

# Aham Svasthah Web Portal for healthcare services

Submitted by

Dhiraj Koli

Dhiraj Patil

Swapnil Nyayade

Aditya Pachpande

Vrushali Patil

SSBT College Of Engineering and Techonology, Bambhori

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# Chapter 1

## Introduction

Online registration is familiar to the developed countries throughout the world. Online medical appointment is becoming increasingly popular because of speed and ease of use for customers. The patients and person in critical situations are attracted to online appointment by high levels of satisfaction, they get registered without wasting time, and also get huge amount of information about hospitals in single place. The modern era totally depends on technology and for that reason online users are increasing day by day.. The objective of this project is to develop a general online healthcare website where appointment can be taken from the comfort of home and in serious conditions through internet .There may be website is present for particular hospital for same purpose. Now, a new trend starts people get registered online for vaccine. Our website provide nearby hospitals, their current status which are registered, so users can navigate and get appointed, without hindering.

Here we make web application where customer will be able to visit our website and check for the hospital, freely register and access many times.

## Problem Definition

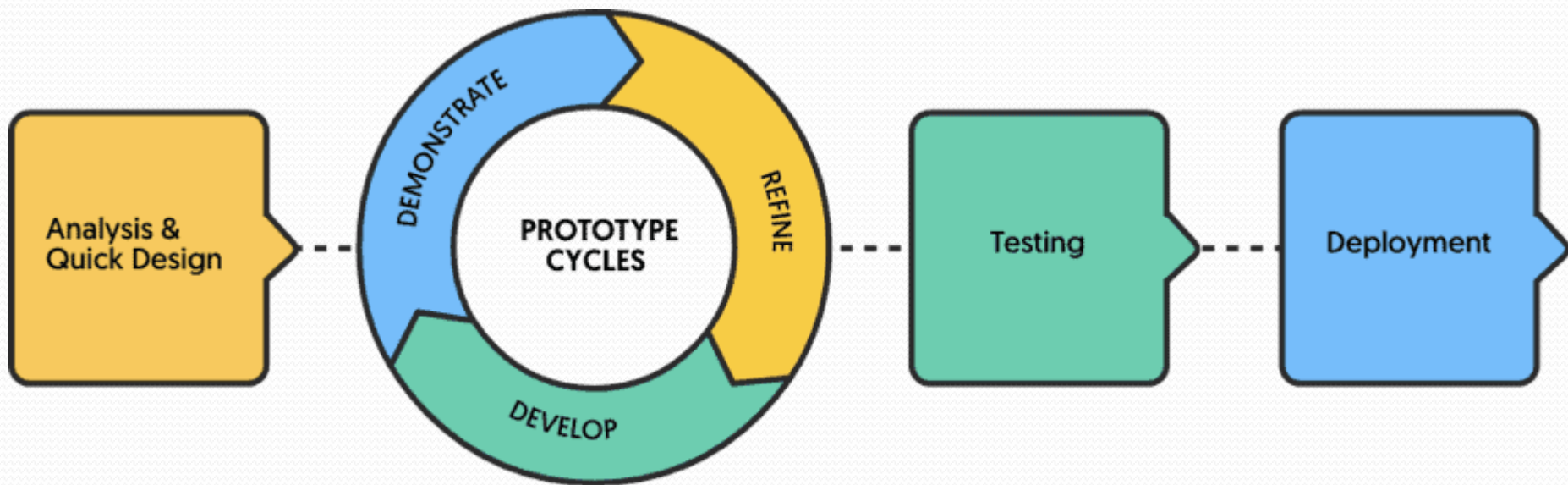
- Nowadays, there is no centralized system available for normal peoples, which will help them related to their health issues. People are not able to know about the nearby hospitals and not able to contact the hospital which they really need, especially the new peoples in a city who are completely unknown with that city.
- To overcome this problem we are providing a portal which can help to solve all these problems. It is a way to increase access to meet to a high level of health care providers, so that normal peoples are provided with a variety of healthcare services.

## Scope and Objective

- Online Appointment for the peoples.
- Live Status of the Hospital
- Navigation to nearby Hospital
- A comprehensive profile of doctor and hospital
- Health camp notifications
- Updated Facilities.
- Category-wise hospitals in accordance with their specialties such as Brain Hospital, Accidental Hospital, Heart Hospital.
- Specialists Availability on some particular day.
- Online Medical Services

# Waterfall Development Methodology

James Martin developed the rapid application development approach during the 1980s at IBM. The Rapid Application Development (or RAD) model is based on prototyping and iterative model with no (or less) specific planning. In general, RAD approach to software development means putting lesser emphasis on planning tasks and more emphasis on development and coming up with a prototype.



A typical RAD cycle

# Chapter 2

## **Project Planning and Management**

Project management is defined as a collection of proven techniques for proposing, planning, implementing, managing, and evaluating projects, combined with the art of managing people.

## **Feasibility Study**

A feasibility study is an analysis done to determine the viability of a project from an economical, legal, and technical perspective. The objective of feasibility study is to determine whether the proposed system can be developed with available resources. There are three steps to be followed for determining feasibility study of proposed systems.

1. Technical feasibility
2. Operational feasibility
3. Economical feasibility

# Risk Analysis

Risk analysis involves examining how project outcomes and objectives might change due to the impact of the risk event.

Once the risks are identified, they are analysed to identify the qualitative and quantitative impact of the risk on the project so that appropriate steps can be taken to mitigate them.

The Most Common Risks lie under the categories:

1. Cost Risks
2. Schedule Risk
3. Requirement Issues
4. Management Issues
5. Performance Risks
6. Other Risk Categories



# Project Scheduling and Effort Allocation

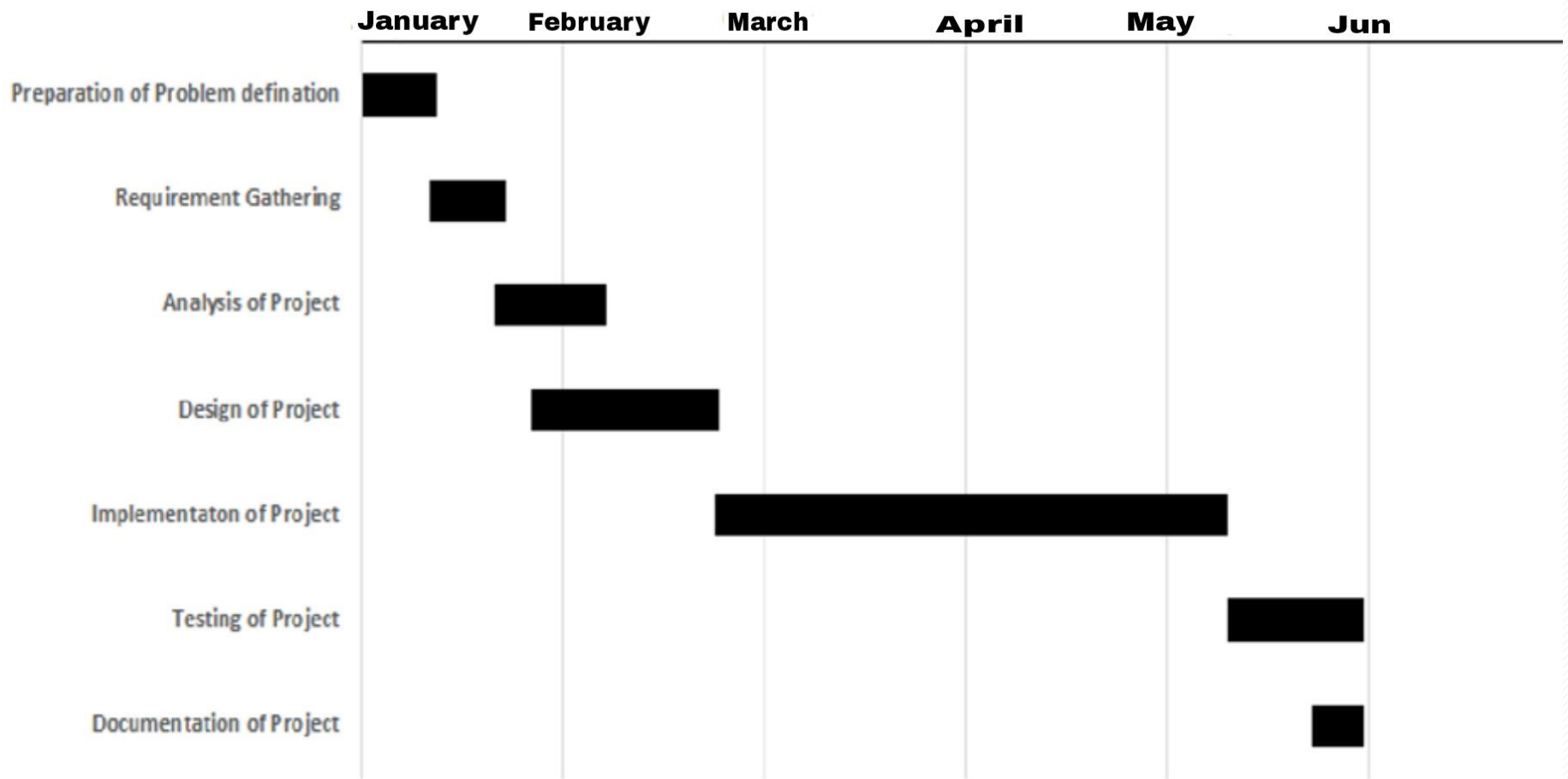


Figure 2.1: Project Scheduling Chart

# Cost Estimation

It was proposed by Barry Boehm in 1970. Cost estimation in project management is the process of forecasting the financial and other resources needed to complete a project within a defined scope.

COCOMO Model (Constructive Cost Model) is a regression model based on LOC, i.e number of Lines of Code.

- **Basic COCOMO Model:** The effort equation is as follows:-

$$E = a * (KLOC)^b$$

$$D = c * (E)^d$$

Where:

**E** = effort applied by per person per month

**D** = development time in consecutive months

**KLOC** = estimated thousands of lines of code delivered for the project.

# Chapter 3

## Analysis

The analysis leads to various benefits such as increased productivity, enhanced quality of work, reductions in support and training costs, and improved user satisfaction.

## Requirement Collection and Identification

- ❖ Gaining the knowledge from colleagues or developers already having prior working experience on that project.
- ❖ Look for previous version that is already implemented and is in use.
- ❖ Look into installation guide if it is available to see what are the installation required.
- ❖ Analyze the domain or industry knowledge that team is trying to implement,etc.

# Software Requirements Specification (SRS)

## ❖ Product Features

- 1.The website is easy to navigate.
- 2.The website has Browser consistency which is helpful in user interference ,etc.

