

UNIFIED LIBRARY APPLICATION

INTRODUCTION

Unified Library Application System emphasizes on the online reservation, issue and return of books. This system globalizes the present library system. Using this application the member can reserve any book from anywhere in the world. Still in nascent stages, this application soon revolutionizes present library system.

Let us just have an overview of the unified library application system:

- Librarian lends books and magazines
- Librarian maintains the list of all the members of library
- Borrower makes reservation online
- Borrower can remove reservation online
- Librarian issues books to the borrower
- Librarian calculates dues to be paid by the borrower
- Borrower issues/returns books and/or magazines
- Librarian places order about the requirements to the master librarian
- Librarian updates system
- Master librarian maintains librarians

TEXTUAL ANALYSIS

(a) ACTORS

- i. Librarian
- ii. Borrower
- iii. Catalog
- iv. Master Librarian

(b) VERBS

- i. Borrower:
 1. Logs into the system
 2. Browses/searches for books or magazines
 3. Makes/removes reservation
 4. Views results and reports from the unified library application system
- ii. Librarian:
 1. Manages and validates members
 2. View reports from the system

3. Issues books
4. Calculates dues
5. Takes books
6. Places orders to the master librarian
7. Maintains list of books and magazine

iii. Master Librarian

1. Maintains other librarians

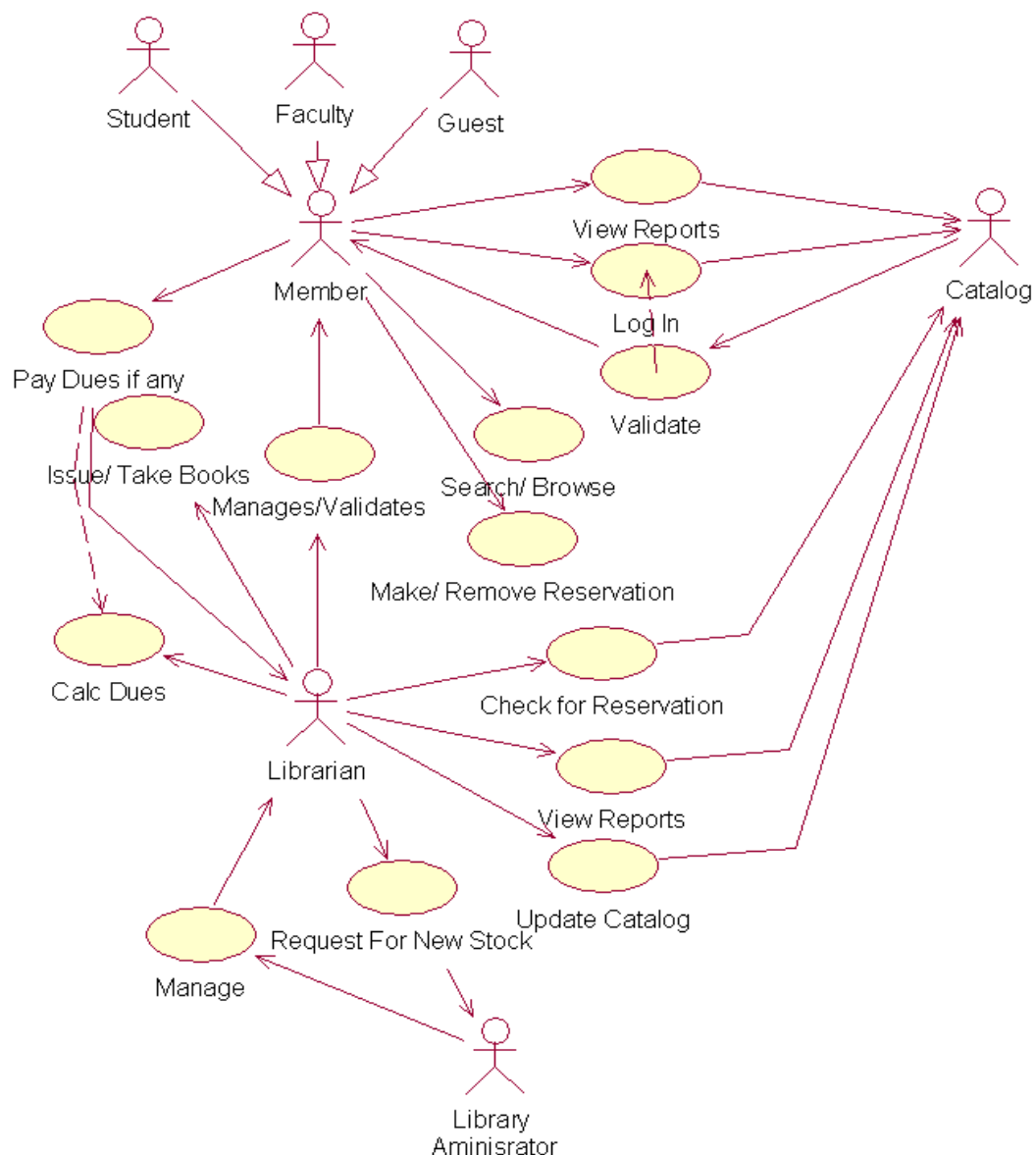
USECASE DIAGRAM:

Use case diagram is created to visualize the interaction of our system with the outside world. The components of use case diagram are:

Use Case: Scenarios of the system

Actor: Someone or something who is interacting with the system

Relationship: Semantic link between use case and actor.

