Object Oriented Course Project

Project Title

Room Reservation System

Course Code: SWE331

Course Title: Object Oriented Software Development

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Date: 05-12-17

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Chapter 1: Introduction

1. Introduction

My working system name is Room Application Management system. The system is a web based for managing shared office, meeting, laboratory, and teaching space is to be developed.

1.1 About The System

A networked display appliance is situated outside each room. The appliance allows users to reserve a room and check the availability of other rooms.
The system can:

Reserve the appropriate room
Display meeting information
Easily extend room reservation
Release a room early
Quickly identify
#Grab a room

1.2 Purpose

In Room Management Appliance System the office employee's or any registered user for this system can book or canceled the meeting room reservation by the system. No collision will occurred for room reservation. After complete payment reservation will be confirmed.

1.3 Scope:

In this system the registered user confirm about their room reservation with time. They can reserve the existing room for their purpose by maintaining the system. They have to login by their account and they can also cancel their reservation but after payment they are not be able to cancel reservation. This system such a great dill for them who need the meeting room.

1.4 Vision:

For reserving a room we have to going or contact here and there for getting a room. But maintaining this system we have not to go anywhere for meeting room. This system will be manage the room for appliance by online payment.

1.5 Why This System Is Necessary?

Minimize the collision of room time and schedule or reservation for meeting or teaching in a room.

1.6 Proposed Solution:

- Reservation with touch screen
- Identified room by using green or red light
- Check availability with view web interface

Chapter 2: System Analysis

2. System Analysis

2.1 Actor Goal List

Table 1: Actor Goal List

Actor	Goal
User	View Room information View Room reservation Schedule View Room reservation Schedule with price Reserve a room.