## ❖ Operating Environment

## ❖ Assumptions

## ❖ Functional Requirements

## ❖ Non-Functional requirements

## ❖ External Interfaces

**User:** Patient, Hospital Management , other

**Hardware Requirements :**Processor, Hard disk,etc

**Software Requirements :** JavaScript, ReactJs, NodeJs ,etc.

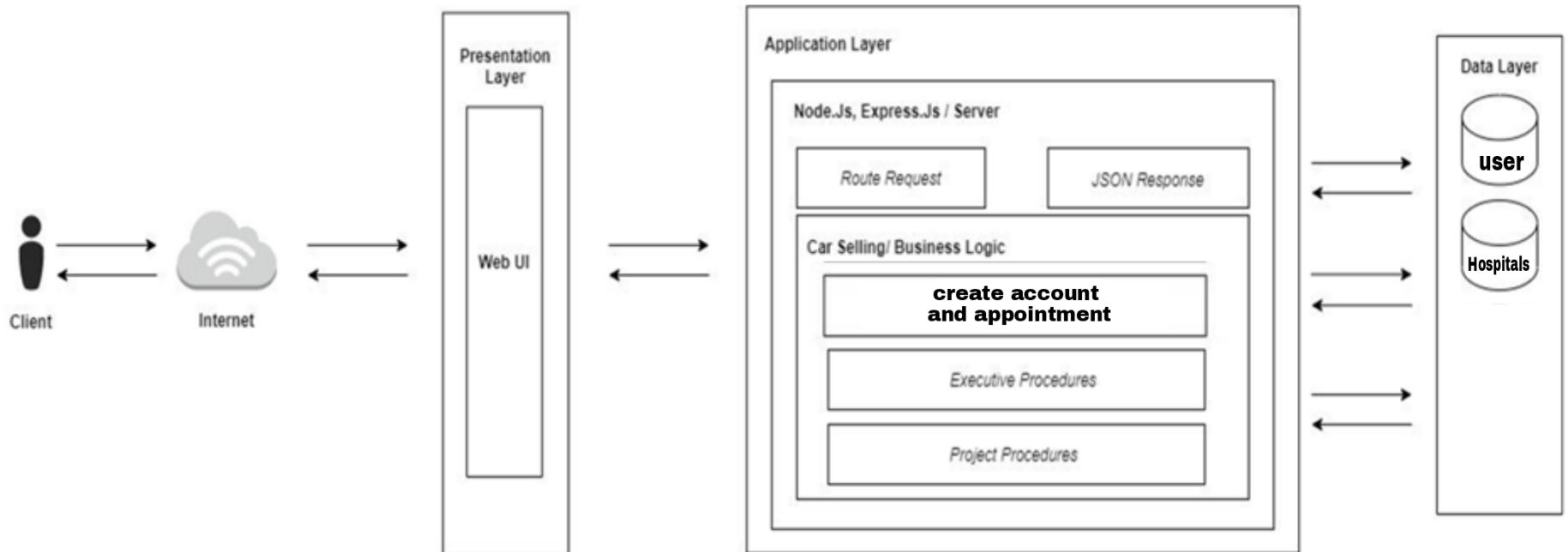
**Communication :** HTTPS, TCP/IP , etc

# Chapter 4

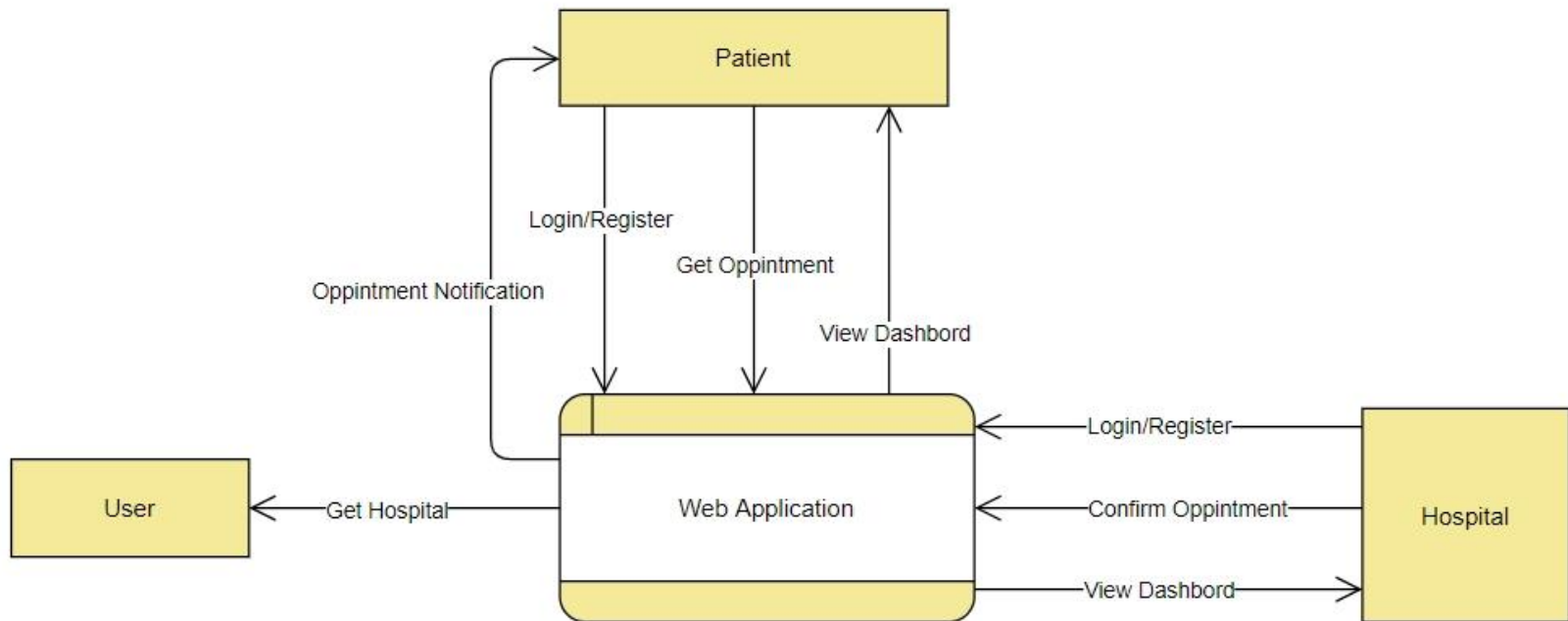
## Design

System Design chapter provides graphical structure of the project by using various UML diagrams, DFD's and Architecture. In the software engineering context, design focuses on four major areas of concern are data, architecture, interfaces and components.

