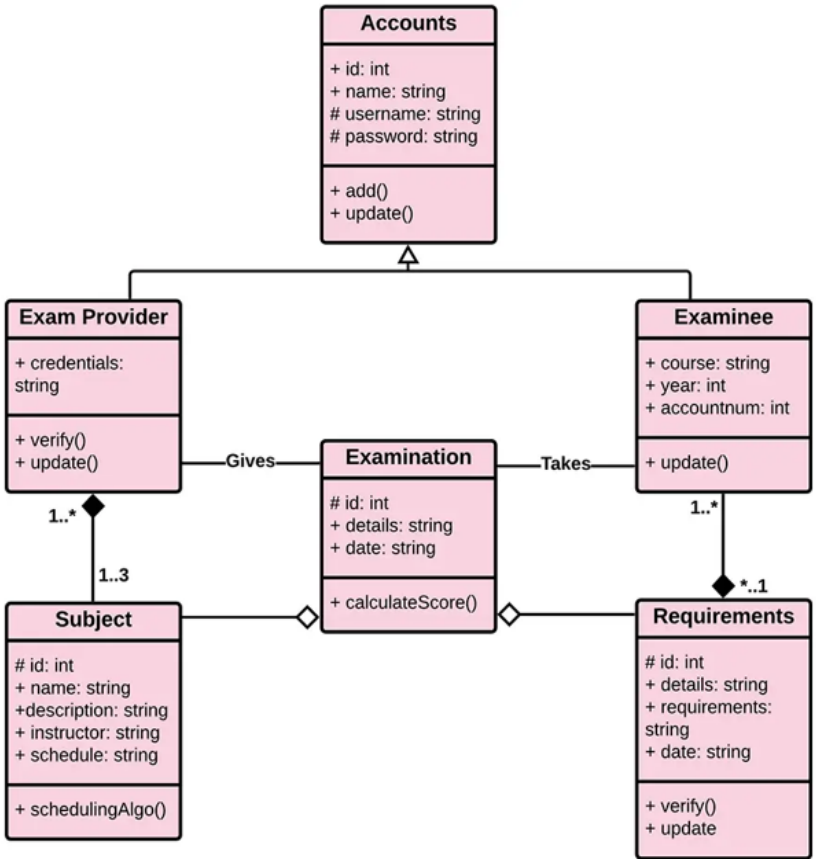
Online Examination System Project UML Diagrams:

Here are the UML Diagrams that composes an Online Examination System. Each of the UML Diagrams has a major role in achieving a well-developed and functional Online Examination System.

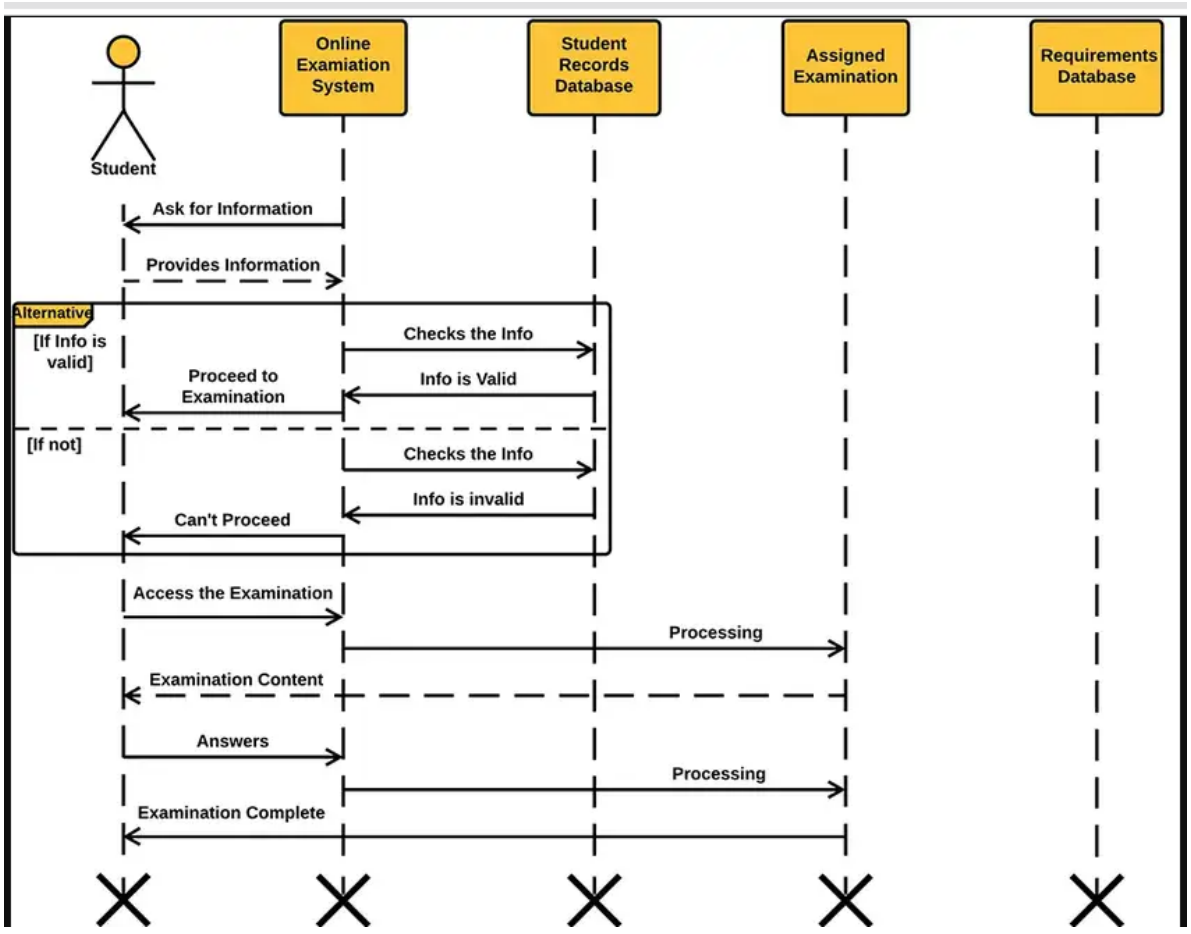
1. **Online Examination System Class Diagram | UML**

The Class diagram for Online Examination System shows the structures of information or data that will be handled in the system. These data or information will be represented by classes. Each of the classes will have their attributes in accord to the methods they will use. So the UML Class diagram was illustrated by a box with 3 partitions and the upper part was the name of the class, the middles are the attributes and the bottom is for the methods. The arrows on them represents their relationships in each other.



