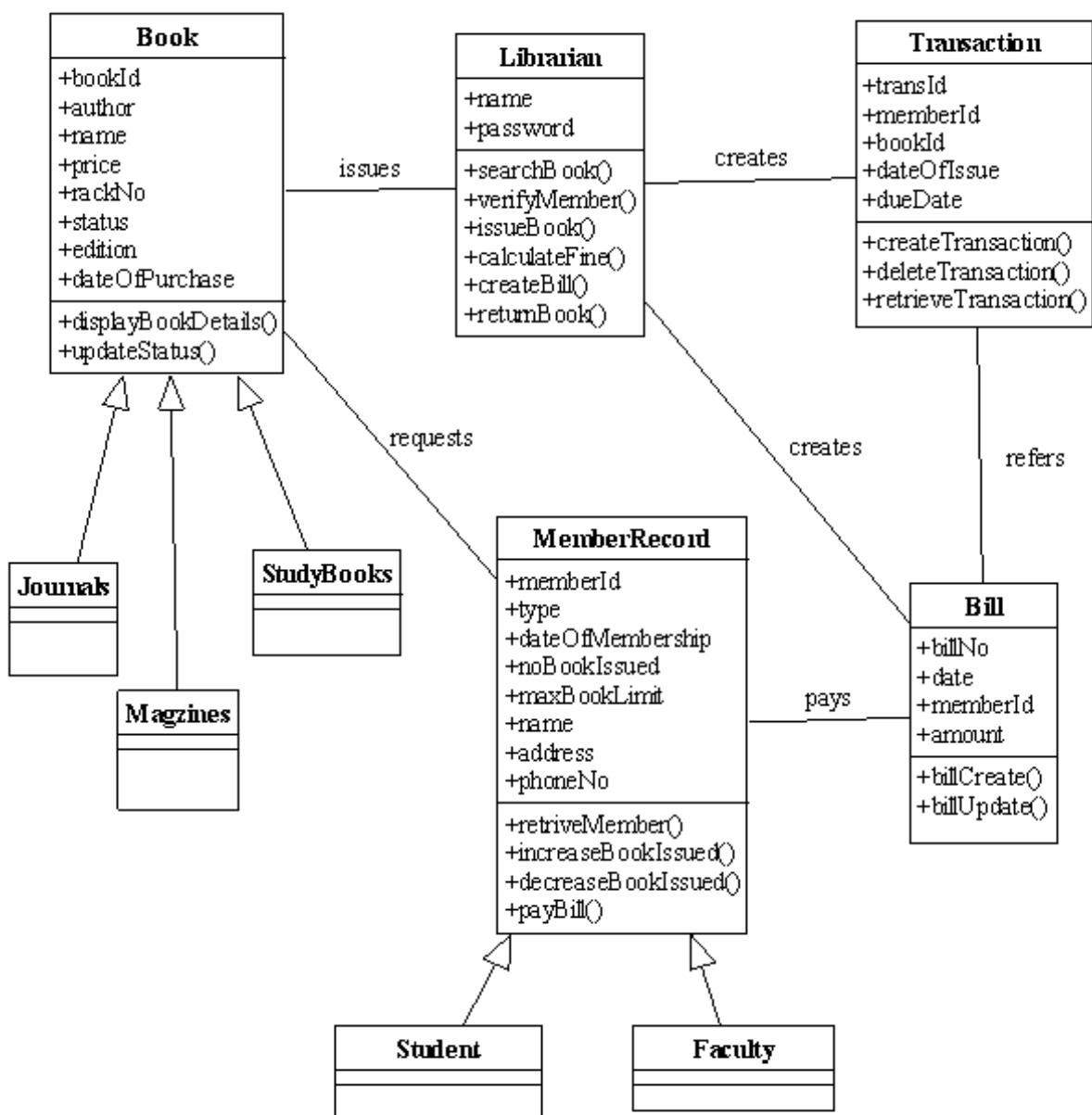
To develop a UML diagram to maintenance Library Management System.