## System Architecture

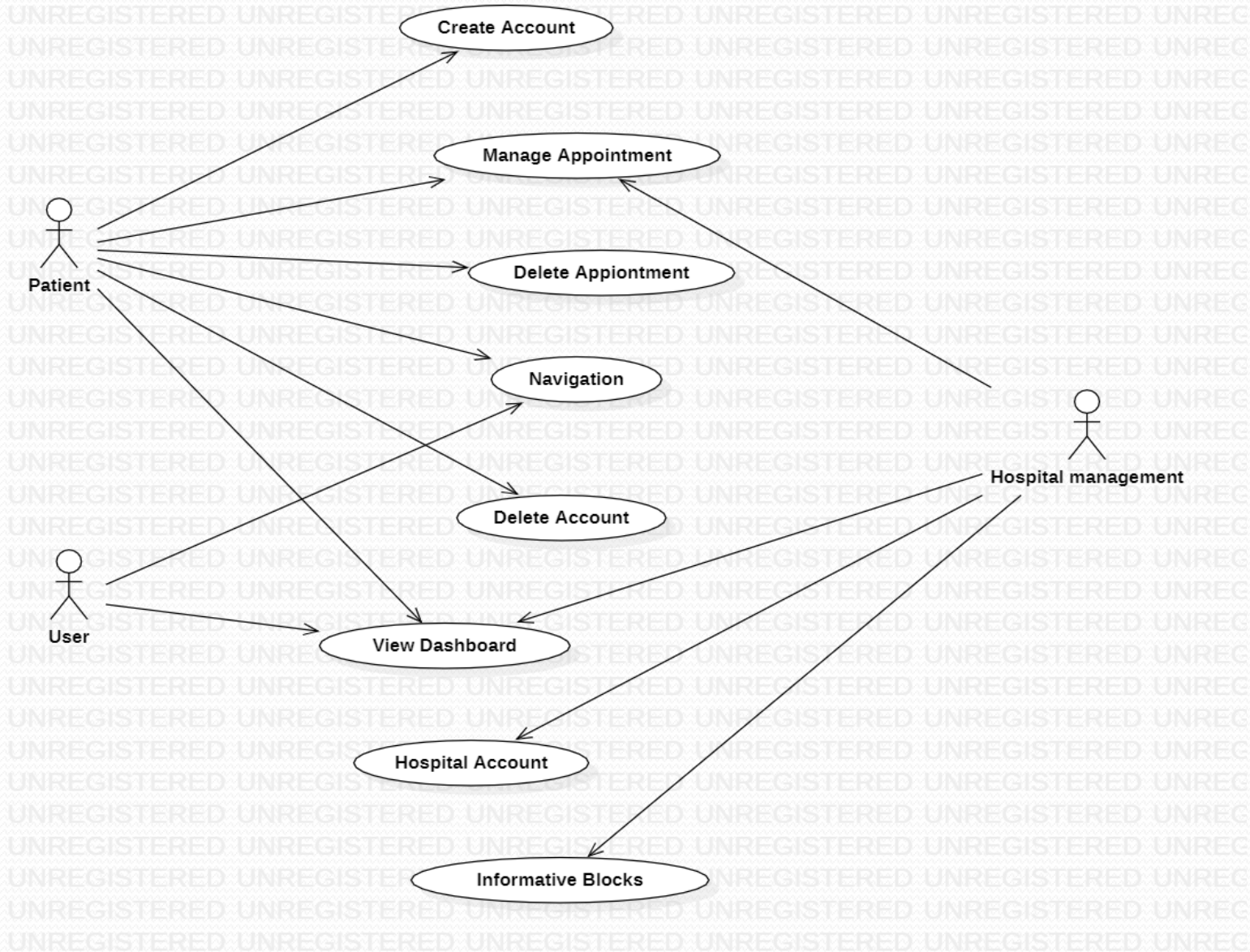


**Data Flow Diagram :** The DFD enables the software engineer to develop models of the information domain and functional domain at the same time.