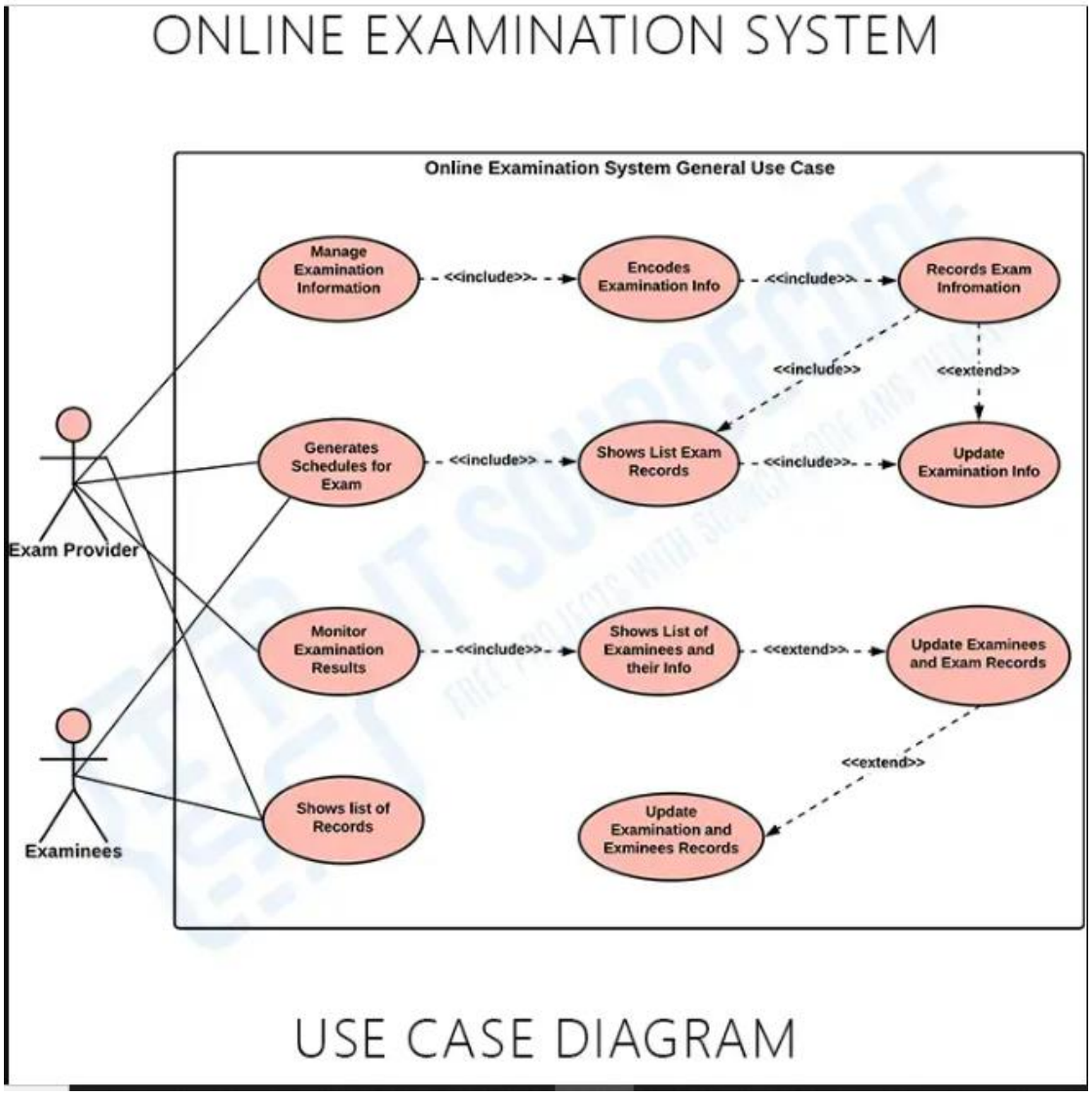
So the classes that are included in an Online Examination would be the **examinees**, **examination**, **exam provider or school**, **requirements**, and **subject**. The mentioned classes were just general. If you want more complex or wider scope of your Online Examination system, then you can add your desired classes. You must also include the database on your Class Diagram for your system.

2. **Online Examination System Sequence Diagram | UML**
   The designed sequence diagram illustrates the series of events that occurs in Online Examination System. In this illustration, the actors are represented by a stick man and the transactions or classes are represented by objects. It will give you clear explanation about the behavior of an Online Examination System in terms of processing the flow of instructions.



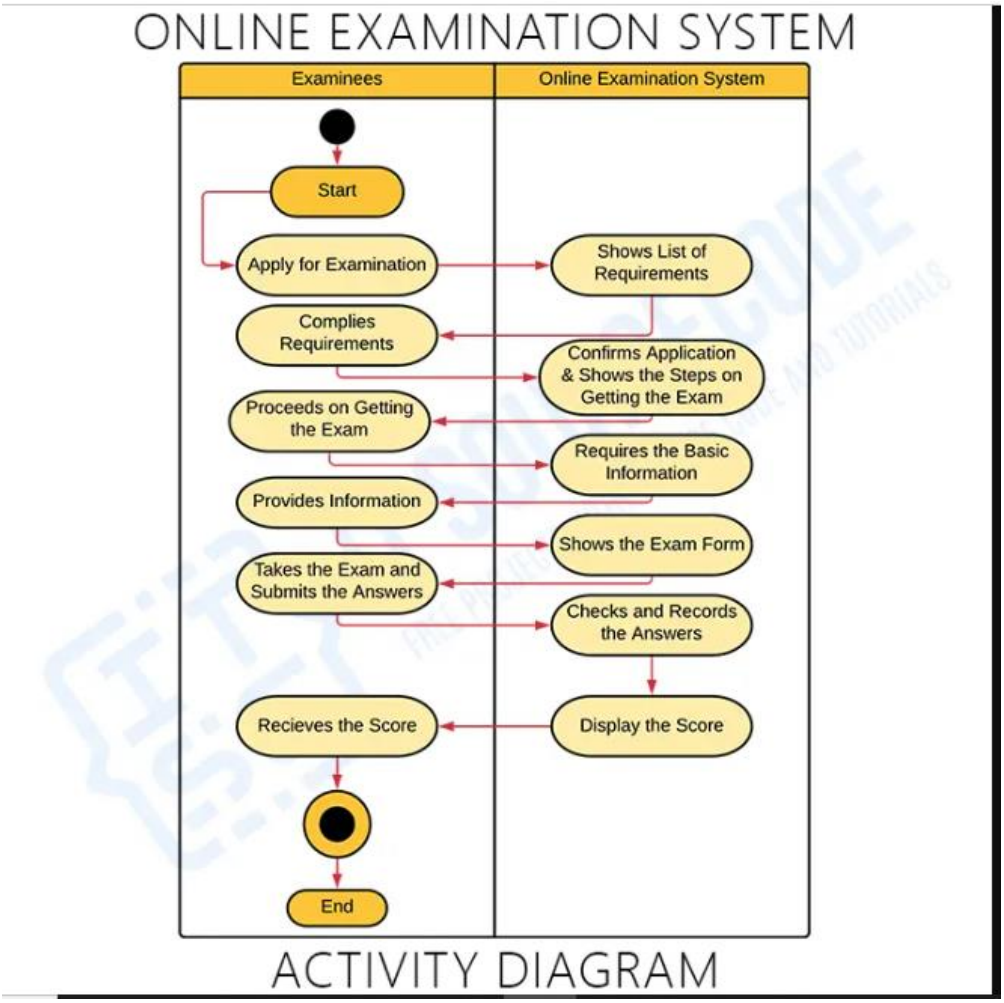
This designed sequence diagram is able to show programmers and readers about the sequence of messages between the actor and the objects.

3. **Online Examination System Use Case Diagram | UML**
   The use cases in the diagram represents the main processes in a Online Examination system. Then they will be broken down into more specific use cases depending on the included processes of the main use case. In this article you will know the main or general use case of Online Examination system as well as its specific use cases.



The UML Use Case Diagram is a design used as one of the Methodology on Online Examination System development. It represents the main functions or processes of the system as well as the specific processes included. They were also labelled properly to guide programmers and users about the structure of Online Examination System.

4. **Online Examination System Activity Diagram | UML**
   Here's the UML activity diagram design of Online Examination System that you can use for your own Final year Project. The UML activity Diagram is used to show the interaction of the user and the system. By creating it, you'll be able to see the flaws of the system and you may avoid it once you apply it to the project development. So it is important to have your diagrams designed first before jumping into its development.