## UML Diagrams:

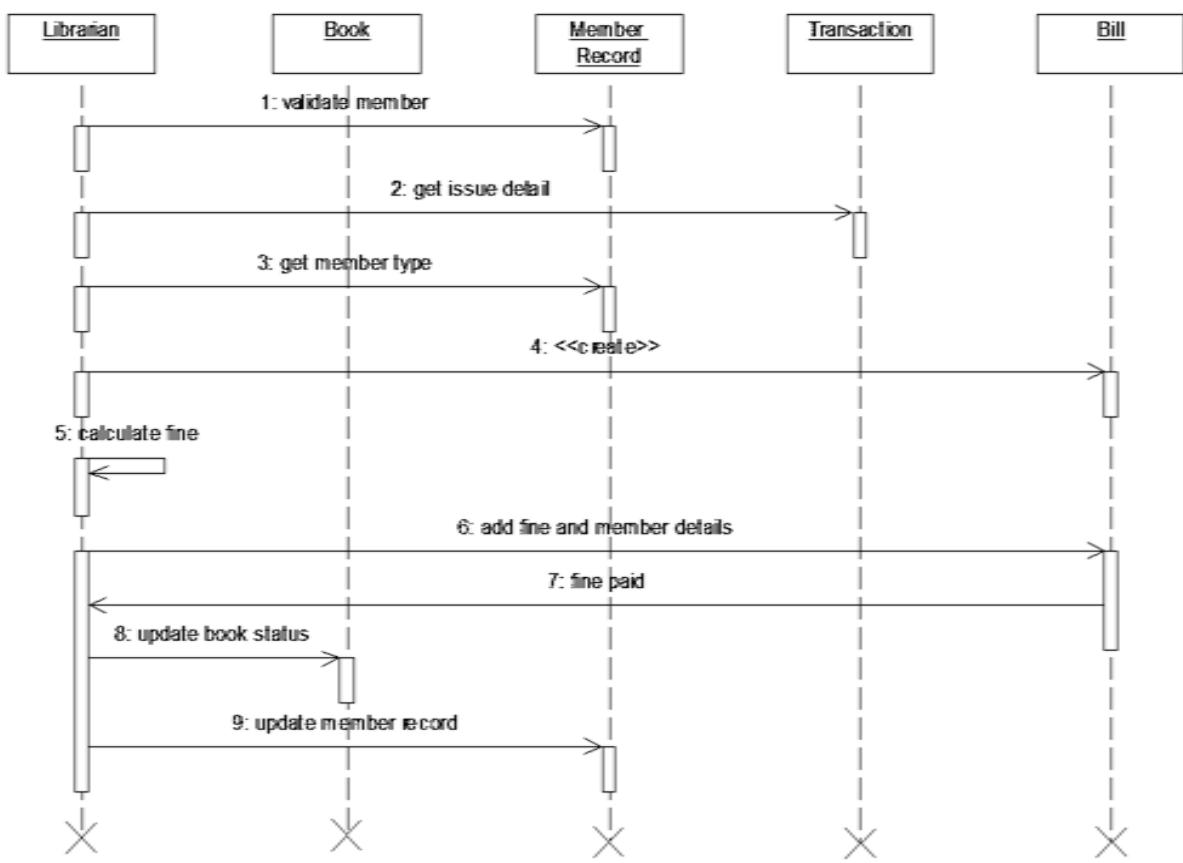
### 1. USE CASE DIAGRAM



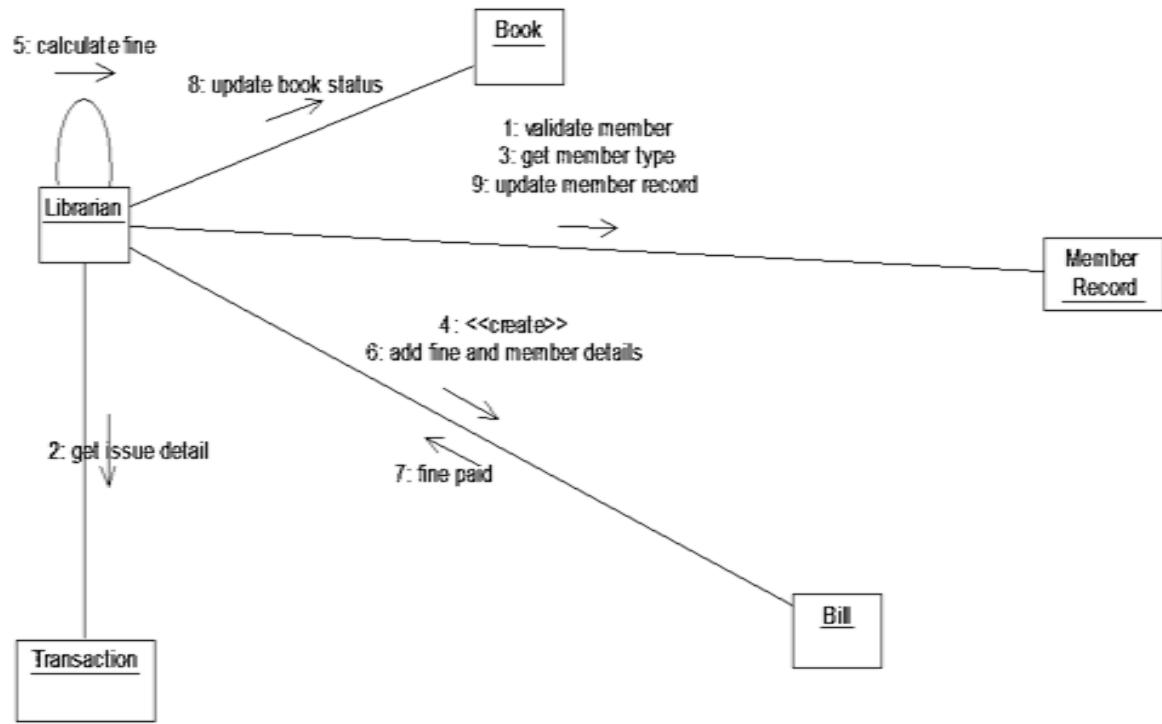
### 2. CLASS DIAGRAM



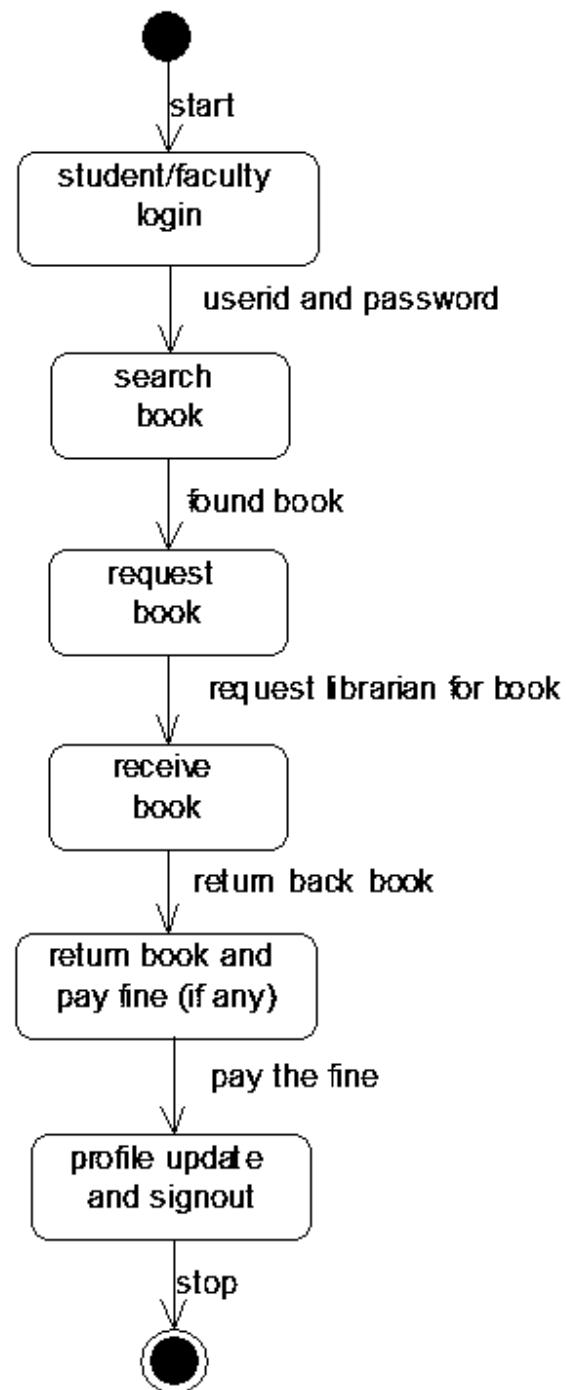
### 3. SEQUENCE DIAGRAM



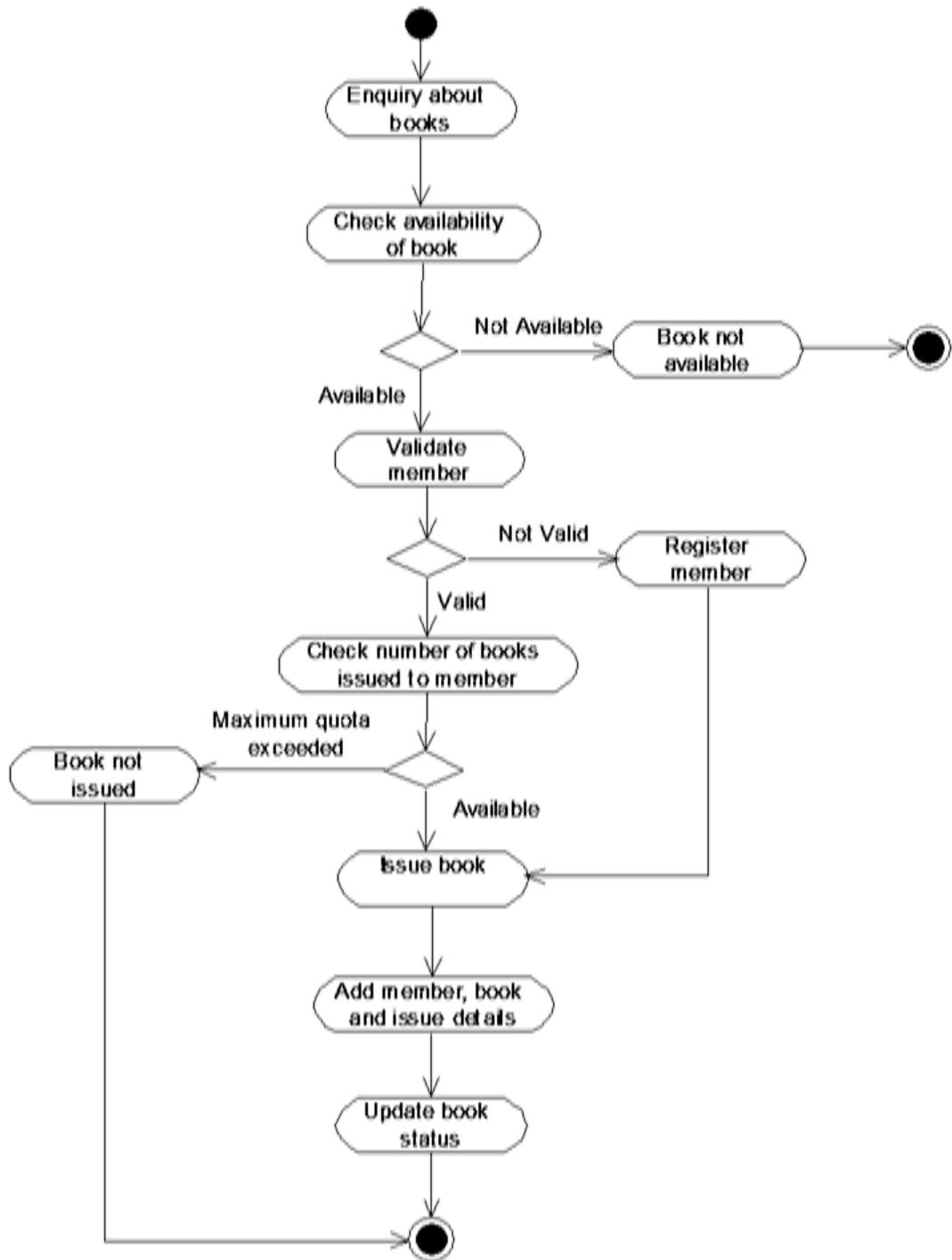
#### 4. COLLABORATION DIAGRAM



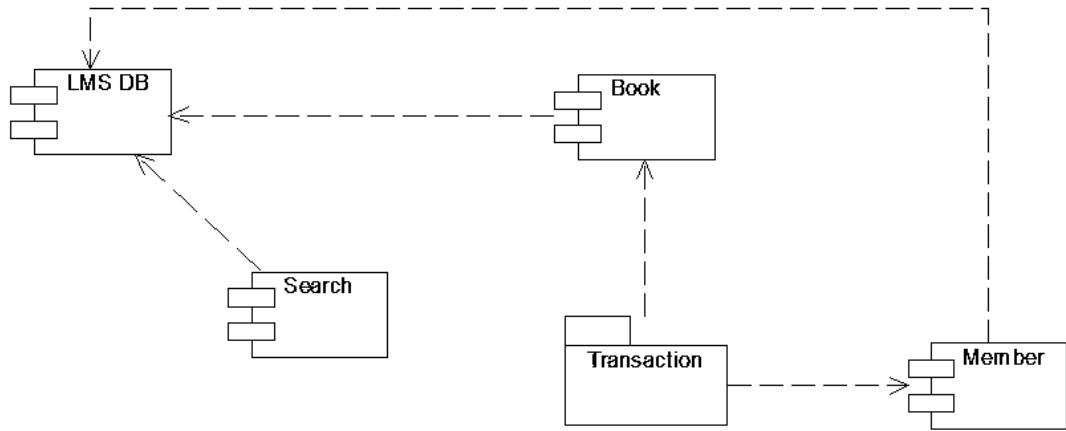
## 5. STATECHART DIAGRAM



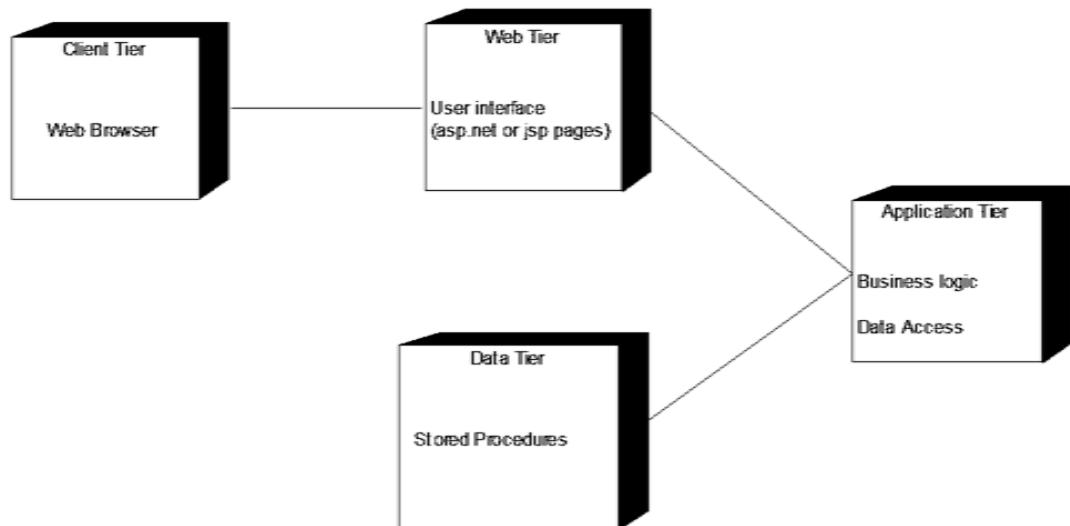
## 6. ACTIVITY DIAGRAM



## 7. COMPONENT DIAGRAM



## 8. DEPLOYMENT DIAGRAM



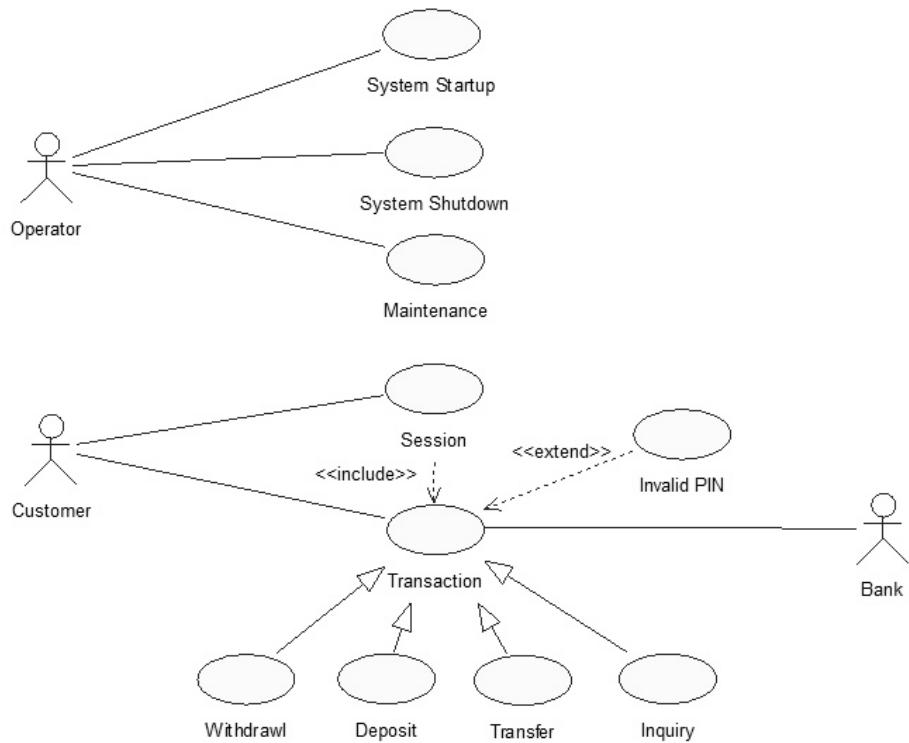
**EX.NO:2**

b. Automatic Teller Machine(ATM)

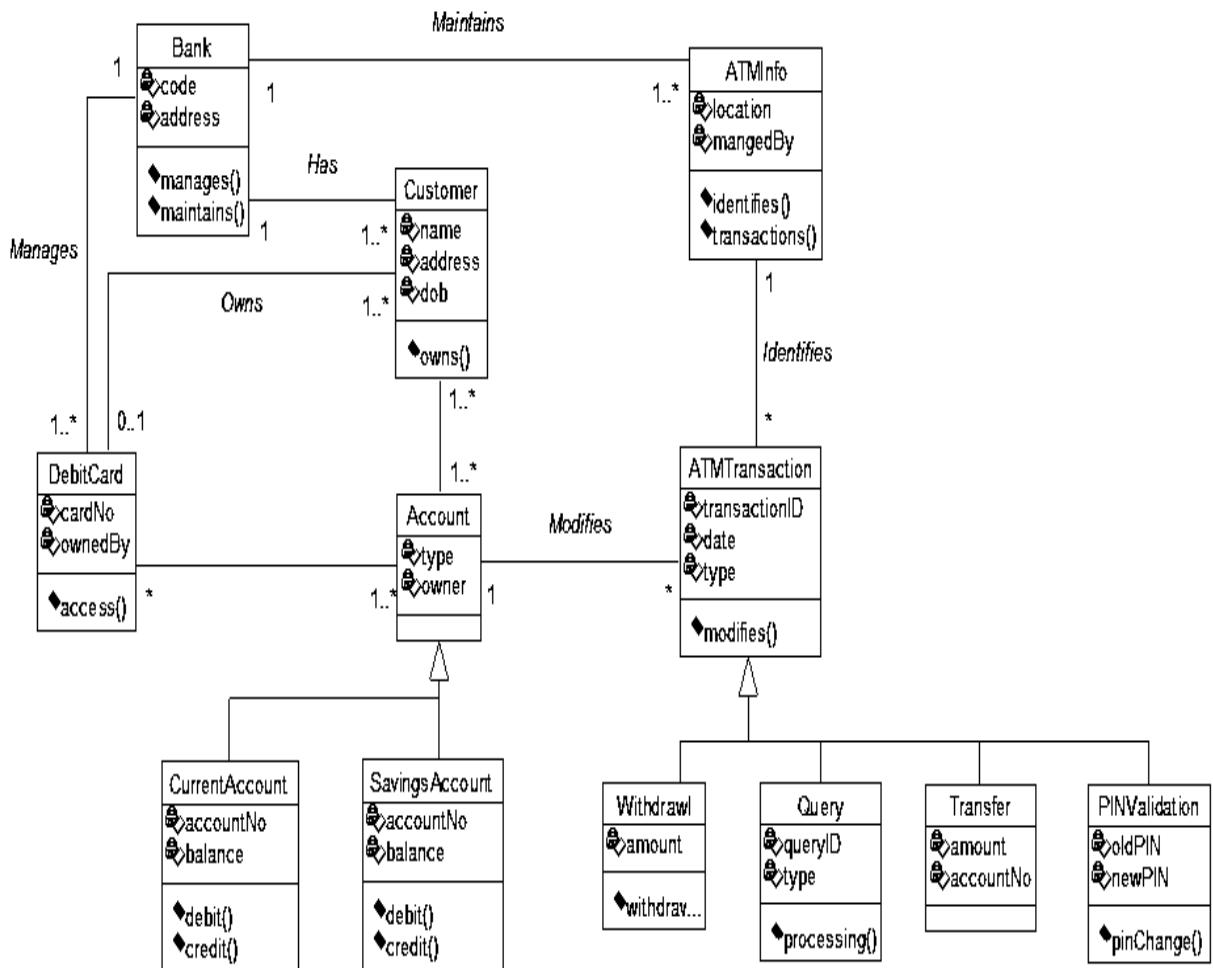
AIM:

To develop a UML diagram to maintenance Automatic Teller Machine(ATM).