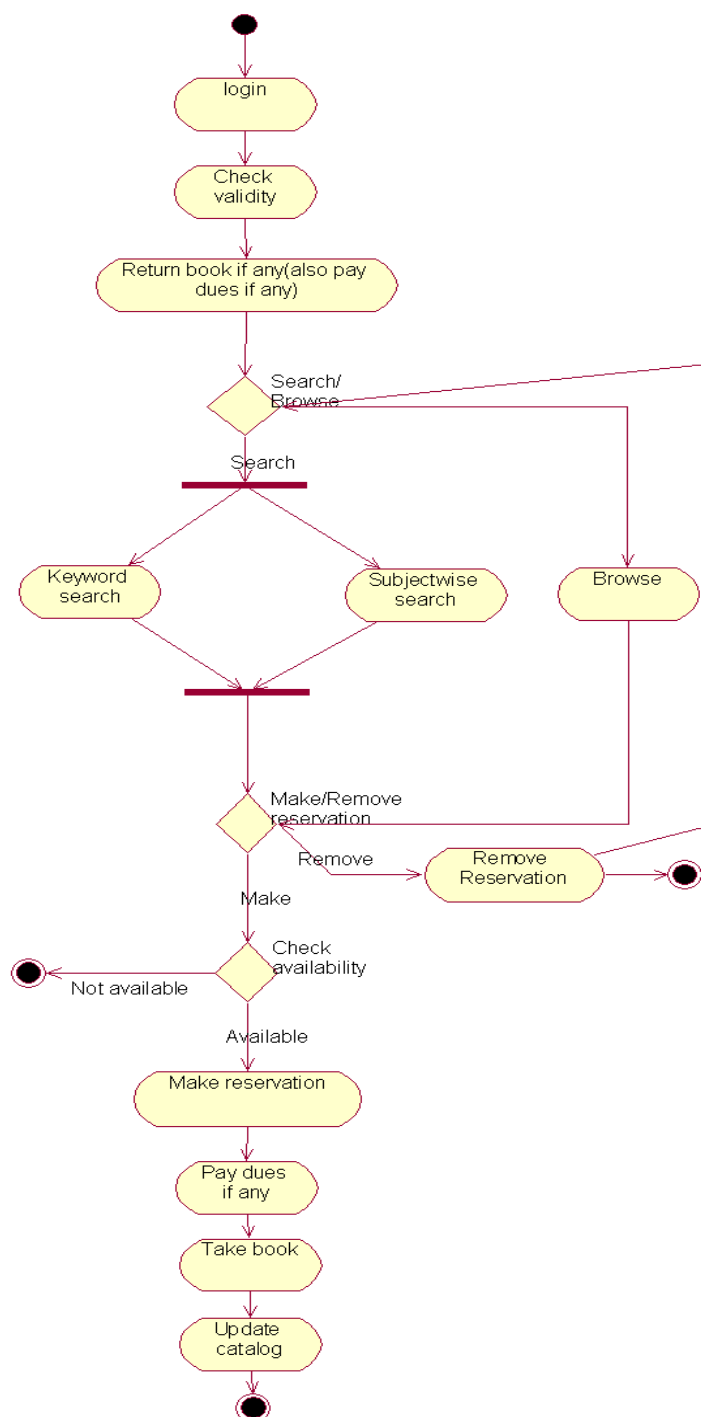


ACTIVITY DIAGRAM:

Activity diagram shows the flow of events within our system.

The components are:

- a) Start State
- b) End State
- c) Transition
- d) Decision Box
- e) Synchronization Bar
- f) Swim Lane



