



# Health+

## Technical Design Document

	Prepared By / Last Updated By	Reviewed By	Approved By
Name			
Role			
Signature			
Date			

## Table of Contents

<b>1.0 Introduction.....</b>	<b>3</b>
1.1 Purpose of this document.....	
1.2 Project overview.....	
<b>2.0 Solution Summary.....</b>	<b>3</b>
2.1 Scope.....	
2.2 User and Features.....	
2.3 Assumptions.....	
<b>3.0 System Design.....</b>	<b>5</b>
3.1 Proposed design.....	
3.2 Modules.....	
<b>4.0 Data Flow Diagram.....</b>	<b>6</b>
<b>5.0 Database Design.....</b>	<b>7</b>
5.1 Data Model.....	
<b>6.0 Appendices.....</b>	<b>7</b>
6.1 Glossary.....	
<b>7.0 Terms &amp; Conditions.....</b>	<b>8</b>
<b>8.0 Change Log.....</b>	<b>8</b>

# 1.0 Introduction

## 1.1 Purpose of this document

The purpose of this document is to document the technical design, component details and Database design. This will also capture the scope, assumptions, risk, dependencies of this project.

## 1.2 Project overview

*Hospital Management System came into the picture of hospital management as early as 1960 and have ever since been evolving and synchronizing with the technologies while modernizing healthcare facilities. In today's world, the management of healthcare starts from the hands of the patients through their mobile phones and facilitates the needs of the patient. Hospitals and healthcare facilities improve the quality of healthcare services, reduce operating costs, and improve the revenue cycle by using such hospital management systems.*

**Health+** is a Hospital Management System which is an integrated information system for managing all aspects of a hospital's operations such as medical, billing, administrative and compliance. It includes electronic health records, appointment scheduling, and customer billing management. This Hospital Management System is a patient-centric system which includes online appointment scheduling and tracking, room booking, managing diagnostic reports, doctor and patient portal/dashboard, accounting/billing, medicine and diet prescribing solution.

# 2.0 Solution Summary

## 2.1 Scope

To develop a Hospital Management System that contains the following modules:

1. Appointment Booking management.
2. Information/Helpdesk page with information of all the doctors and the departments they are involved in.
3. A calendar like schedule for all types of users to track their scheduled appointment dates.
4. Room booking system that allows patients to book hospital rooms/beds on behalf of the patients.
5. Report uploading and management system for the patients.
6. Integrated billing system to calculate the total cost accumulated with the usage of hospital services and resources.
7. System for doctors to prescribe medicines to patients i.e. prescriptions.

## 2.2 User and Features

### **Patient**

1. *Should be able to create an account in order to access hospital services.*
2. *Should be able to log in to my account easily with my username and password.*
3. *Should be able to book appointments online with a doctor.*
4. *Should be able to update my health information and access them.*
5. *Should be able to upload my medical test reports in the portal.*

### **Doctor**

1. *Should be able to check patient appointments to examine and help them recover their illness.*
2. *Should be able to log in to my account easily with my username and password so that I can access patient information and view thier reports.*
3. *Should be able to create a prescription to prescribe medicines to the patients and suggest diet plan.*