2.2 Use Case Model

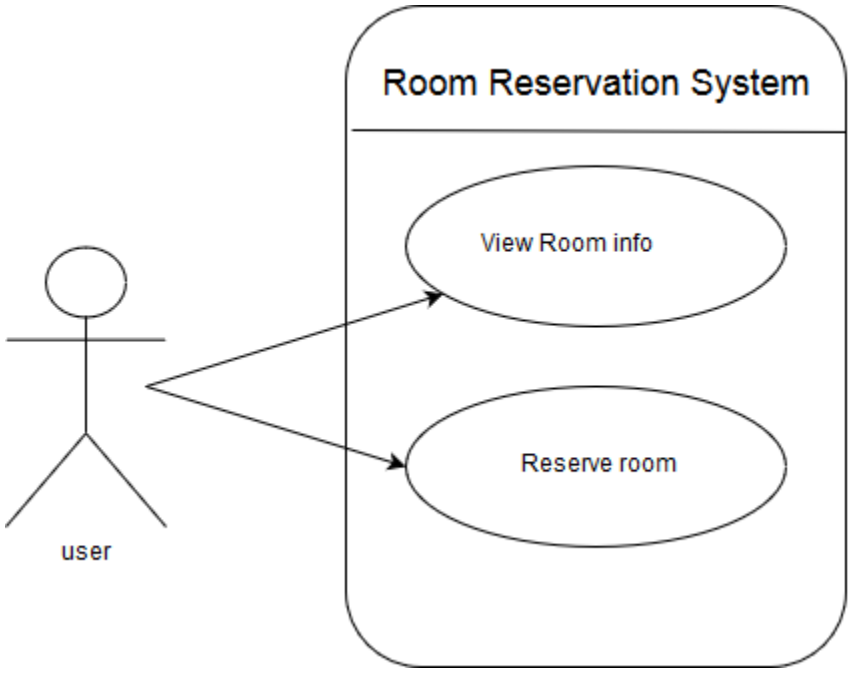

Figure 1:Actor user

2.3 Use Case Description (Brief)

2.3.1 Description of use case: View Room info

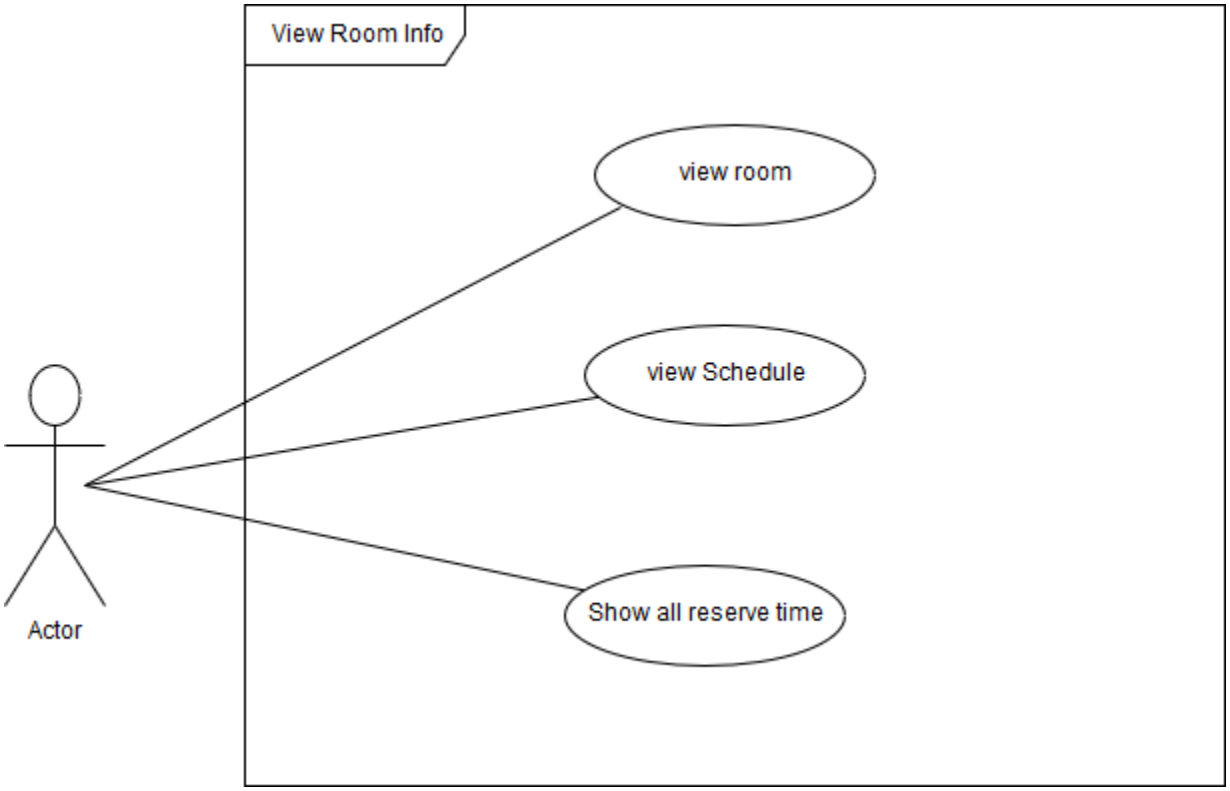

Figure 2:View Room

2.3.2 Description of use case: Reserve Room

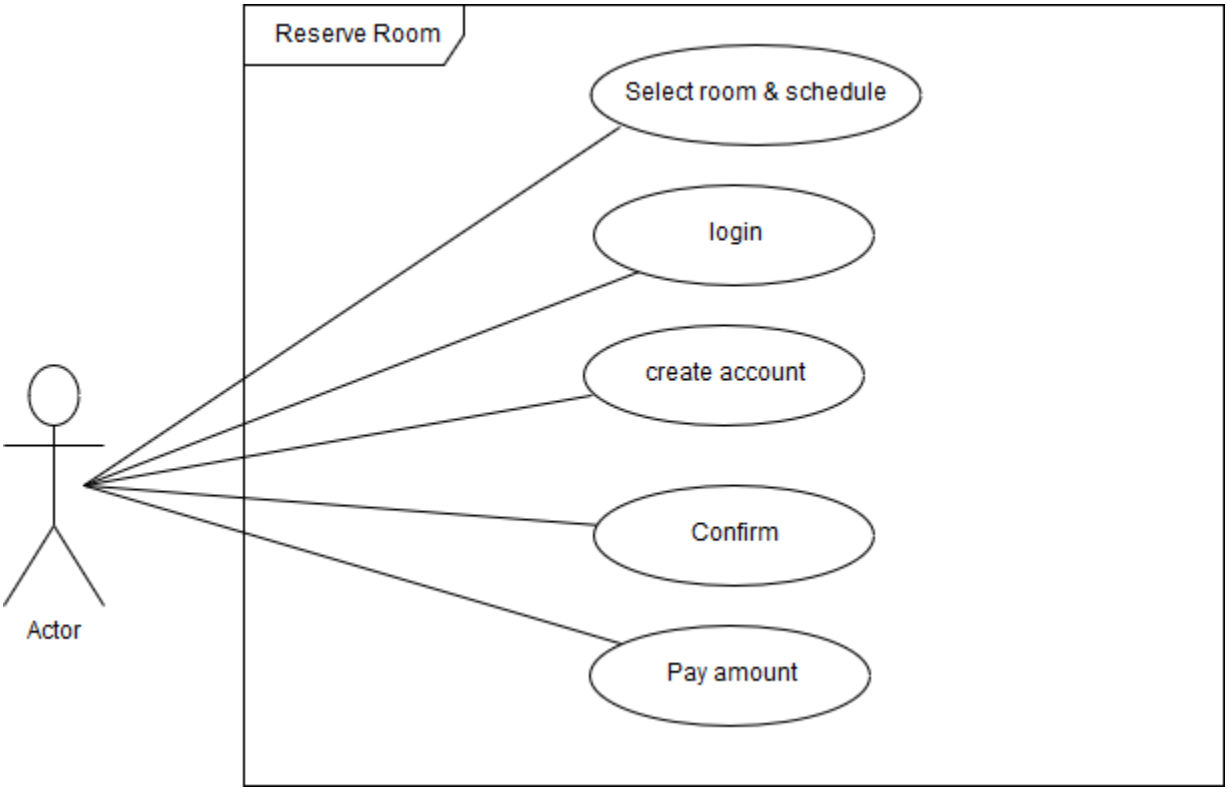

Figure 3:Reserve Room

2.4 Use Case Description (Detailed)

Here is detailed given for every single use cases. Because of that brief of use cases everyone can understand what that use case has been used for, for which actor this use case has been used.