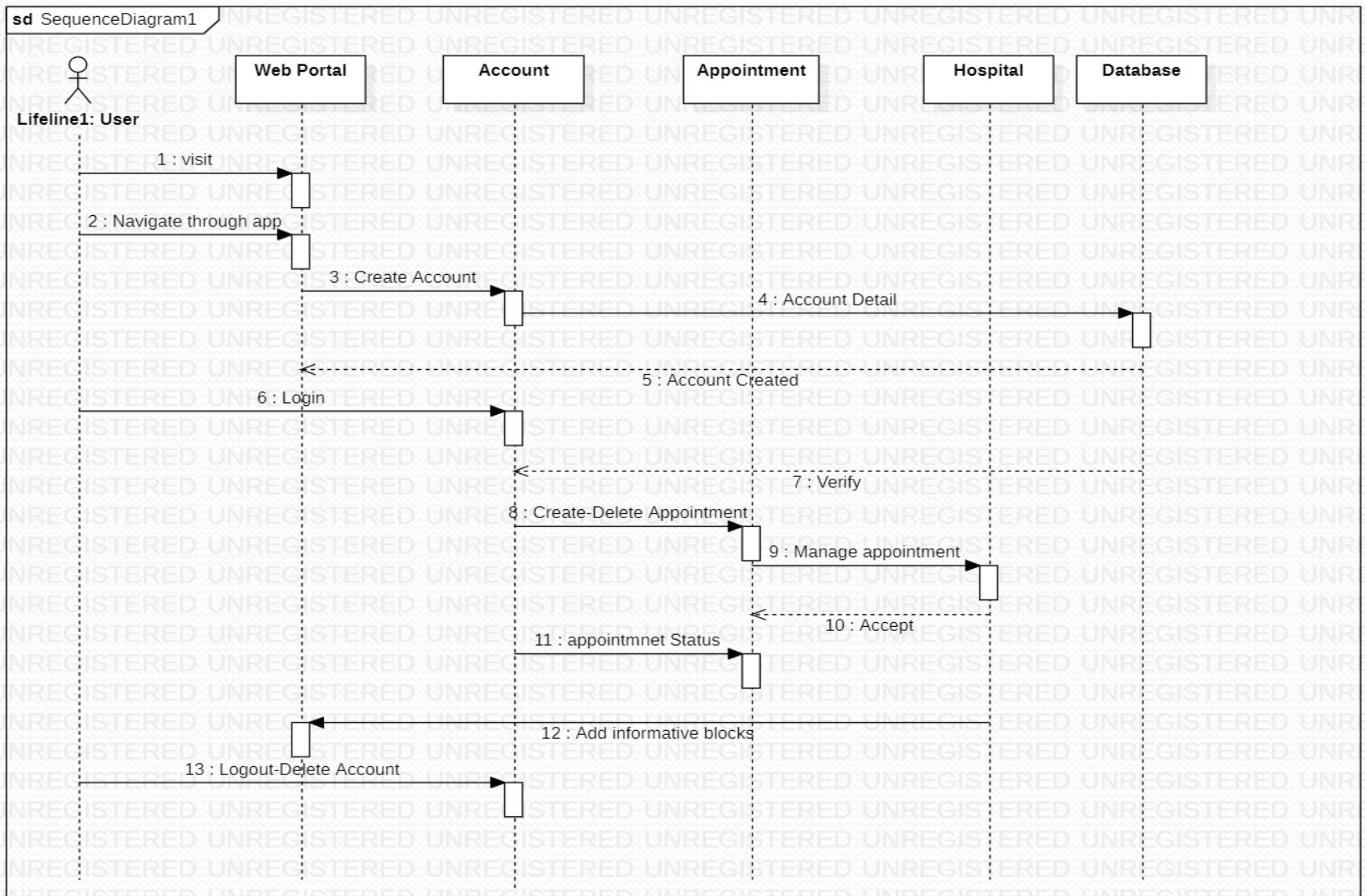
Data Flow Diagram

# Use Case



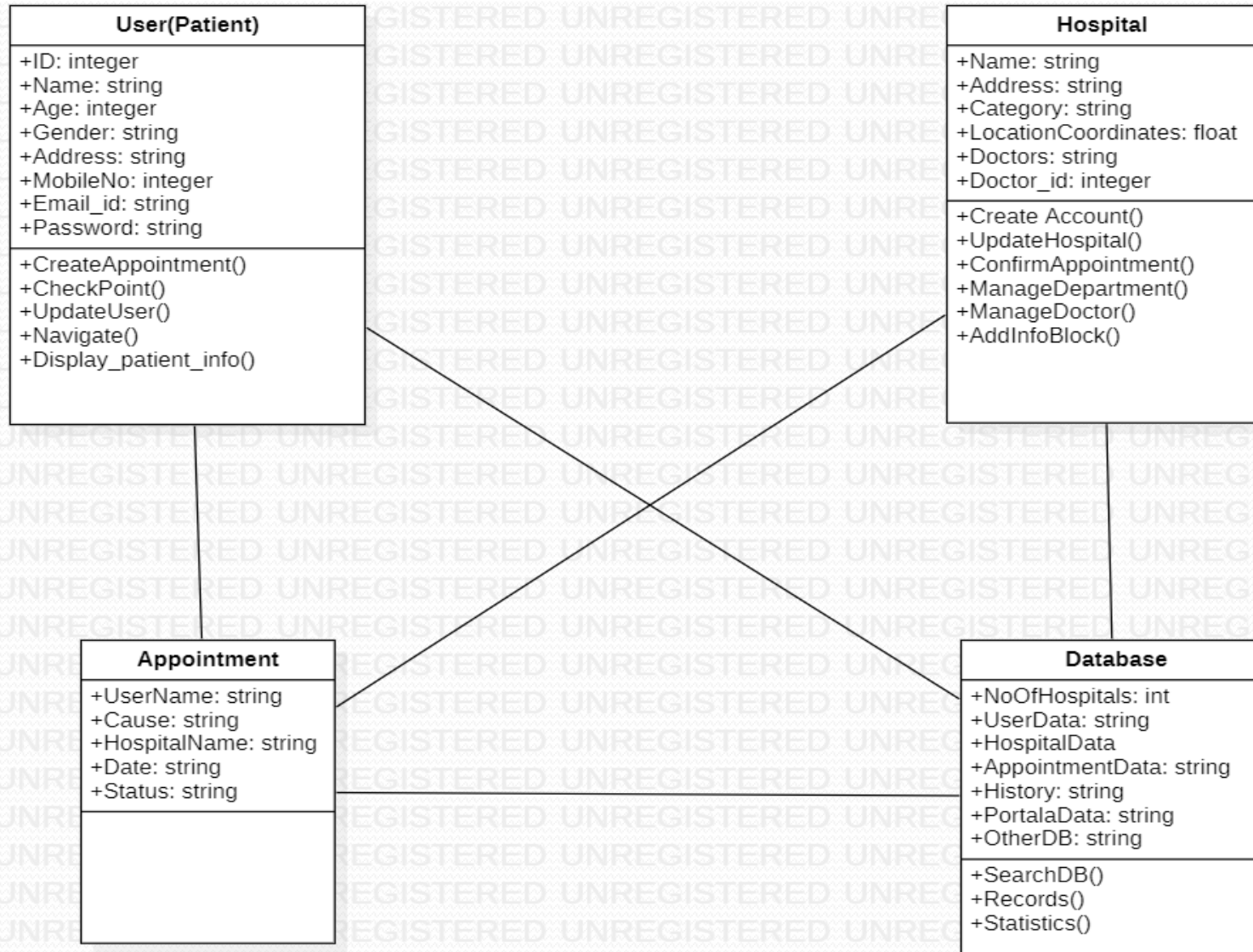


# Sequence-User

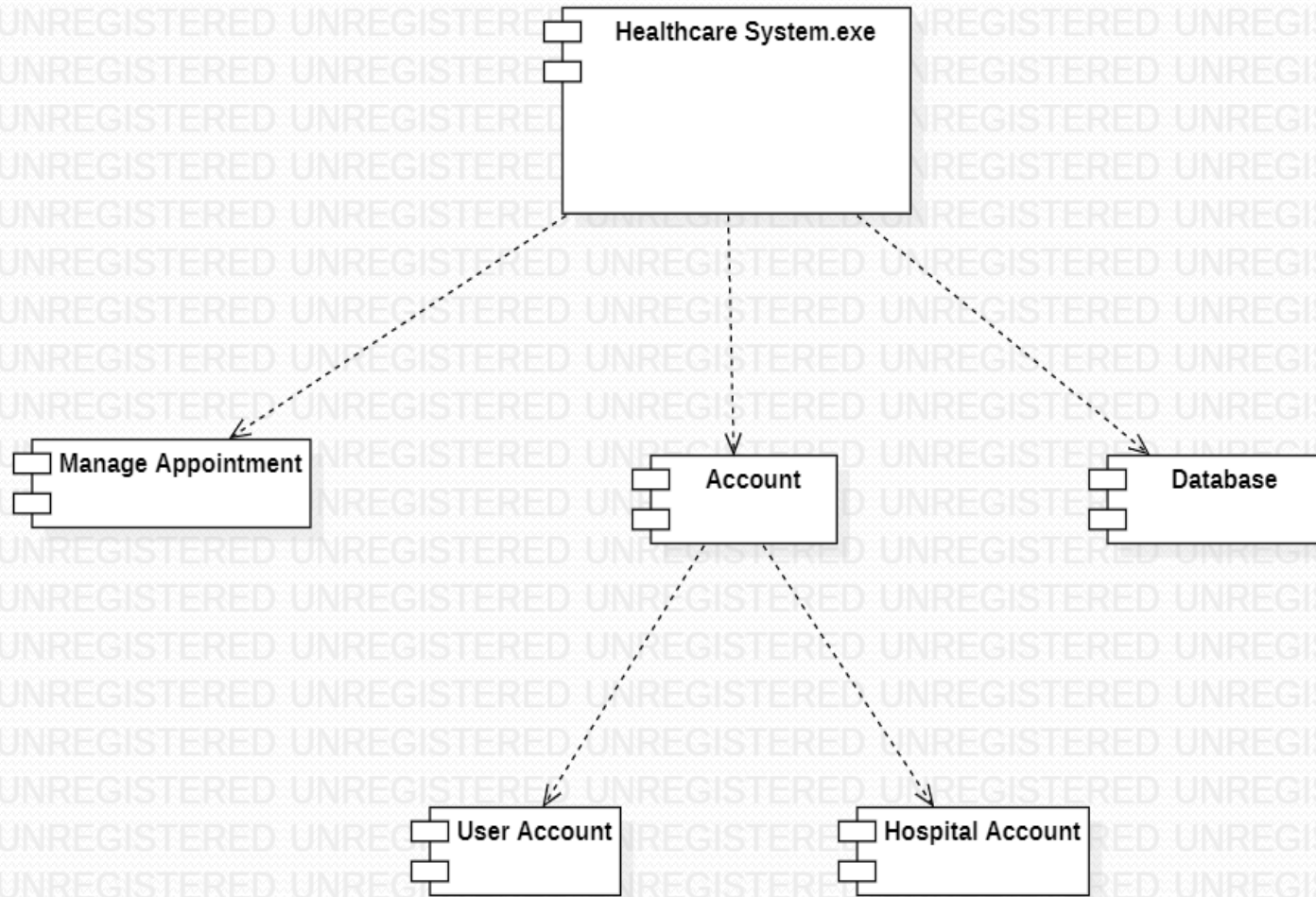




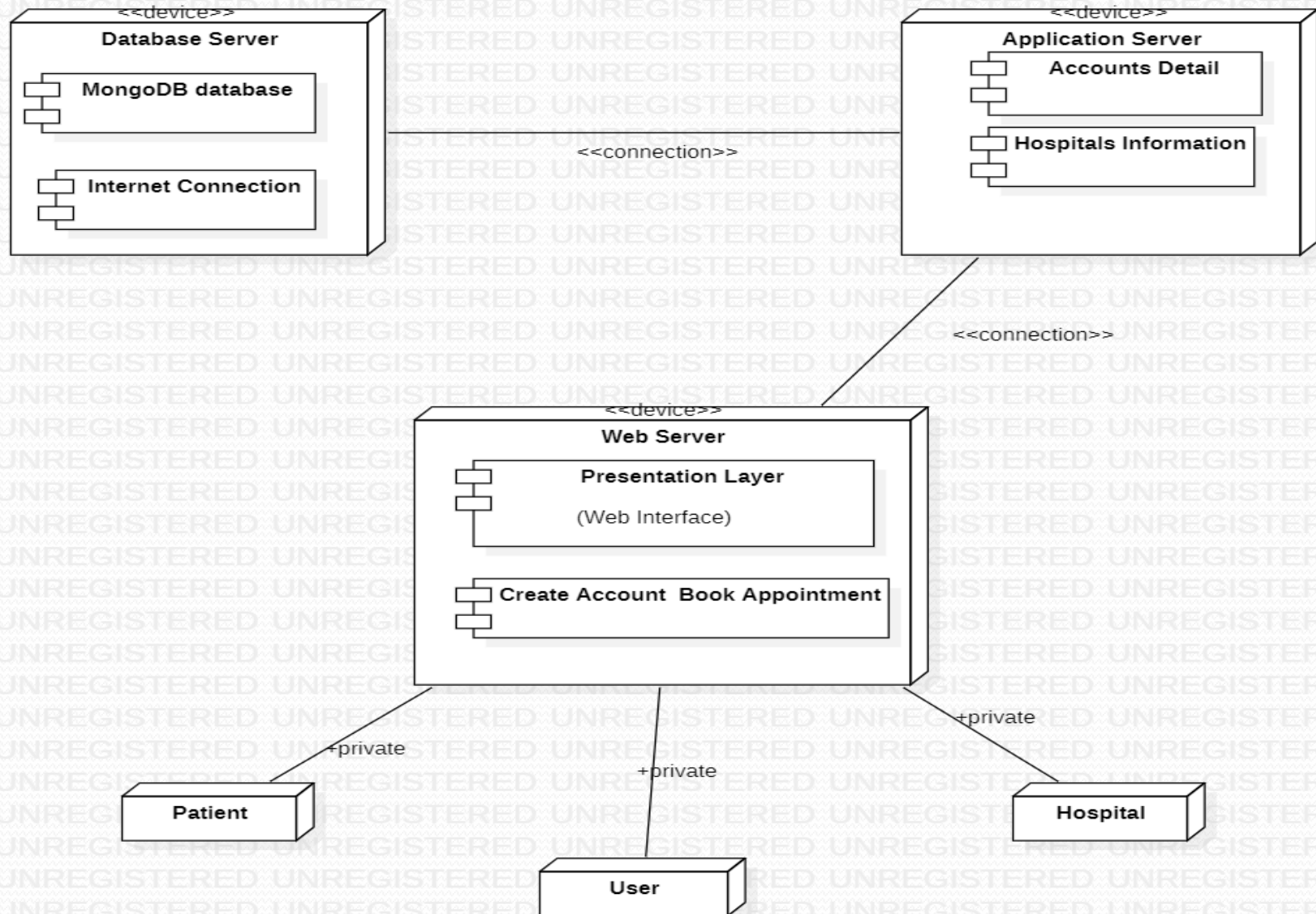
