ABSTRACT

This project is a web based room management system for any existing company. The project objective is to deliver the online reservation application into Desktop platform. This project is an attempt to provide the advantages of online reservation to customers. It helps reserve the room from anywhere through internet. Thus the customer will get the service of online reserving. This system can be implemented to any company in the locality or to multinational organization having retail outlet chains.

ACKNOWLEDGEMENT

We take this occasion to thank God, almighty for blessing us with his grace and taking our endeavor to a successful culmination. We extend our sincere and heartfelt thanks to our esteemed guide, **Alamgir Kabir** for providing us with the right guidance and advice at the crucial junctures and for showing us the right way. We extend our sincere thanks to our respected Head of the department **Mr. Touhid Bhuiyan**, for allowing us to use the facilities available.

Table of Contents

List of Table

List of figure

Chapter-01
Introduction

1. Introduction

1.1 About the System

A system for managing shared office, meeting, laboratory, and teaching space is to be developed. A networked display appliance is situated outside each room. The appliance indicates who has reserved the space and for what period. The appliance allows users to reserve a room and check the availability of other rooms. The system is a web based scheduling system but the status of each room can be checked at location. It incorporates the use of small flat panel displays to eliminate scheduling conflicts, interruptions, and encourage better space utilization.

1.2 Purpose

The purpose of the system to reserve the appropriate room when needed from any location on the network · Display meeting information outside each room · Easily extend room reservation with the touch screen · Release a room if meeting finishes early · Quickly identify occupied and available rooms by a red or green light · Grab a room with the touch screen for an uninterrupted impromptu meeting.

1.3 Scope

The system will make easy to reserve or check room to the users whenever they need from anywhere by using internet. It will take less time for reservation and make easy to select room and check room. User can easily cancel reservation if needed.

1.4 Vision

All the room displays are networked so then can be accessed via a web interface (a single URL). Every room's schedule can viewed from the web interface and maintained by an administrator. A user should be able to check the availability of any room from the room display and the web interface. The web interface allows for reserving rooms along with searching tools to find available rooms.

1.5 Why the System Needed?

- ✓ To make reservation in short time.
- ✓ Make reservation without visiting the rooms.
- ✓ Make reservation from anywhere
- ✓ Cancel reservation easily if needed.
- ✓ Reserve multiple room at a time.

1.6 Proposed solution

- ✓ User can make reservation quickly using internet.
- ✓ User don’t need to visit the required room.
- ✓ User can make reservation from anywhere.
- ✓ User can also cancel reservation.
- ✓ User can make multiple reservation.

Chapter-02
System Analysis

2. System analysis
2.1 Actor goal list

Table 1-Actor goal list

Actor	Goals
Administrator	Add a User Delete A User Add Room Update Room Information Delete Room View Reservation Room
User	Make A Reservation Delete Reservation Change Reservation Check Room Information View Reservation Information

2.2 Use Case model

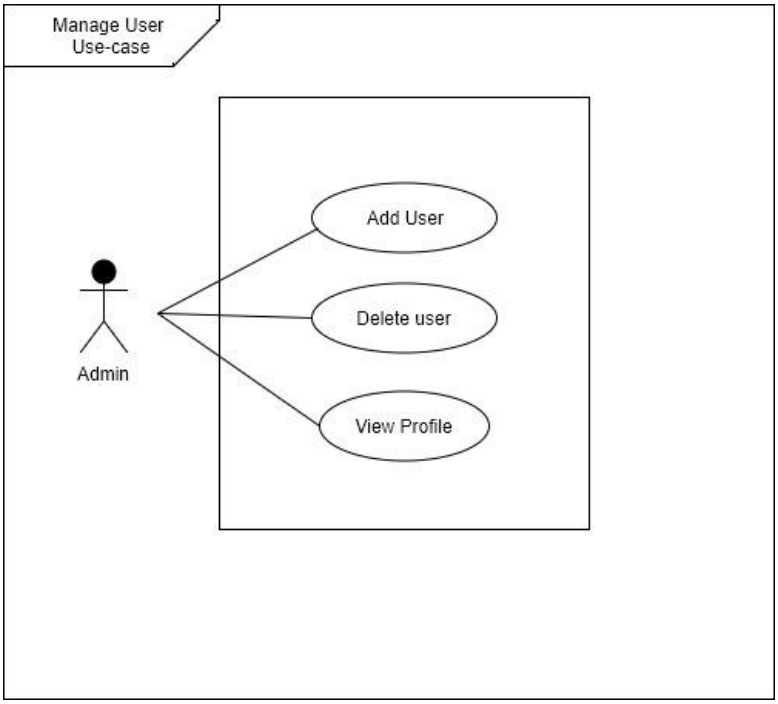

Figure 1-Use Case Model

2.3 Use case description

2.3.1 Manage User Use-Case

When a user wanted to register in the site and provides proper information then Admin will approved it. Admin can add a User, delete a user.

