

HOSPITAL MANAGEMENT SYSTEM

CSE445/598 Service Development Assignment – 3 (Part 1)

Group 6: Team SMS

Group Members:

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SYSTEM DESCRIPTION:

Hospital Management System primarily deals with the management of various services and functions of a hospital. Some of the main services include **Book Appointment, Registration, Generate Bill** and **View Report**. The end users would be able to use multiple services that help them complete their tasks easily. Following is a general overview of the services provided by the system,

Book Appointment: The user can select the doctor and the time slot available to book their appointment.

Bank Service: The user can enter credit card details and these details are encrypted and sent over to the bank. The user receives a payment confirmation.

Send Confirmation: The user receives a confirmation mail with his appointment details.

Storage Service: It performs two functions, viewing the working hours of a doctor and viewing a patient's record.

Book Rooms: It allows a user to select the type of room required and generates confirmation for the same.

Registration: A new user must register with the system through this service and this service then assigns the user a unique hospital ID.

Search Store: It allows a user to search the pharmacies in a particular area.

Shopping Cart: The user can enter the medicines prescribed by the doctor and it is added to his cart.

Generate Bill: The user's bill is generated according to the type of services provided to him.

Doctor Review: It allows a user to view the general rating of a doctor.

Word Stemming: It is used by the Doctor Review service to extract root words for analysis.

Image Compression: It compresses a given image before it is uploaded into a patient's record.

Hike Calculator: It allows the management to calculate the percentage hike in a doctor's salary by considering his rating as obtained from Doctor Review

Search by Specialty: The user can view the list of doctors available under a specific specialization.

View Report: It allows a user to view his report.

SYSTEM DESIGN:

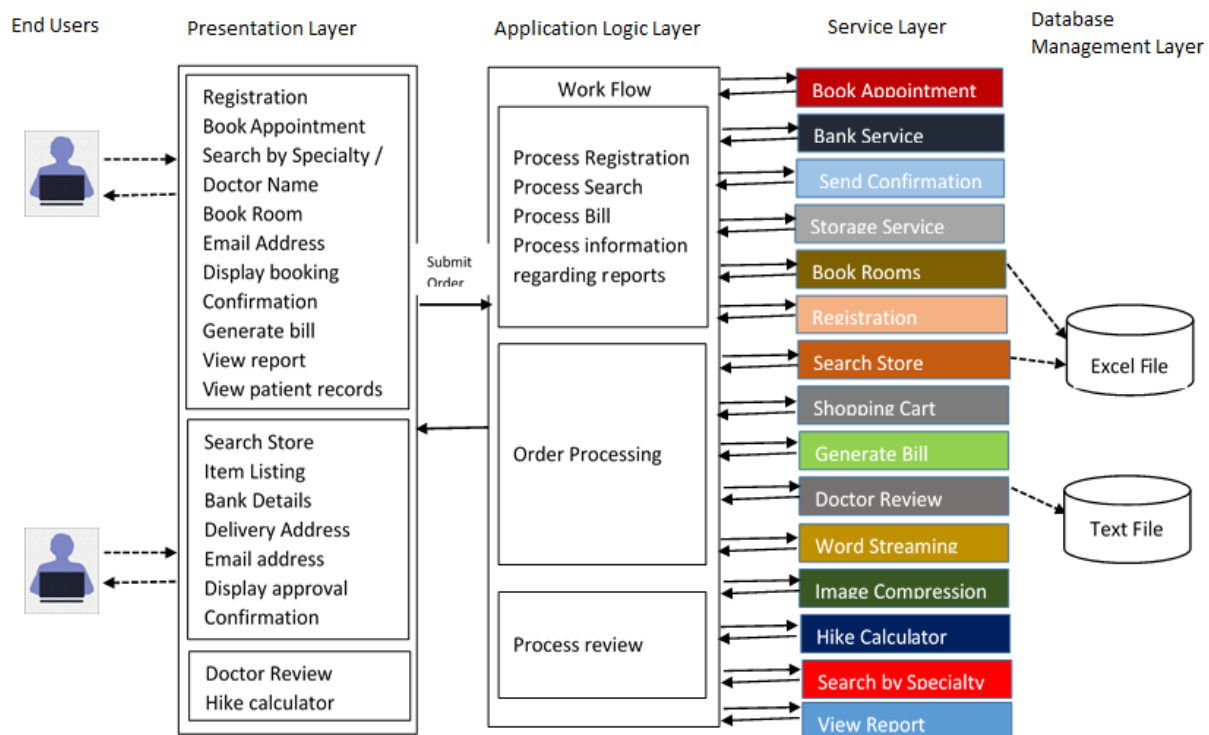


Figure 1 Hospital Management Four-Tier Service Oriented Computing System

SERVICE DIRECTORY:

This page is deployed at: -

This project is developed by: **Team SMS**

Provider name	Service name, with input and output types	TryIt link	Service description	Planned resources need to implement the service
Sreesh Prakash	Doctor Review Input: Doctor Name, Specialty Output: Review of the Doctor	-	Helps a patient to find doctor review by taking doctor name and his specialty as input. It gives the rating of the doctor as output	Using backend logic
Sreesh Prakash	Word Stemming Input: List of Words Output: Stemmed Word	-	Performs stemming to extract root words	Using backend logic
Sreesh Prakash	Book Appointment Input: Patient Details Output: Appointment Confirmation	-	Takes the patient name, hospital ID, doctor name and time as input and generates confirmation of the appointment	Using backend logic
Sreesh Prakash	Image Compression Input: Original Image Output: Compressed Image	-	Takes the original image as input and compresses it	Using backend logic
Sreesh Prakash	Bank Service Input: Encrypted credit card details Output: Payment confirmation	-	Performs encryption of the user provided credit card information and generates payment confirmation.	Using backend logic
Madhu Meghana Talasila	Storage Service viewPatientRecord() Input: patient id Output: medical record	-	viewPatientRecord() – Takes the patient ID as input and displays the medical records associated with that patient	Using backend logic

	viewDoctorHours() Input: doctor id Output: hours of working		viewDoctorHours()- Takes the doctor ID as input and displays the working hours of the doctor	
Madhu Meghana Talasila	Book Rooms Input: room number , number of days, doctor name Output: Room confirmation	-	It allows the patient to book rooms in the hospital for his recovery post-surgical procedure	Using backend logic
Madhu Meghana Talasila	View Report Input: Patient id, current consultation details Output: Report	-	It takes in the patient id and the current details of the consultation and generates patient report	Using backend logic
Madhu Meghana Talasila	Search By Specialty Input: Specialty Required Output: List of Doctors	-	It allows the patient to view the list of doctors in each specialty	Using backend logic
Madhu Meghana Talasila	Send Confirmation Input: Email id, message Output: Send success/failure	-	It sends a confirmation mail to the patient by taking his email id as input.	Using Gmail API
Sujata Sridharan	Registration Input: Patient Details Output: Hospital Registration Number	-	It takes the patient name, address, phone number, date of birth and age as input and generates a unique ID.	Using backend logic
Sujata Sridharan	Hike Calculator Input: Doctor Name, Review Output: Percentage Hike	-	It takes the doctor name and his rating as input and calculates the percentage hike he is eligible for in that particular year	Using backend logic
Sujata Sridharan	Search Store Input: Zipcode Output: Nearest Pharmacies	-	It takes the zip code as input and generates nearest pharmacies in that area	Using yelp API

Sujata Sridharan	Generate Bill Input: Prescribed Medicines Output: Bill Amount	-	Based on the medicines purchased, it generates bill amount	Using backend logic
Sujata Sridharan	Shopping Cart Input: Medicine List Output: Displays cart content	-	The user adds items to the cart and it displays the items added so far.	Using backend logic