# Class



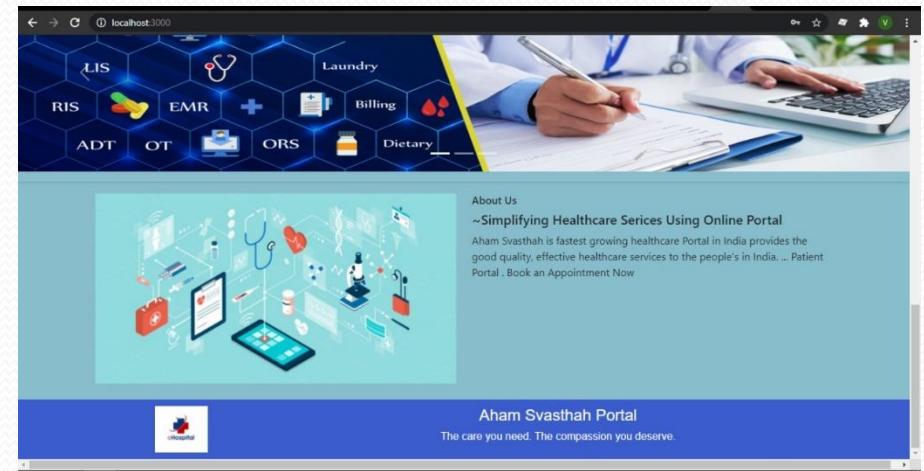
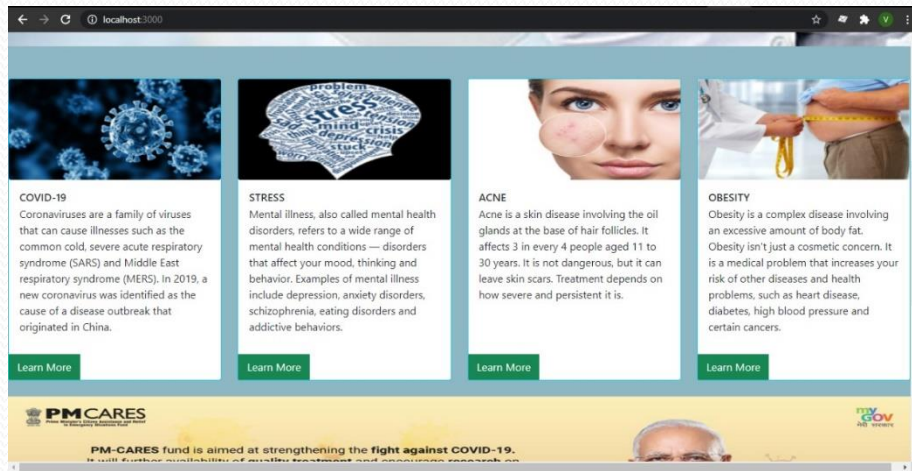
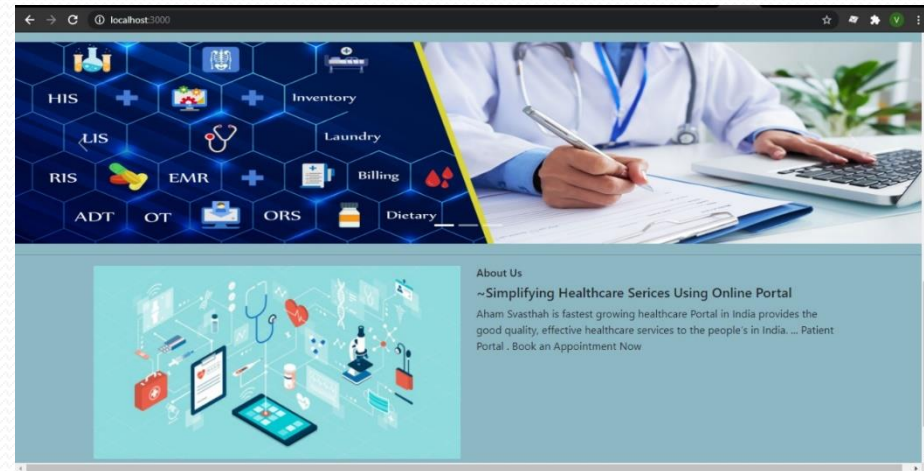
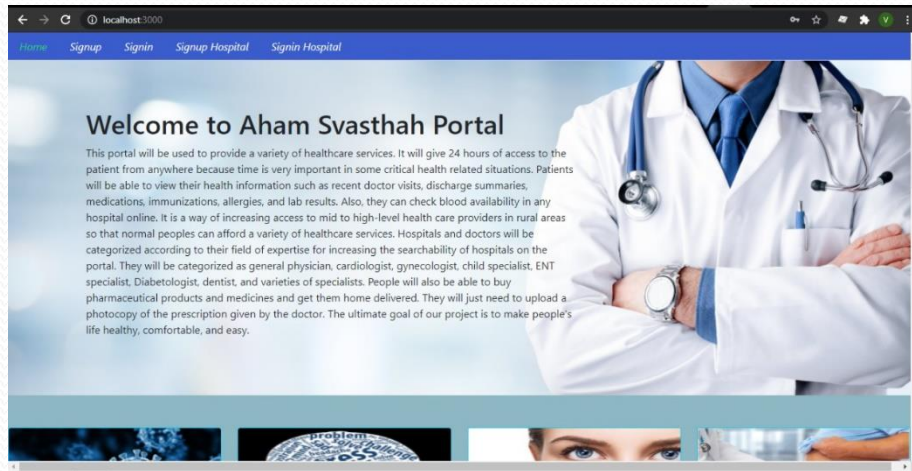
# Component