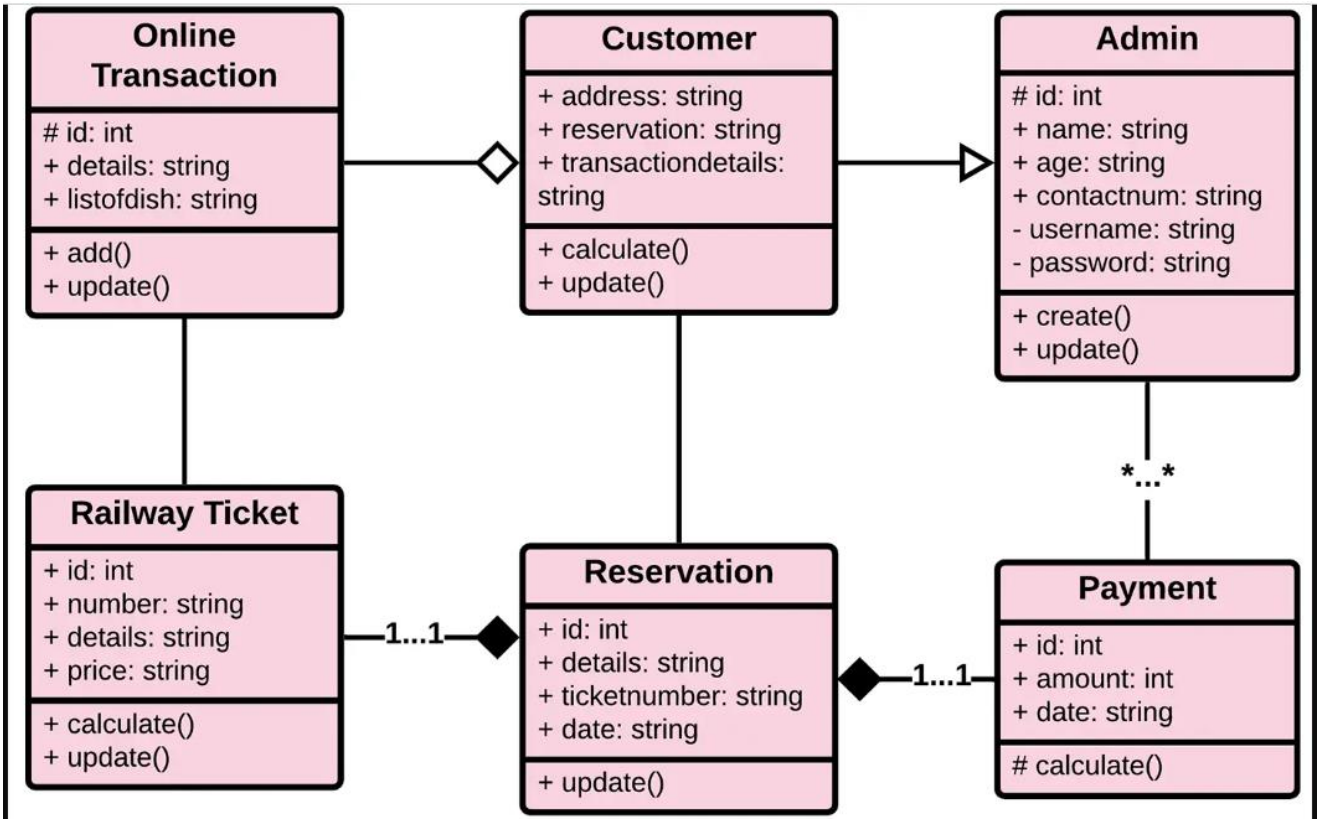


Now to create this kind of diagram, you have to determine the processes involve, the users and finalize the behavior of your proposed system.

Railway Reservation System Project UML Diagrams:

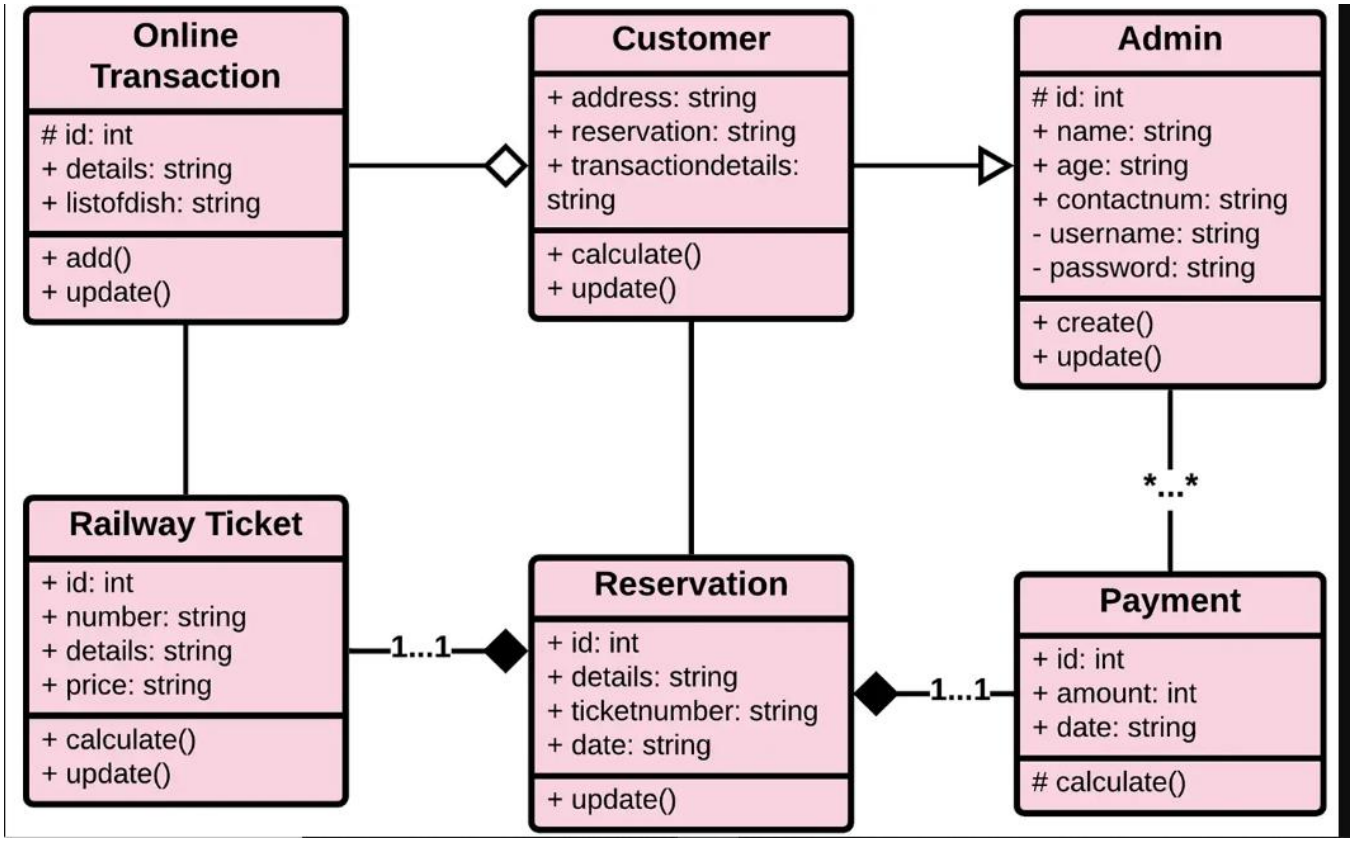
Here are the UML Diagrams that composes an Online Railway Reservation System. Each of the UML Diagrams has a major role in achieving a well-developed and functioning Railway Reservation System.

1. **Online Railway Reservation System Class Diagram**
   The Class diagram for Online Railway Reservation System shows the structure of information or data that will be handled by the system. These data or information will be represented by classes. Each of the classes will have their attributes in accord to the methods they will use. So the UML Class diagram was illustrated by a box with 3 partitions and the upper part was the name of the class, the middles are the attributes and the bottom is for the methods. The arrows on them represents their relationships in each other.