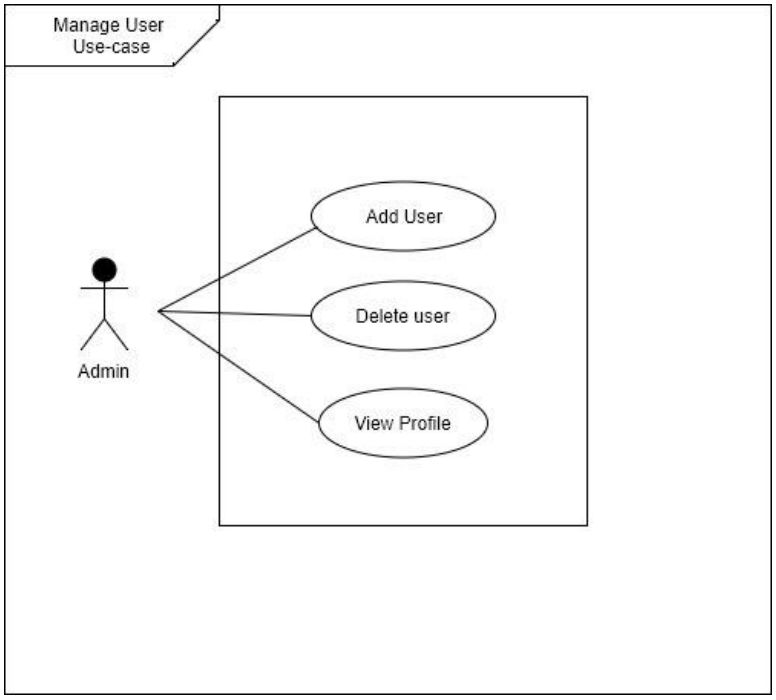

Figure 2-Mange User Use Case

2.3.2 Manage Room Use-Case

Administrator have authority to add room, Update room information, Delete Room and view reservation room.

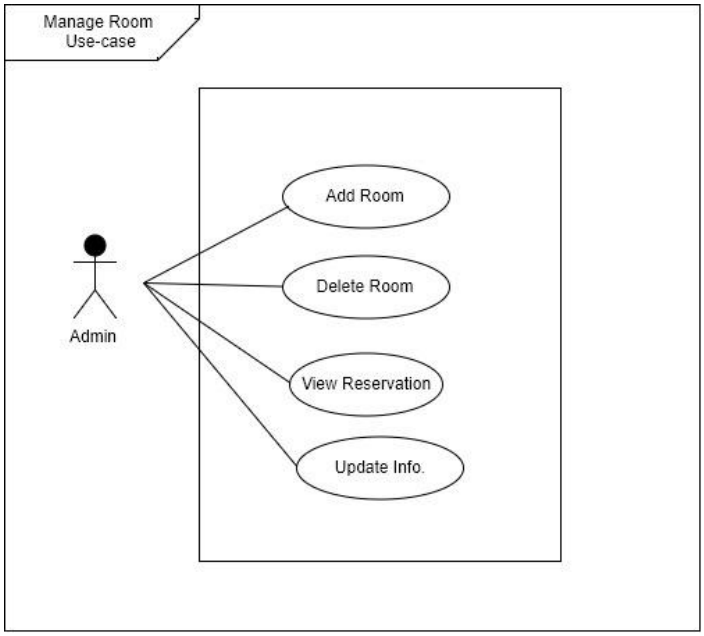

Figure 3-Manage Room Use Case

2.3.3 Manage Reservation Use-Case

User can check room information and reserve a room that he/she want. User can also can a reservation if they want.