# Deployment

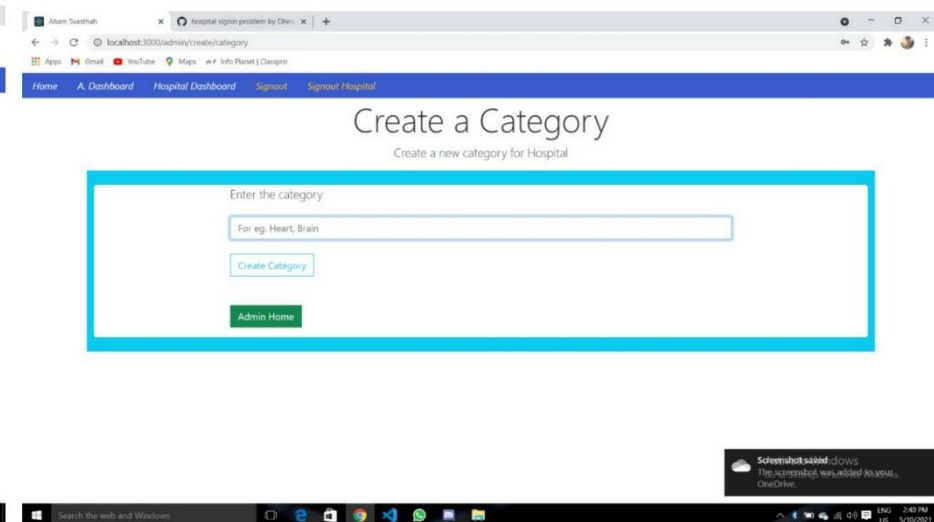
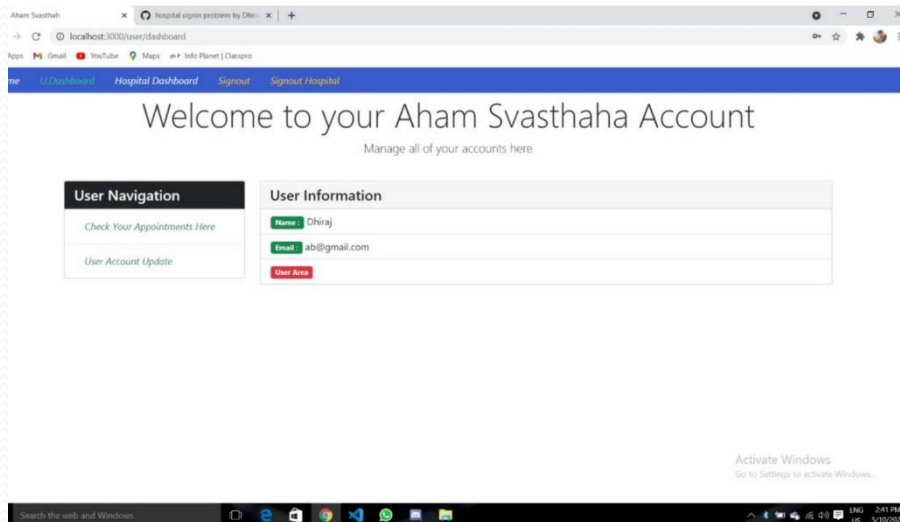
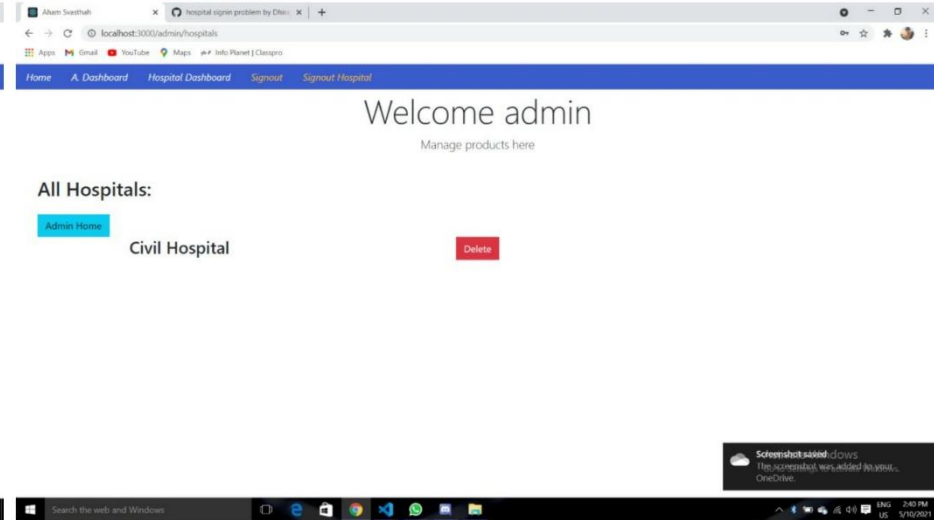
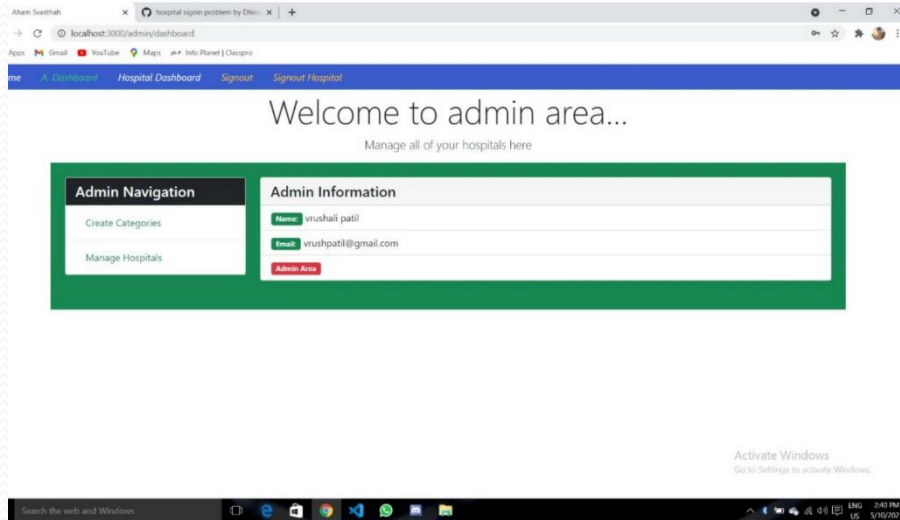


