Software Engineering Lab

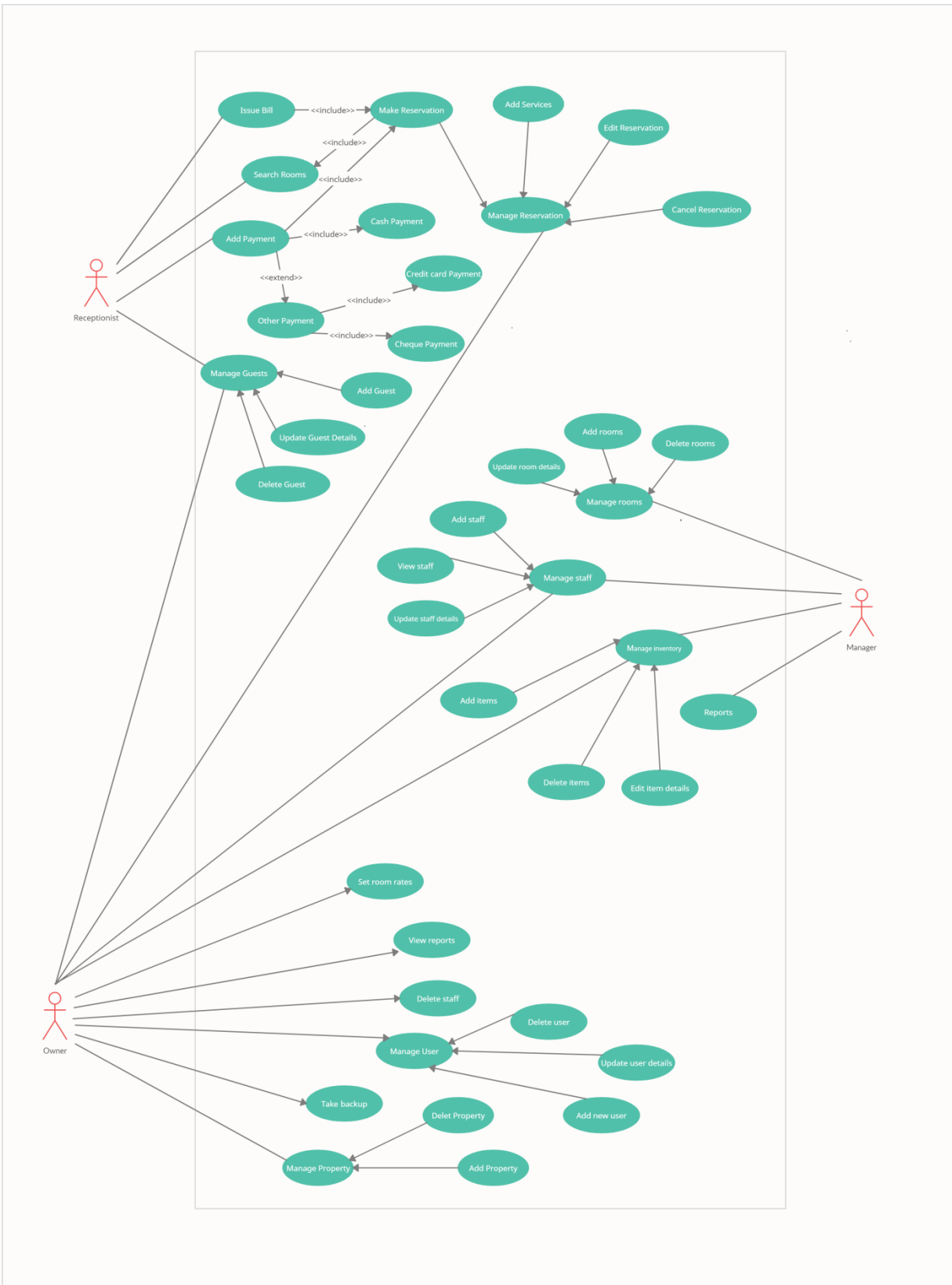**Group Members:**

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Topic: Resort Property Management System

Aim : Design UML diagram -Use Case & Description

Problem Statement : The main objective of this project is to build a resort management system that consists of all the features and functions required for effectively managing a chain of resorts and to have an online presence that makes the reservation process easier and delivers outstanding customer service. The Resort Property Management System will permit employees to manage the daily administrative tasks of the resort and ensure smooth functioning of the resort. The system will be able to handle many services to take care of all customers in a quick manner. As a solution to the large amount of file handling happening at the resort, this software will be used to overcome those drawbacks.

Use Case Diagram :

Use Case Scenarios:

1)

Use case Name	Make Reservation	
Goal	Add a new reservation	
Actors	Receptionist, Owner	
Precondition	Guest shouldn't already exist	
Post condition	Hotel Guest Details updated to include Current Guest	
Main flow	Step	Action
	1	Receptionist enter guest details
	2	System searches for room details
	3	System presents room types and tariffs
	4	Customer selects room and confirms tariff
	5	System records customer's name and address
	6	Receptionist confirms booking on system
	7	System generates confirmation receipt

2)

Use case Name	Check Availability	
Goal	To check whether a room available or not	
Primary Actors	Receptionist	
Precondition	Login to the system.	
Main flow	Step	Action
	1	Display User interface
	2	Select Availability Tab
	3	Enter room type, duration, number of adults and children
	4	System check room availability relevant to each requirements
	5	Display available room details
Extensions	4.1	No room available for entered details and display "No Room Available"

3)

Use case Name	Add Guest	
Goal	Add a new Guest	
Actors	Receptionist, Owner	
Precondition	Log in to the system	
Main flow	Step	Action
	1	Receptionist selects "add guest" button
	2	System prompts to fill out guest details
	3	System validates details
	4	Update database
	5	Display "Successful message"
Extensions Extension	3.1	Guest details are incomplete or registration is not successful, Display the message "Unsuccessful" and display Add guest option.