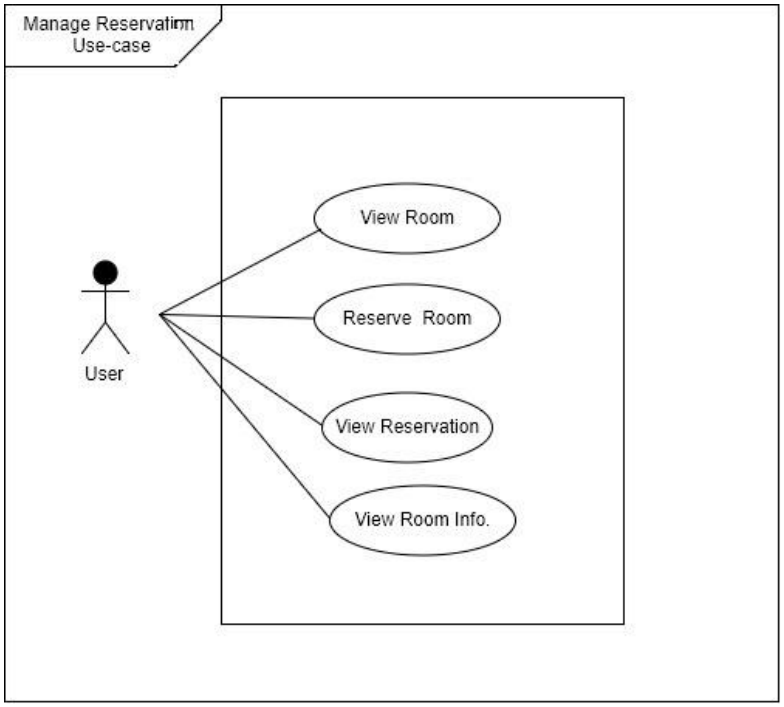

Figure 4-Manage Reservation Use Case

2.4 Use case description (details)

2.4.1 Manage User

Table 2-Description of Manage User

Use Case Name:	Manage User
Scenario :	Manage the all register web user
Brief Description:	When a user wanted to register in the site and provides proper information then Admin will approved it.
Actors:	Administrator
Stakeholders:	Web user Administrator
Preconditions:	Web user must exist. Internet must be connected. Registration form must be provided.
Post conditions:	User list must be provided. Delete option must be provided.
Flow of Events:	Actor: 1. Create registration option. 2. Listed the require information. 3. Customer request for registration form. System: 1.1. Create registration form. 2.1. Provides form with require information. 3.1. Provides customer registration form.
Exception Conditions:	1.1. If the user can use the site without registration there is less important of this use case. 2.1. If the user do not need to provide their information administrator will pause this use case.

2.4.2 Manage Room

Table 3-Description of Manage Room

<table>
<tr><td>Use Case Name:</td><td>Manage Room</td></tr>
<tr><td>Scenario :</td><td>Manage the all the room.</td></tr>
<tr><td>Brief Description:</td><td>Administrator will add room and provides all necessary room information that needed. He can check reservation if anyone reserve any room. He also can delete a room if needed</td></tr>
<tr><td>Actors:</td><td>System Administrator</td></tr>
<tr><td>Stakeholders:</td><td>Web user
Administrator</td></tr>
<tr><td>Preconditions:</td><td>Room must be exist.</td></tr>
<tr><td>Post conditions:</td><td>Provides all necessary information.
Check if any room reserved or not.</td></tr>
<tr><td>Flow of Events:</td><td><table><tr><th>Actor</th><th>System</th></tr><tr><td>1. Add a new room.
2. Provide room information.
3. Check reservation.</td><td>1.1. Create a new room
2.1. Add information with room.
3.1. Provides reservation information.</td></tr></table></td></tr>
<tr><td>Exception Conditions:</td><td>1.1If a room does not exist there is less important of this use case.

2.1. If the information does not accurate with added room then admin will check information.
3.1 If user did not reserve any room, admin will pause this use case.</td></tr>
</table>

2.4.3 Mange Reservation

Table 4-Description of Manage Reservation

Use Case Name:	Manage Reservation
Scenario :	Manage the reservation of room.
Brief Description:	When a user check room information, he/ she can reserve a room with necessary information. They can cancel a reserve room or delete their reservation.
Actors:	Web User
Stakeholders:	Web user Administrator
Preconditions:	Web user must exist. Internet must be connected. Registration and login must be done.
Post conditions:	Room must be provided. Availability must be provided.
Flow of Events:	Actor: 1. Login with information 2. Check room. 3. Confirm Reservation. System: 1.1. Verify user 2.1. Provides room with require information.
Exception Conditions:	1.2. If a user does not exist this use case will paused by the user. 2.1. If a room does not exist user will pause this use case.