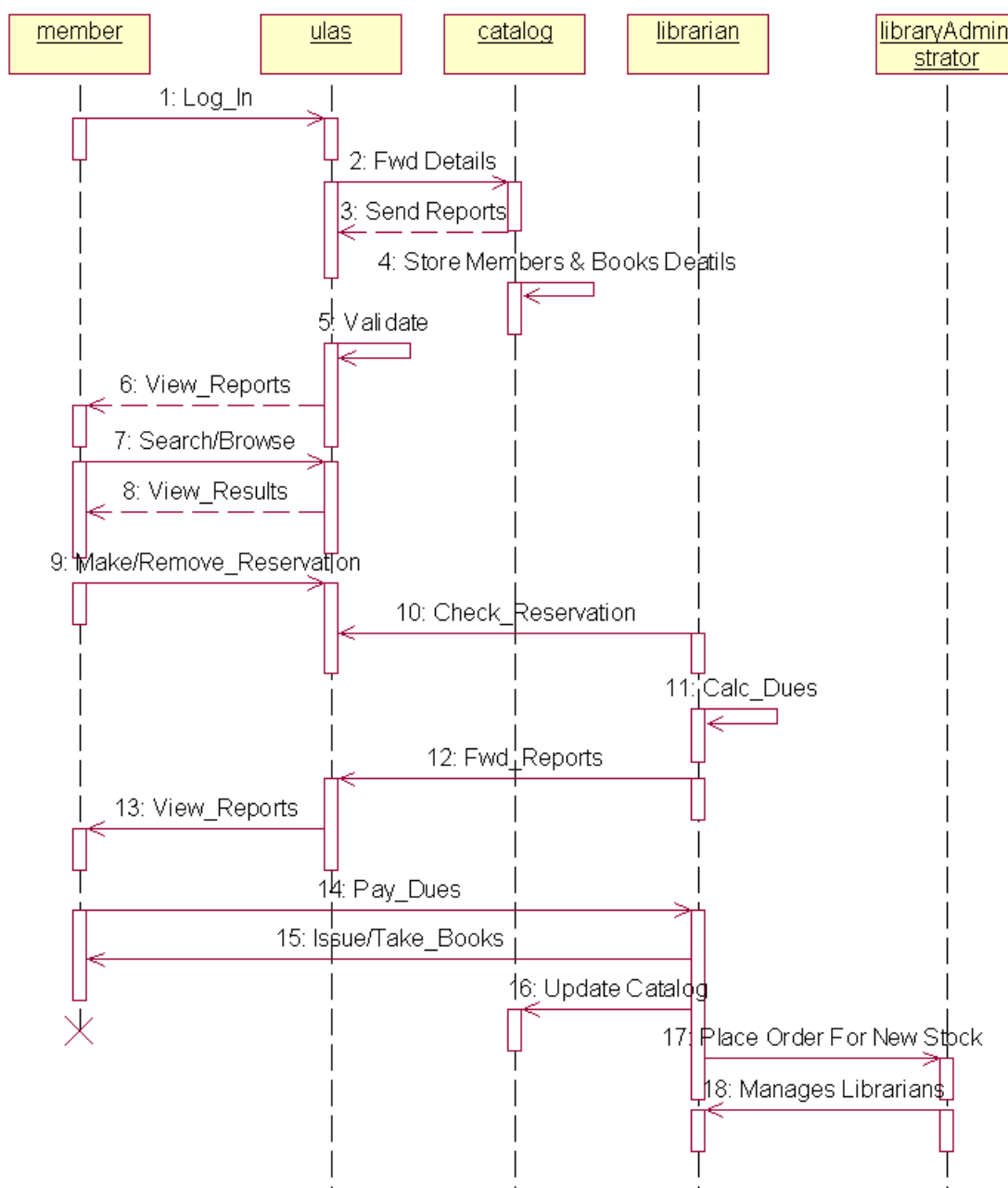
INTERACTION DIAGRAM:

An interaction diagram models the dynamic aspects of the system by showing the relationship among the objects and messages they may dispatch. There are two types of interaction diagrams:

SEQUENCE DIAGRAM:

Sequence diagram shows the step to step what must happen to accomplish a piece of functionality provided by the system. The components are:

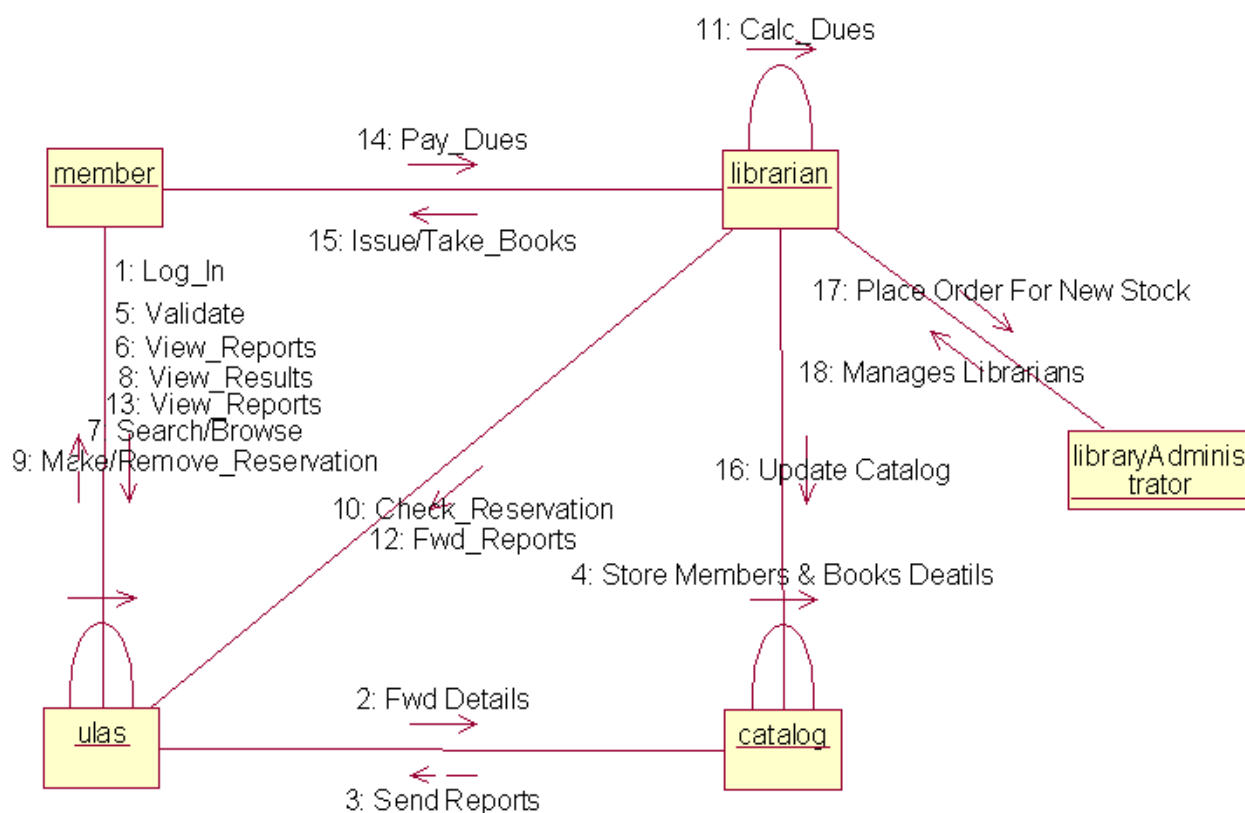
- a) Actor
- b) Object
- c) Messages
- d) Lifeline
- e) Focus of Control



COLLABORATION DIAGRAM:

Collaboration diagram displays object interactions organized around objects and their links to one another. The components are:

- a) Actor
- b) Object
- c) Link



CLASS DIAGRAM:

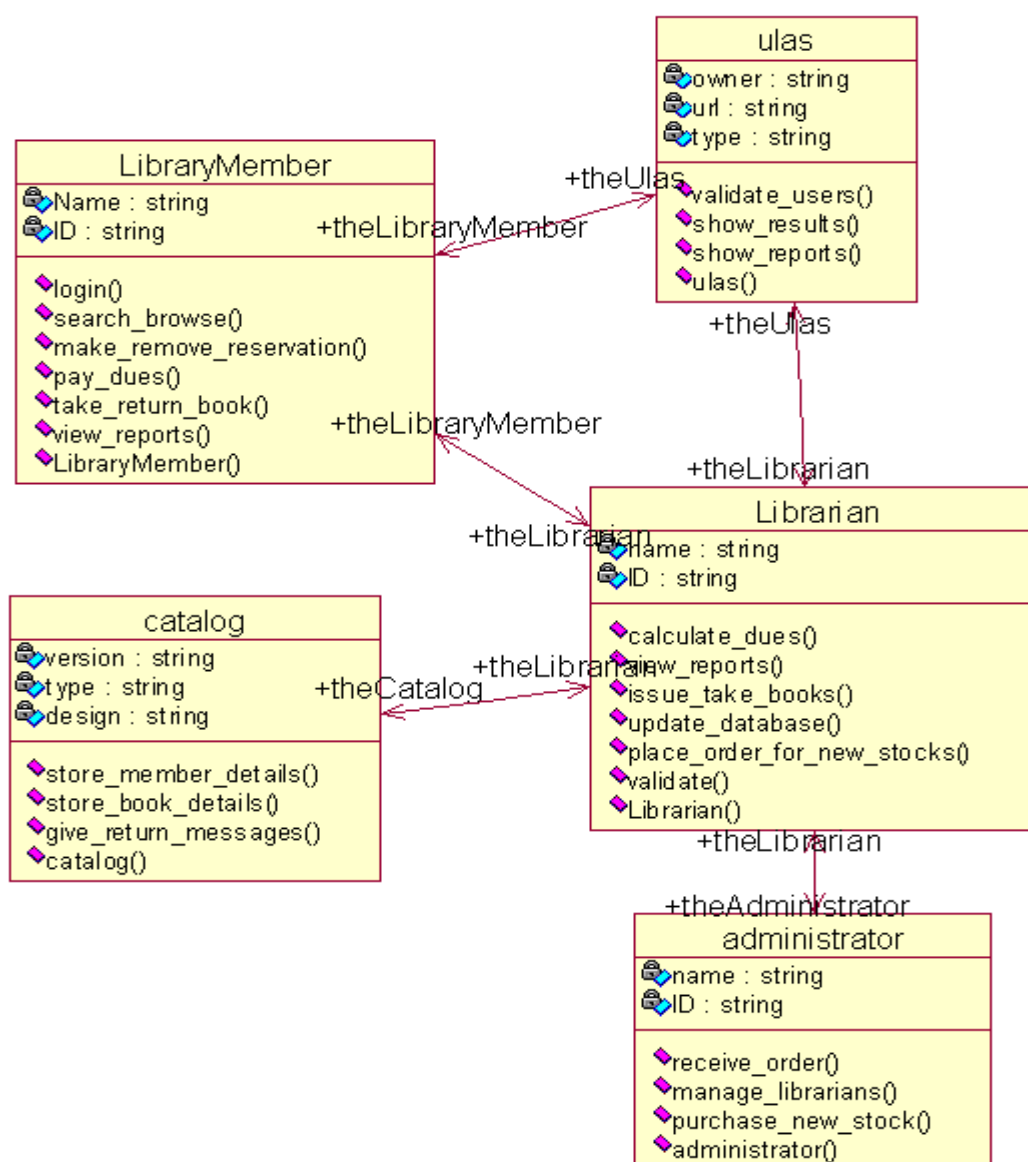
Class diagram shows structure of the software system. The class diagram shows a set of classes, interfaces and their relationships. The components are:

a) Class

b) Relationship:

The forms of relationship are:

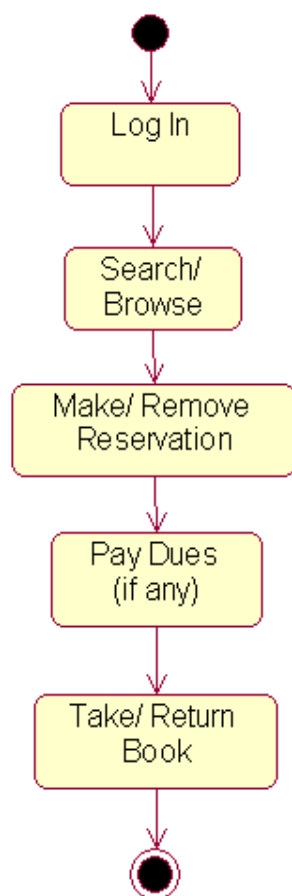
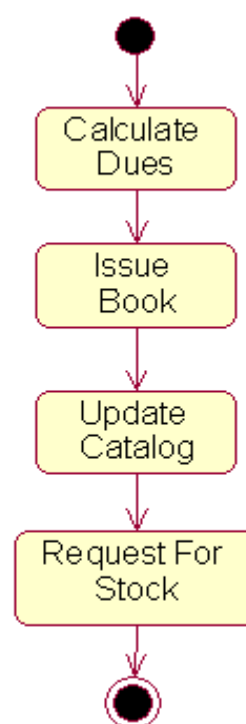
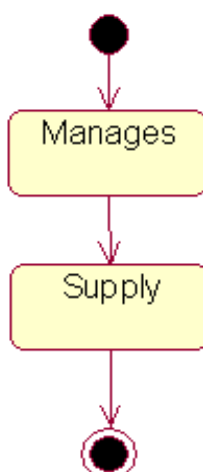
1. Association
2. Aggregation
3. Generalization
4. Composition
5. Dependency



STATE CHART DIAGRAM:

State chart diagram show a life cycle of a single class. The state is a condition where the object may be in. The components are:

- a) Start state
- b) End state
- c) State
- d) Transition

Member:**Librarian:****Library Administrator:**

ATM SYSTEM

Introduction:

ATM system needs enhancement to record card information electronically is automatically displays the details in the card. The ATM will communicate with the bank computer over an appropriate communication link. The ATM will serve one customer at a time. A customer will be required to insert an ATM card and enter a PIN number both of which will be sent to bank for valuation as a part of each transaction. The customer will then be able to perform one or more transactions. The card will be retained in the machine until the customer indicates that he/she desires no further transactions, at which point it will be returned.

Objective :

The main objective of the ATM system is to facilitate the user with easy transaction of money at a faster rate. The ATM application will run automatically and there will be no need of any manual interventions. Some built in functions are provided which performs the depository with-drawl functions.

Scope :