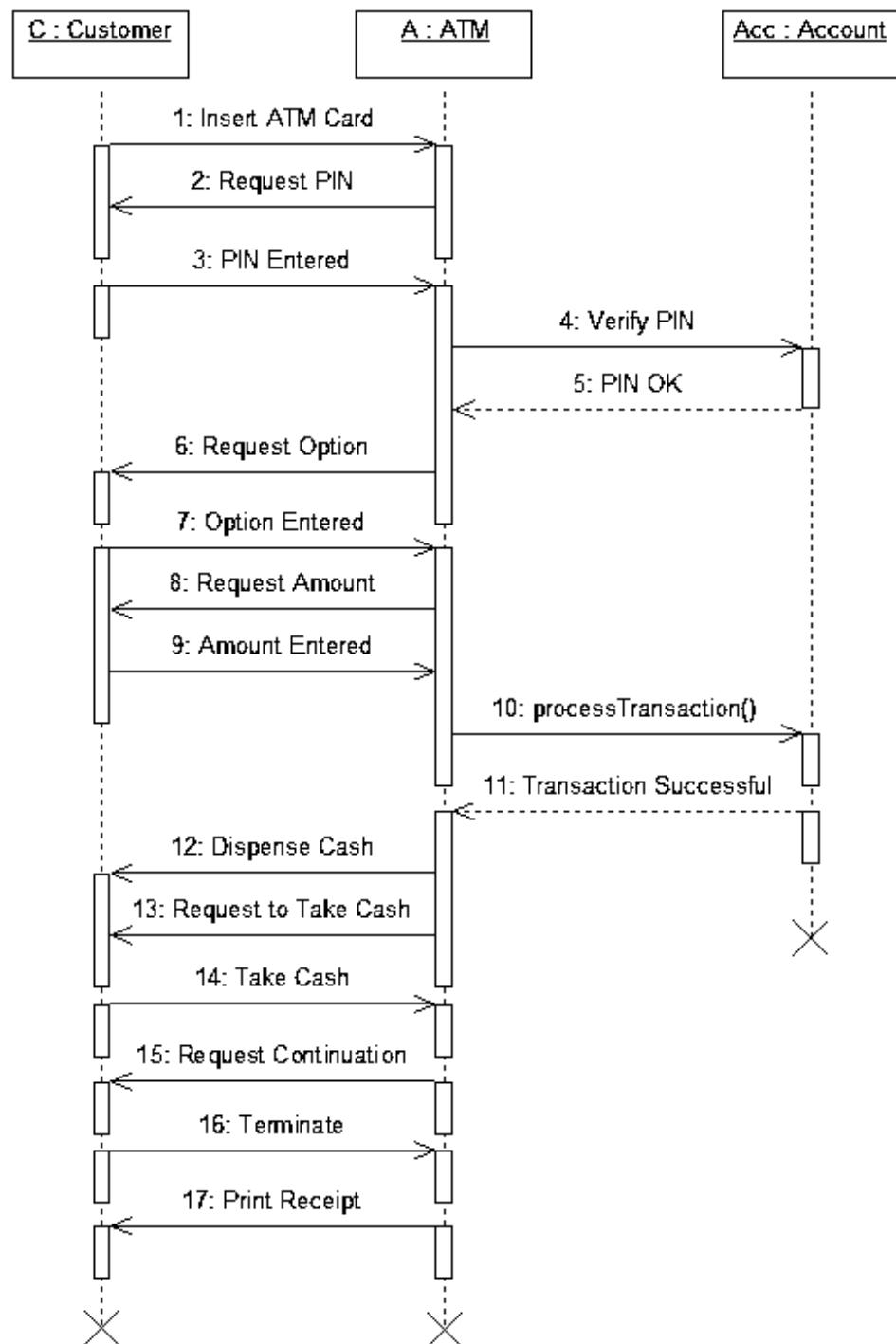
### 1. USE CASE DIAGRAM



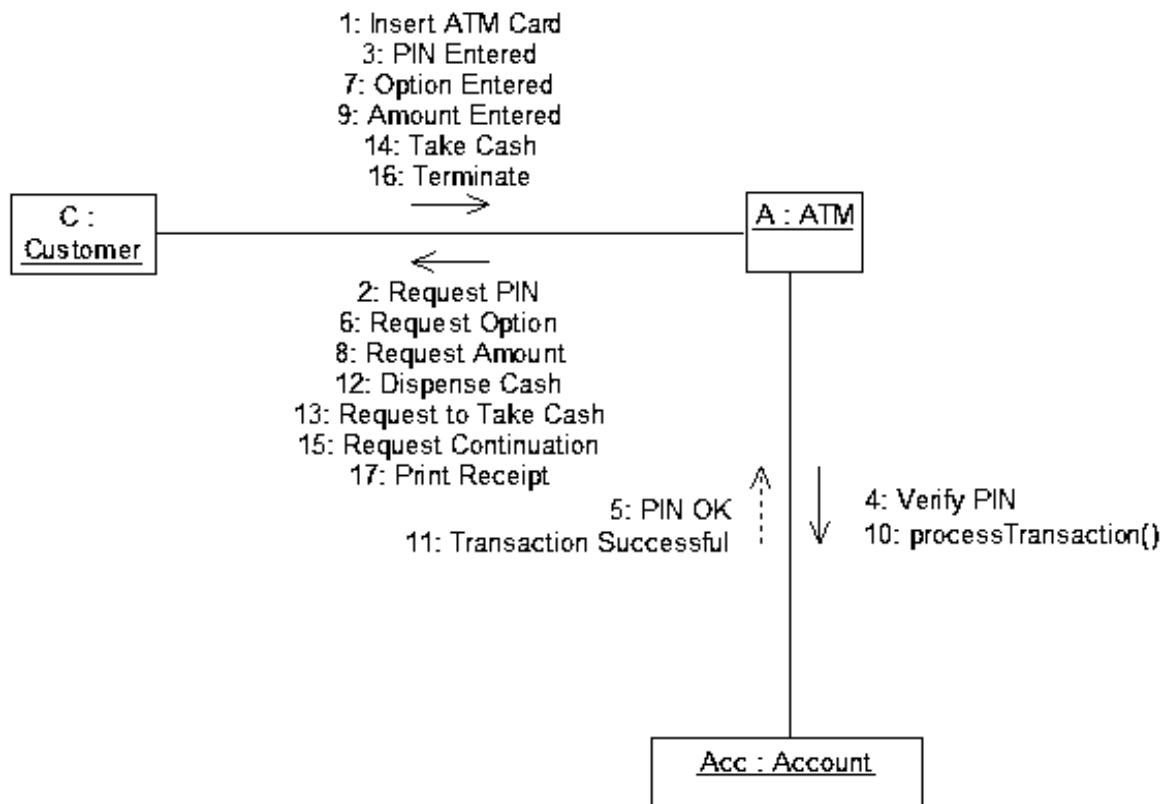
### 2. CLASS DIAGRAM



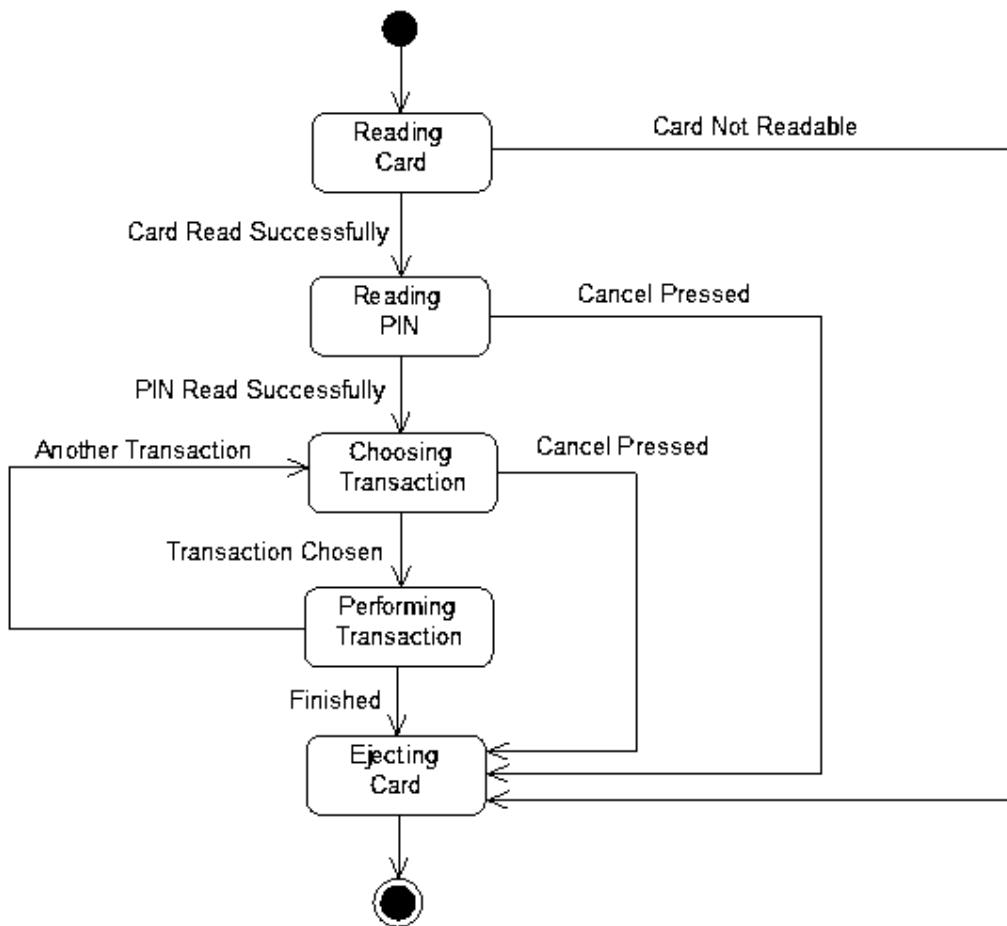
### 3. SEQUENCE DIAGRAM



### 4. COLLABORATION DIAGRAM



## 5. STATECHART DIAGRAM

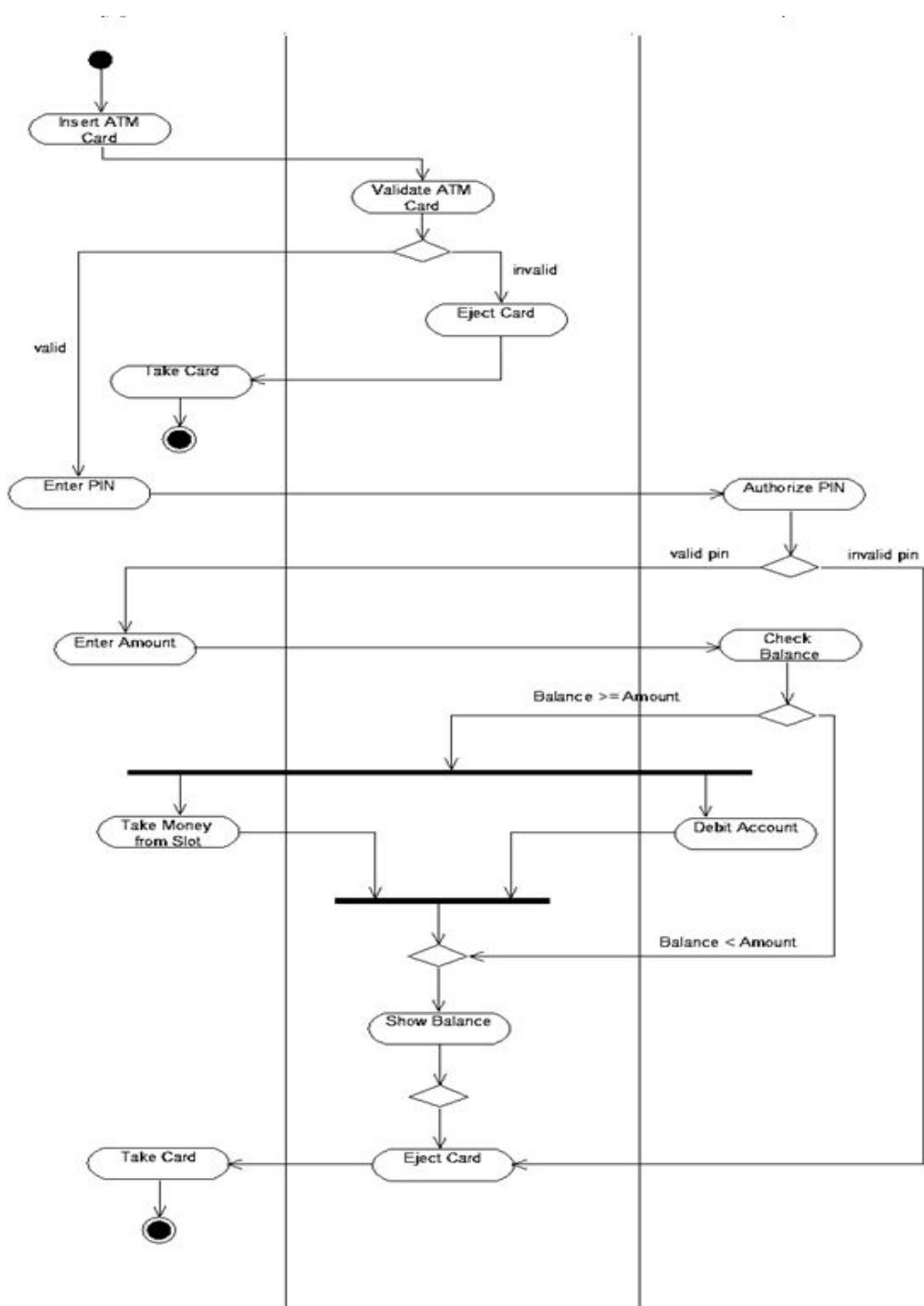


## 6. ACTIVITY DIAGRAM

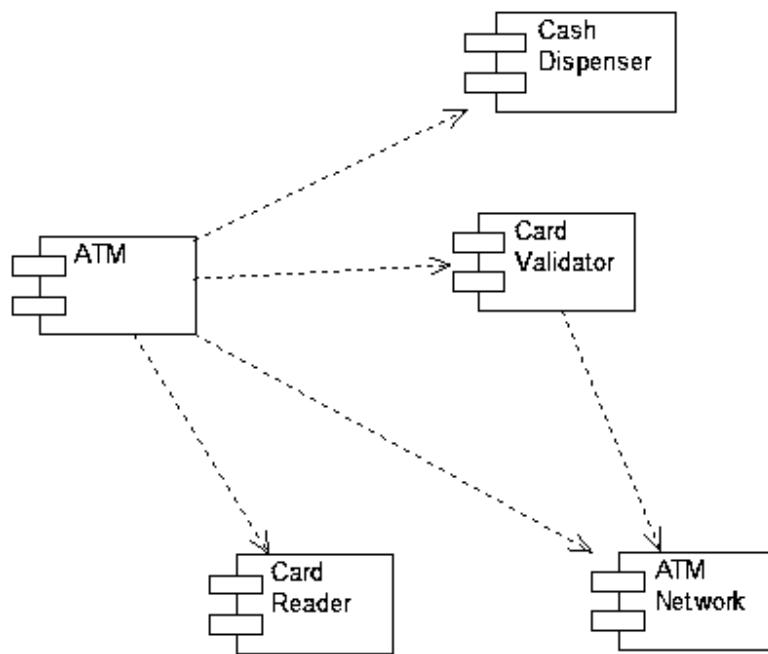
Customer

ATM