2.5 System sequence diagram

2.5.1 Manage User

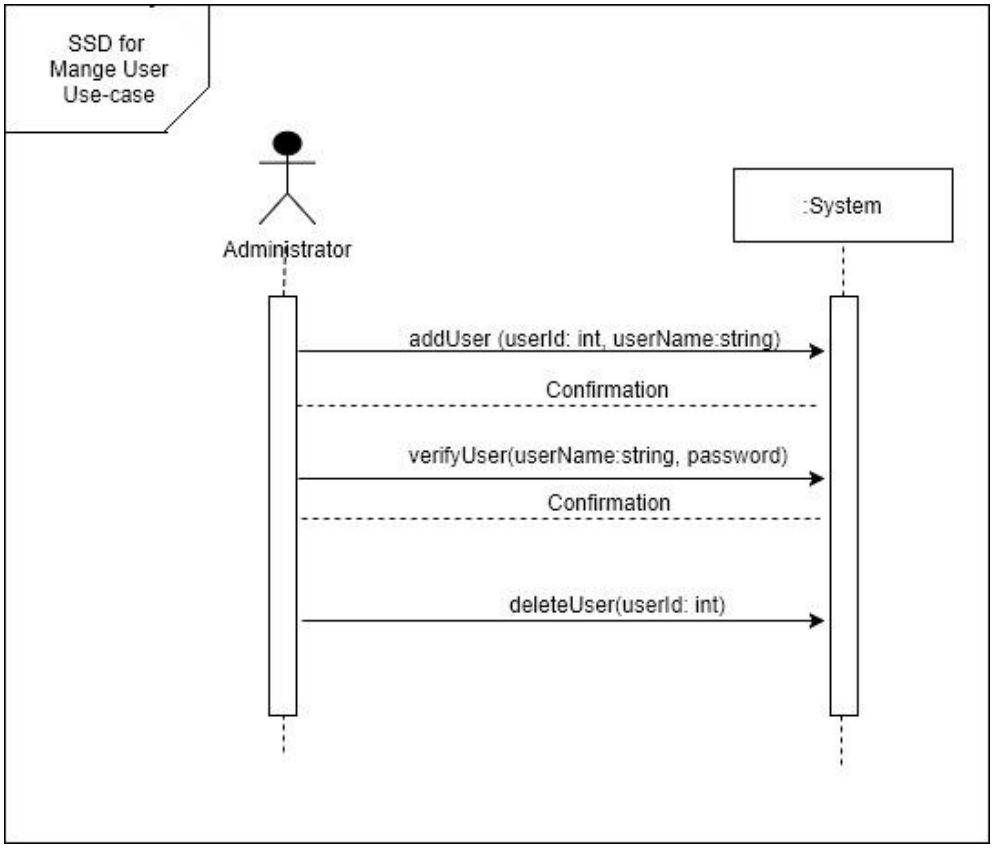

Figure 5-System Sequence diagram for manage user

2.5.2 Manage Room

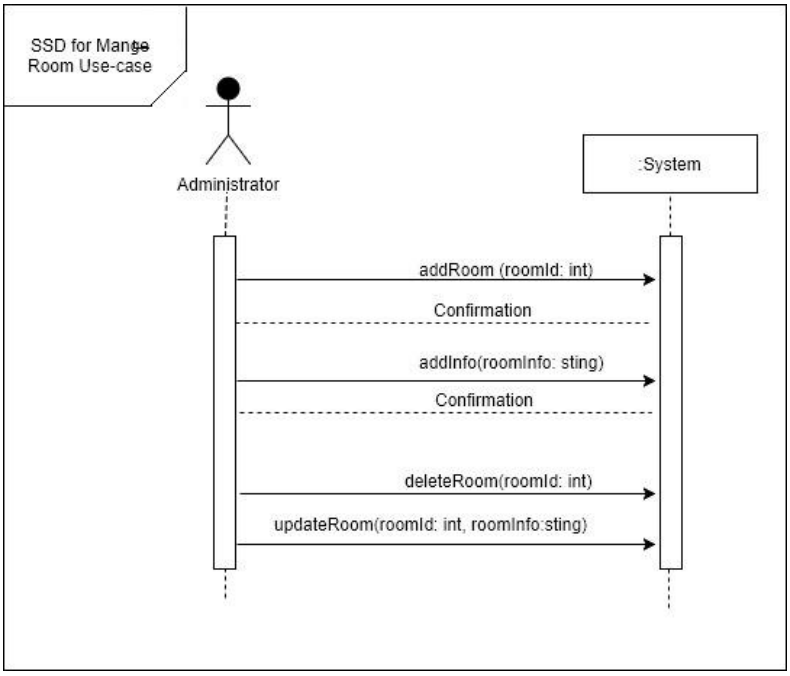

Figure 6-System sequence diagram for mange room

2.5.3 Manage Reservation

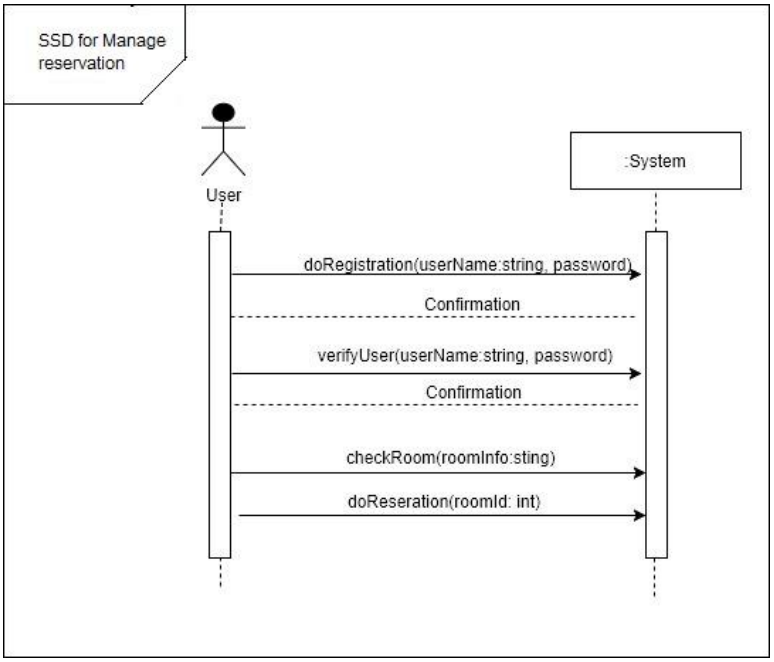

Figure 7-System sequence diagram for reservation use case

2.6 Domain model

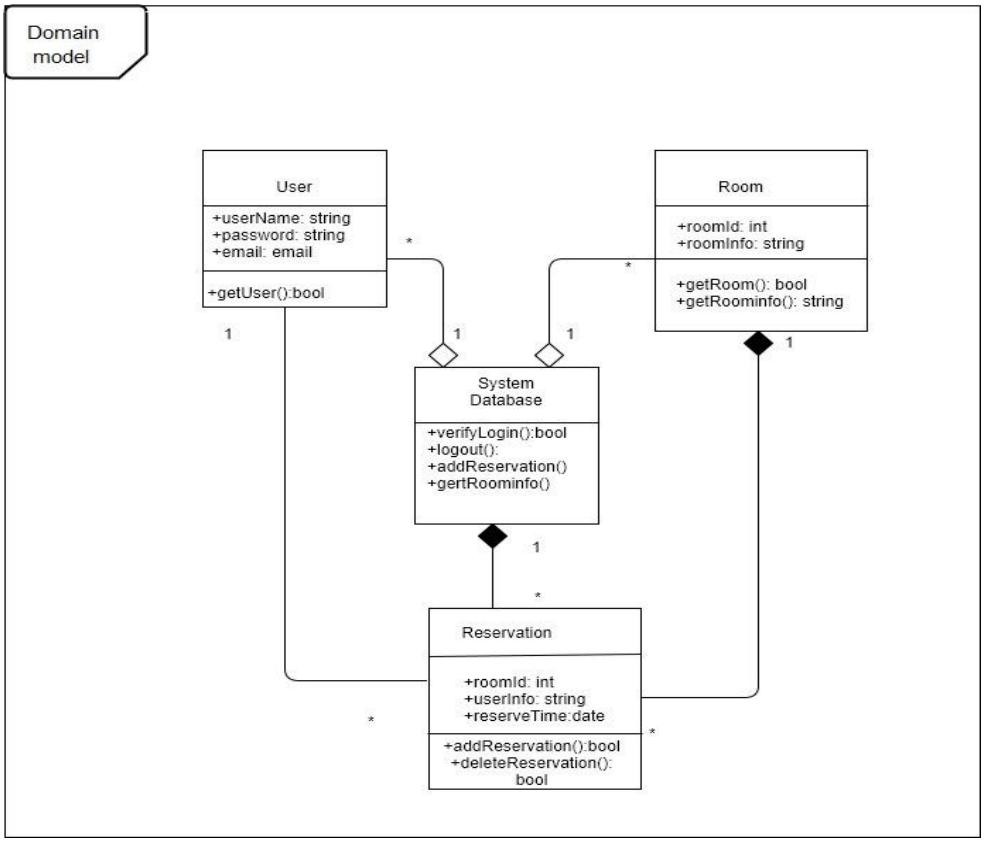

Figure 8-Domain model

2.7 Activity diagram

Activity diagrams are graphical representations of workflows of stepwise activities and actions with support for choice, iteration and concurrency. In the system workflows starts from the stage when an applications enters the area of Federal Shariat Court i.e. uploaded in the system to last activity that is a judgment comes or the case is dismissed .This whole process is shown in the below diagram.

