





#### **Project and Professionalism**

(6CS007)

## **Artefact Design**

Hotel Recommendation System

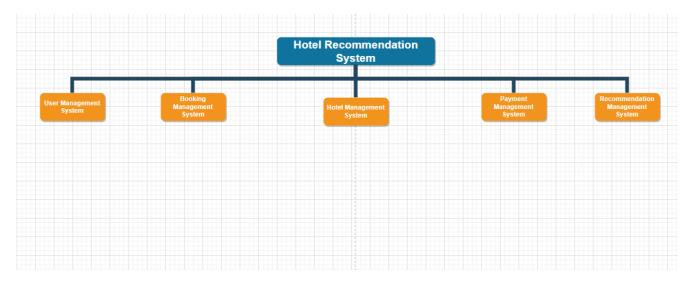
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## **Functional Decomposition Diagram (FDD)**



Sub-System

UMS: User Management System

BMS: Booking Management System

RMS: Recommendation Management System

HMS: Hotel Management System

Types of Requirements:

F: Functional Requirements

NF: Non-Functional Requirement

UR: Usability Requirements

# **User Management System (UMS)**

## **SRS Table**

Req. Code	Req. Desc	Use Case	Prioritization
UMS-F- 1.0	The system should allow the user to visit the website.	View Interface	Must Have
UMS-F- 1.1	The system should allow the user to reserve or book the hotel through the website.	Book/Reserve Hotel	Must Have
UMS- NF-1.2	While submitting the registration form, user must enter emailid to get booking details and go for the further process.		
UMS- NF-1.3	The registration data must be encrypted before sending over to server.		
UMS- NF-1.4	The login password for the registration must be through a combination of alphabets, numbers, and special characters.		
UMS- UR-1.5	After visiting the website, user must have an interface to search about the hotel information.	Search Hotel	Must Have
UMS- NF-1.6	The admin should be able to see all the information before sending it to respective hotel owners.		
UMS-F- 1.7	The admin should be able to ban/unban the user.		
UMS-F- 1.8	After searching ideal hotel, recommendation interface should be shown to user.	List Hotel	Must Have