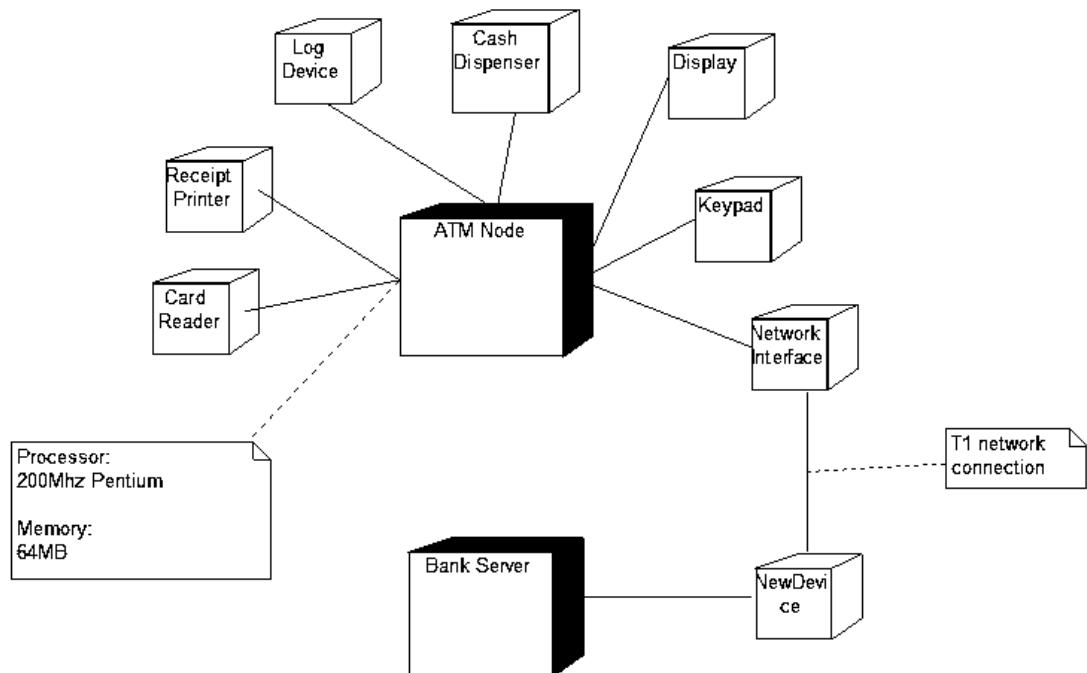
Bank



## 7. COMPONENT DIAGRAM



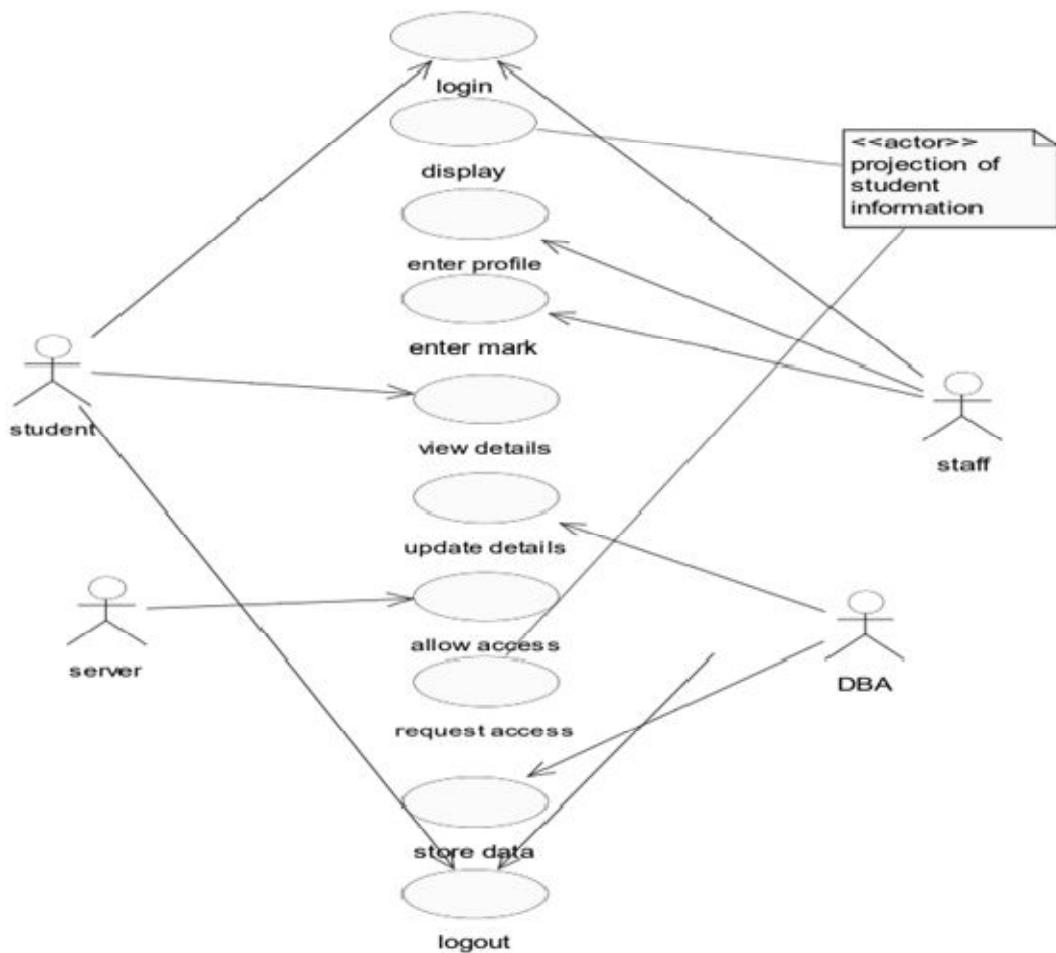
## **8. DEPLOYMENT DIAGRAM**



EX.NO:3 STUDENT INFORMATION SYSTEM

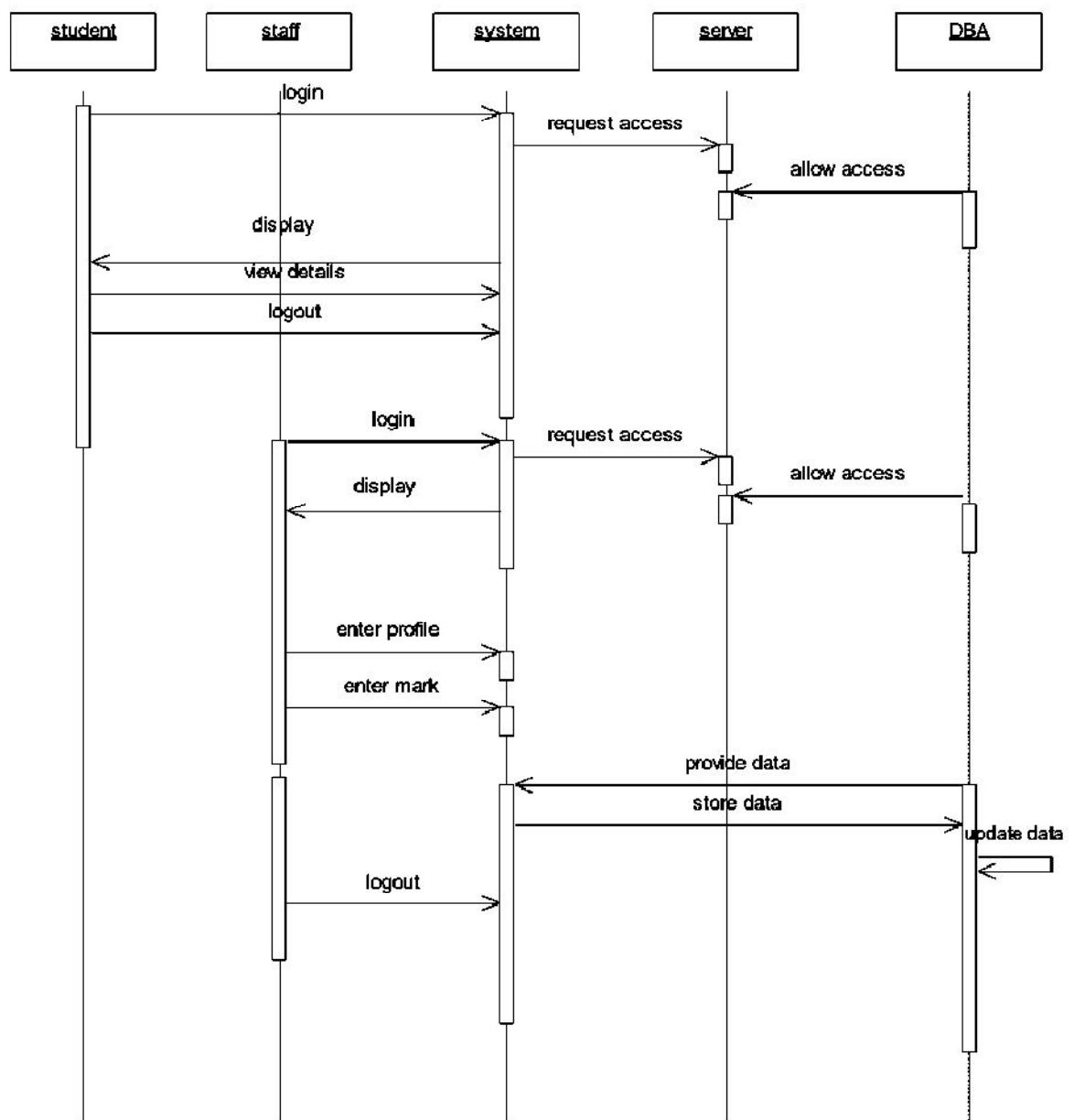
**AIM:**

To develop a UML diagram to maintenance Student Information System.

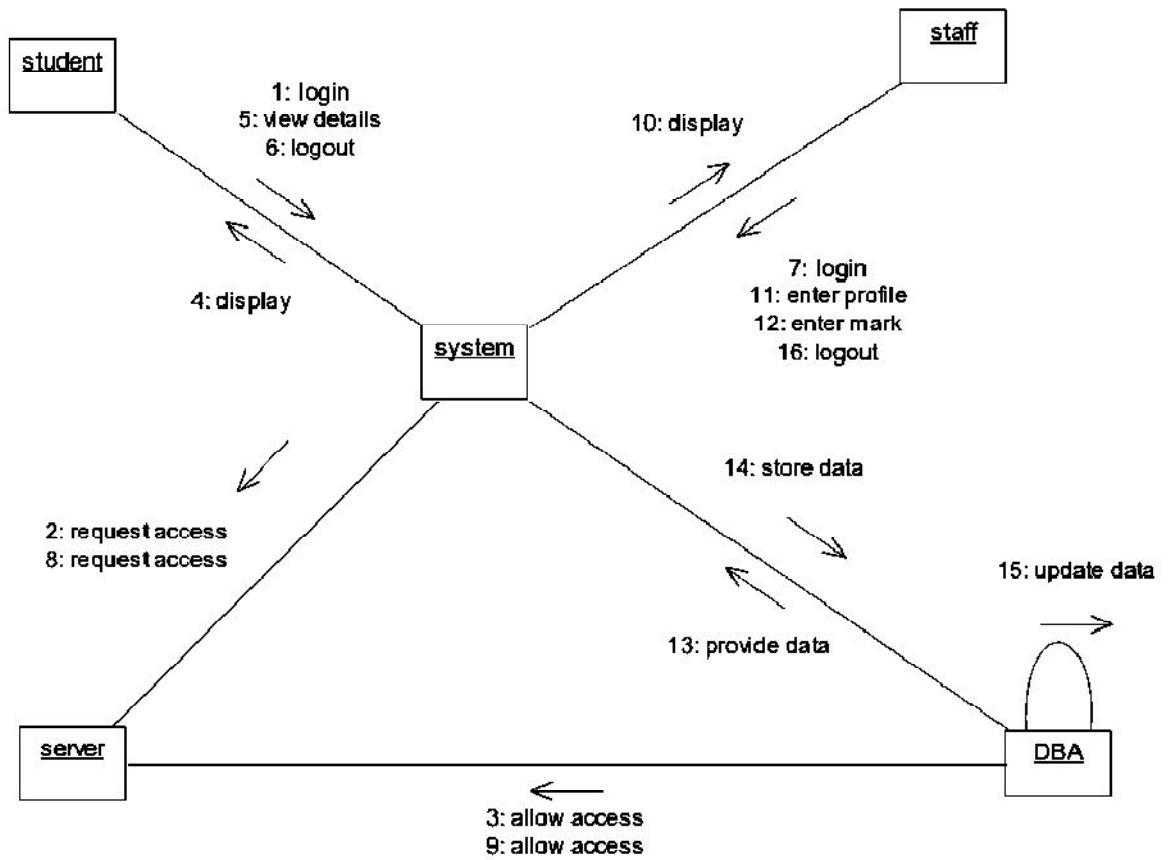
**1. USE CASE DIAGRAM****2. CLASS DIAGRAM**