2.4.1 Description of use case: View Room info

Table 2: Actor Goal List

Use case Name:	View Room info
Scenario:	User can Show details of any room.
	In Room Management System (RMS), user can able to get some primary information about room before reservation. He/she can be known details about room like its condition, location, scheduling time, reservation price etc. After that he/she reserved the room.
Actors:	User
Stakeholders:	User, Admin
Precondition:	User can able to View all information (reserved time, schedule time, reservation price etc.) and show the sample condition about room without login.
Post condition:	After show all information about room he/she able to reserve any room.
Flow of Event	Actor 1.Go Show room Menu 2.Select room 3.Select schedule time System 1. Show details about room.

2.4.2 Description of use case: Reserve Room

Table 3: Actor Goal List

Use case Name:	Reserve Room
Scenario:	User can reserve any room.
Brief Description:	In Room Management System (RMS), anyone can reserve a room. But have to reserve a room he/she must have login in the system. If he/she have no account then he/she have to create an account. After login users have to confirm him/her reservation by pay the amount of reservation price. User can't cancel their reservation.
Actors:	User
Stakeholders:	User, Admin
Precondition:	i) Login in the System ii)Select room and schedule time iii)Pay the payment for confirmation
Post condition:	i) Successfully reserved the room ii) Can't cancel the reservation
Flow of Event	Actor 1.Select any room 2.Select free schedule time 3.pay the amount System 1.Received payment 2. Confirm the reservation.