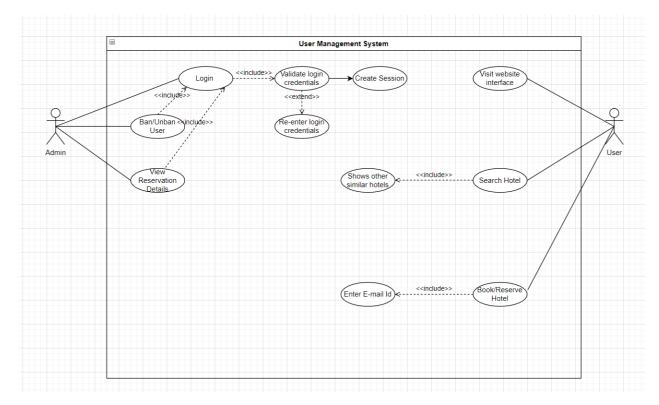


Figure 1: Use case Diagram

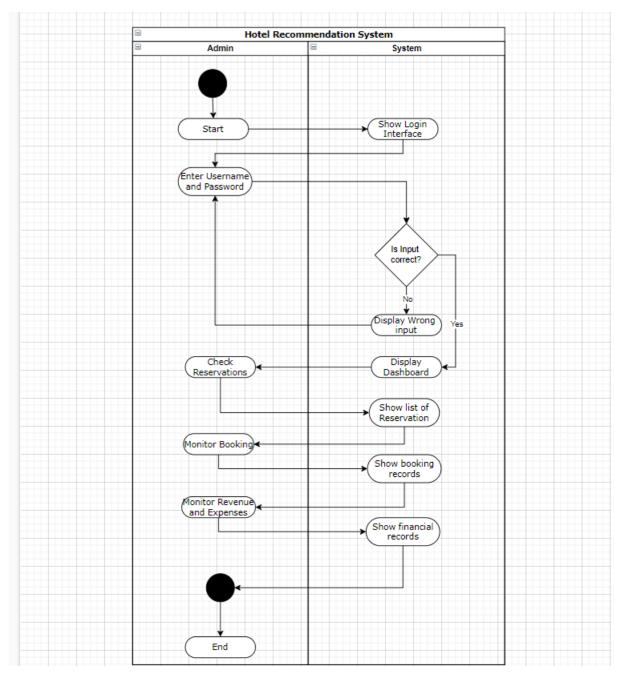


Figure 2: Activity Diagram for Admin

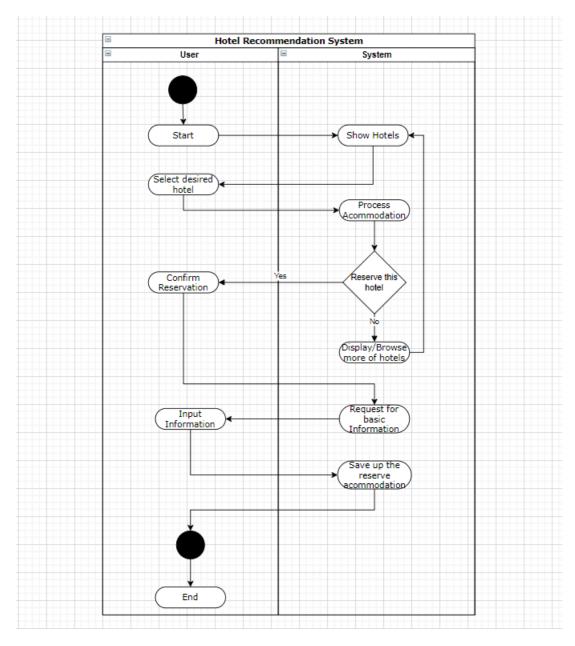


Figure 3: Activity Diagram for User

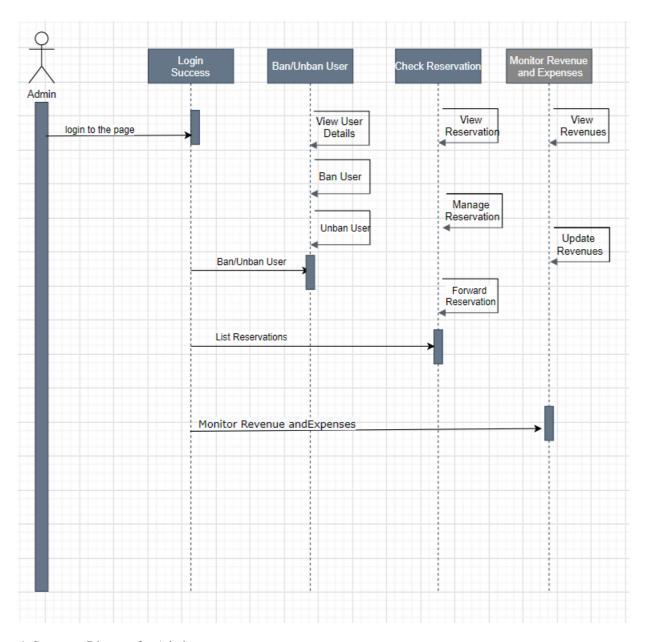


Figure 4: Sequence Diagram for Admin

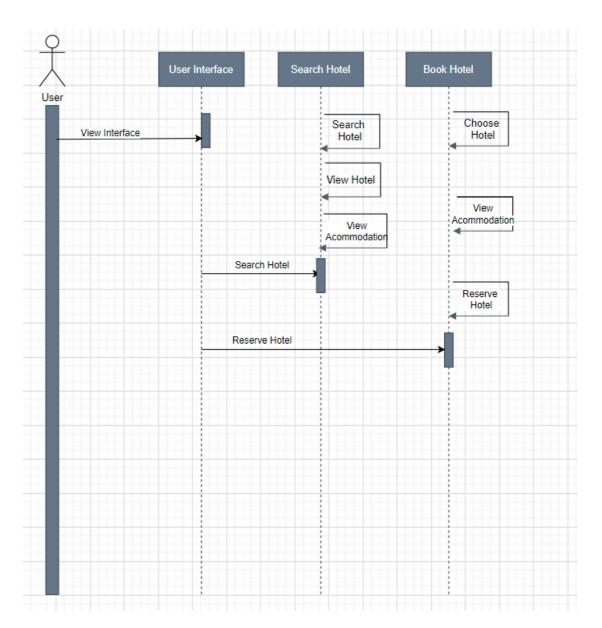


Figure 5: Sequence Diagram for User

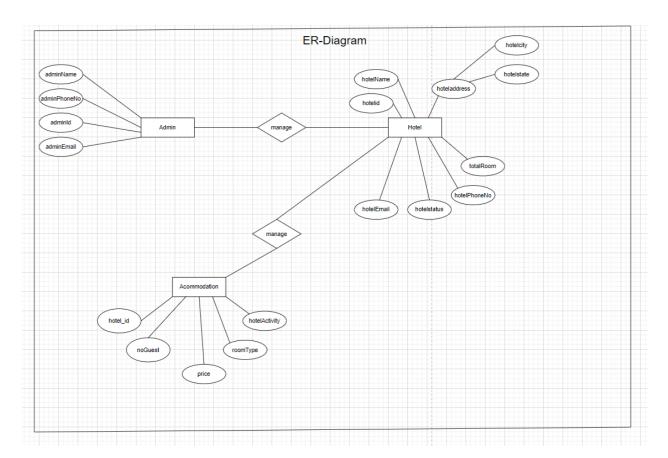


Figure 6: ER Diagram

## **Data Dictionary**

Table 1: Database table for user

Attribute	Type	Length	Explanation
userEmail	VARCHAR	5	One ID can be own by only one user.
userType	VARCHAR	2	Status whether the user is admin or hotel owner

Table 2: Database table for Admin

Attribute	Type	Length	Explanation	
adminId	VARCHAR	5	One ID can be own by one	
			admin.	
adminName	VARCHAR	50	Represents the name for admin	
			and Only character are allowed.	
adminEmail	VARCHAR	50	Represents email for admin	
phoneNo	VARCHAR	15	Represents phone number for	
			admin and only digits are	
			allowed.	

Table 3: Database table for hotel owner

Attribute	Type	Length	Explanation
hotelOwnerId	VARCHAR	5	One ID can be own by one hotel
			owner.
hotelName	VARCHAR	50	Represents the name for admin and Only character are allowed.
hotelAddress	VARCHAR	30	Represents the address for hotel
city	VARCHAR	30	Represents the city address for hotel
state	VARCHAR	30	Represents the state address for hotel.
email	VARCHAR	50	Represents email for hotel
phoneNo	VARCHAR	15	Represents phone number for hotel and only digits are allowed.
totalRoom	VARCHAR	5	Represents total hotel room
status	VARCHAR	10	Represents hotel status

Table 4: Database table for Hotel Accommodation

Attribute	Type	Length	Explanation	
hotelOwnerId(FK)	VARCHAR	5	One ID can be own by one	
			hotel owner.	
noGuest	VARCHAR	3	Represents number of guest	
			for hotel and only digits are	
			allowed.	
price	VARCHAR	10	Represents price for	
			accommodation.	
roomType	VARCHAR	20	Represents room type for hotel	
activity	VARCHAR	100	Represents activity that	
			offered	
			E.g. relaxing , adventure,	
			business travel	