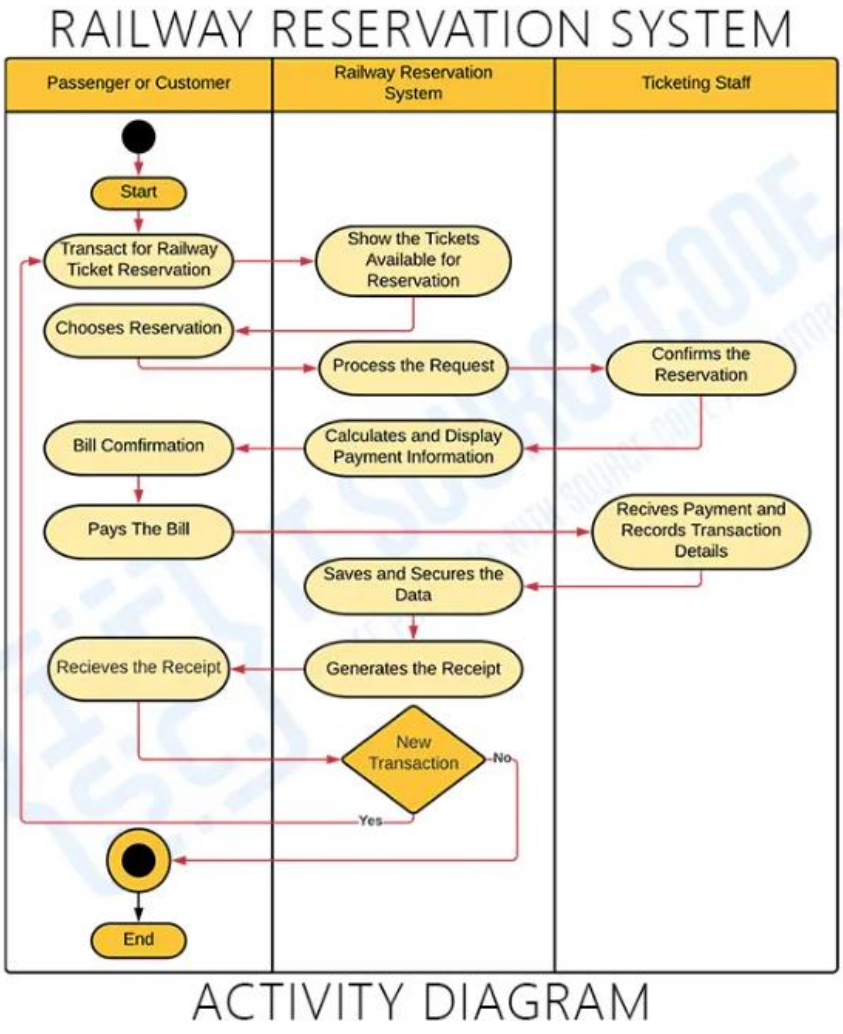
So the classes included in Online Railway Reservation are the **reservations**, **users**, **customers**, **ticket**, **payment** and **transaction**. The mentioned classes were just general. If you want more complex or wider scope of your Railway Reservation system, then you can add your desired classes.

2. **Railway Reservation System Sequence Diagram | UML**
   The designed sequence diagram illustrates the series of events that occurs in Railway Reservation System. In this illustration, the actors are represented by a stick man and the transactions or classes are represented by objects. It will give you clear explanation about the behavior of the Railway Reservation System in terms of processing the flow of instructions.



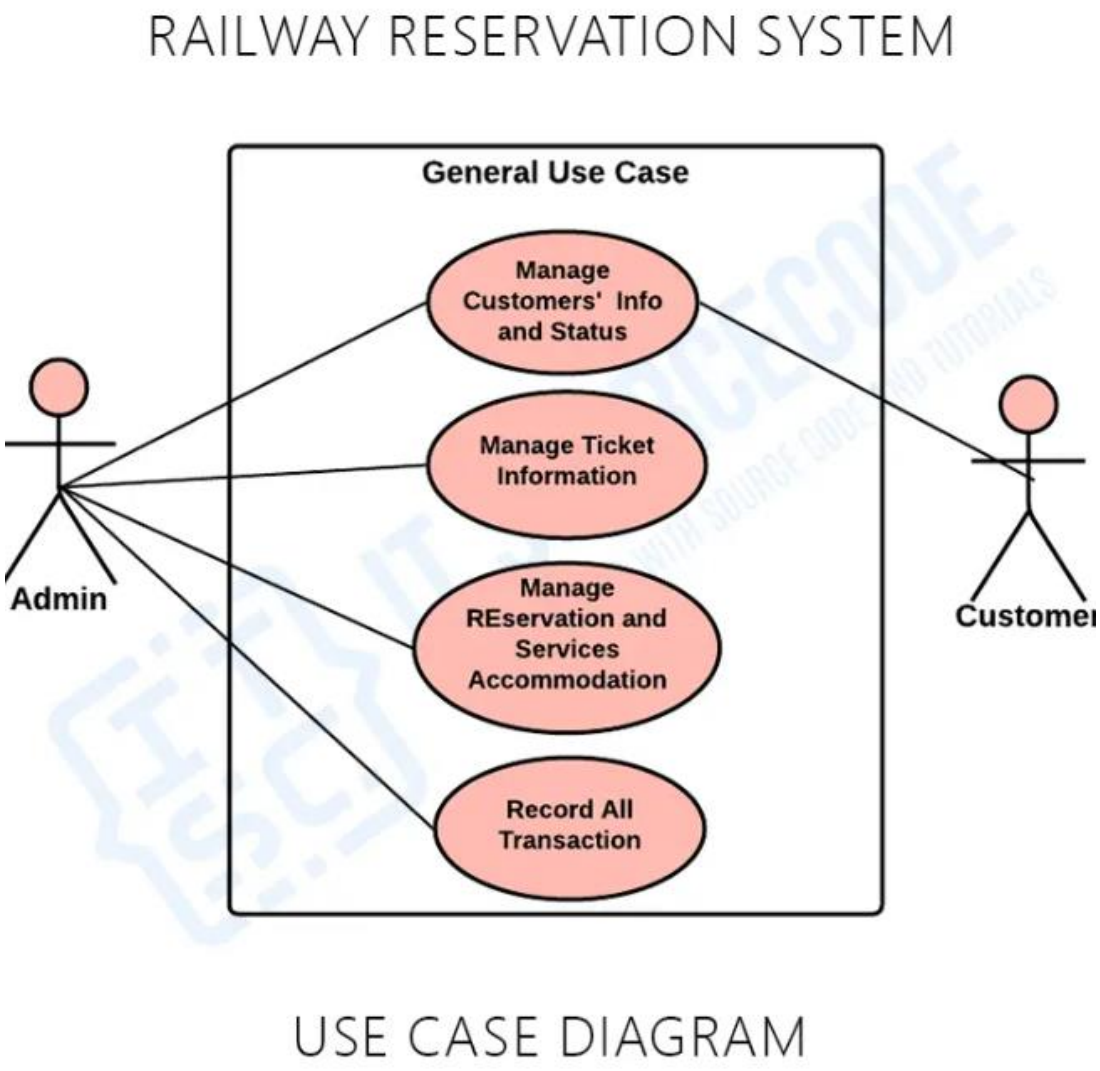
This designed sequence diagram is able to show programmers and readers about the sequence of messages between the actor and the objects.