4)

Use case Name	Add Room	
Goal	Add a new room to the system	
Actors	Manager	
Precondition	Log in to the system	
Main flow	Step	Action
	1	Manager clicks "Add room" button
	2	System prompts the manager to fill out room details
	3	System validates new room information
	4	System creates a new room
	5	Update database
	6	Display "successful " message
Extensions	3.1	Room details are incorrect, Display the message "Unsuccessful" and display room management option.

5)

Use case Name	Delete room	
Goal	Delete a room from the system	
Actors	Owner, Manager	
Precondition	Log in to the system	
Main flow	Step	Action
	1	User select "delete room" option
	2	Display delete room option
	3	User select the room
	4	System display confirm message
	5	User select confirmation
	6	Update database
	7	Display "successful message'
Extensions	4.1	If user select "Yes" details are remove from the database. Else cancel the process

6)

Use case Name	Edit room properties	
Goal	Alter properties such as view or type of room	
Actors	Manager, Owner	
Precondition	Log in to the system	
Main flow	Step	Action
	1	Manager selects "change room properties"
	2	System prompts manager to select room
	3	Manager select the room
	4	System display room properties
	5	Manager edit room properties
	6	System alters room properties
	7	Update database
	8	Display "successful" message
Extensions		-

7)

Use case Name	Guest search	
Goal	Modify or delete guest information	
Actors	Manager	
Precondition	Log in to the system	
Triggers	Receptionist searches for customer	
Main flow	Step	Action
	1	User select search option
	2	System displays search interface
	3	User enters details
	4	System validates user inputs
	5	Display search results
Extensions	4.1	User inputs are invalid and prompt Display unsuccessful message

8)

Use case Name	Set room rate	
Goal	Set room rate to hotel room in system	
Actors	Owner	
Precondition	Log in to the system	
Main flow	Step	Action
	1	User select room properties
	2	Display room management window
	3	User selects set room rates
	4	Display enter room rate
	5	User enter room rates
	6	Validate details
	7	Update database
	8	Display "successful" message
Extensions	4.1	If room rates set previously clear them and redirect to set room rates

9)

Use case Name	Add Property	
Goal	Add a new property to the system inventory	
Actors	Owner	
Precondition	Log in to the system	
Main flow	Step	Action
	1	User Select inventory section
	2	System displays inventory handling section
	3	User Select add property
	4	User enter product details
	5	Validate product details
	6	Update database
	7	Display successful message
Extensions	4.1	If data invalid display "Invalid selections" redirect to inventory section window

10)

Use case Name	View financial reports	
Goal	View a financial report for specific time	
Actors	Owner	
Precondition	Log in to the system	
Triggers	Owner clicks button "view reports"	
Main flow	Step	Action
	1	System prompts the owner to select two dates
	2	Enter dates
	3	System will display the revenue for that specific time
	2.1	If invalid details entered Display "unsuccessful" message and reenter interface.

11)

Use case Name	Delete Guest	
Goal	Delete a Guest	
Actors	Receptionist	
Precondition	Log in to the system	
Post condition	A new guest is added to the system	
Triggers	Receptionist clicks button "Delete guest"	
Main flow	Step	Action
	1	User interface displayed
	2	Select "delete Guest" option
	3	Enter guest details
	4	Valid guest details
	5	System display guest details
	6	System confirms deletion of selected guest
	7	Update database
Extensions	4.1	If invalid details entered Display "not found" message and redirect to main interface
	5.1	Database is not updated, Display the message "Unsuccessful"

12)

Use case Name	Modify Guest details	
Goal	Updating the details of the guests	
Actors	Receptionist	
Precondition	Log in to the system	
Post condition	A guest details are updated in the system	
Triggers	Receptionist clicks button "Modify guest details"	
Main flow	Step	Action
	1	User interface displayed
	2	Select "Modify guest details" option
	3	Enter guest details
	4	Modify the details
	5	System displays guest details
	6	System confirms that selected guest details are modified
	7	Update database
Extensions	5.1	Database is not updated, Display the message "Unsuccessful"

13)

Use case Name	Change Guest information	
Goal	Alter properties such as telephone number or email of guest	
Primary Actors	Receptionist	
Precondition	Log in to the system	
Post condition	Guest details edited	
Triggers	Receptionist clicks button "Edit guest"	
Main flow	Step	Action
	1	User interface displayed
	2	Select "Edit Guest" option
	3	Enter guest details
	4	Valid guest details
	5	System displays guest properties
	6	System alters the guest properties
	7	Update database
	8	Display "Successful" message
	9	Database updated
Extensions	4.1	If invalid details entered Display "unsuccessful" message and redirect to main interface
	5.1	Database is not updated, Display the message "Unsuccessful"

14)

Use Case	Take Backup	
Goal	Take a backup of the system	
Primary Actor	Owner	
Pre-condition	User should login to the system	
Main Flow	Step	Action
	1	Display user interface
	2	Select backup option
	3	Display backup interface
	4	Select create backup option
	5	Create backup
	6	Creating backup process is not successful, display "Unsuccessful" message.

Conclusion: Thus, in this experiment, UML Use Case diagram was successfully created for our case study.