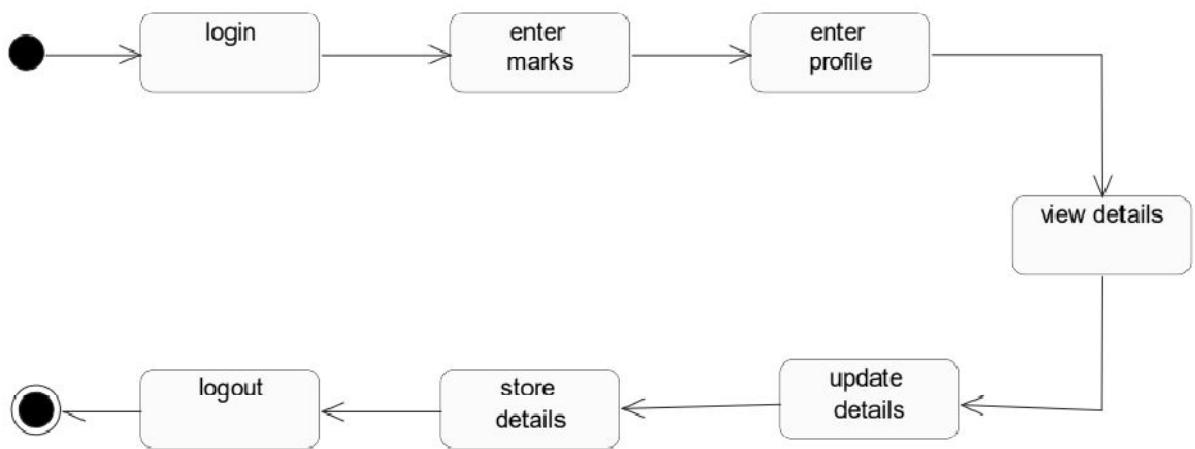
### 3. SEQUENCE DIAGRAM



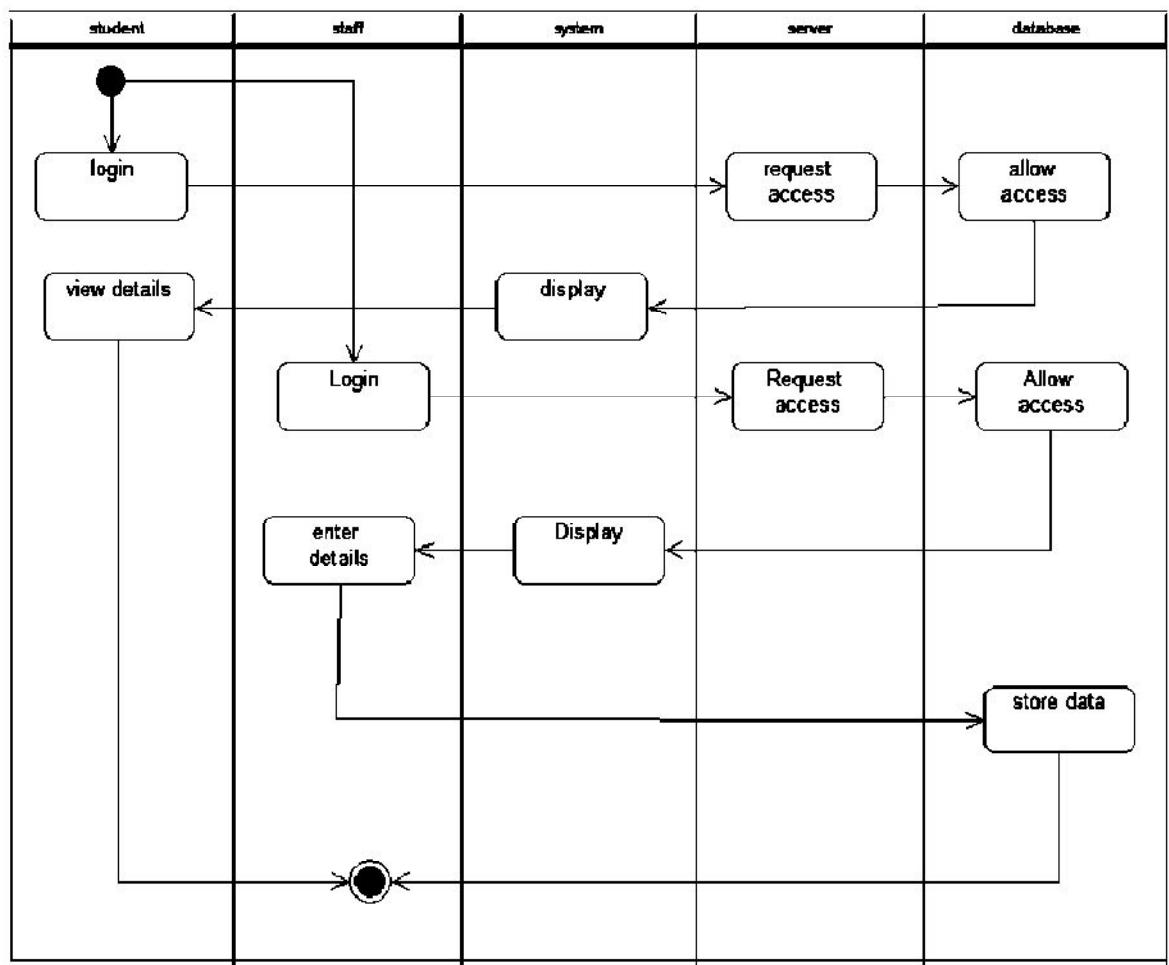
#### 4. COLLABORATION DIAGRAM



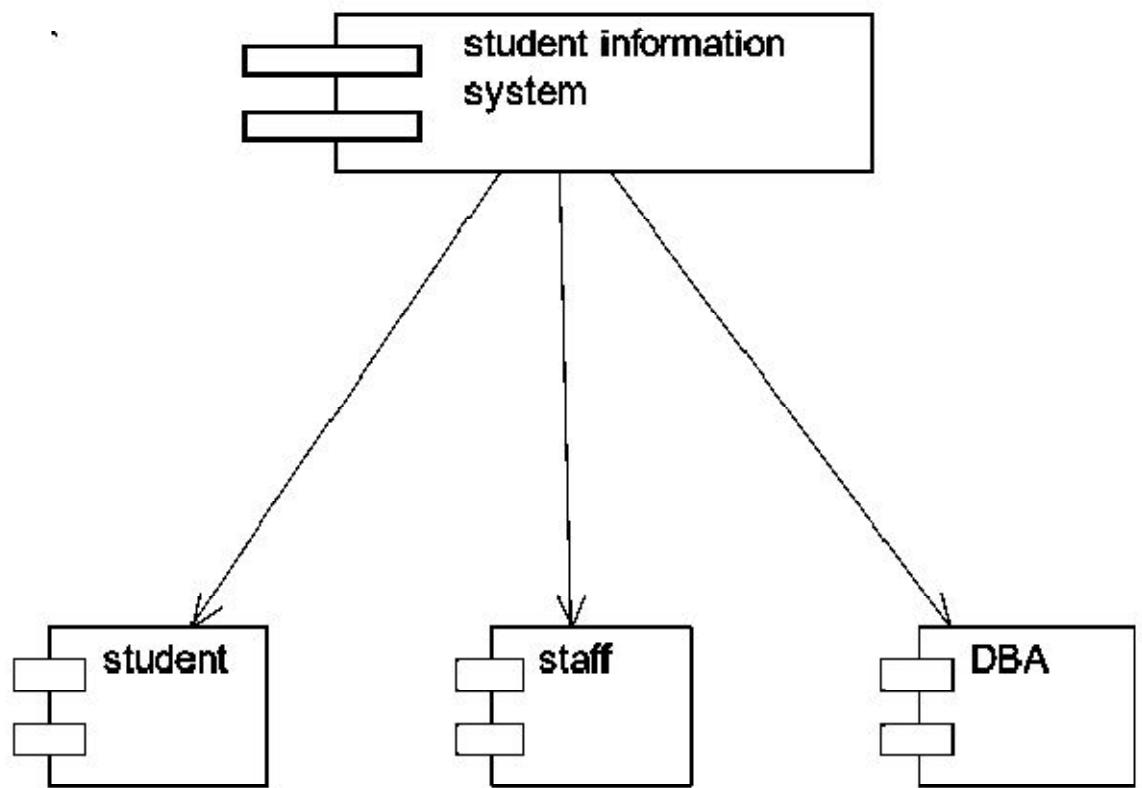
## 5. STATECHART DIAGRAM



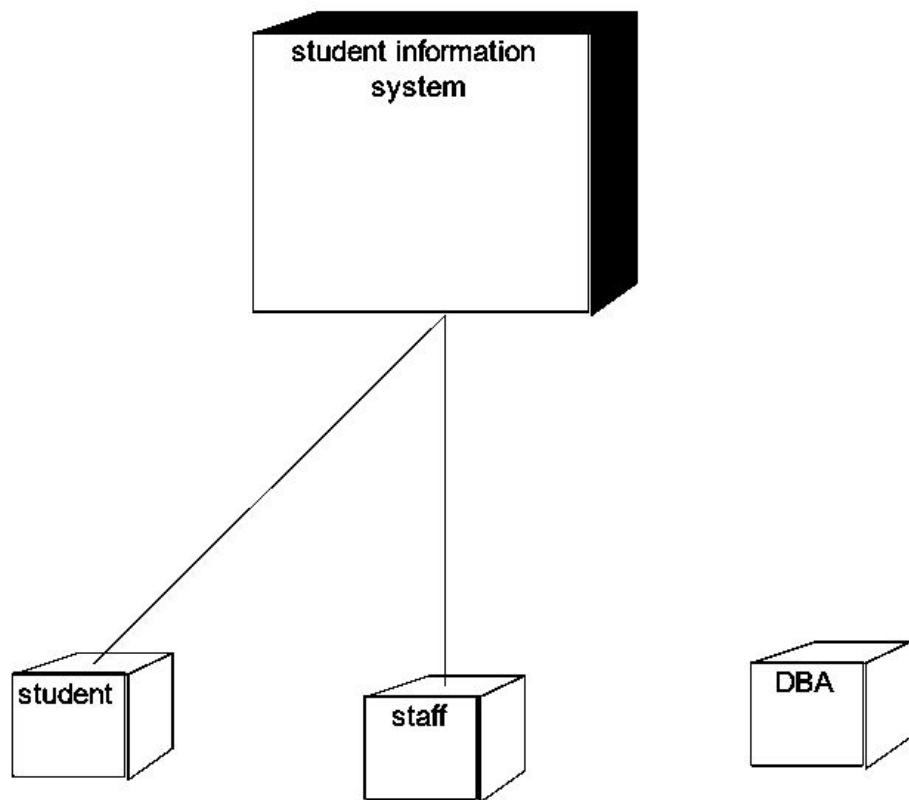
## 6.Activity Diagram



## 7.COMPONENT DIAGRAM



## 8.DEPLOYMENT DIAGRAM

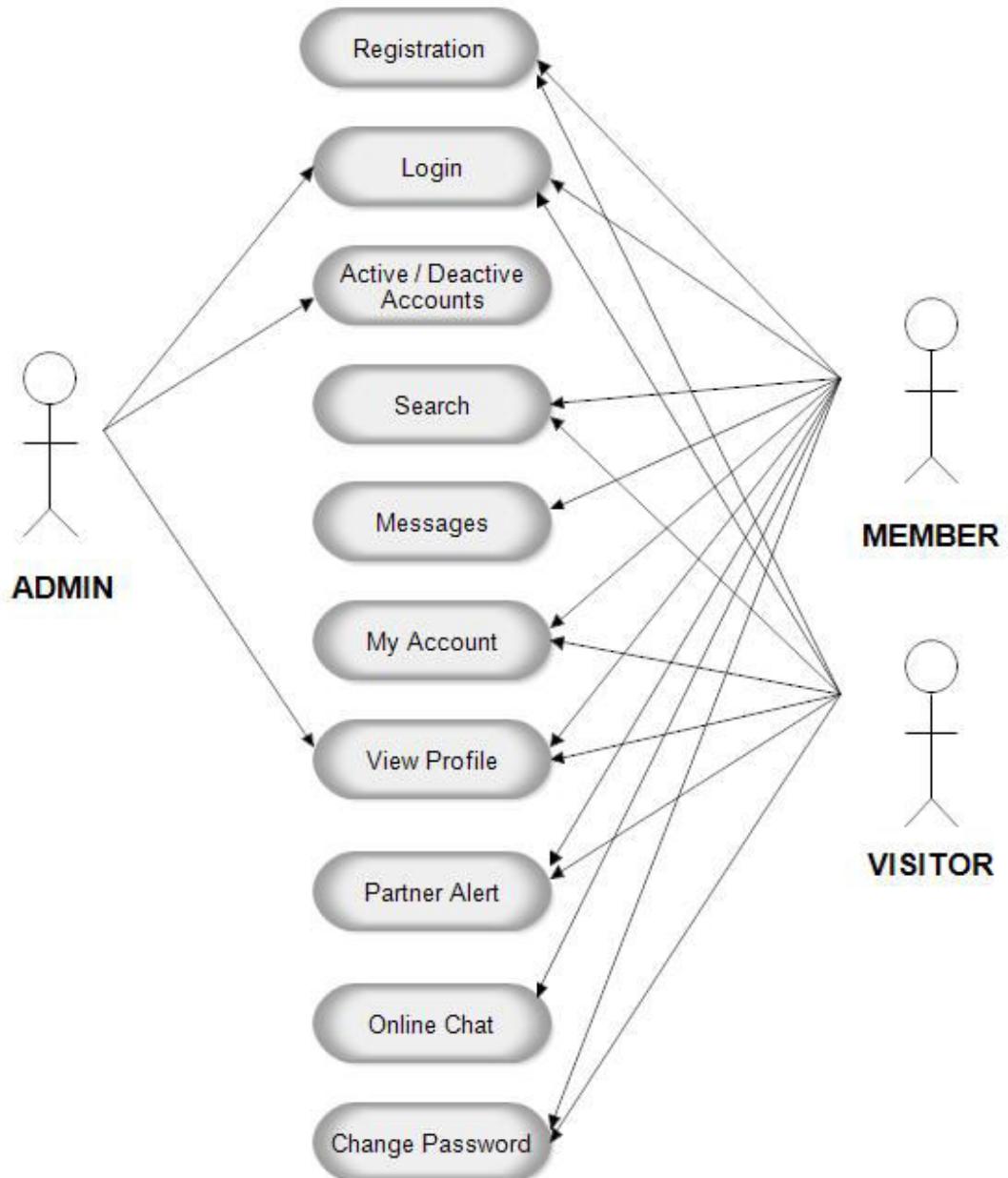


**EX.NO:4**  
**D.MATRIMONY SERVICE**

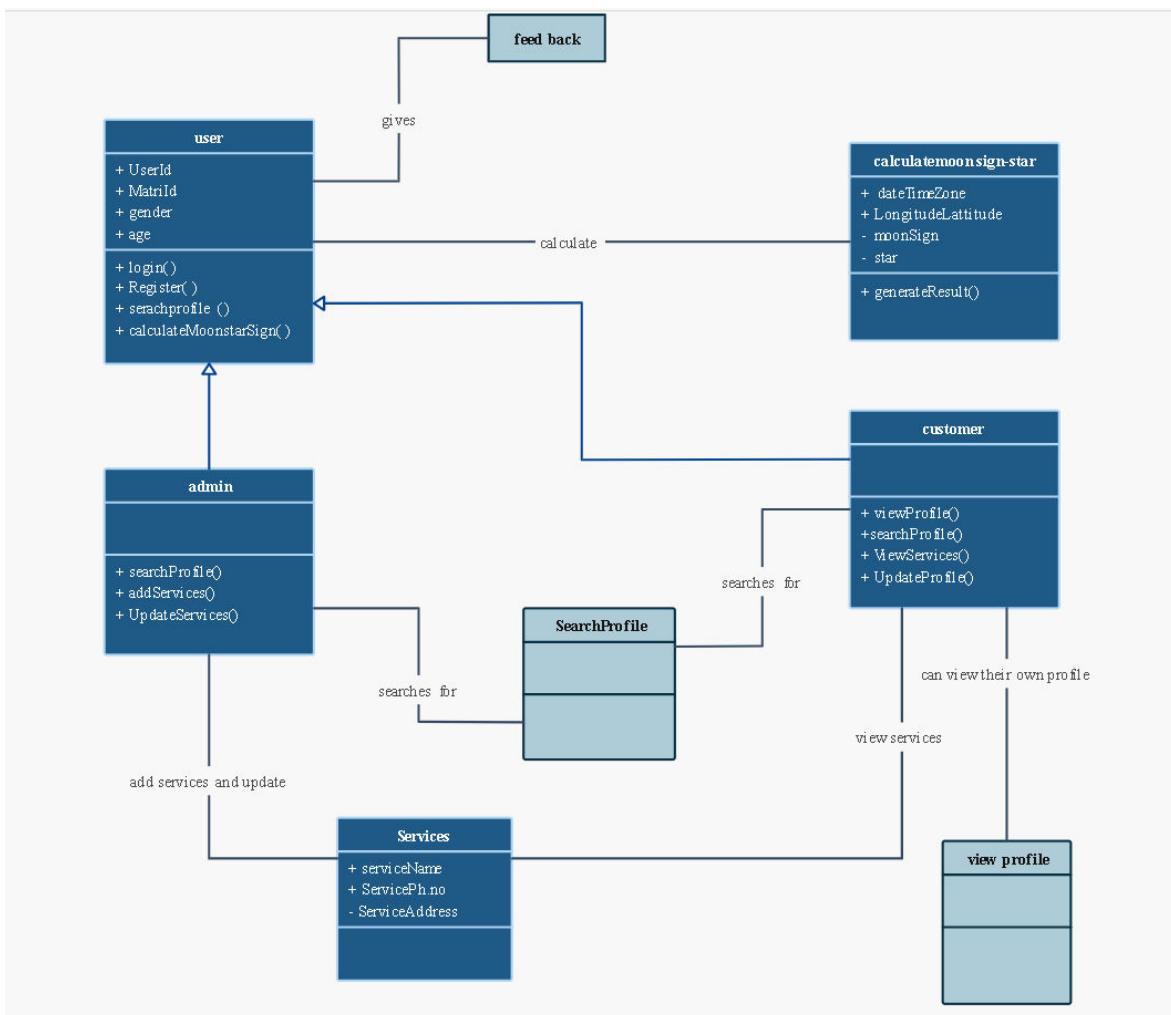
**AIM:**

To develop a UML diagram to maintenance Matrimony Service System.

### 1. USE CASE DIAGRAM

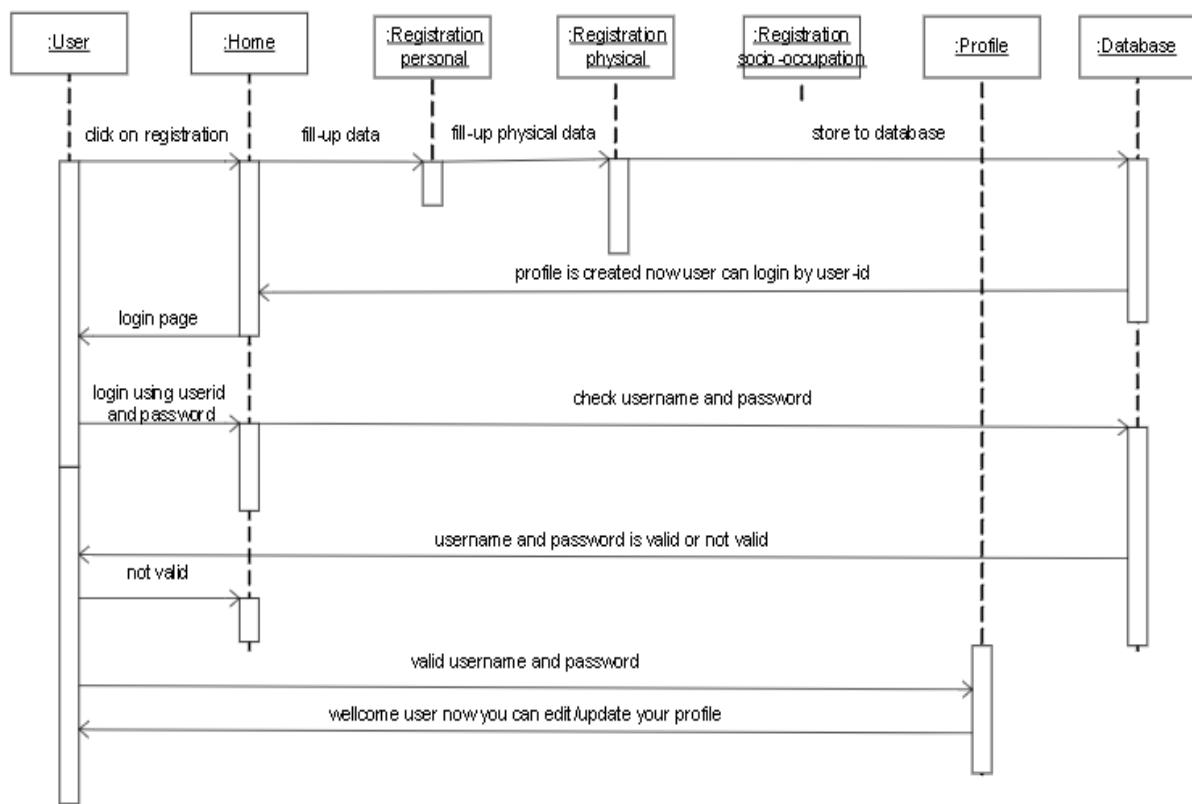


### 2. CLASS DIAGRAM

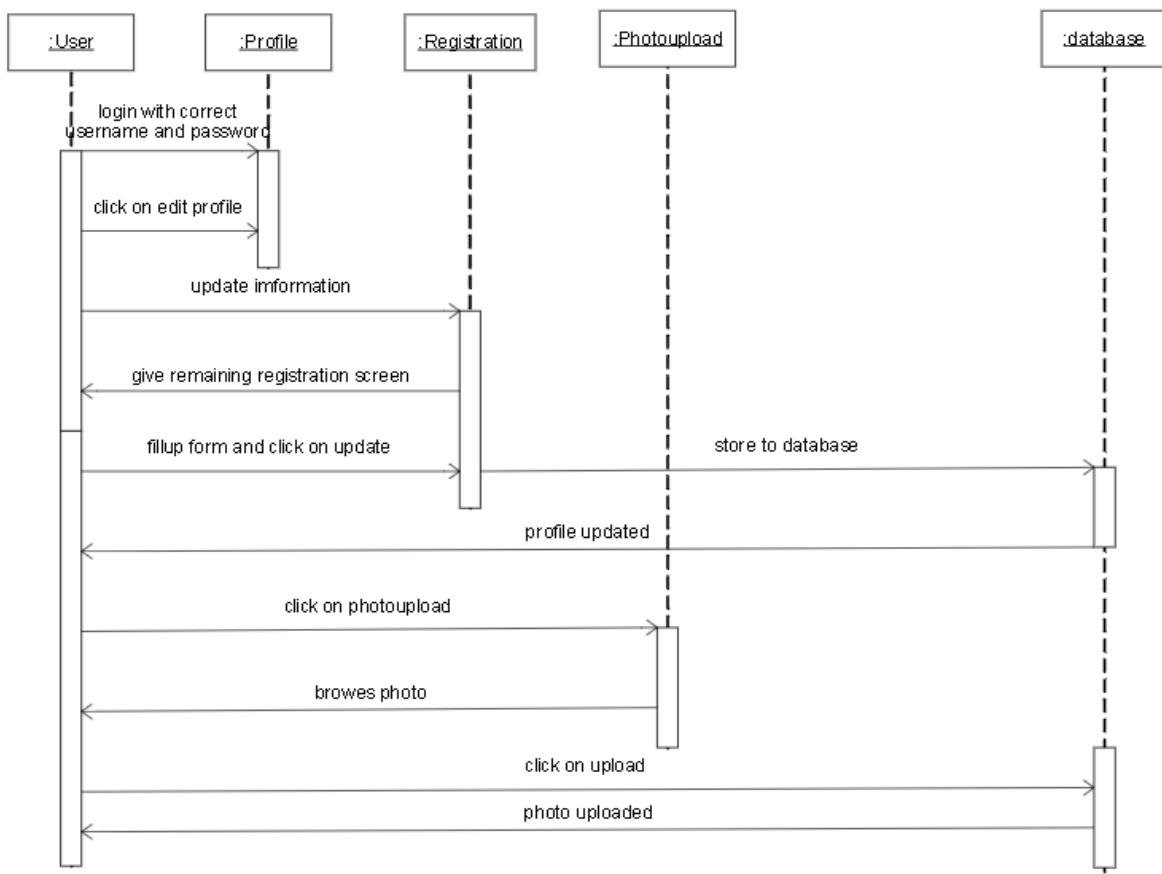


### 3. SEQUENCE DIAGRAM

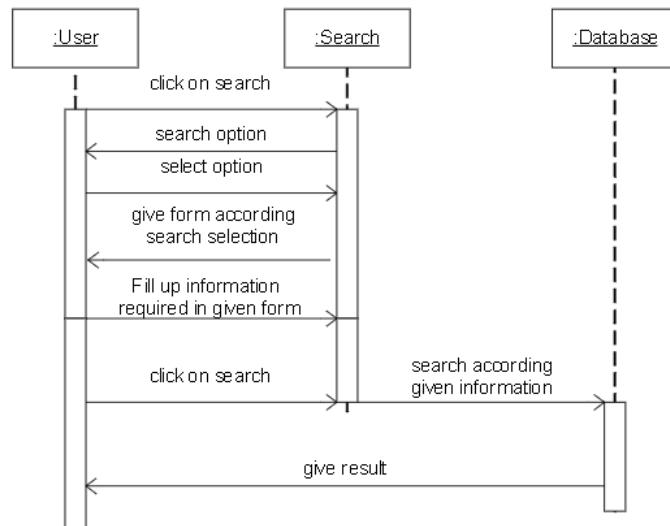
### Sequence Diagram For Registration :-