3. **Railway Reservation System Activity Diagram | UML**
   Here's the UML activity diagram designs of Online Railway Reservation System that you can use for your own Final year Project. The UML activity Diagram is used to show the interaction of the user and the system. By creating it, you'll be able to see the flaws of the system and you may avoid it once you apply it to the project development. So it is important to have your diagrams designed first before jumping into its development.



Now to create this kind of diagram, you have to determine the processes involve, the users and finalize the behavior of your proposed system.

4. **Railway Reservation System Use Case Diagram**
   Now the use case UML diagram serves as the guide to the programmers in determining the use cases that should be included in the Online Railway Reservation system. The use cases stands for the main processes in the system. Then they will be broken down into more specific processes to know all the included processes that completes the railway reservation system.



By creating the use case of the Online Railway Reservation System, you will identify the overall flow of the system. After that you can relate it to the other diagrams and complete all of the system function.

LIBRARY MANAGEMENT SYSTEM

AIM

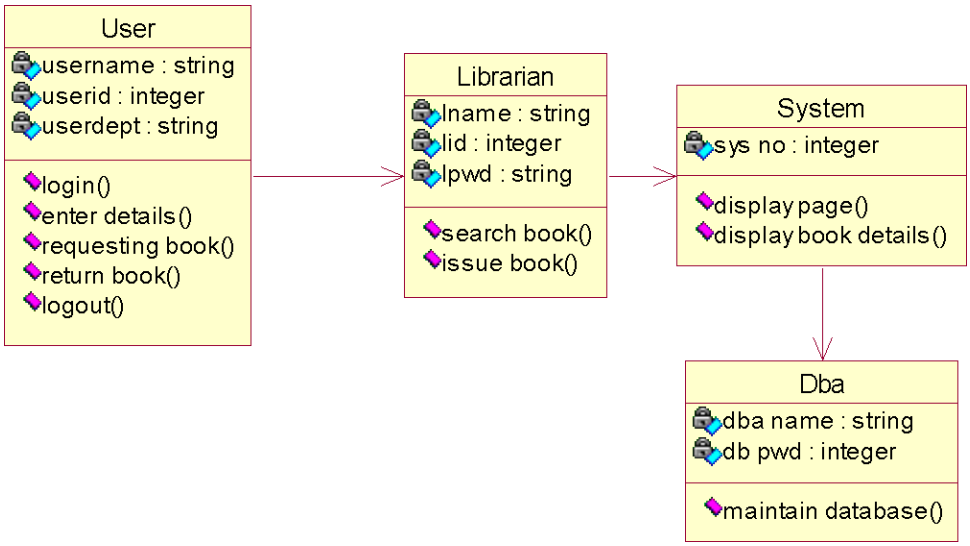
To design an object oriented model for Library Management System using Rational Rose software and to implement it using Java.

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.

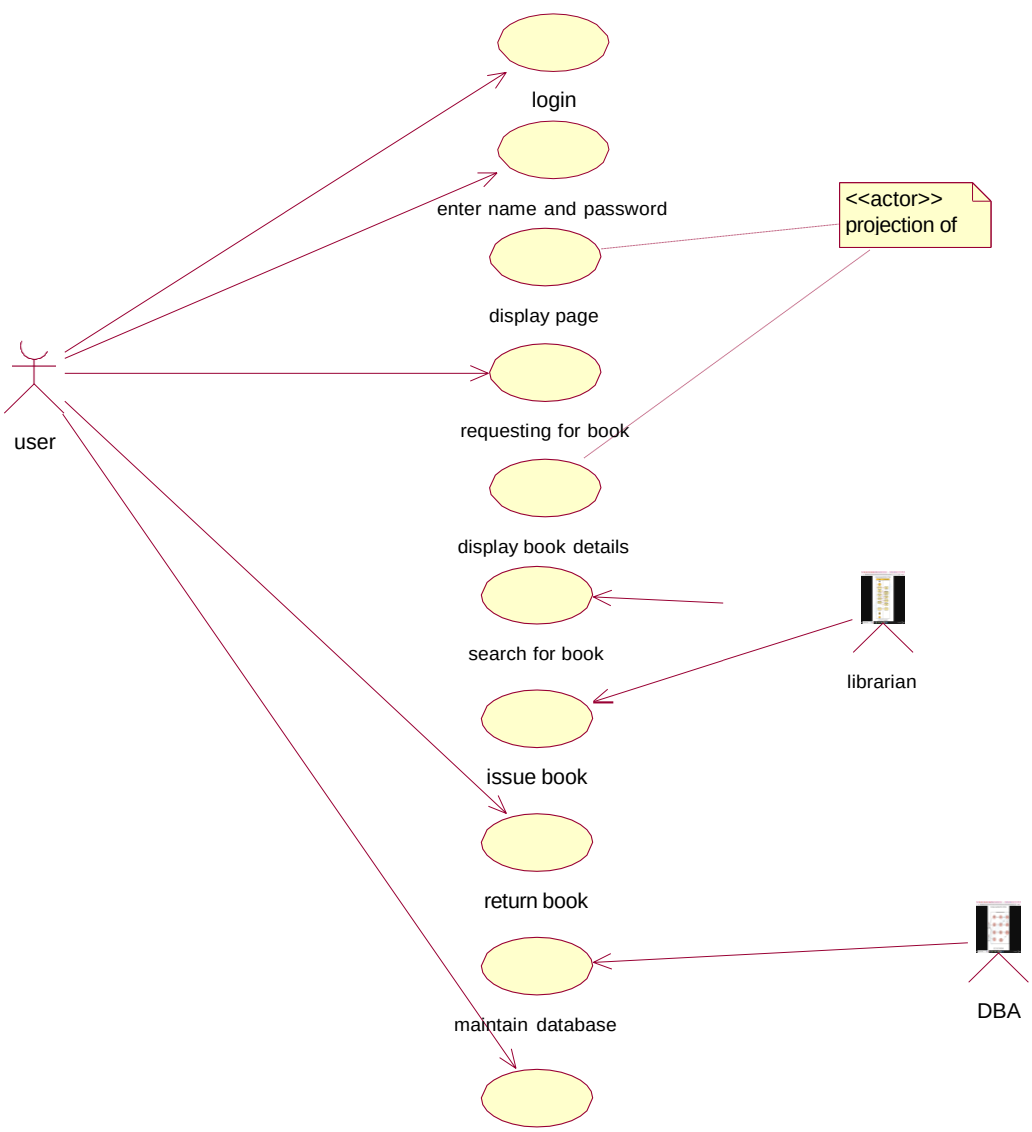
CLASS DIAGRAM

A class diagram in the unified modeling language is a type of static structure diagram that describes the structure of a system by showing the system's classes, their attributes, operations and the relationships among objects. The library management system makes use of the following classes user, librarian, system and DBA.