# First Look

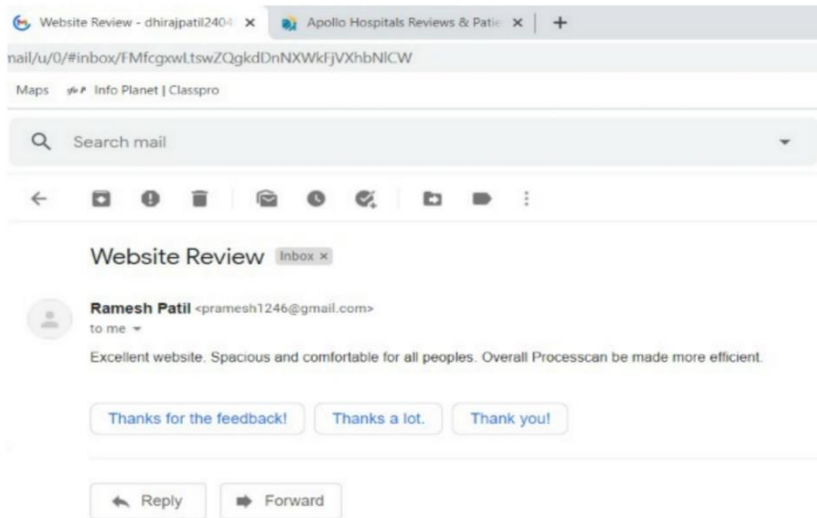




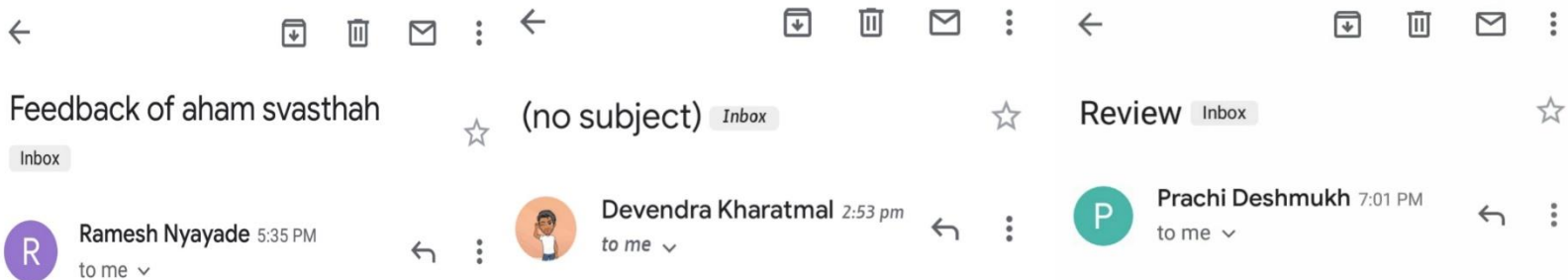
# First Look



# Reviews



5:36 PM 0.2KB/s 4G 5:09 0.04 KB/s 7:02 PM 12.9K/s 4G VoLTE 67%



This website is pretty useful. A good feature is that one can get nearby hospitals and online appointment at single place makes it different. It will be more efficient if some more features are added but overall good at last

*The AhamSvasthah website is very useful especially in this pandemic where getting appointment with doctor is very difficult this site make is so easy for us don't need to go outside and waiting in the queue for appointment and UI of this website is little bit complex some time you'll get confused but overall this site is very helpful*

This online hospital portal gives us excellent facility. Spacious and comfortable for elders. The process of annual checkup can be made more efficient. It is with all facilities... Best care.. compared to offline appointment.

# Chapter 5

## Conclusion

Online Healthcare Application can be a very good technology to the patients(users) for checking nearby hospital and book appointment. The internet has become a major resource throughout the world for online services. During the the project we have faced many difficulties. However we have studied more and tried to solve those problems.

# Future Scope

- In the future, we'll provide the **user preferred languages** as per the user requirements.
- We'll provide a **Chabot for the user** who is not too much handy with the portal.
- User will get their **medicines from the medicals directly** by their name or their ID after prescriptions being assigned to the Patient's Digital ID by Doctor.
- As soon as the traffic or requirements will get increased, we'll increase our hospital navigations on our portal.





## **Bibliography**

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[2] Different Hospital Websites

# **Thanks...**