2.5 System Sequence Diagram

2.5.1 System Sequence Diagram of View Room info

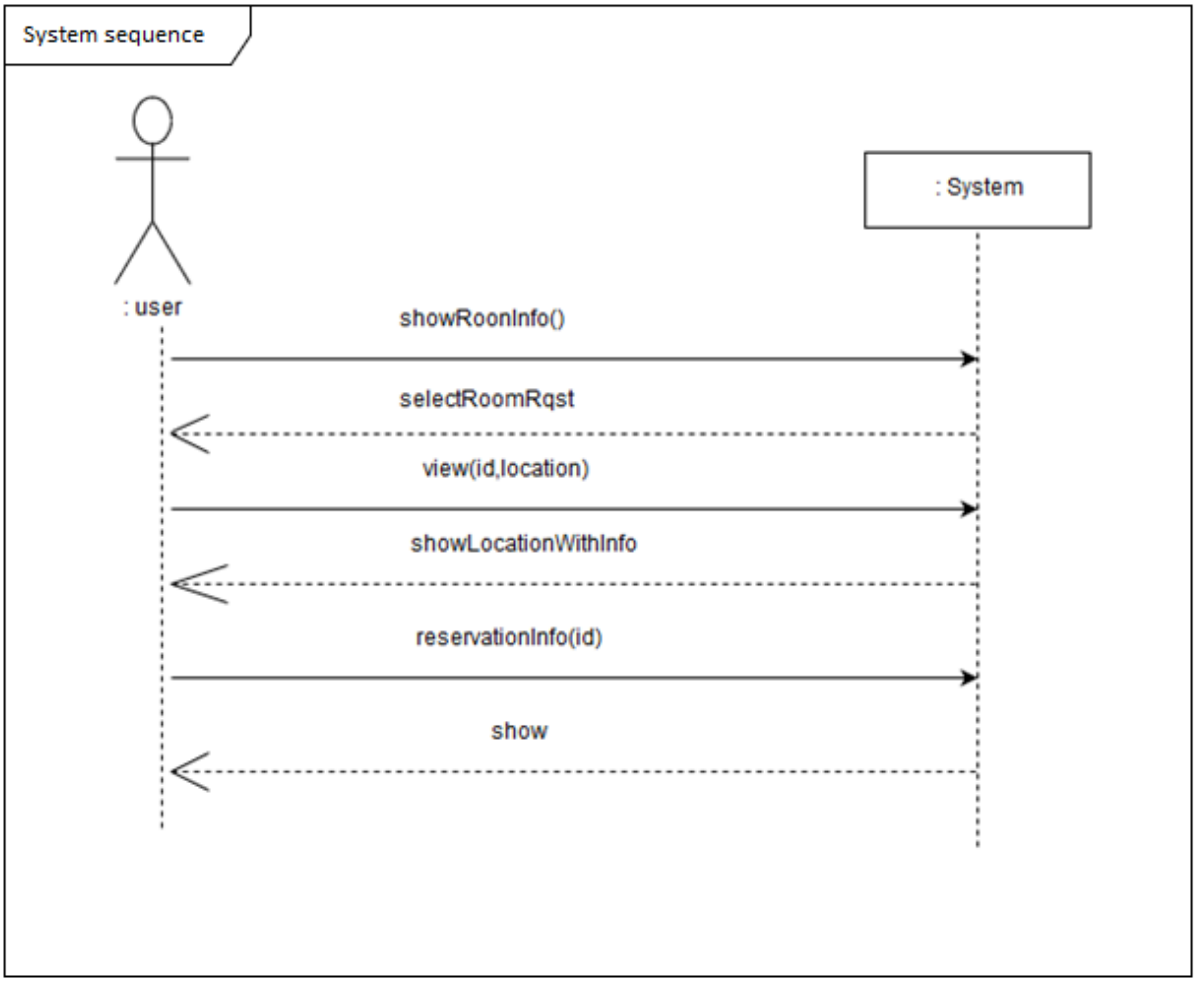

Figure 4:System Sequence Diagram for view room info

2.5.2 System Sequence Diagram of Reserve Room

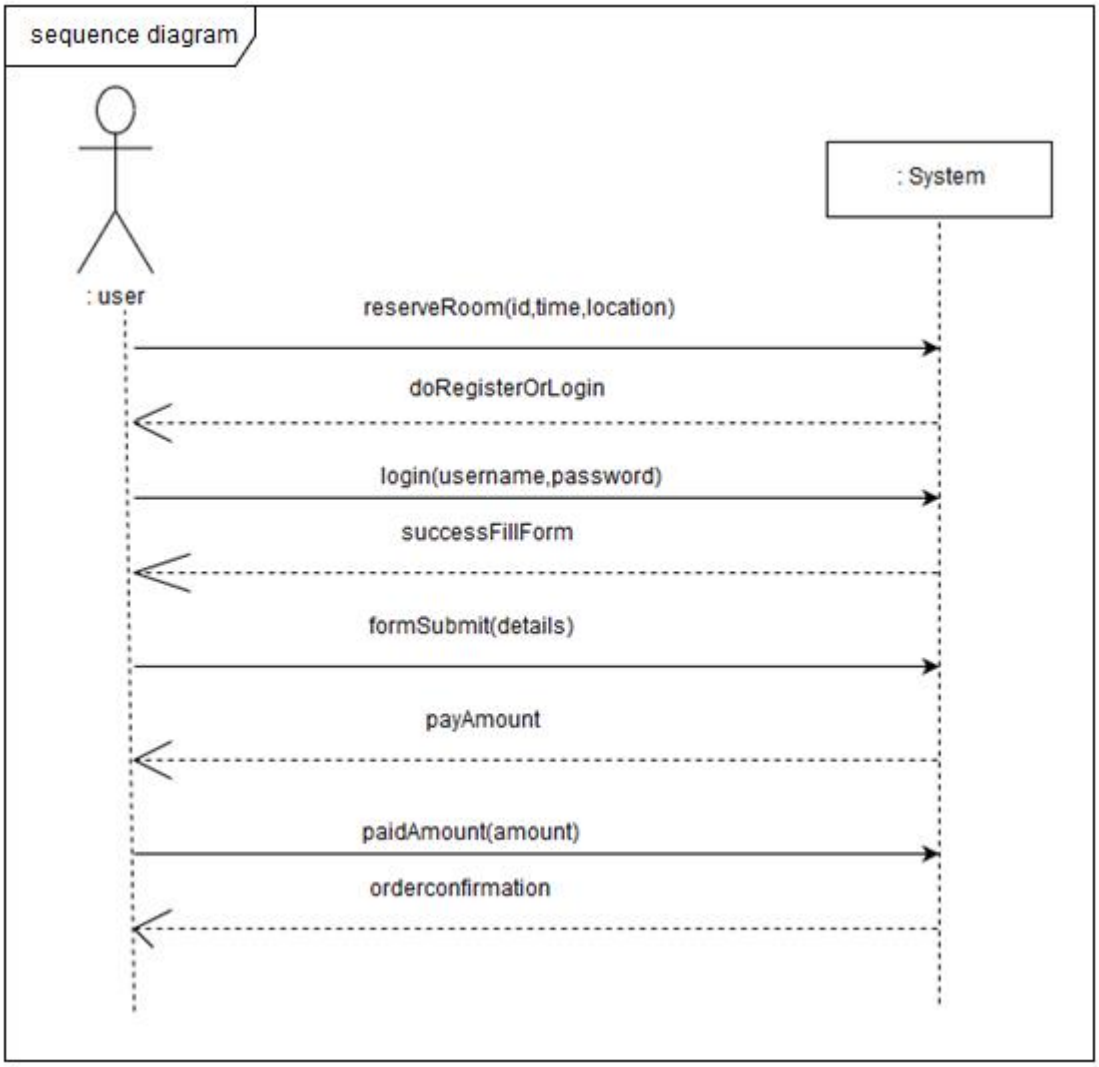