### **Admin**

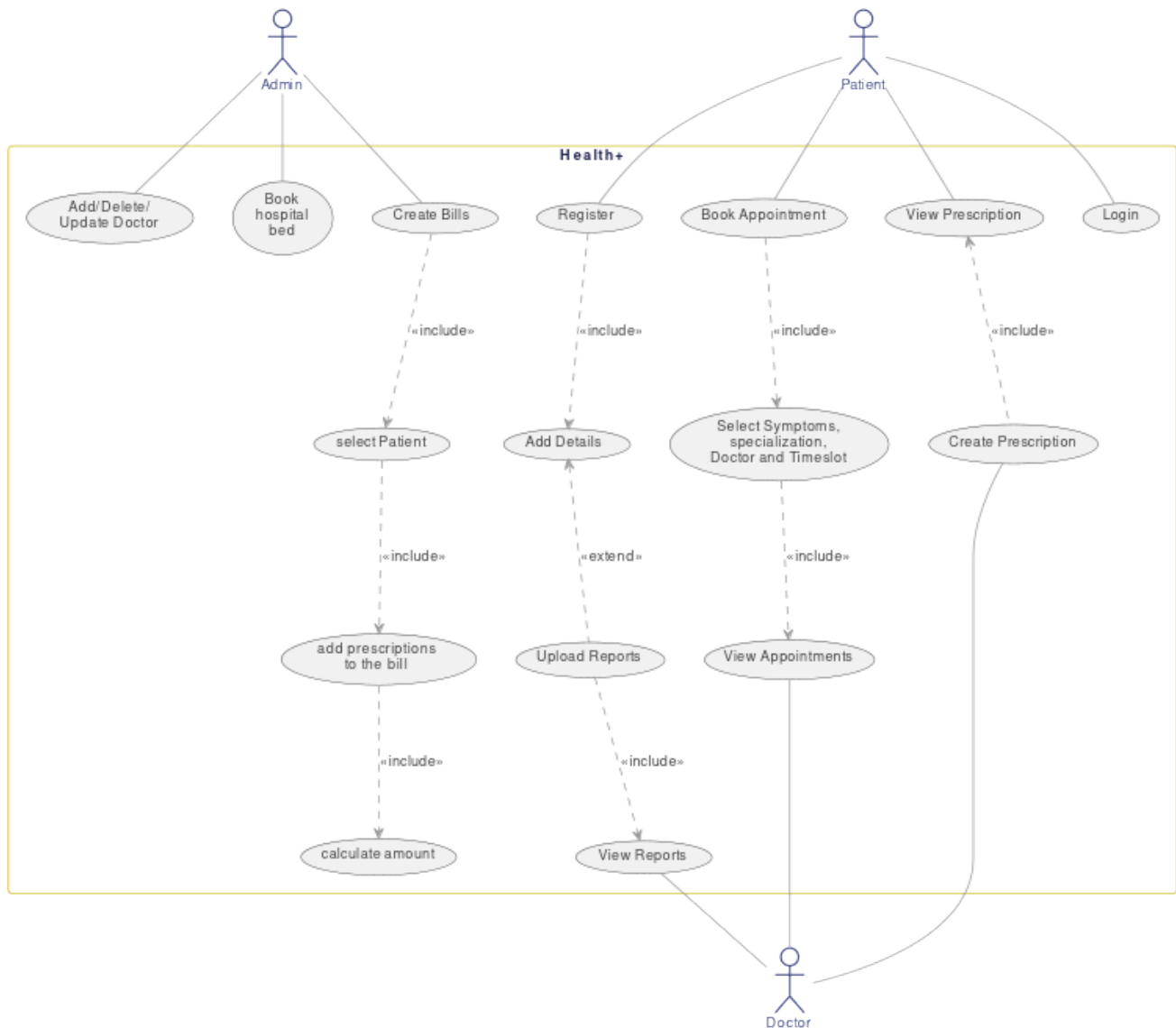
1. *Should be able to create bills for all the services and resources used by the patient.*
2. *Should be able to log in to my account with my username and password with valid credentials so that I can access and manage hospital information and resources.*
3. *Should be able to access and modify all the information of hospital and book room-beds for patients, in the hospital.*