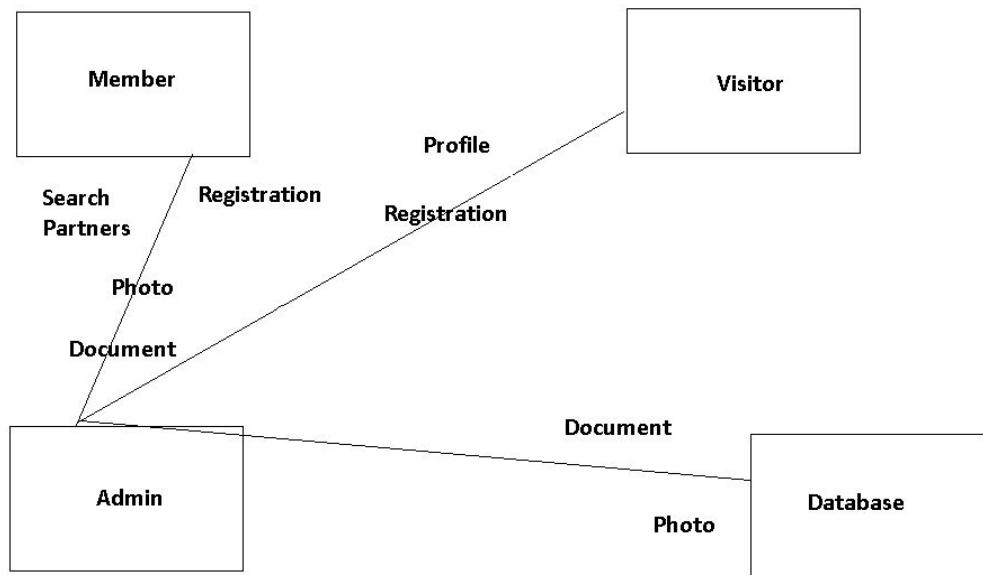
### Sequence Diagram For Edit Profile :-