USE CASE DIAGRAM

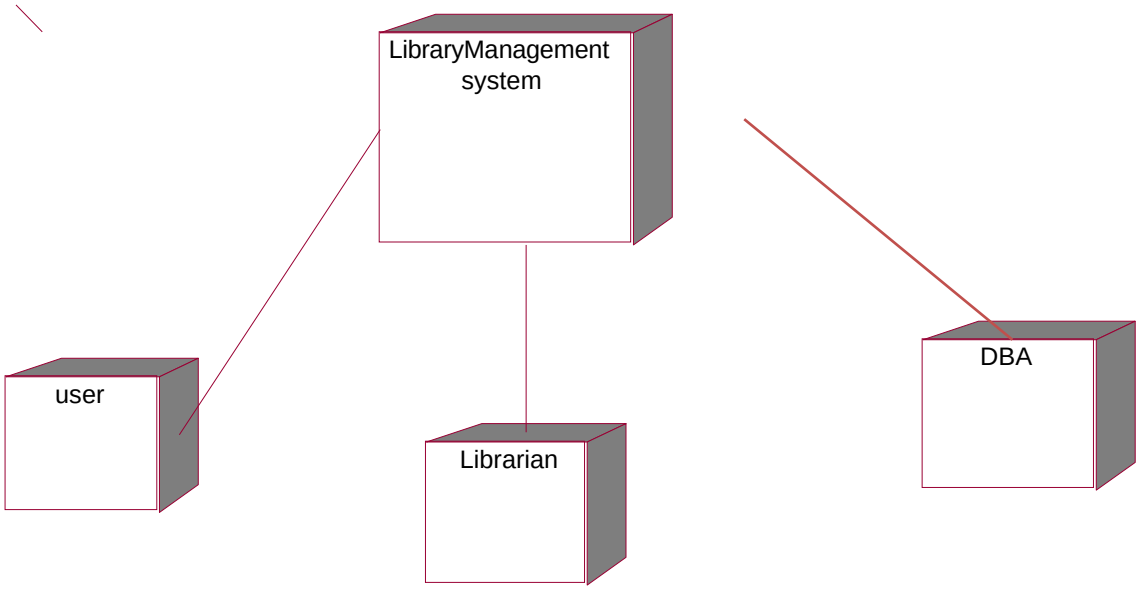
Use case is a list of actions or events. Steps typically defining the interactions between a role and a system to achieve a goal. The use case diagram consists of various functionality performed by actors like user, librarian, system and DBA.



logout

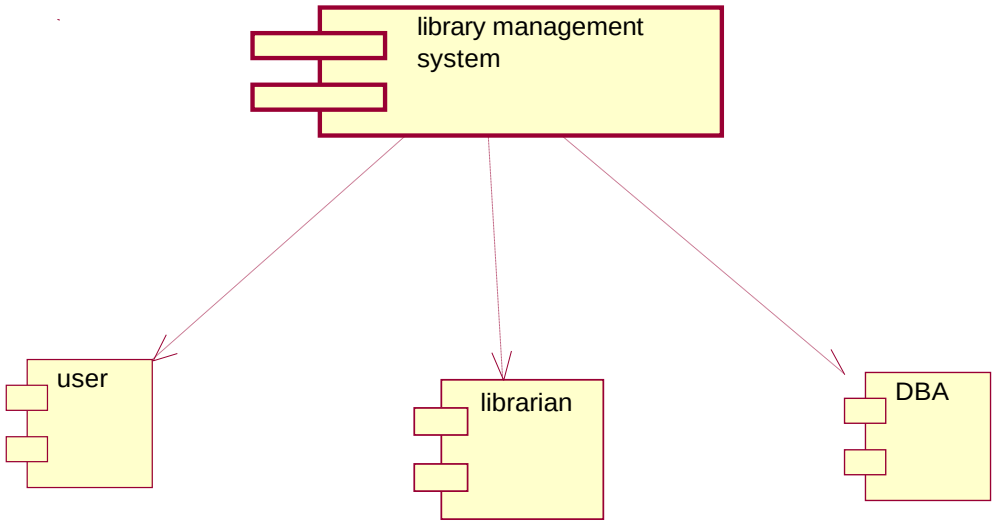
DEPLOYMENT DIAGRAM

Deployment diagram is a structure diagram which shows architecture of the system as deployment of software artifacts to deployment target. It is the graph of nodes connected by communication association. It is represented by three dimensional box. The device node is library management system and execution environment nodes are user, librarian, system and DBA.



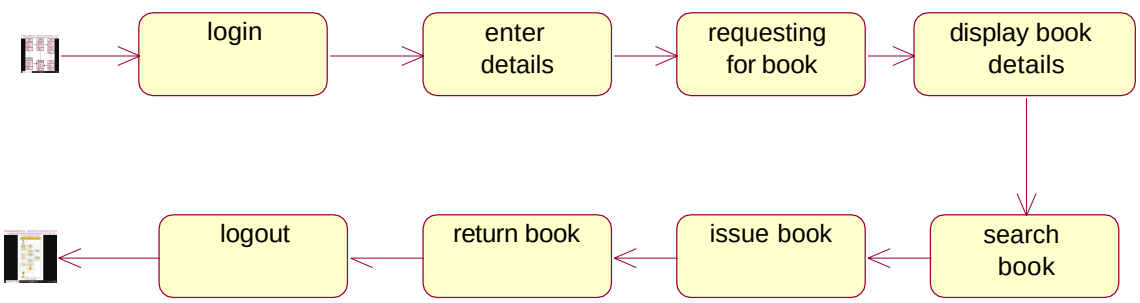
COMPONENT DIAGRAM

Component diagram shows the dependencies and interactions between software components. Component diagram carries the most important living actors of the system i.e, user,librarian and DBA.



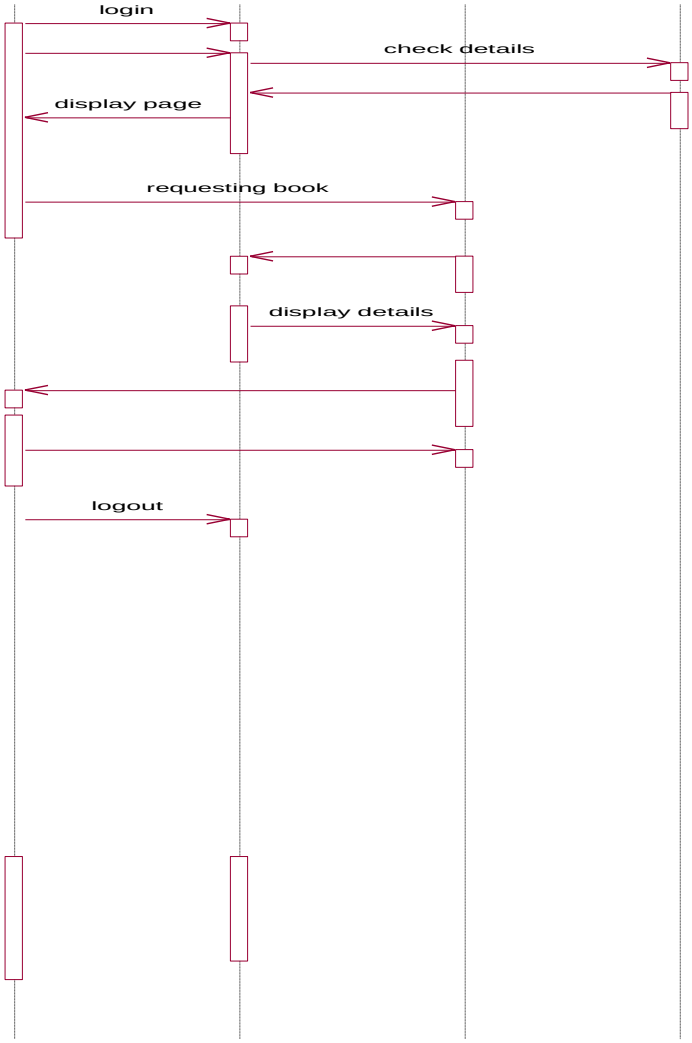
STATECHART DIAGRAM

State chart diagram is also called as state machine diagram. The state chart diagram contains the states in the rectangular boxes and the states are indicated by the dot enclosed. The state chart diagram describes the behavior of the system. 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.