## 2.3 Assumptions

1. *Medicines never run out of stock*
2. *Bills are always paid by cash*

## 3.0 System Design

### 3.1 Proposed design

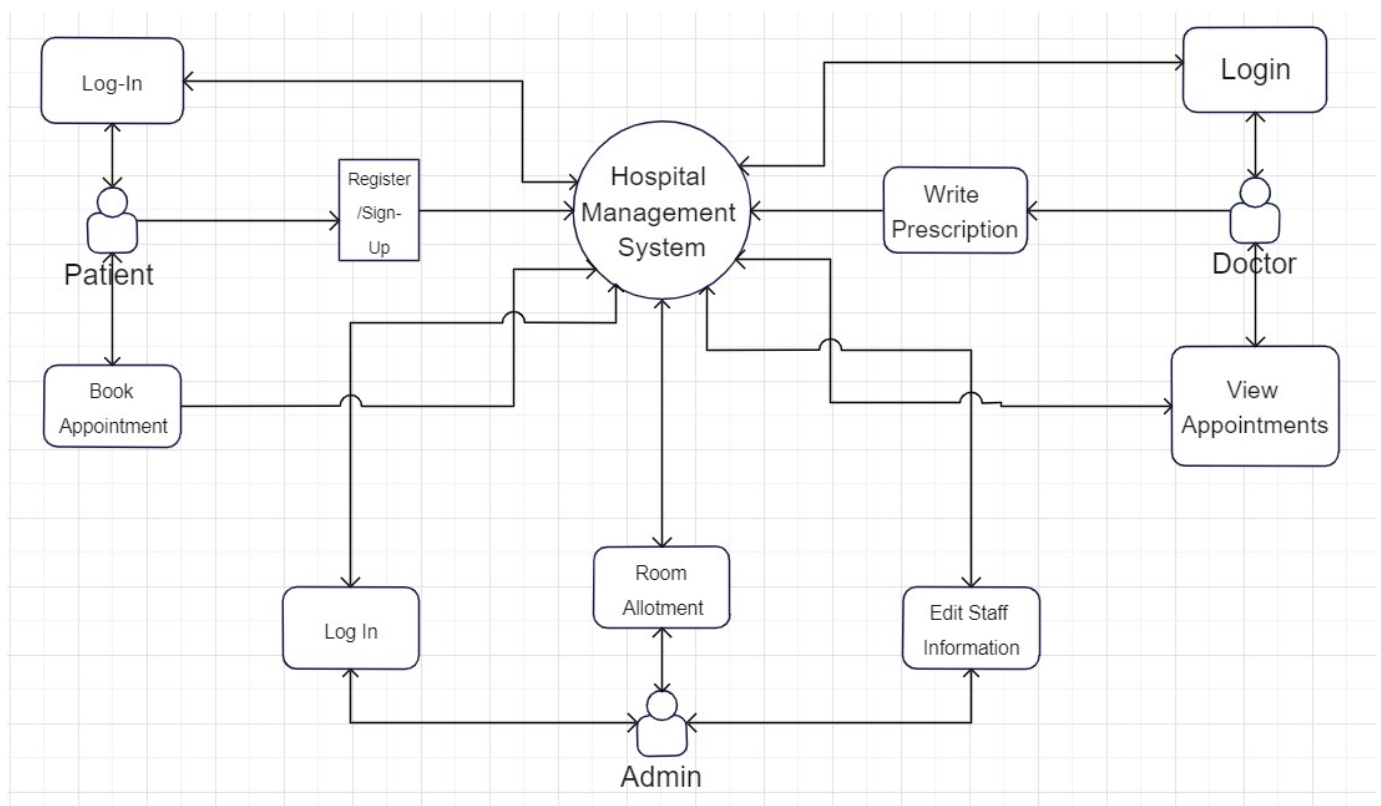


Full image can be viewed at: [plantuml.com](http://plantuml.com)