Figure 5:System Sequence Diagram for Reserve room

2.6 Domain Model:

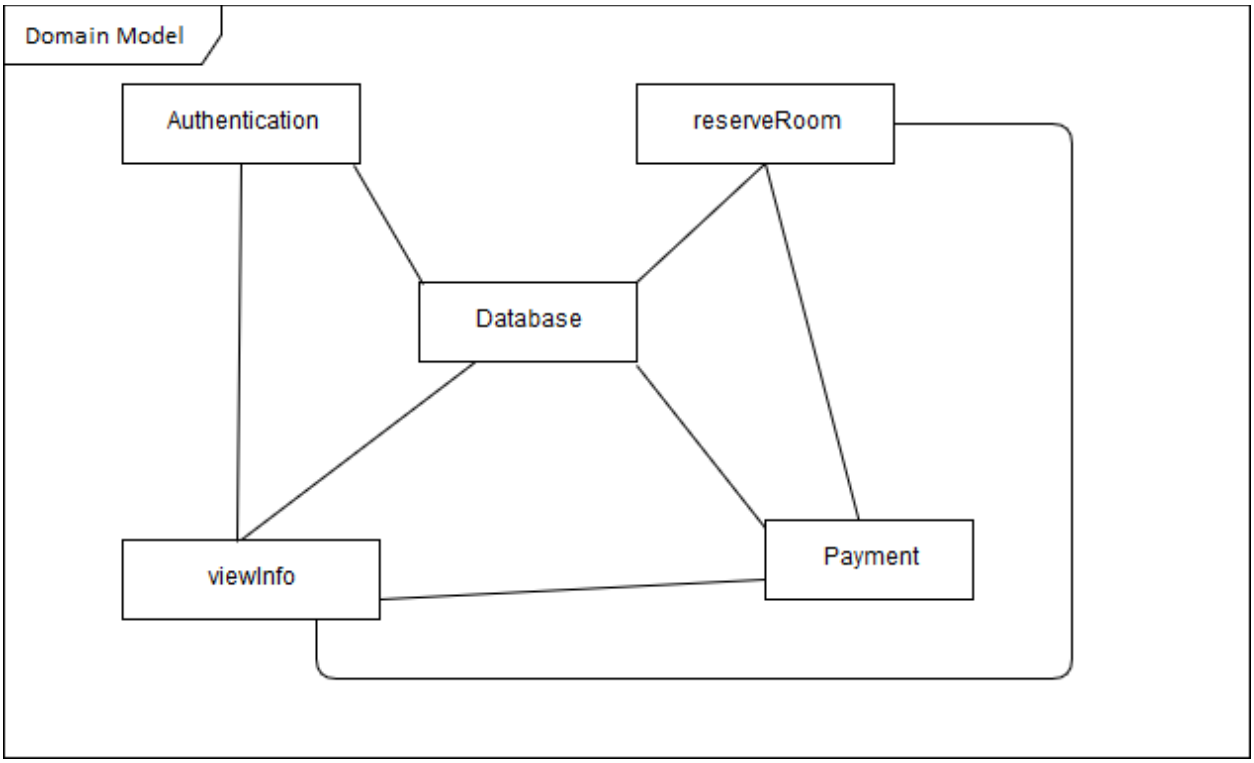

Figure 6: Domain Model

2.7 Activity Diagram:

Activity diagrams are graphical representations the flows of stepwise activities and actions of a system.