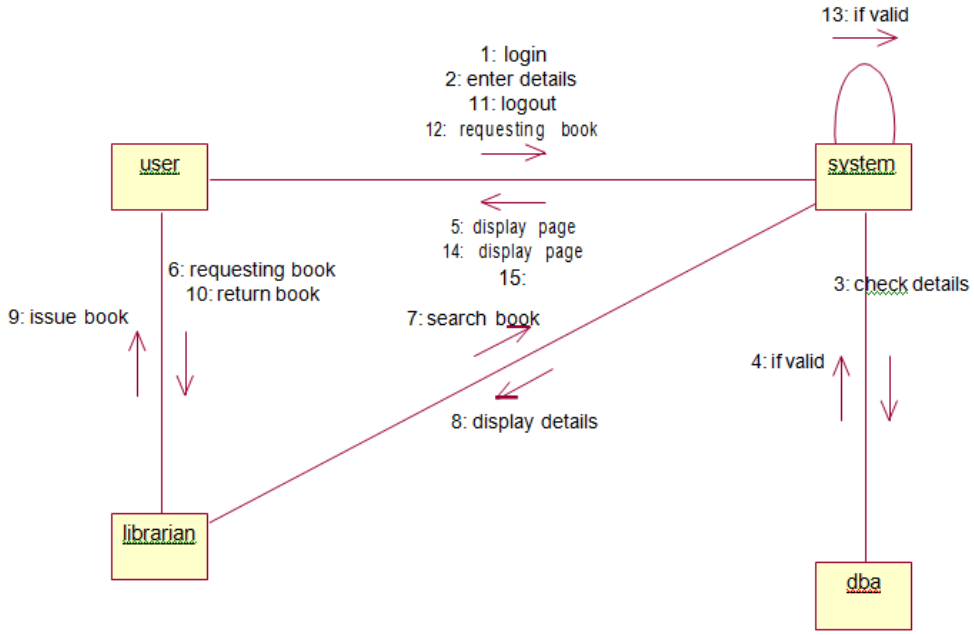
SEQUENCE DIAGRAM

A sequence diagram represent the sequence and interactions of a given use case or scenario. Sequence diagram capture most of the information about the system. It is also represent in order by which they occur and have the object in the system send message to one another. 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.


login
check details
display page
requesting book
display details
logout

COLLABORATION DIAGRAM

Like sequence diagram collaboration diagrams are also called as interaction diagram. Collaboration diagram convey the same information's as sequence diagram but focus on theobject roles instead of the times that messages are sent. Here the actions between various classes are represented by number format for the case of identification.



UML diagrams for ECommerce

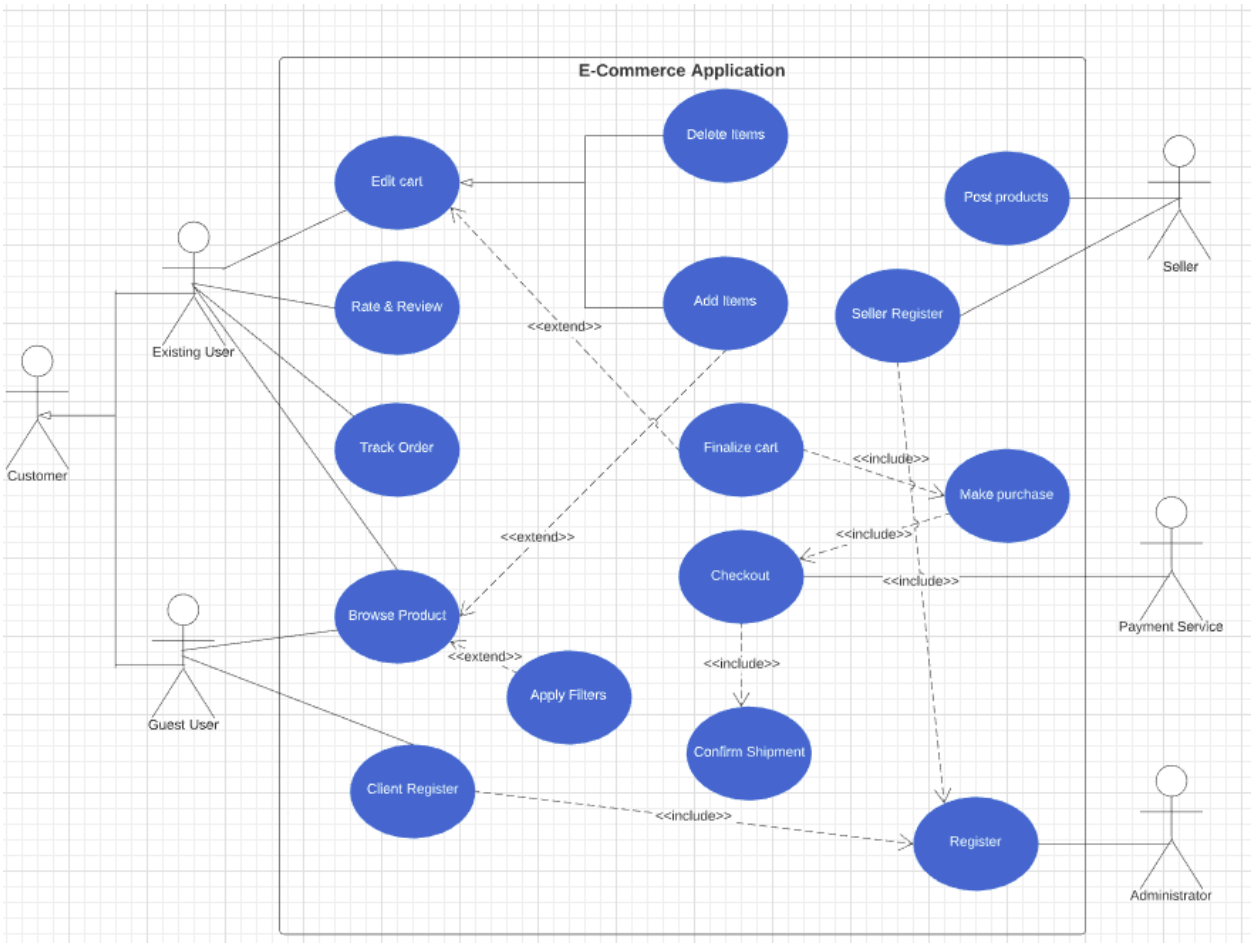
In software and systems engineering, a **use case** is a list of steps, typically defining interactions between a role (known in Unified Modeling Language (UML) as an "actor") and a system, to achieve a goal. The actor can be a human or an external system.

In systems engineering, use cases are used at a higher level than within software engineering, often representing missions or stakeholder goals. The detailed requirements may then be captured in Systems Modeling Language (SysML) or as contractual statements.