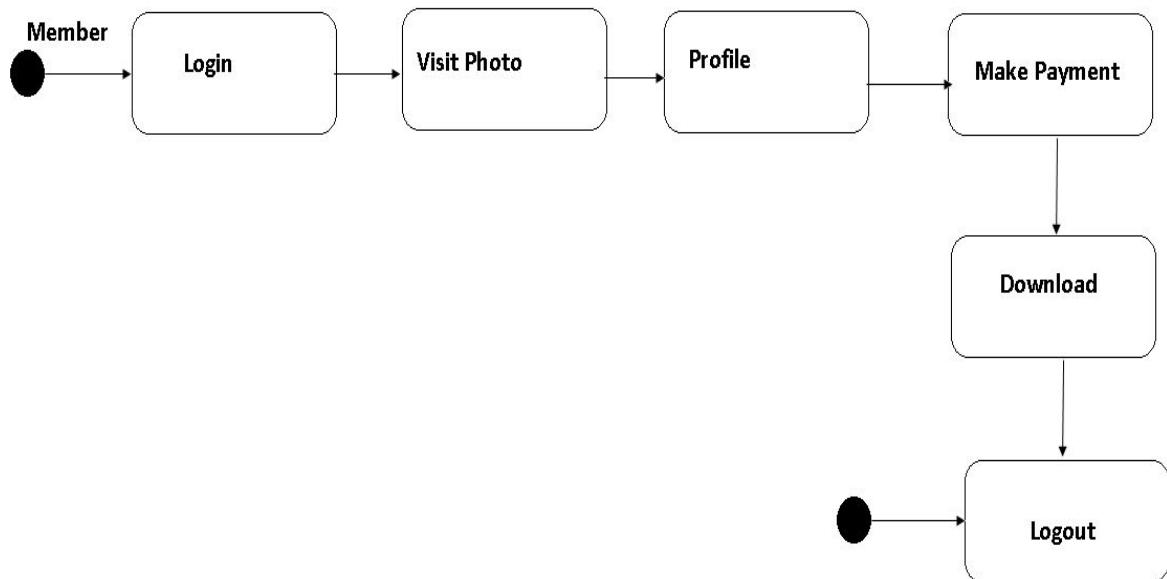
### Sequence Diagram For Search :-



### **4. COLLABORATION DIAGRAM**

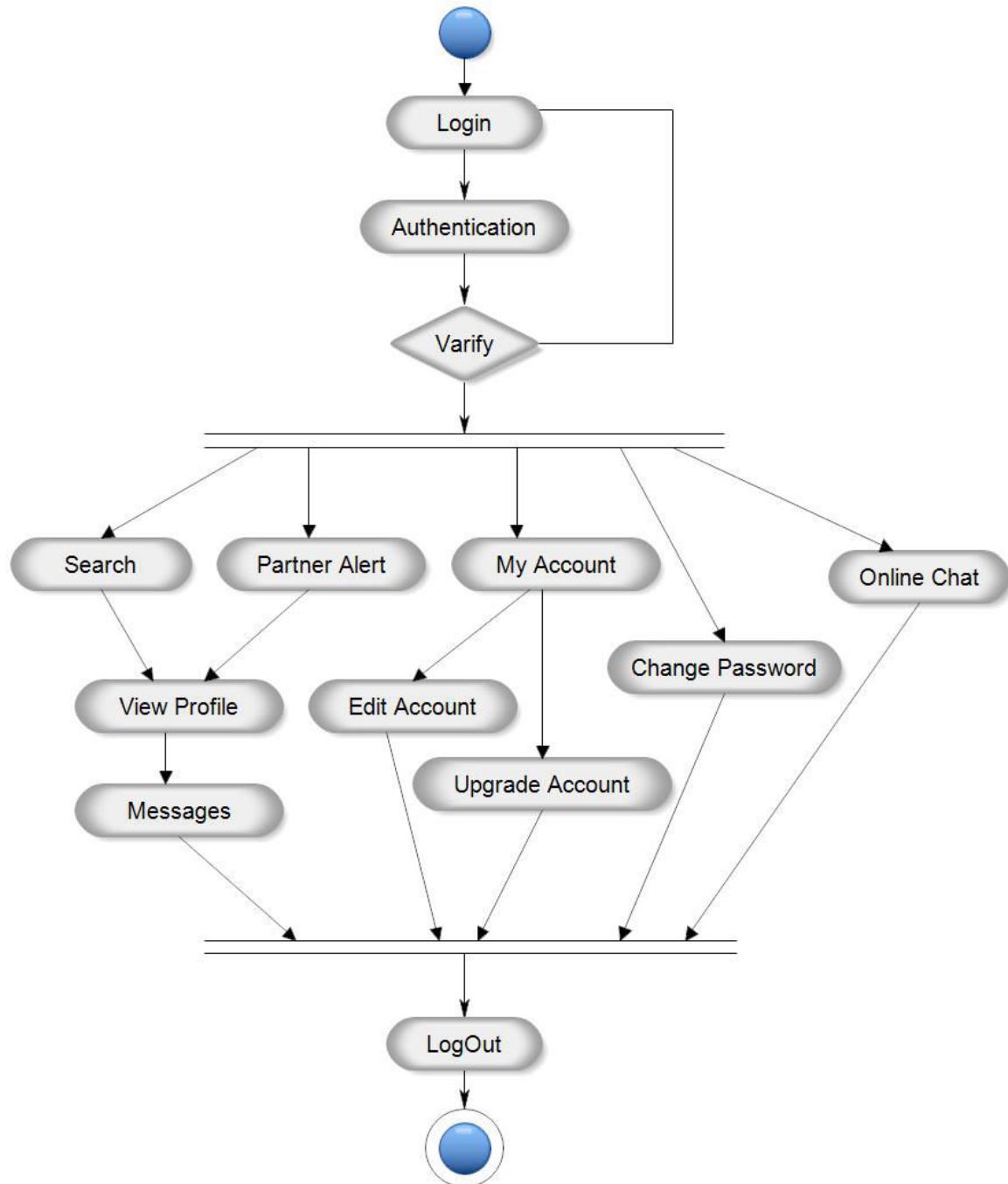


## 5. STATECHART DIAGRAM

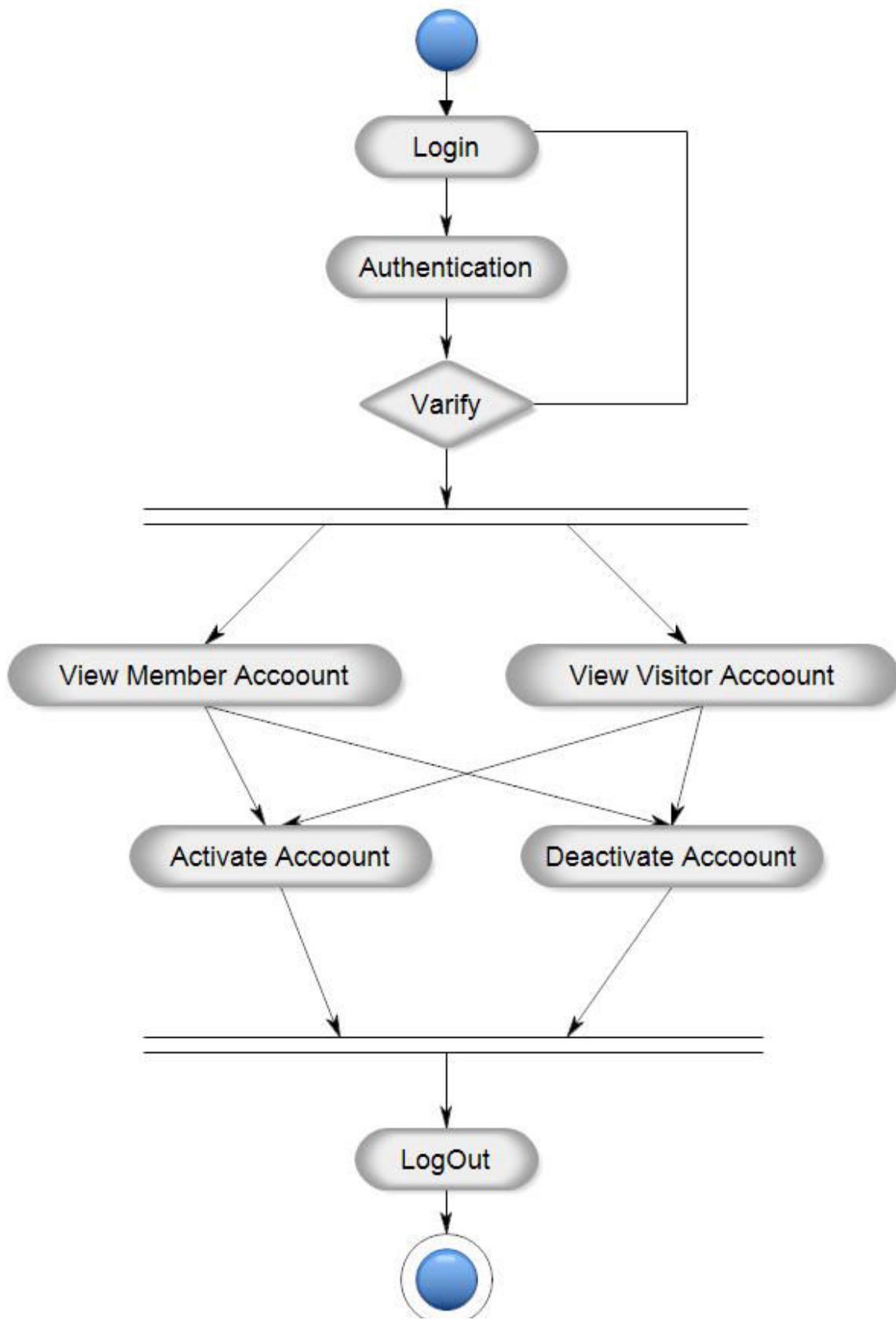


## 6. ACTIVITY DIAGRAM

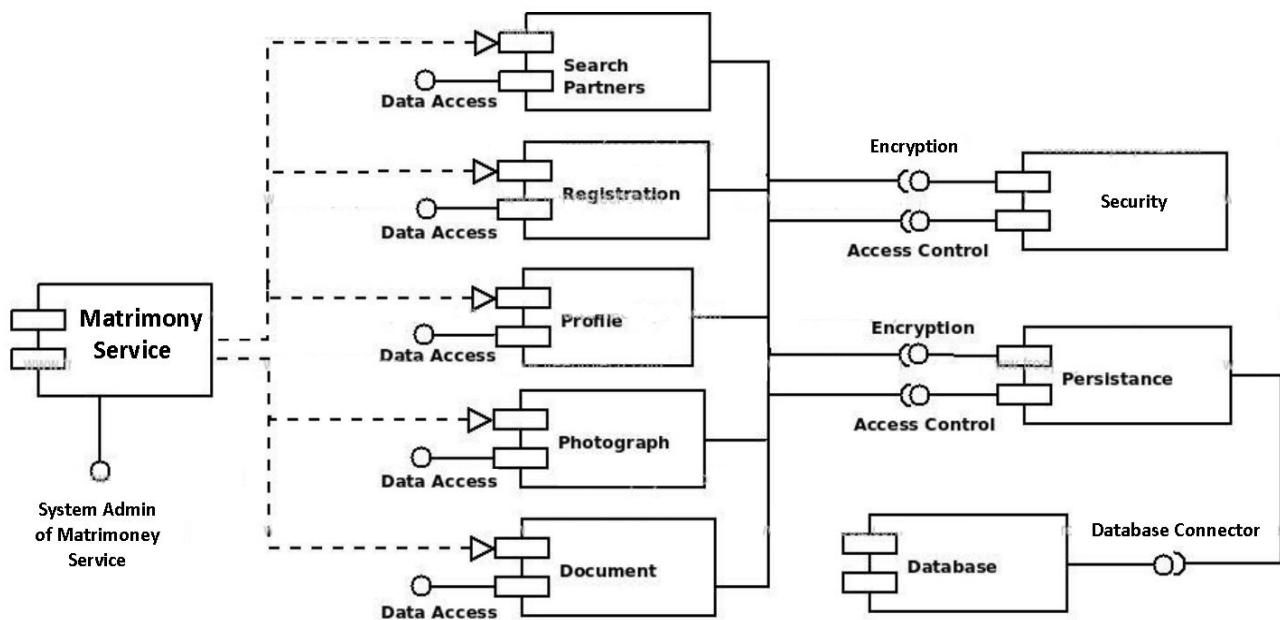
### Activity Diagram - MEMBER



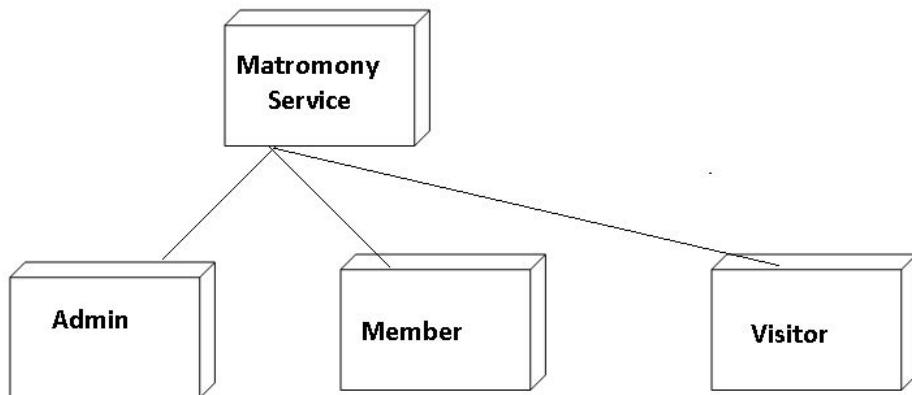
## Activity Diagram - ADMIN



## 7. COMPONENT DIAGRAM



## 8. DEPLOYMENT DIAGRAM

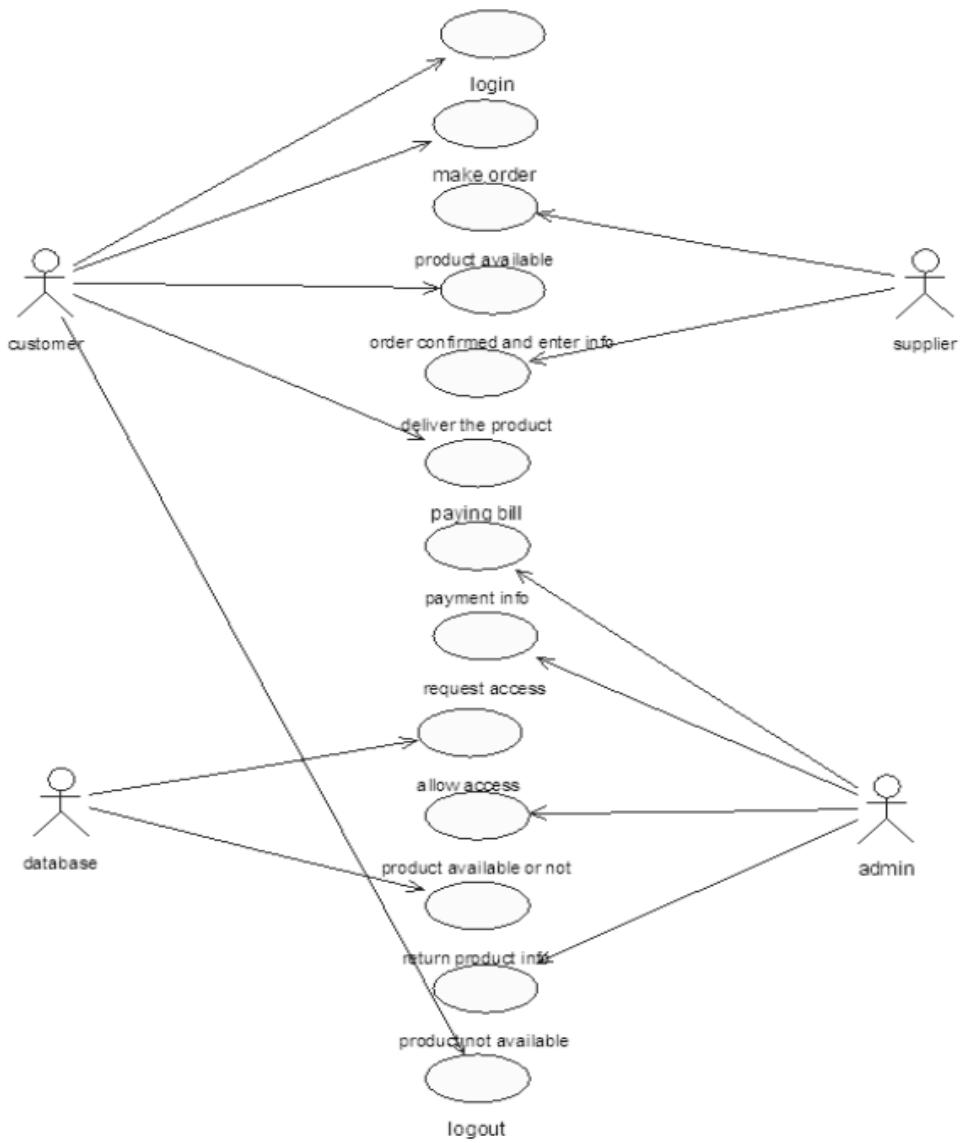


## EX.NO:5E STOCK MAINTENANCE SYSTEM

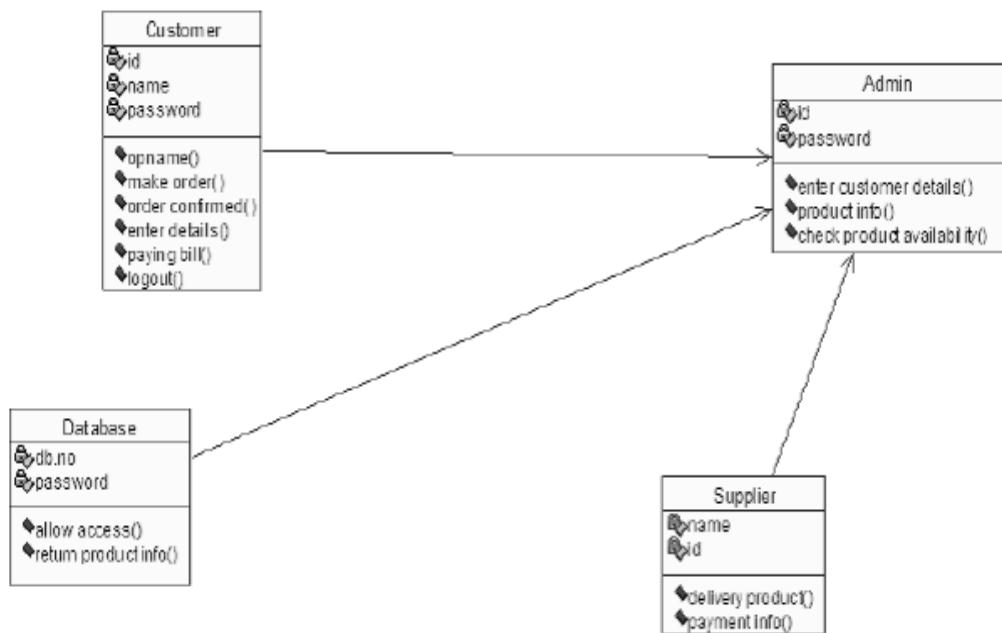
### AIM:

To develop a UML diagram to maintenanceStock Maintenance System.