## 3.2 Modules

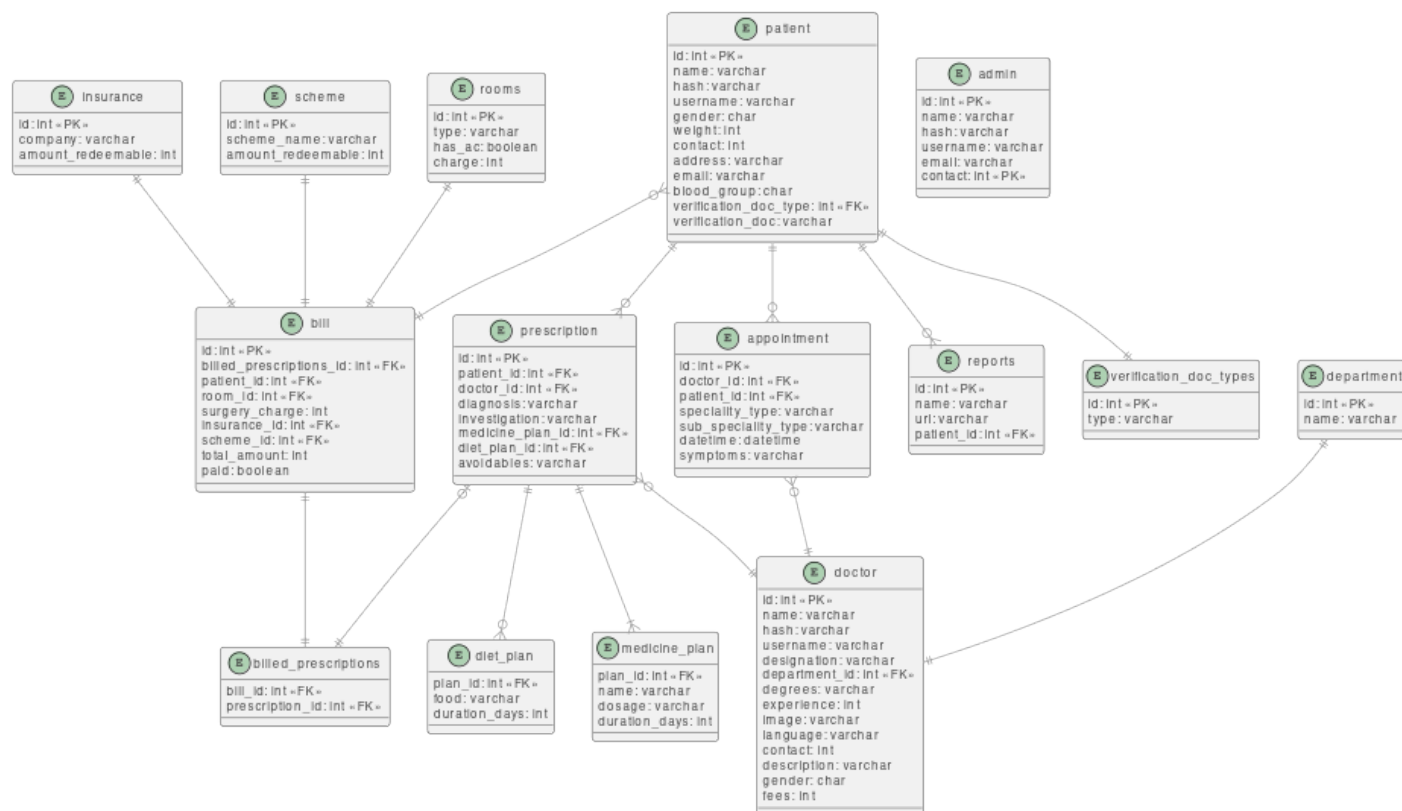
1. **Sign Up** - Patient can register into website with valid credentials into an account for an appointment.
2. **User Login** - Patient can login with registered details which was backened in the account to login into the website.
3. **Book Appointment** - Patient can login and book an appointment for the future and to interact with doctor regarding their illness.
4. **Book Room** - Administrator can help the patients with the booking of a room in the helpdesk.
5. **Create Prescription** - Doctor can add medicines and patient records and recommend them with some diet.
6. **Billing System** - Registration and consulting billing for the appointments of the patients.
7. **Add Reports** - It is accessible either by an administrator or patient itself. Only they add data into the website. The data can be retrieved easily by both doctor and patient.

## 4.0 Data Flow Diagram



## 5.0 Database Design

### 5.1 Data Model



Full image can be viewed at: [plantuml.com](http://plantuml.com)

## 6.0 Appendices

### 6.1 Glossary

Acronyms	Definitions
HMS	Hospital Management System
OT	Operation Theatre

## 7.0 Terms & Conditions

**Disclaimer: Please do not circulate or distribute this document outside of Cognizant Network, We have a Zero Tolerance Policy. Kindly adhere to 100% Compliance at all times.**

## 8.0 Change Log

*Please note that this table needs to be maintained even if a Configuration Management tool is used.*

Version Number	Changes made			
V<n.n>	<If the change details are not explicitly documented in the table below, reference should be provided here>			
	Page no	Changed by	Effective date	Changes effected