2.7.1 Activity diagram for Administrator

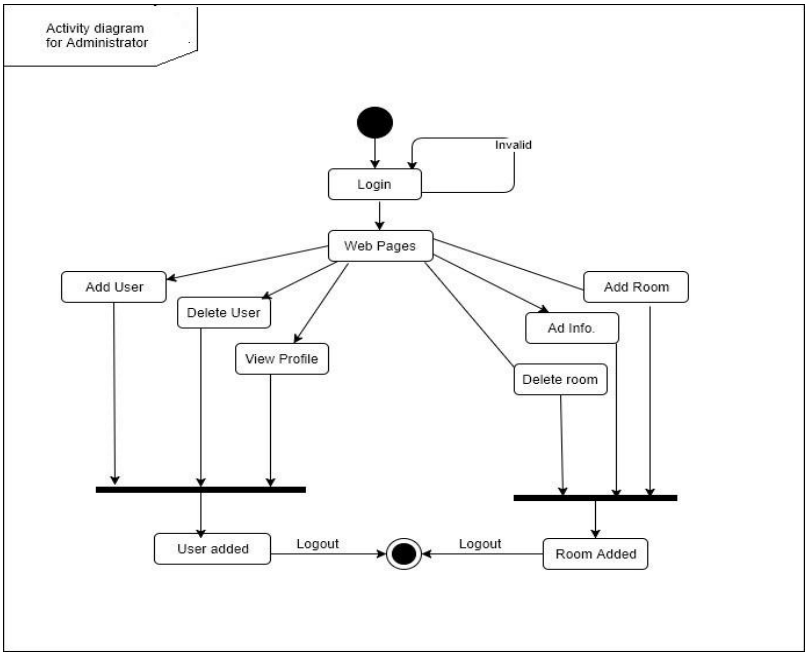

Figure 9-Activity diagram for administrator

2.7.2 Activity diagram for Web User

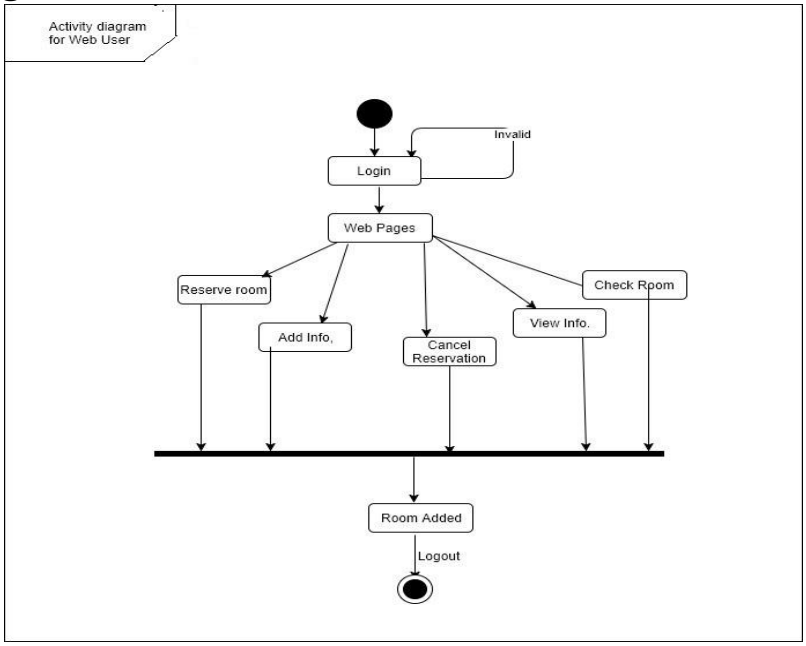

Figure 10-Activity diagram for Web user

Chapter-03

System Design

3. System Design

Design is a process that uses the product of analysis to produce a specification for implementing a system. Design is the logical description of how a system will work. Design emphasizes a conceptual solution that fulfills the requirements, rather than its implementation. For example, a description of a database schema and software objects. Design ideas often exclude low-level or "obvious" details obvious to the intended consumers. Ultimately, designs can be implemented, and the implementation (such as code) expresses the true and complete realized design. The term is best qualified, as in object-oriented design or database design.

3.1 Sequence Diagram

The UML includes interaction diagrams to illustrate how objects interact via messages. They are used for dynamic object modeling. The term interaction diagram is a generalization of two more specialized UML diagram types:

3.1.1 SD for Manage User

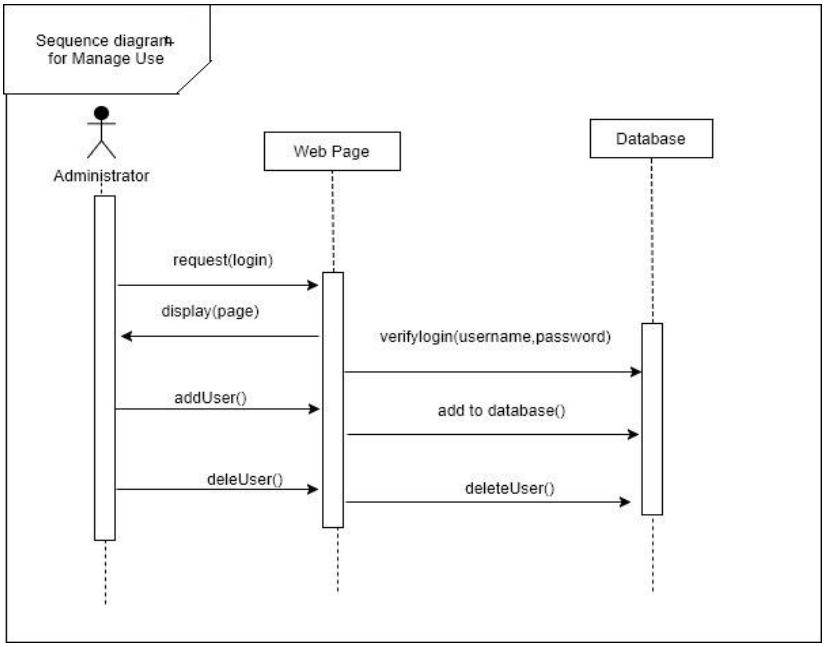

Figure 11-Sequence diagram for Manage user use case

3.1.2 SD Manage Room

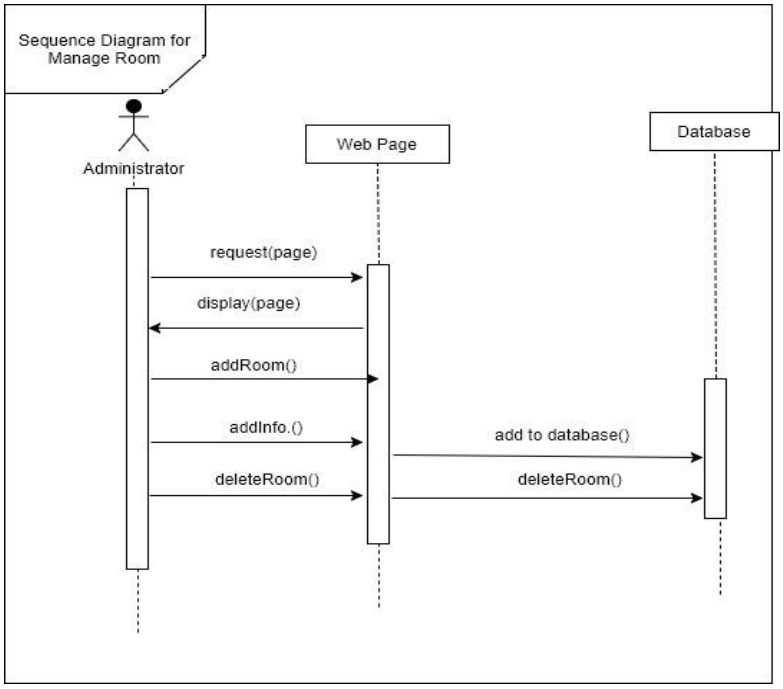

Figure 12-Sequence diagram for manage room Use case

3.1.3 SD for Manage Reservation

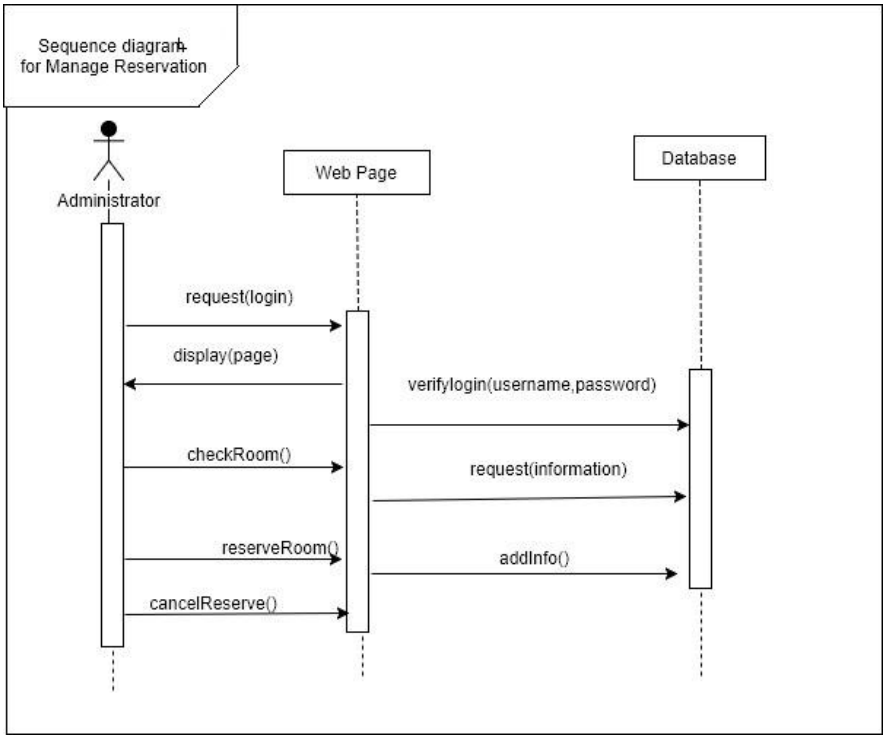

Figure 13-Sequence diagram for manage reservation use case

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.

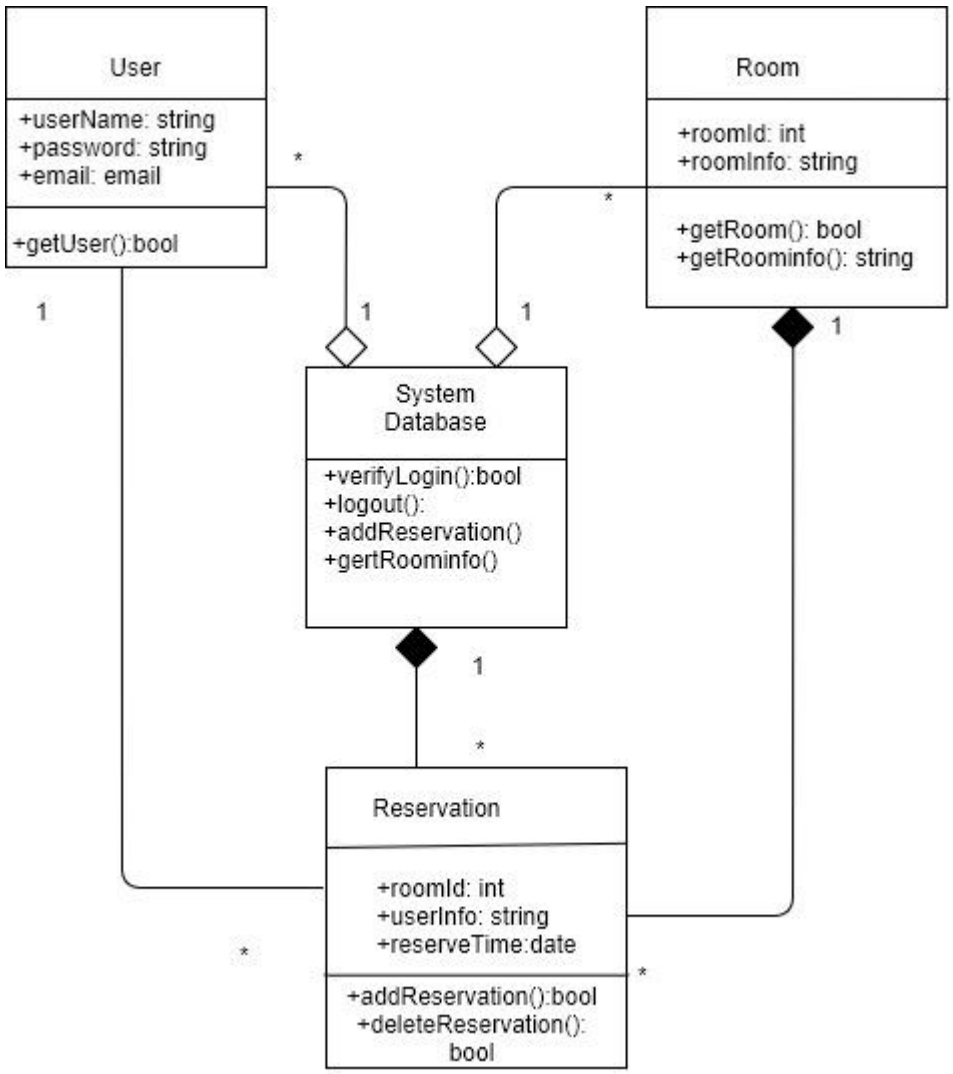

Figure 14-Class diagram