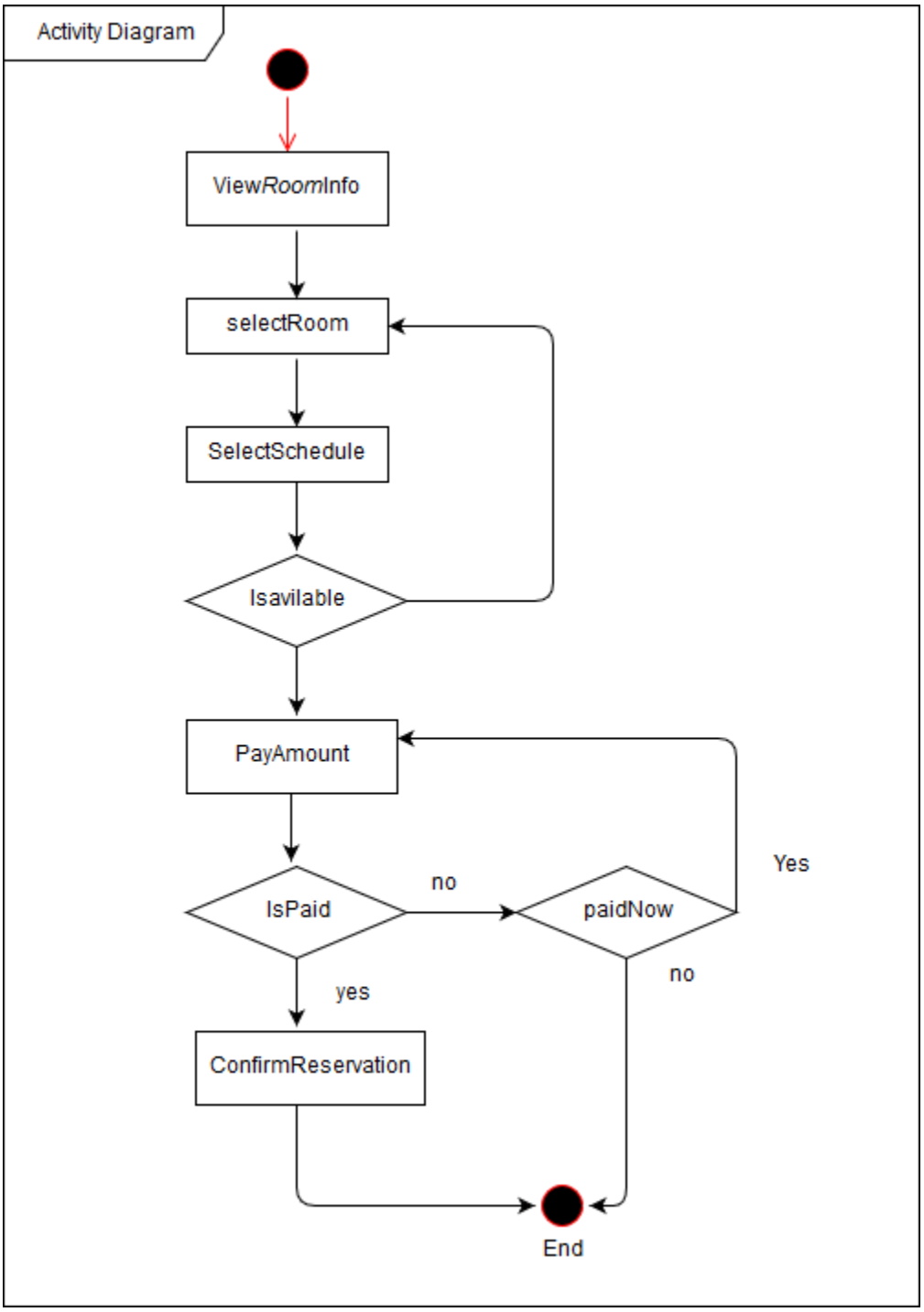

Figure 7: Activity Diagram

Chapter 3 System Design

3. Sequence Diagram

3.1.1 Sequence Diagram of View Room info:

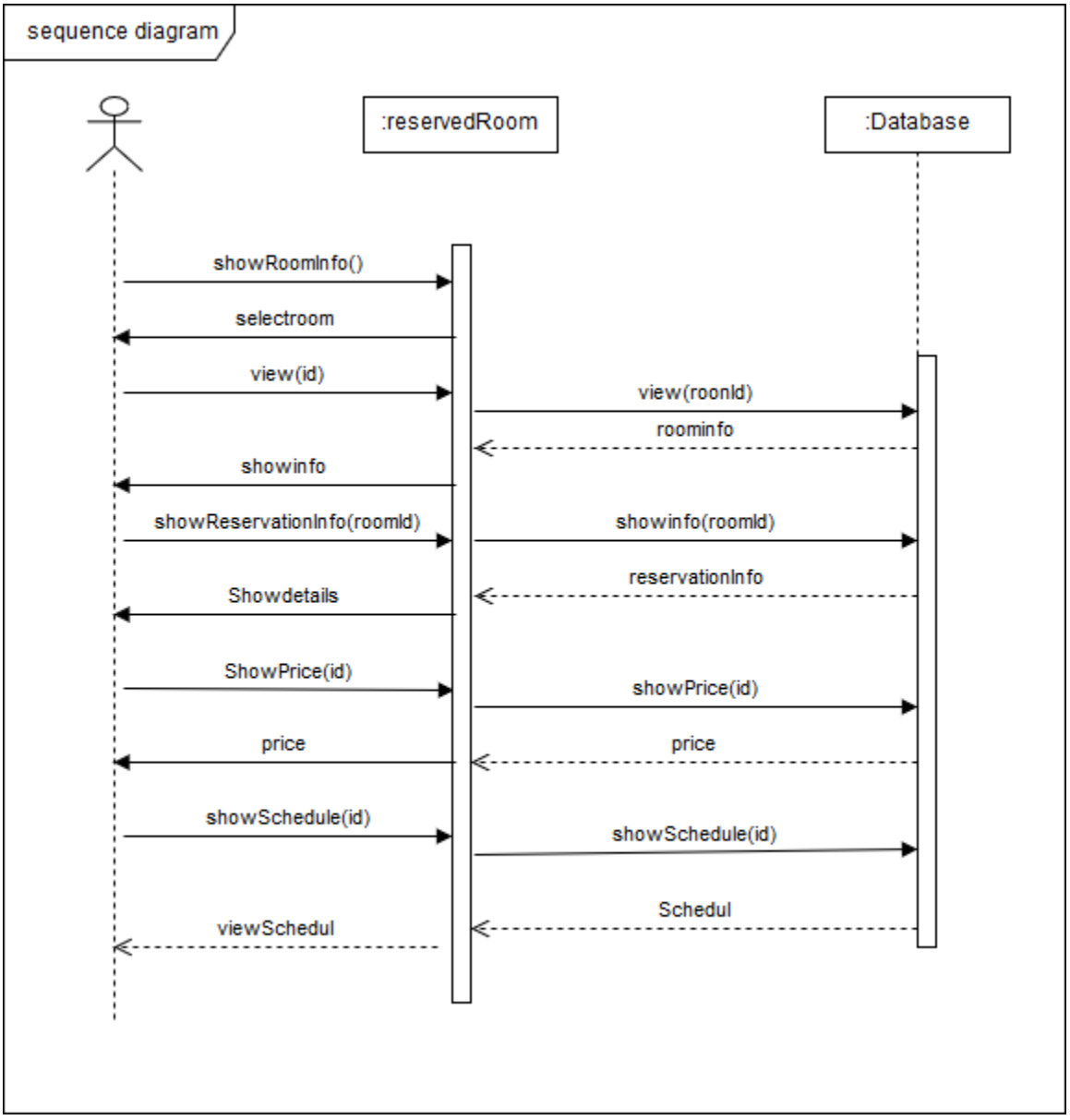

Figure 8: Sequence Diagram for View Room Info

3.1.2 Sequence Diagram of Reserve Room:

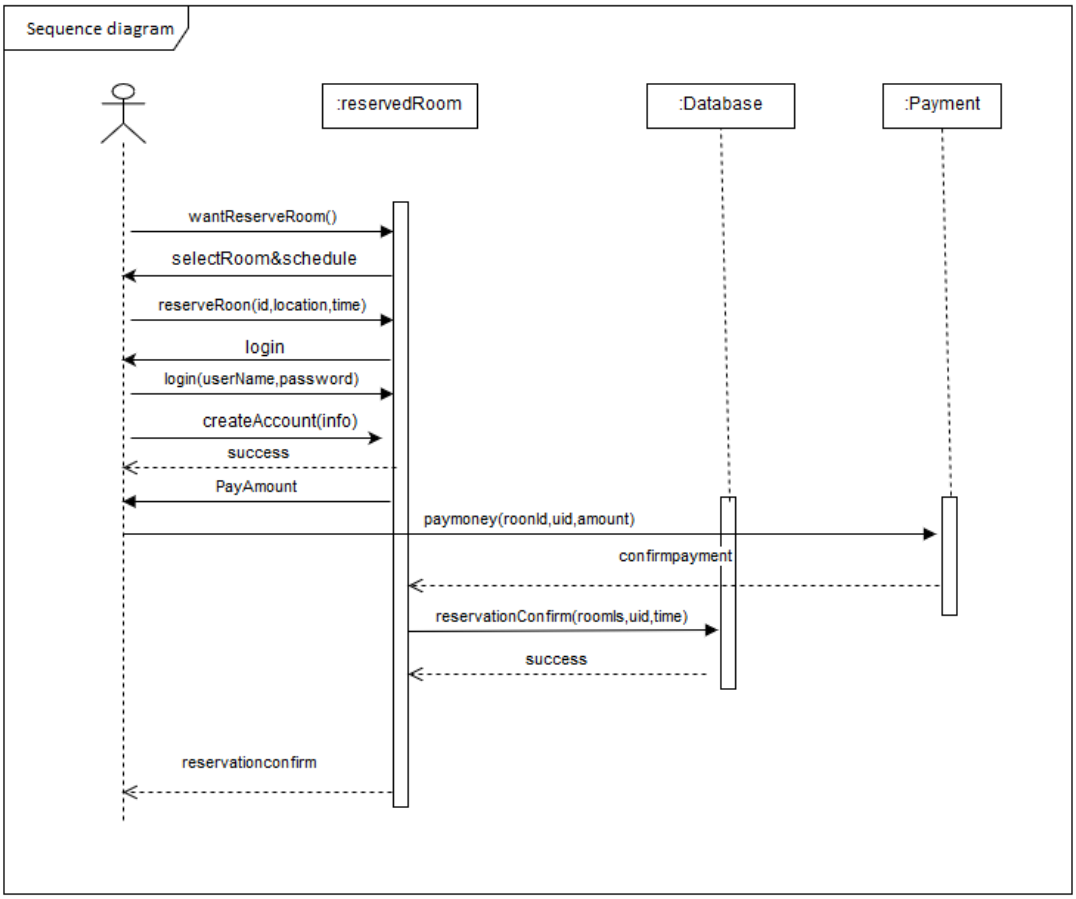

Figure 9: Sequence Diagram for View Room Info

3.2 Class Diagram:

Class or structural diagrams define the basic building blocks of a model. They are used for static object modeling, describing what attributes and behavior it has rather than detailing the methods for achieving operations.