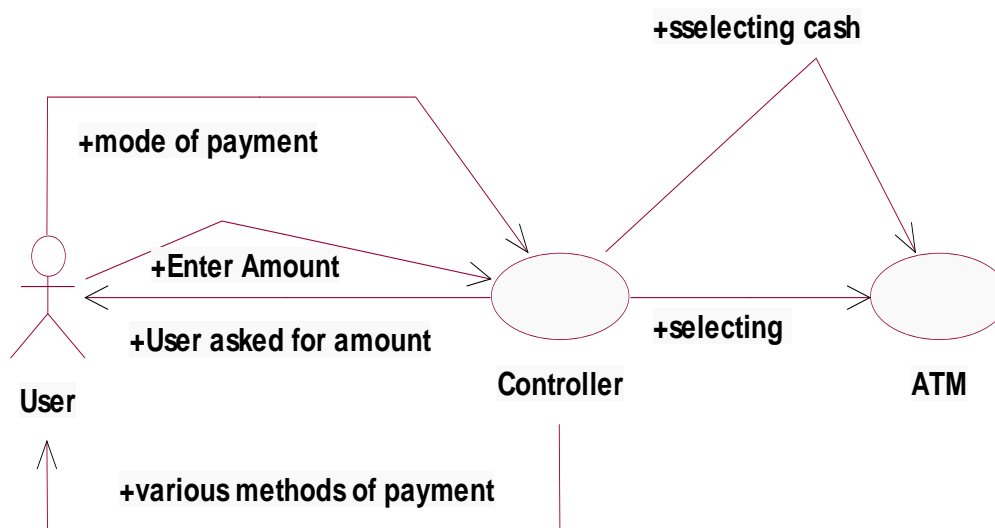
The scope of the project of the ATM system is to understand the working of the system and also to provide more security to the user as it facilitates with easy transaction.

Problem Statement :

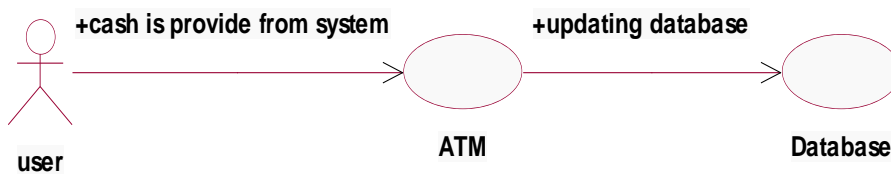
The operations on the function of the ATM are as follows:

1. The card has to be inserted in the place of the provided.
2. As the system accepts the card it displays the name and other details of the user.
3. It asks for the password, which is exclusively assigned for the particular card.
4. If the code is correct then the system gets activated with details.