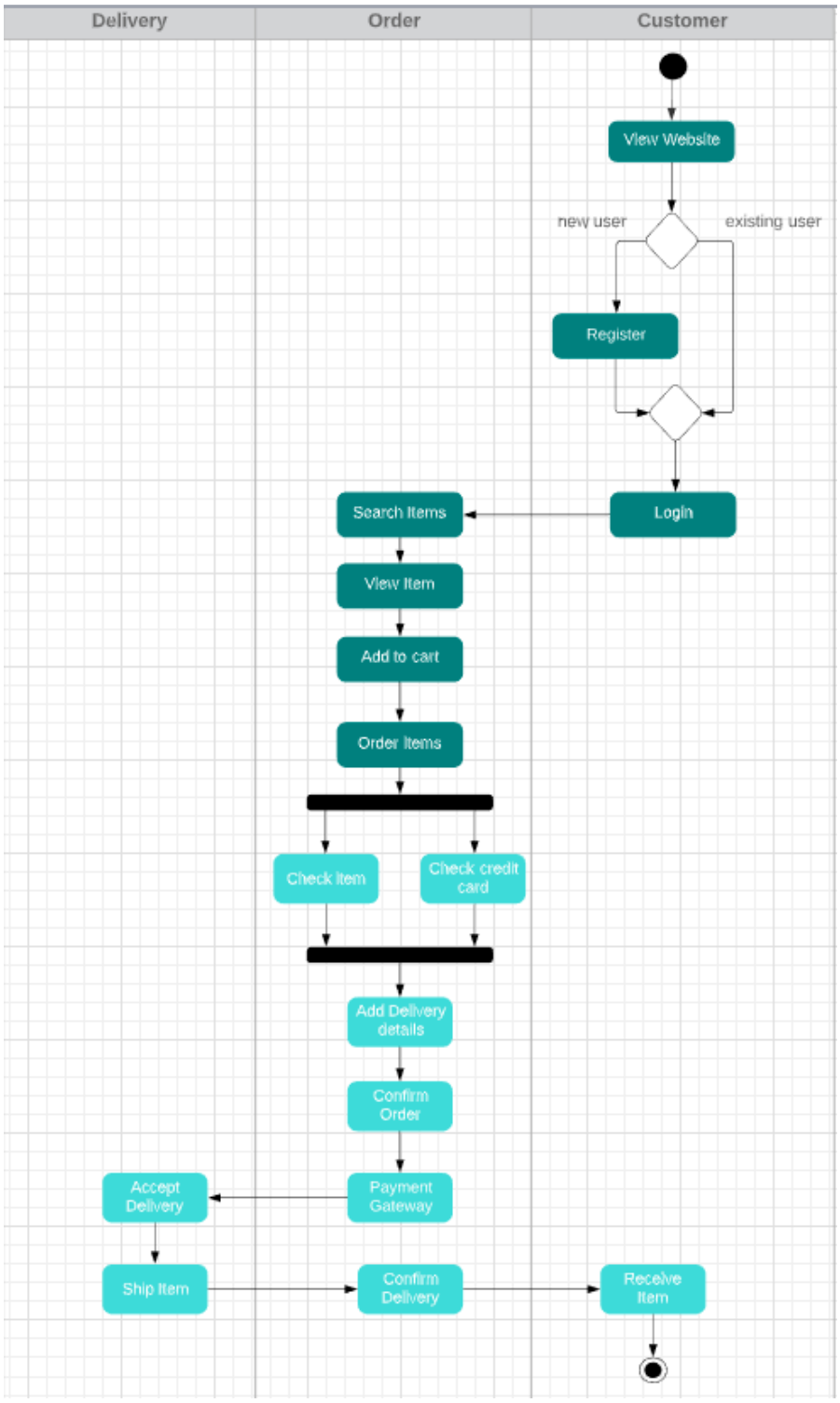
As an important requirement technique, use cases have been widely used in modern software engineering over the last two decades. Use case driven development is a key characteristic of process models and frameworks like Unified Process (UP), Rational Unified Process (RUP), Oracle Unified Method (OUM), etc. With its iterative and evolutionary nature, use case is also a good fit for agile development.

Requirement Modeling:

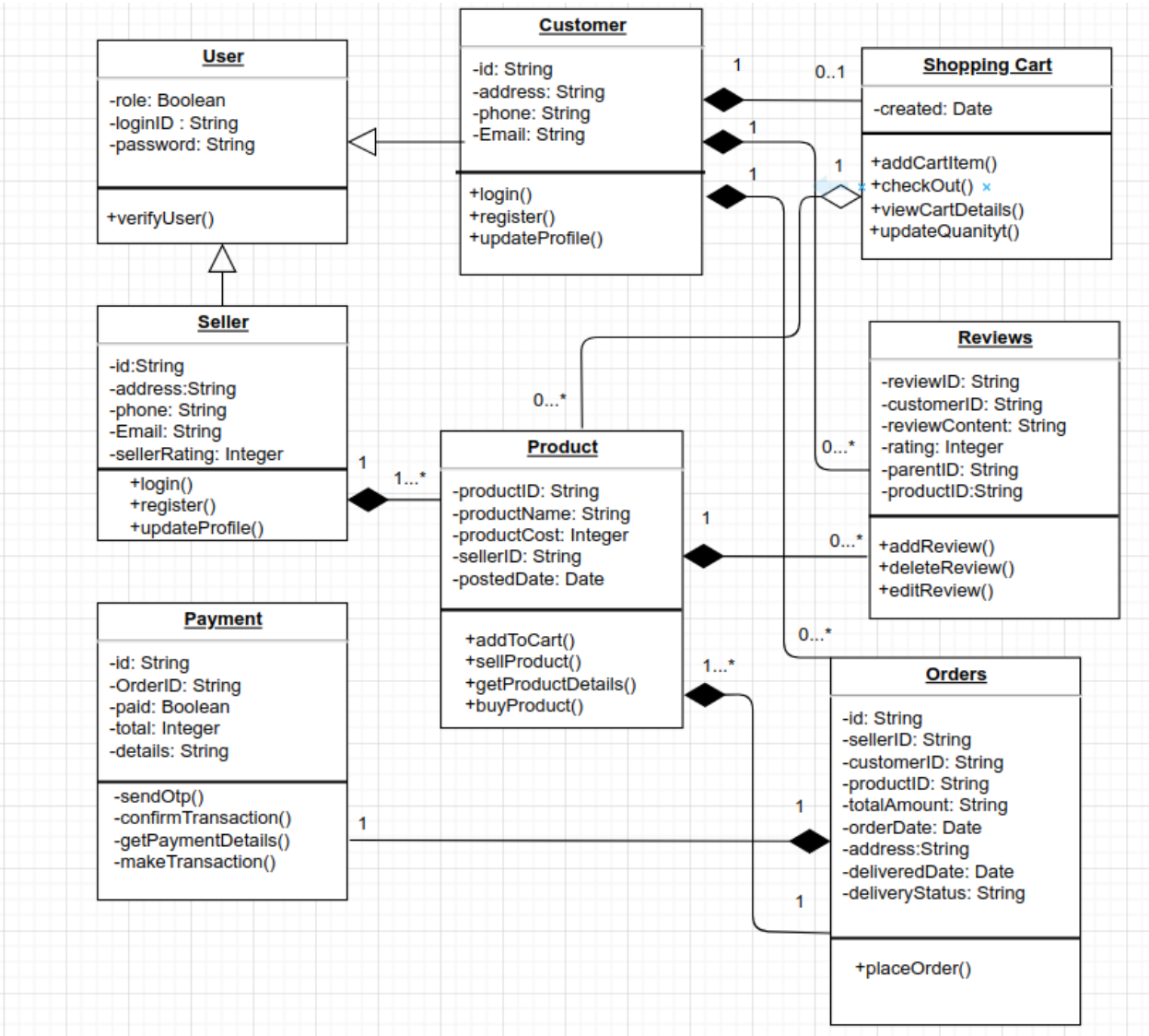
- **Use case**: The aim of the use case diagrams is clearly to provide the system with a high level view and to communicate the specifications to the stakeholders in terms of the laypeople. To have a full practical and technological view of the system, additional diagrams and documentation may be used.



- **Activity diagram**: The basic aims of the task diagrams are equivalent to the four other diagrams. It catches the system's complex behaviour. Other four diagrams are used to show the message flow from one object to another but activity diagram is used to show message flow from one activity to another.



- **Class diagram**: The aim of the class diagram is to model an application's static vision. The only diagrams that can be explicitly converted to object-oriented languages and therefore commonly used at the time of development are class diagrams. UML diagrams, such as the operation diagram, will only give the application's sequence flow, but the class diagram is a little different. It is the most common UML in the world.



- **Sequence diagram**: Business staff could use sequence diagrams to communicate how the business currently works. Diagrams can also be used to showcase the prerequisites for a future system implementation. It is during the design period that developers and architects utilize the diagram to showcase the system's object interactions.