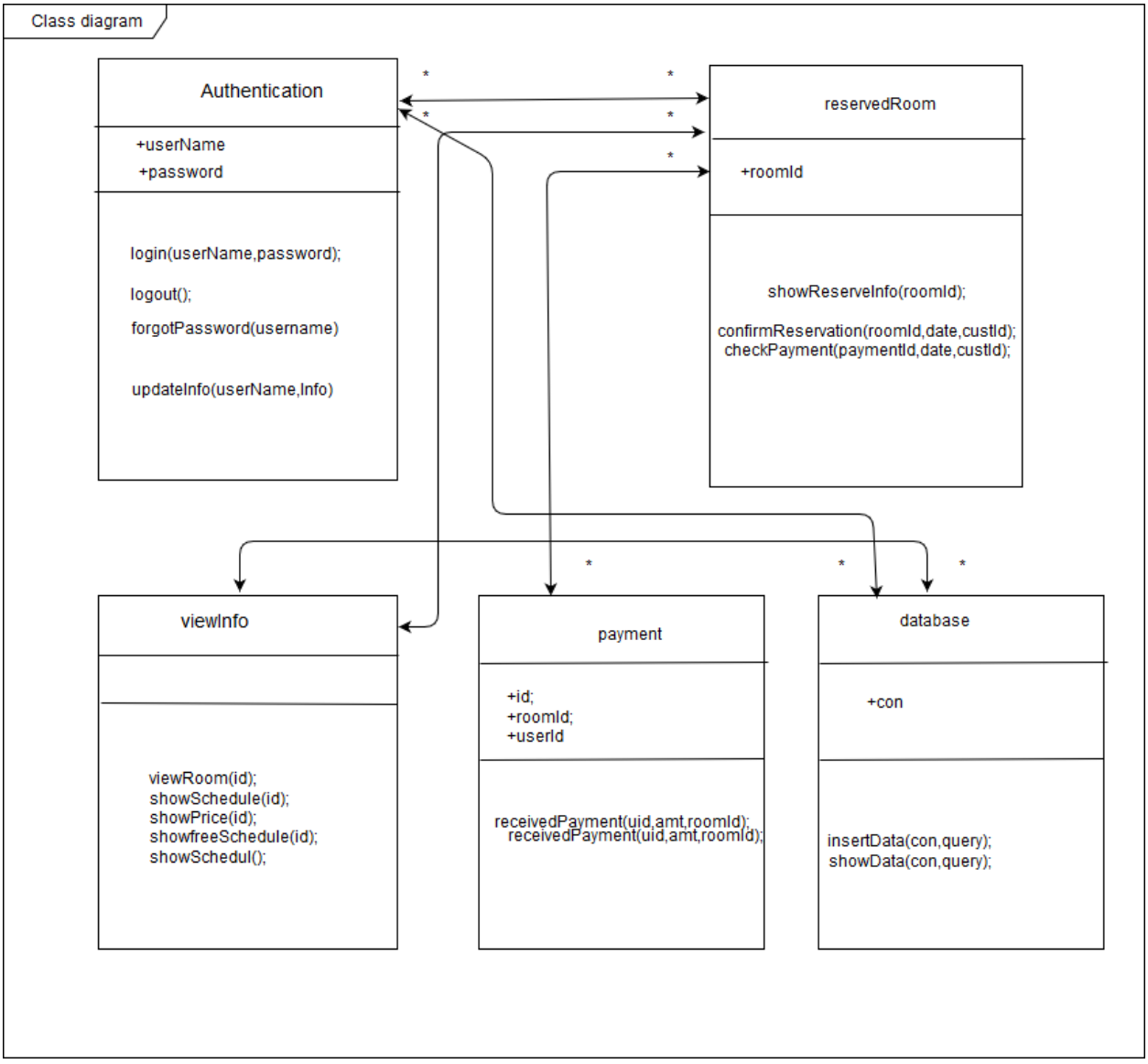

Figure 10: class diagram

3.3 Entity Relationship Diagram

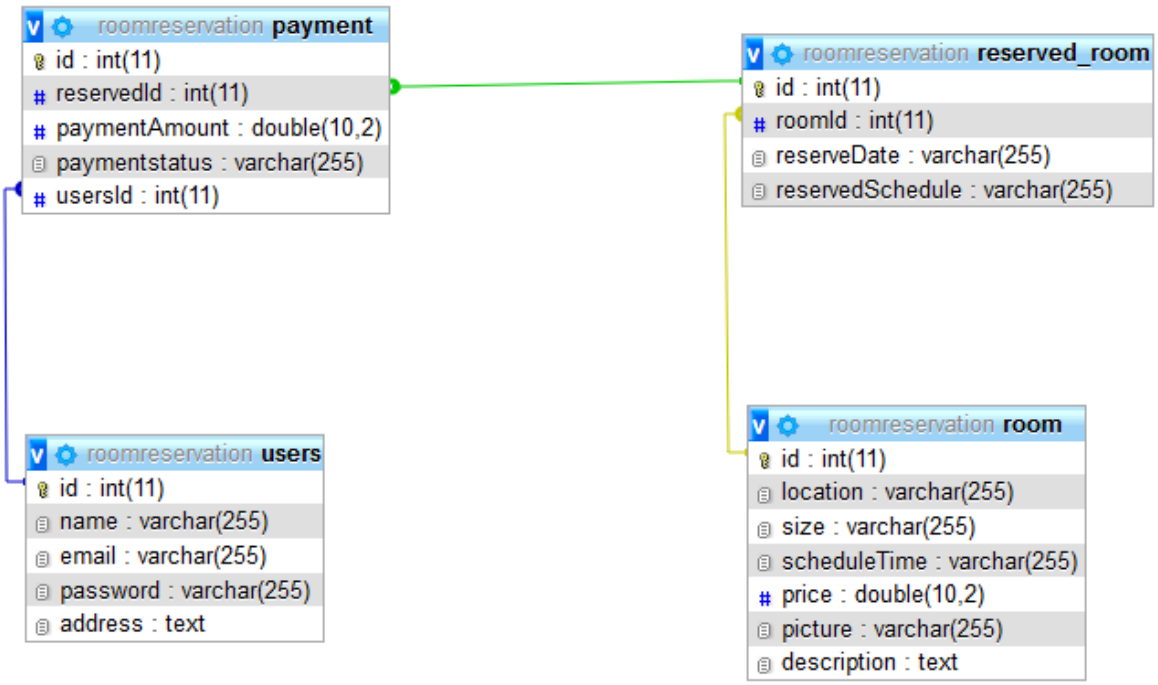

Figure 11: class diagram

Chapter 4: Implementation

The room Reservation System is has two parts. One is front-End and second is back-End. Here two parts are developed by different language and tools.

Front-end is developed by **HTML5, CSS3, J Query, and Bootstrap (V-3.7), JavaScript.**

And Back-end is developed by **php5, php7** And **Ajax**.

For manage and store all information, **MySQL** Database is used.

4.1 Tools and technologies

- It will be run all web browser
- It'll be run all Operating system which support HTML5.
- Sublime text editor is used for modified every coding files.
- All Diagram are drawn using draw.io

4.2 Github code link

https://github.com/shajushahjalal/OOP.git

The End