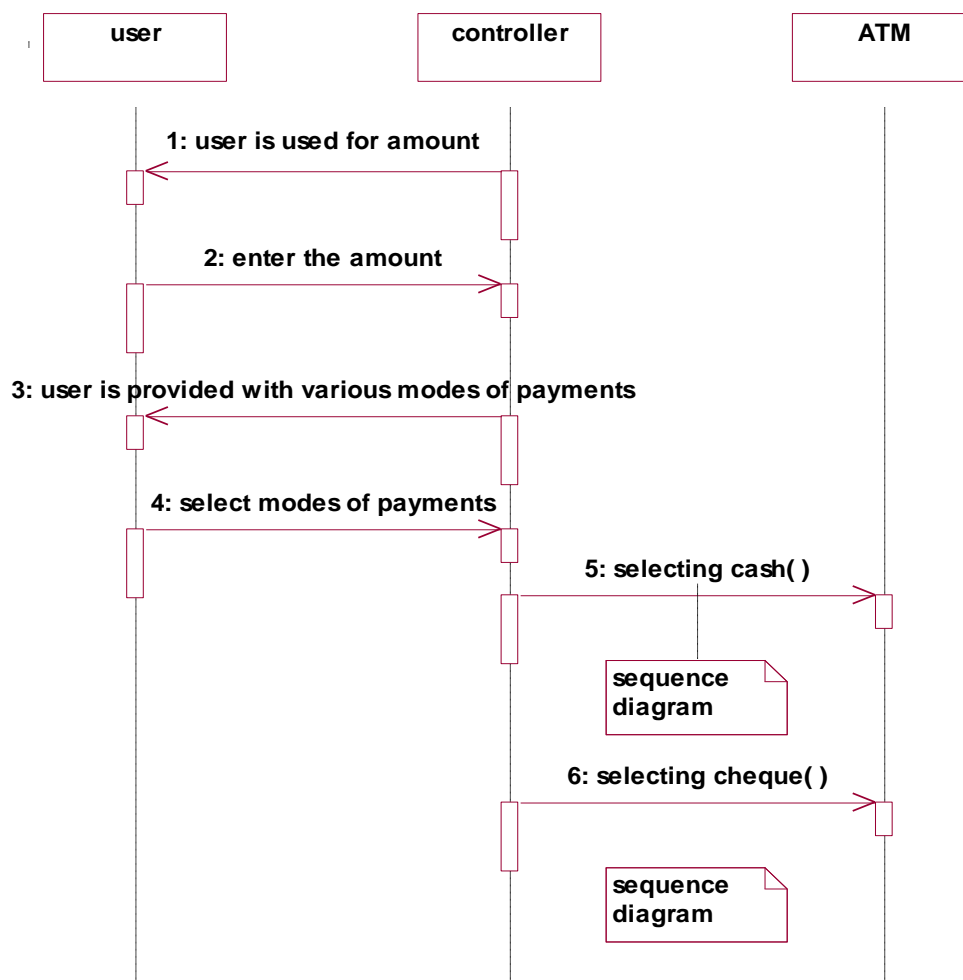
Withdraw usecase diagram :-



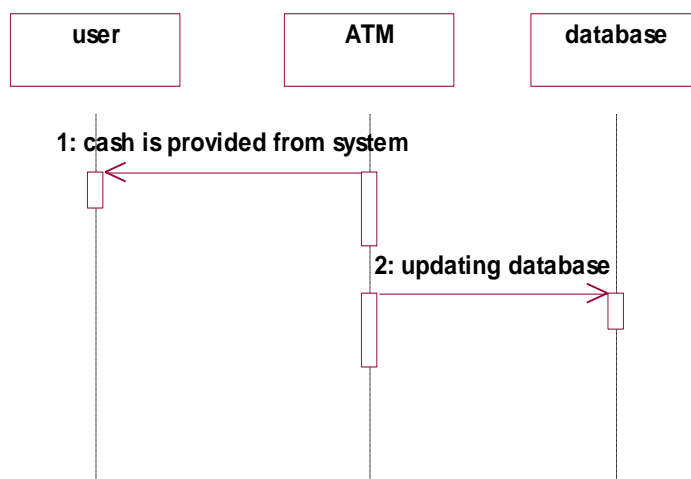
Withdraw cash usecase diagram :-



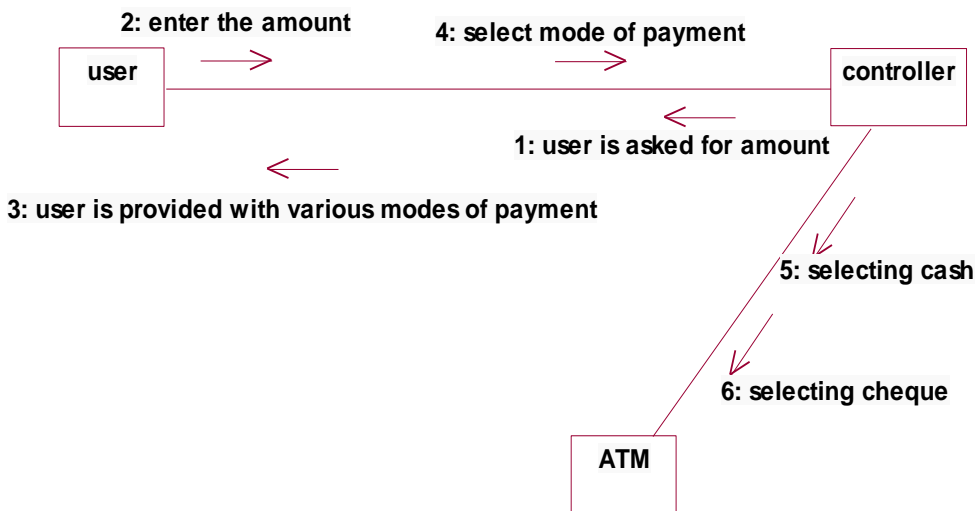
Withdraw sequence diagram :-



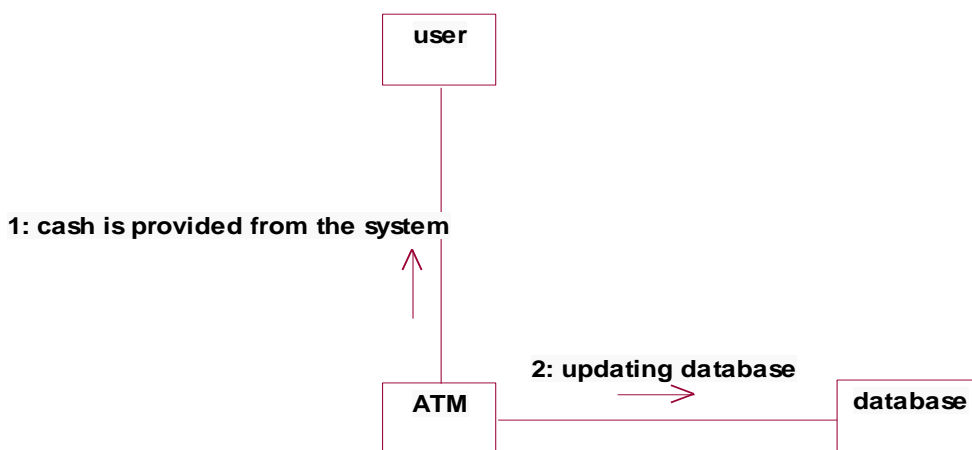
Withdraw cash sequence diagram :-



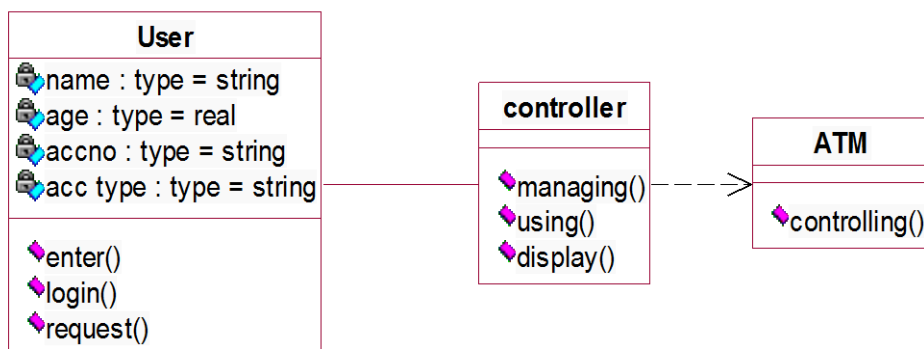
Withdraw collaboration:-



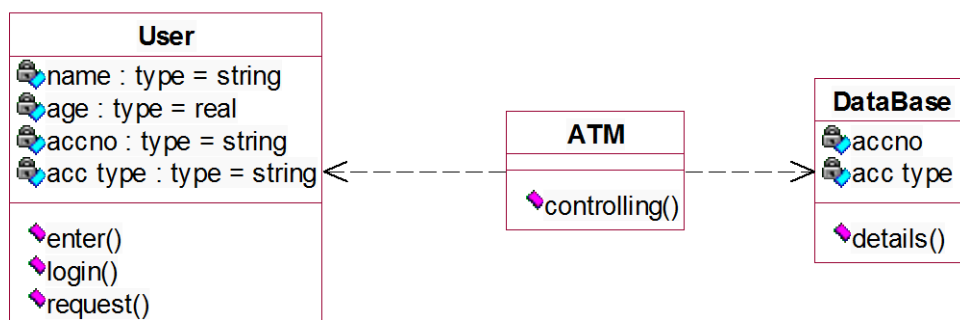
Withdraw cash collaboration :-



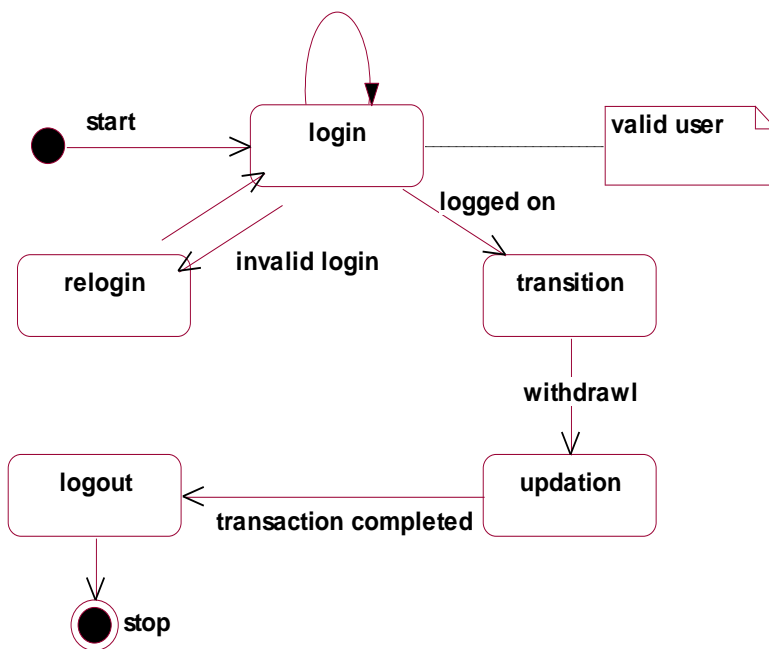
Withdraw class diagram :-



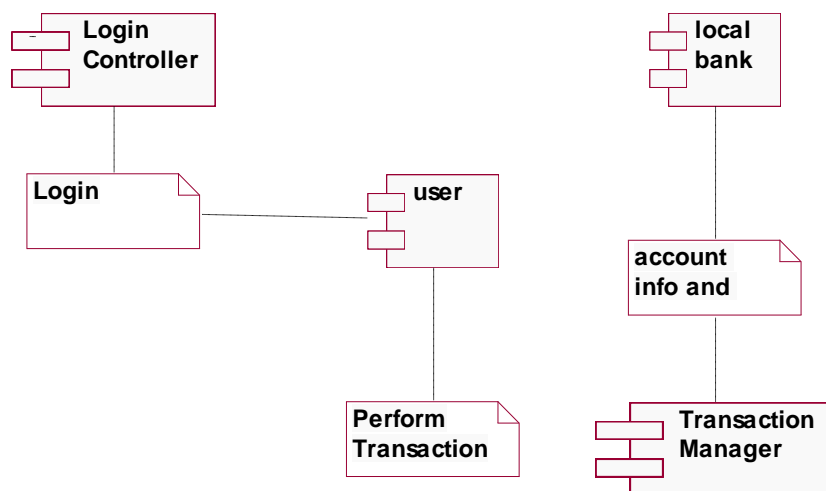
Withdraw cash class diagram:-



State Transition diagram :



Component Diagram :-



Deployment Diagram :-