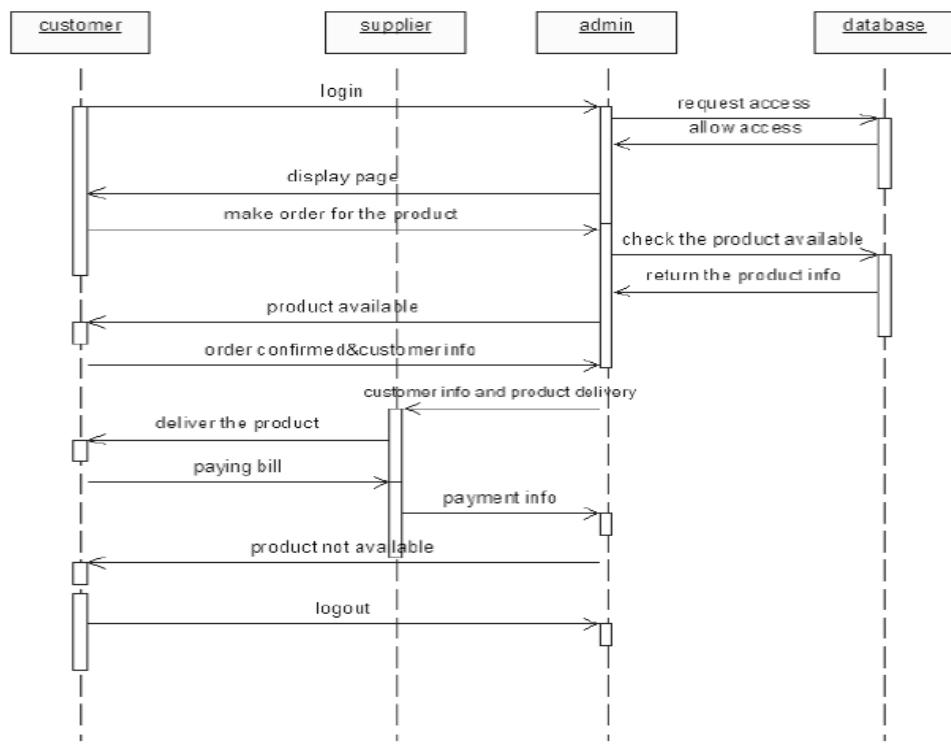
### 1. USE CASE DIAGRAM



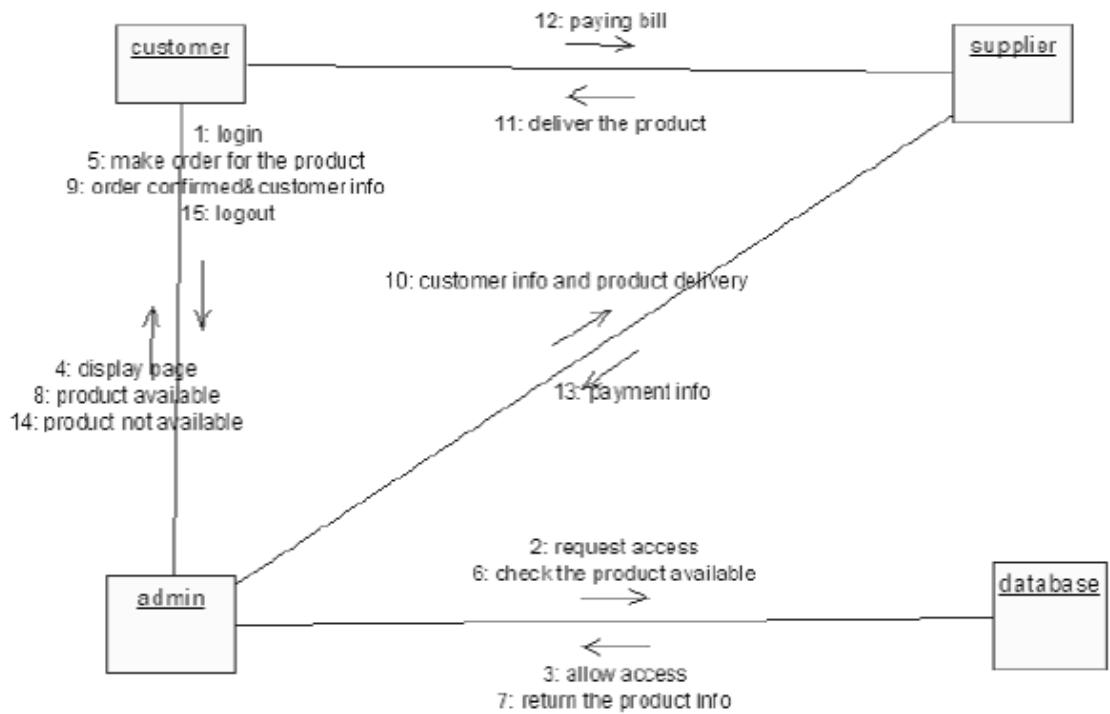
### 2. CLASS DIAGRAM



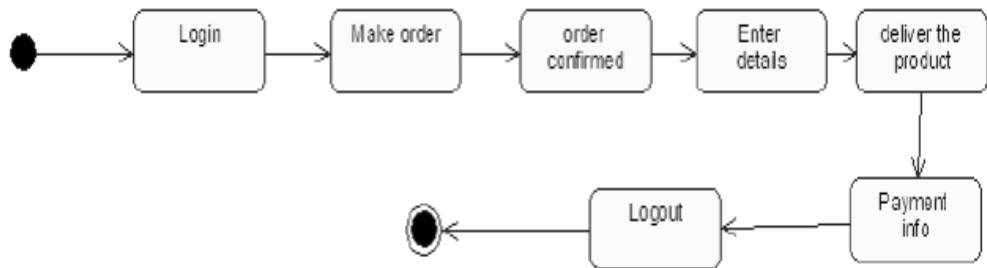
### 3. SEQUENCE DIAGRAM



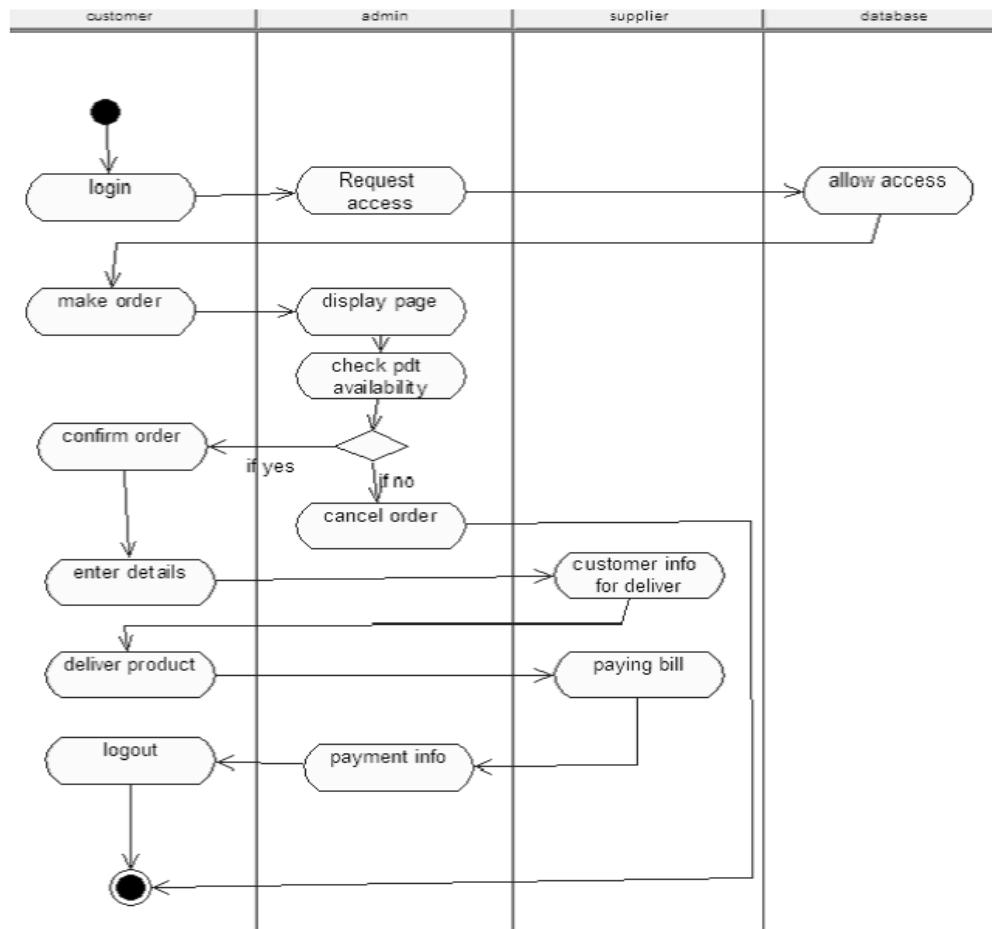
#### 4. COLLABORATION DIAGRAM



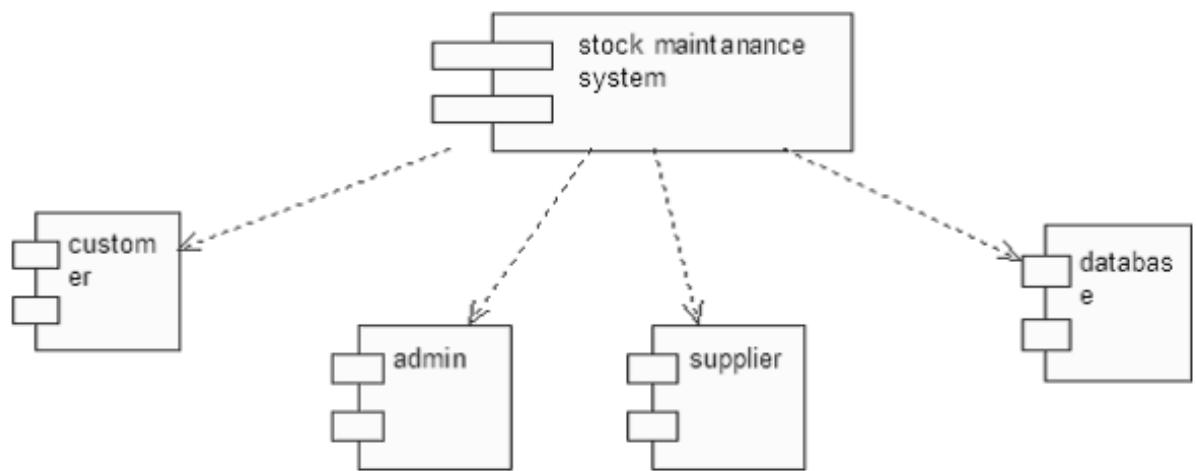
## 5. STATECHART DIAGRAM



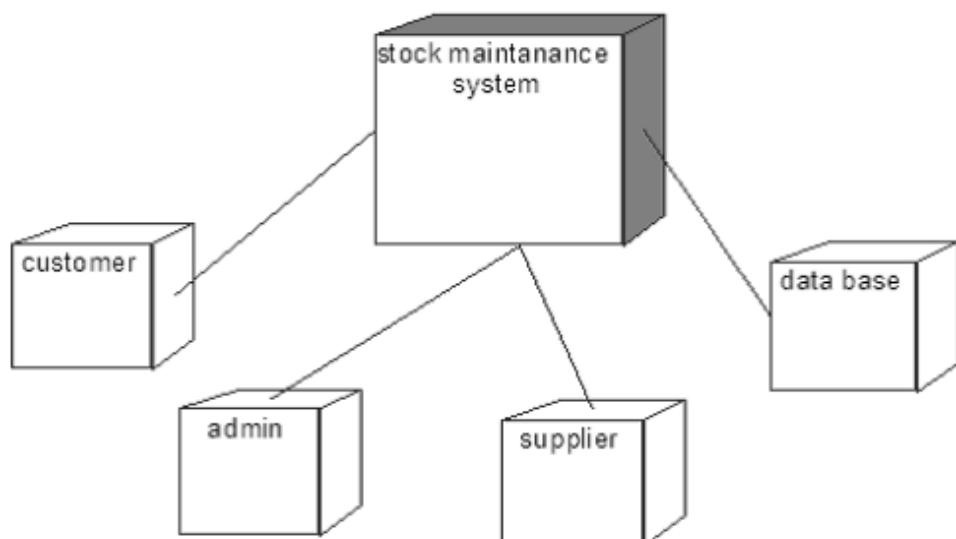
## 6. ACTIVITY DIAGRAM



## 7. COMPONENT DIAGRAM



## 8. DEPLOYMENT DIAGRAM



# **TESTING TOOLS**

**EX.NO:1**

## **URL LAUNCHING**

url lunching

```
package org.google;

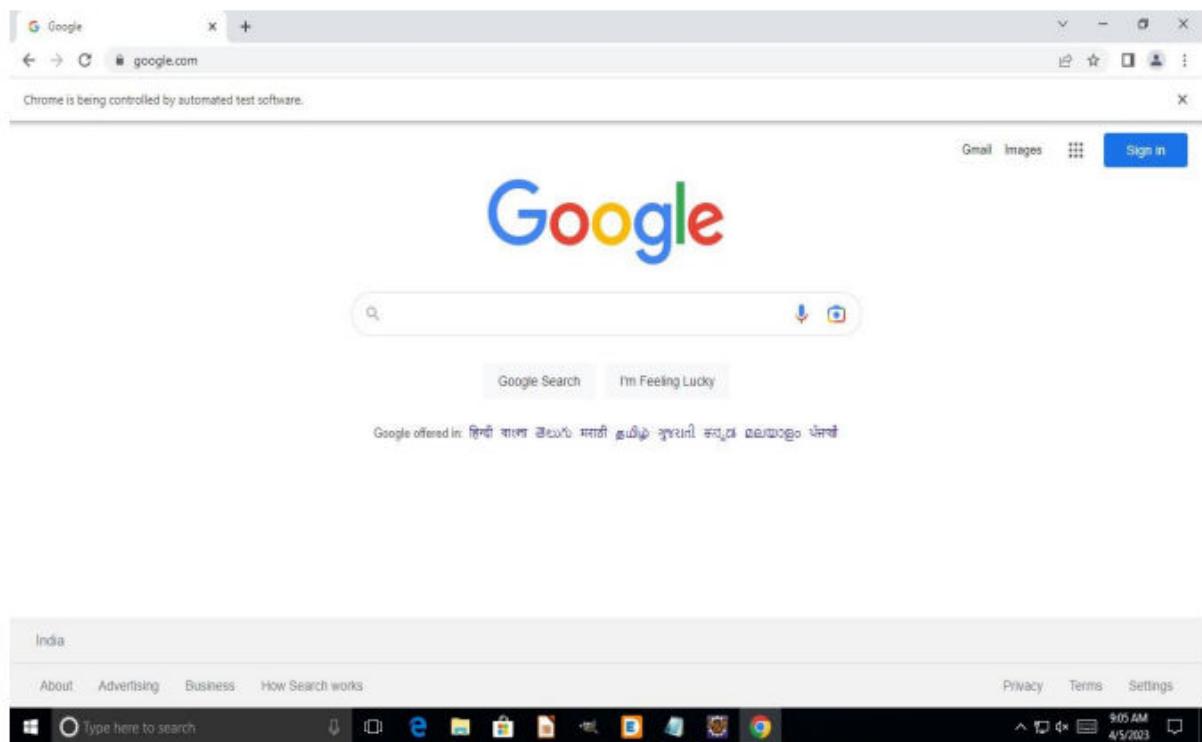
import org.openqa.selenium.WebDriver;

import org.openqa.selenium.chrome.ChromeDriver;

public class SkrW {

    public static void main(String[] args) {
        System.setProperty("webdriver.chrome.driver",
        "C:\\\\Users\\\\SKR\\\\eclipse-workspace\\\\ValluKullu\\\\driver\\\\chromedriver.exe");
        WebDriver driver = new ChromeDriver();
        driver.manage().window().maximize();
        driver.get("https://www.facebook.com/login/");
    }
}
```

## OUTPUT



USING Xpath iphone searching in amazon

```
package org.google;
import org.openqa.selenium.WebDriver;
import org.openqa.selenium.chrome.ChromeDriver;
public class SkrW {

    public static void main(String[] args) throws AWTException {
        System.setProperty("webdriver.chrome.driver", "C:\\\\Users\\\\Admin\\\\eclipse-
workspace\\\\Google\\\\driver\\\\chromedriver.exe");

        WebDriver driver = new ChromeDriver();

        driver.manage().window().maximize();

        driver.get("https://www.amazon.in/?&ext_vmc=hi&tag=googhydrabk1-
21&ref=pd_s1_g50zekzm1_e&adgrpid=74238127911&hvpone=&hvptwo=&hvadid=610644609
009&hvpos=&hvnetw=g&hvrand=6368280987823730905&hvqmt=e&hvdev=c&hvdvcndl=&h
vlocint=&hvlocphy=9061917&hvtargid=kwd-
29089120&hydadcr=5496_2359482&gclid=Cj0KCQiAorKfBhC0ARIsAHDzsluVstdIX6qeRQx
Gr2NdfI3_MX2DIlhkkuIrmijDa8lBv9EBwgr72VgaAiYNEALw_wcB");

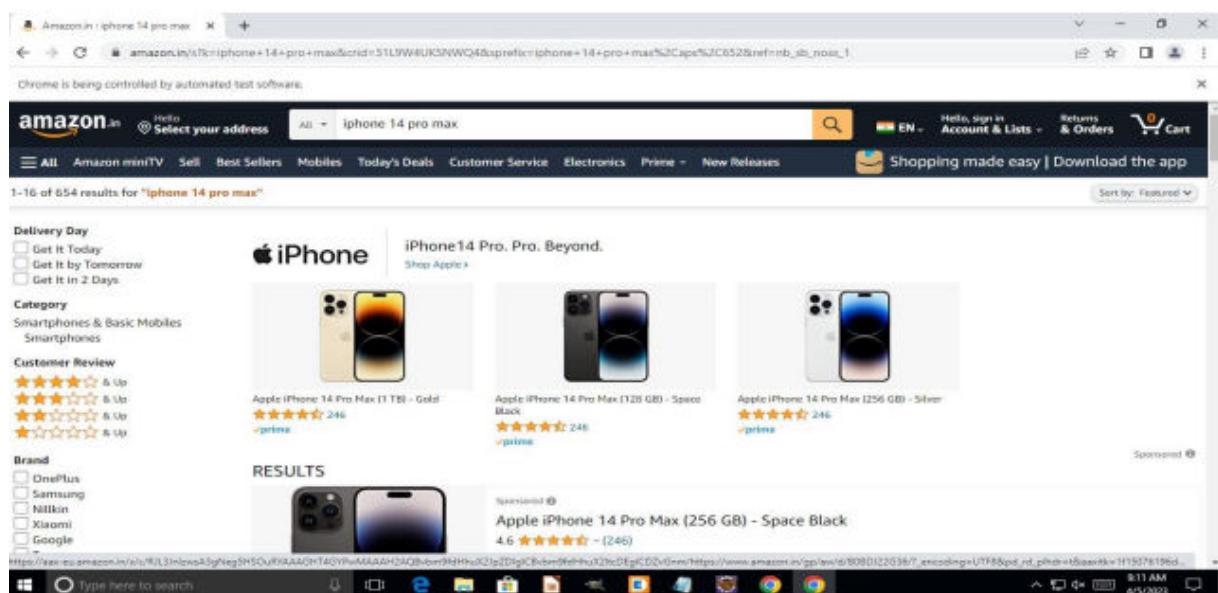
        WebElement am = driver.findElement(By.xpath("//input[@id='twotabsearchtextbox']"));

        am.sendKeys("iphone");

        WebElement click = driver.findElement(By.xpath("//input[@type='submit']"));

        click.click();
```

## OUTPUT



using robot key

```
package org.st;

import java.awt.AWTException;
import java.awt.Robot;
import java.awt.event.KeyEvent;
import org.openqa.selenium.By;
import org.openqa.selenium.WebDriver;
import org.openqa.selenium.WebElement;
import org.openqa.selenium.chrome.ChromeDriver;

public class St.joseph {

    public static void main(String[] args) throws AWTException {
        System.setProperty("webdriver.chrome.driver", "C:\\\\Users\\\\Admin\\\\eclipse-workspace\\\\Google\\\\driver\\\\chromedriver.exe");

        WebDriver driver = new ChromeDriver();

        driver.manage().window().maximize();

        driver.get("https://www.google.co.in/");

        WebElement google =
        driver.findElement(By.xpath("//input[@jsaction='paste:puy29d;']"));

        google.sendKeys("st.jospeh college arts & science");

        Robot l = new Robot();

        l.keyPress(KeyEvent.VK_ENTER);

        l.keyRelease(KeyEvent.VK_ENTER);

    }
}
```

## OUTPUT

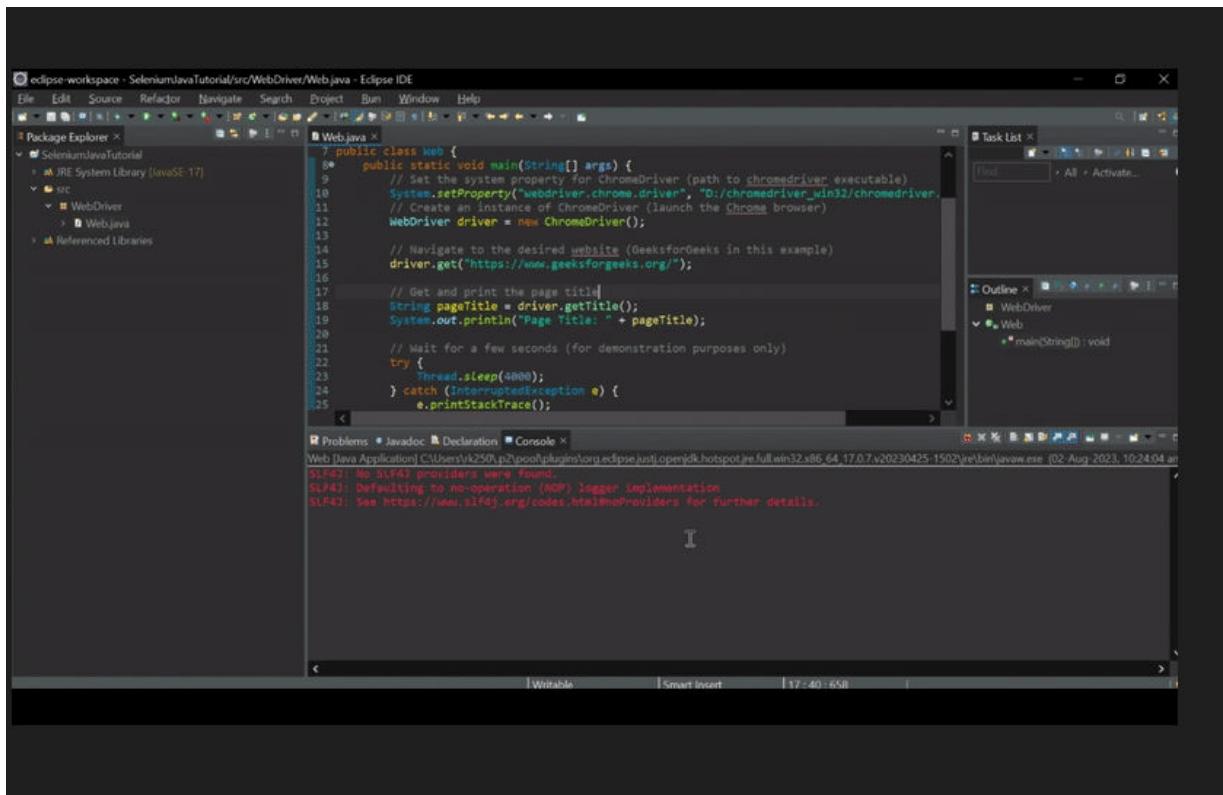
The screenshot shows a Google search results page for the query "ST.JOSEPH COLLEGE ARTS AND SCIENCE". The top result is a link to the college's website, [stjosephcollege.ac.in](http://stjosephcollege.ac.in). The page includes a map showing the college's location in Anna Nagar, Madras Ave, and a photo of the college building. Below the main result, there are sections for "Contact Us", "Application For Admission", "Online Admission", "Programmes Offered", "Faculties", and "Justdial". The Justdial section provides information about the college's courses, admission, and ratings. The bottom of the screen shows the Windows taskbar with various pinned icons and the system clock indicating 12:40 on 22-03-2024.

**Open source testing tool**

```
// Java program to implement  
// the approach  
package WebDriver;  
  
import org.openqa.selenium.WebDriver;  
import org.openqa.selenium.chrome.ChromeDriver;  
  
public class Web {  
    public static void main(String[] args)  
    {  
        // Set the system property for ChromeDriver (path to  
        // chromedriver executable)  
        System.setProperty(  
            "webdriver.chrome.driver",  
            "D:/chromedriver_win32/chromedriver.exe");  
        // Create an instance of ChromeDriver (launch the  
        // Chrome browser)  
        WebDriver driver = new ChromeDriver();  
  
        // Navigate to the desired website (GeeksforGeeks in  
        // this example)  
        driver.get("https://www.geeksforgeeks.org/");
```

```
// Get and print the page title  
  
String pageTitle = driver.getTitle();  
  
System.out.println("Page Title: " + pageTitle);  
  
  
// Wait for a few seconds (for demonstration  
// purposes only)  
  
try {  
  
    Thread.sleep(3000);  
  
}  
  
catch (InterruptedException e) {  
  
    e.printStackTrace();  
  
}  
  
  
// Close the browser  
  
driver.quit();  
  
}
```

## OUTPUT



The screenshot shows the Eclipse IDE interface with the following details:

- Project Explorer:** Shows the project "SeleniumJavaTutorial" with a package "src" containing a class "Web.java".
- Web.java Content:** The code is a Java program that imports the WebDriver API and uses it to open a browser and print the page title. It includes comments explaining the setup of the ChromeDriver executable path and the creation of a WebDriver instance.
- Console Output:** Displays log messages related to SLF4J providers, indicating that no providers were found and defaulting to the NOP logger implementation. It also includes a link to the SLF4J documentation.
- Outline View:** Shows the class structure with a main method.

## OUTPUT 2:

