| | | | JRSE PROJECT | | |
|---|-----------|-----|----------------------|--|--|
| | | | | | |
| | | PR | OJECT TITLE | | |
| | Online Ro | oor | n Reservation System | | |
| | | | | | |
| | | | | | |
| | | | | | |
| NAME: Nahed | Hasan | | ID:151-35-1021 | | |
| Supervisor Nan | ne | : | Alamgir Kabir | | |
| Department: | | : | Software Engineering | | |
| Faculty of Science and Information Technology | | | | | |
| | | | | | |
| | D | ec | ember 2017 | | |

Table of Contents

| Chapter 1 | 6 |
|---|----|
| Introduction | 6 |
| 1. Introduction | 6 |
| 1.1 About The System | 6 |
| 1.3 Scope: | 6 |
| 1.4 Vision: | 6 |
| 1.5 Why This System Is Necessary? | 6 |
| 1.6 Proposed Solution: | 6 |
| Chapter 2 | 7 |
| System Analysis | 7 |
| 2.1 Use Case Model | 7 |
| 2.2 Use Case Description (Brief) | 7 |
| 2.2.1 Description of use case: Check pre-reservation info | |
| Figure 2: Check pre-reservation info | 8 |
| 2.2.2 Description of use case: Manage Reservation | 8 |
| 2.3 Use Case Description (Details) | 9 |
| 2.3.1 Description of use case: Check pre-reservation info | 9 |
| 2.3.2 Description of use case: Manage Reservation | 10 |
| 2.3 System Sequence Diagram | 11 |
| 2.3.1 System Sequence Diagram of Check pre-reservation info | 11 |
| 2.3.2 System Sequence Diagram of Manage Reservation | 11 |
| 2.4 Domain Model: | 12 |
| 2.5 Activity Diagram: | 12 |
| Chapter 3 | 13 |
| System Design | 13 |
| 3.1 Sequence Diagram | 13 |
| 3.1.1 Sequence Diagram of pre-reservation info: | 13 |
| 3.1.2 Sequence Diagram of Manage reservation: | 14 |
| 3.2 Class Diagram: | 16 |

| 3.3 ER diagram | 17 |
|-------------------------|-----------|
| Chapter 4 | |
| Implementation | <i>17</i> |
| 4.1 Tool and Technology | 17 |
| 4.2 Programme code link | 17 |

List of Table

| Table 1: Actor and Goal List | 7 |
|--|------|
| Table 2: Description of use case: Check pre-reservation info | 9 |
| Table 3: Description of use case: Manage Reservation | . 10 |

List of Figures

| Figure 1: Actor User | 7 |
|--|----|
| Figure 2: Check pre-reservation info | 8 |
| Figure 3: Manage Reservation | 8 |
| Figure 4: Check pre-reservation info | 11 |
| Figure 5: Manage Reservation | 12 |
| Figure 6: Domain Model | 12 |
| Figure 7: Activity Diagram Chapter 3 | 12 |
| Figure 8: Sequence Diagram of pre-reservation info | 13 |
| Figure 9: Sequence Diagram of Manage reservation(Login) | 14 |
| Figure 10: Sequence Diagram of Manage reservation(Reservation) | 15 |
| Figure 11: Class Diagram of room management system | 16 |
| Figure 12: ER Diagram of room management system | 17 |

Chapter 1

Introduction

1. Introduction

The proposed system name is Room Application Management system. Room Application Management system is a web based system 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 outside each room
- · Easily extend room reservation
- · Release a room if meeting finishes early
- · Quickly identify occupied and available rooms by a red or green light

1.2 Purpose

In Room Management Appliance System allows users to reserve a room and check the availability other rooms. Any registered user for this system can book or canceled the meeting room reservation by the system. After complete payment reservation will be confirmed. No overlap of reservation will occurred for room reservation because Quickly identify occupied and available rooms by a red or green light.

1.3 Scope:

In Room Management Appliance System the registered user have to login by their account to confirm about their room reservation with time. They can reserve the existing room for their purpose by maintaining the system. They can also cancel their reservation but after payment they are not be able to cancel reservation.

1.4 Vision:

For managing shared office, meeting, laboratory, and teaching space registered user can reserve a room. But maintaining this system we have not to go anywhere for meeting room. This system will also manage the room for appliance by online payment.

1.5 Why This System Is Necessary?

Room Management Appliance System is the system that manage a room reservation for any purpose. It also minimize the conflict of room reservation time and schedule.

1.6 Proposed Solution:

- Check availability with view web interface
- Reservation with touch screen
- identify occupied and available rooms by a red or green light

Chapter 2

System Analysis

Actor goal:

Table 1: Actor and Goal List

| Actor | Goal |
|-------|--|
| User | -check pre-reservation info -log in -Reservation |

2.1 Use Case Model

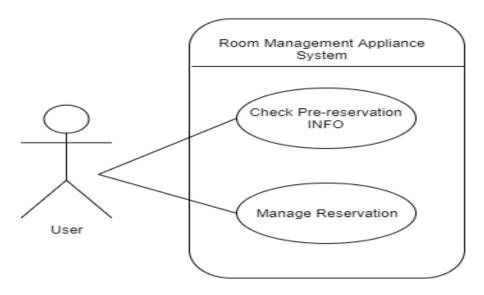


Figure 1: Actor User

2.2 Use Case Description (Brief)

2.2.1 Description of use case: Check pre-reservation info

In Room Management Appliance System, user can able to get some primary information before reservation. User can see the Available room for reservation and also can see existing reservation information and the check out time of existing reservation so that user can reserve after checkout.

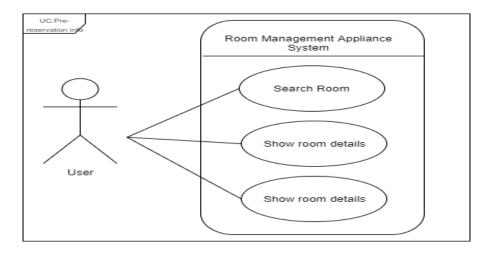


Figure 2: Check pre-reservation info

2.2.2 Description of use case: Manage Reservation

After check all the info user have to log in to reserve room by giving some mandatory information. If the user is new then have to registration must. After giving reservation information user have to give payment details to confirm the reservation.

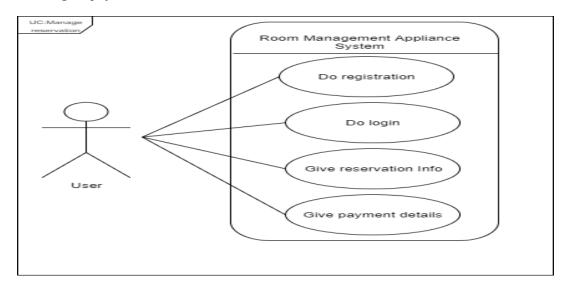


Figure 3: Manage Reservation

2.3 Use Case Description (Details)

2.3.1 Description of use case: Check pre-reservation info

 Table 2:
 Description of use case: Check pre-reservation info

| Use Case Name: | Check pre-reservation info | | | |
|-----------------------|--|--|--|--|
| Scenario: | Check info before reservation | | | |
| Brief Description: | In Room Management Appliance System, user can able to get some primary information before reservation. User can see the Available room for reservation and also can see existing reservation information and the check out time of existing reservation so that user can reserve after checkout. | | | |
| Actors: | user | | | |
| Stakeholders: | | | | |
| Preconditions: | Device of the user must have internet connection to visit this website. | | | |
| Post conditions: | User must have to log in the system if wants to make reservation. If the user is not registered then have to register. | | | |
| Flow of Events: | Actor | System | | |
| | | | | |
| Exception Conditions: | Device of the user must have internet connection to visit this website. User can't have to log in to see the Prereservation INFO. User can able to see the available rooms for reservation. Can also see the check out time of existing reservation so that user can reserve after checkout of existing reservation. If Device of the user have not any internal connection. | 2.1 Allow user to see the Pre-reservation info only. | | |

${\bf 2.3.2\ Description\ of\ use\ case: Manage\ Reservation}$

Table 3: Description of use case: Manage Reservation

| Use Case Name: | Manage Reservation | | | |
|------------------------------|---|--|--|--|
| Scenario: | User can manage room reservation | | | |
| Brief Description: | After check all the pre-reservation info user have to log in to reserve room by giving some mandatory information. After giving reservation information user have to pay to confirm the reservation | | | |
| Actors: | User | | | |
| Stakeholders: | | | | |
| Preconditions: | User must have to log in to do reservation. | | | |
| Post conditions: | After confirm the reservation user cannot cancel the reservation. | | | |
| | Actors | System | | |
| Flow of Events: | 1.User must have to log in to do reservation.2.User have to give some basic info for reservation purpose. | 1.1 system only allow for reservation while log in. 2.1 Collect reservation info | | |
| | 3.After providing reservation information user have to pay bill to confirm the reservation.4.Reservation successfully done. | 3.1 creates notification to the user. | | |
| Exception Conditions: | 1.If User not log in the system for reservation then can not manage reservation. If the user is not registered then have to register. | | | |
| | 2. If user don't confirm the payment the reservation will not successfully done. | | | |

2.3 System Sequence Diagram

2.3.1 System Sequence Diagram of Check pre-reservation info

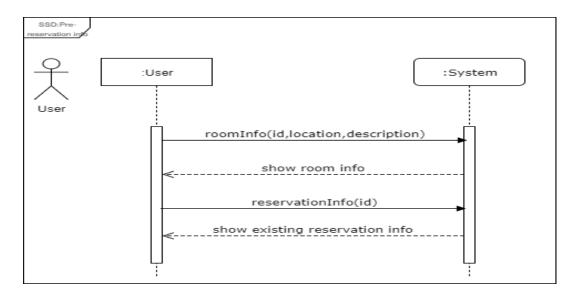


Figure 4: Check pre-reservation info

2.3.2 System Sequence Diagram of Manage Reservation

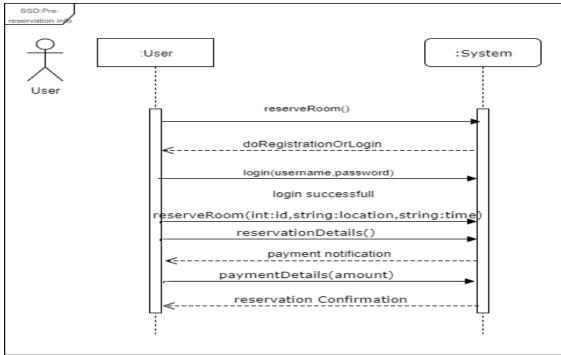


Figure 5: Manage Reservation

2.4 Domain Model:

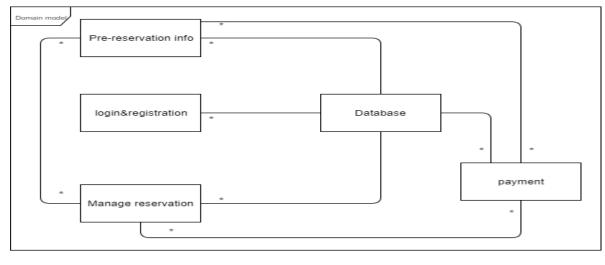


Figure 6: Domain Model

2.5 Activity Diagram:

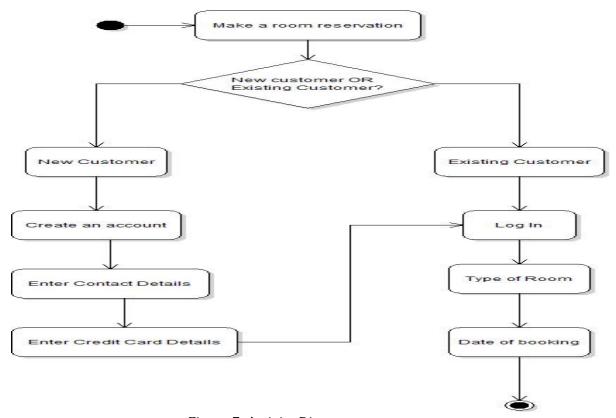


Figure 7: Activity Diagram

Chapter 3

System Design

3.1 Sequence Diagram

3.1.1 Sequence Diagram of pre-reservation info:

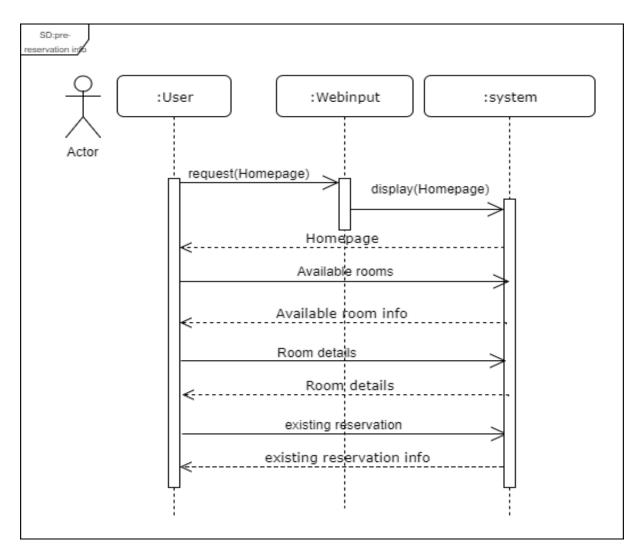


Figure 8: Sequence Diagram of pre-reservation info

3.1.2 Sequence Diagram of Manage reservation:

Login:

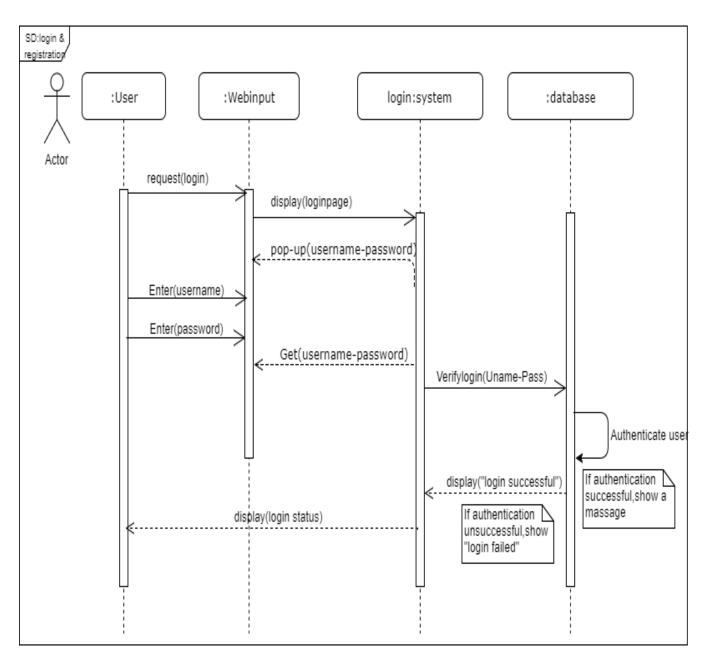


Figure 9: Sequence Diagram of Manage reservation(Login)

Reservation:

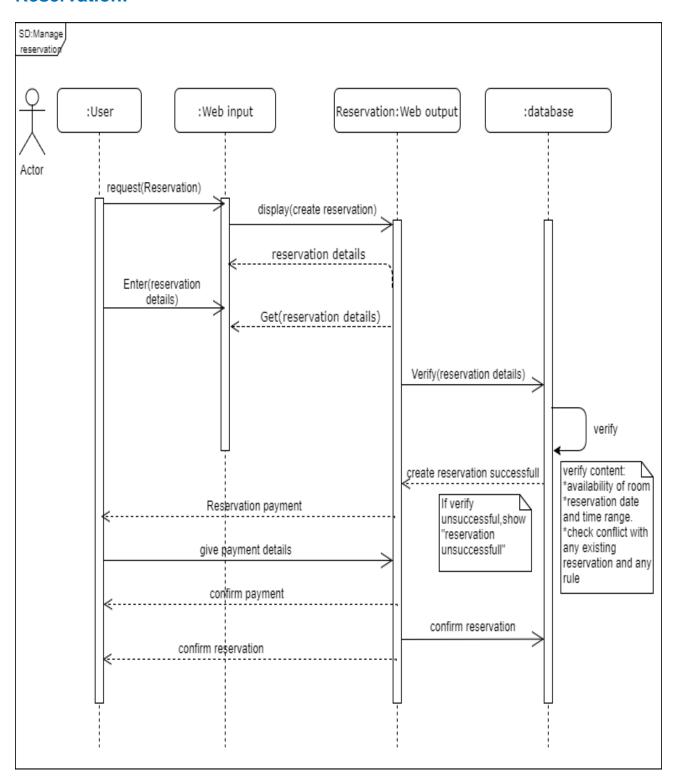


Figure 10: Sequence Diagram of Manage reservation(Reservation)

3.2 Class Diagram:

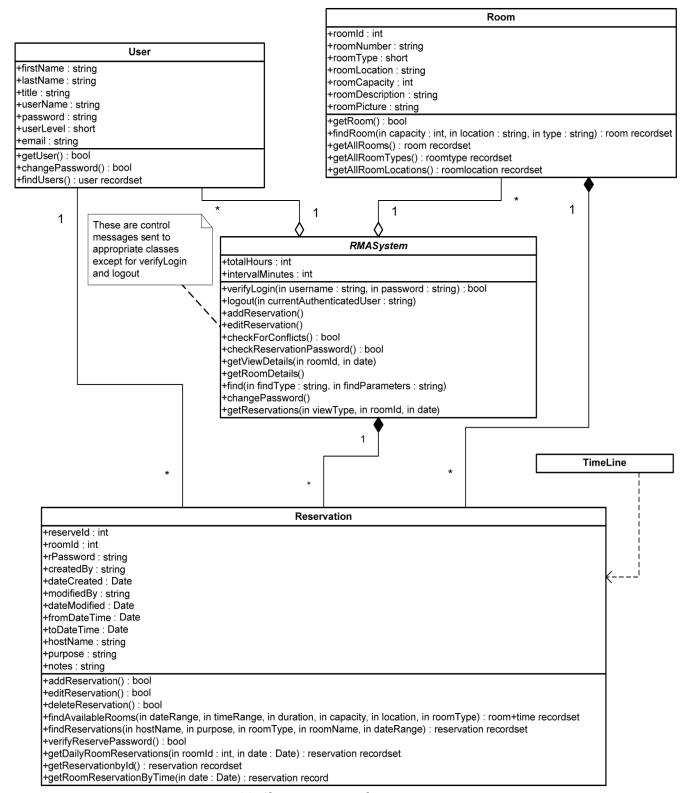


Figure 11: Class Diagram of room management system

3.3 ER diagram

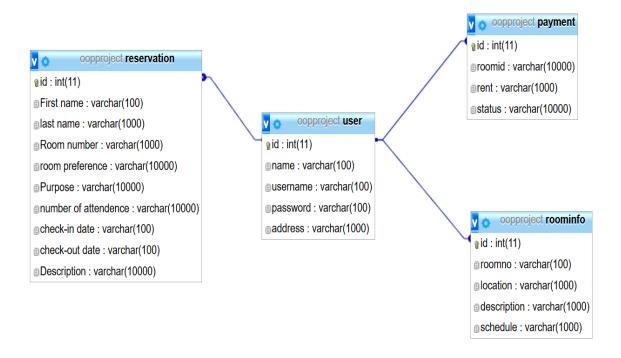


Figure 12: ER Diagram of room management system

Chapter 4

Implementation

4.1 Tool and Technology

 $Tools\ Used:\ Html, CSS, Javascript, jquery, php, mysql, Bootstrap$

Operating System: Anything.

4.2 Programme code link

https://github.com/nahed1021/00Pproject