Software Design Specification For Hospital Management System

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Revision History

Updated By	Date	Reason For Changes	Version
Ashwani and Yogesh	Mar 12 th , 2017	Initial Draft	1.0

The Software Design Specification Outline

The Software Design Specification (SDS) sections provide you with guidelines related to the structure and the contents of SDS document. This document will cover all the design specification of the Hospital Managements System.

1. Introduction

The project is to create a Hospital Management System. This design document presents the designs used or intended to be used in implementing the project. The designs described, follow the requirements specified in the Software Requirements Specifications document prepared for the project.

1.1 Purpose of this document

The purpose of this document is to present a detailed description of the designs of the Hospital Management System.

Firstly, this document is intended for the project group, to use the designs as guidelines to implement the project. Equally, this document is also for the team's instructor, as it fulfils one of the requirements of the project.

1.2 Scope of the development project

The proposed software product is the Hospital Management System (HMS). The system will be used to get the information from the patients and then storing that data for future usage. The current system in use is a paper-based system. It is too slow and cannot provide updated lists of patients within a reasonable timeframe. The intentions of the system are to reduce over-time pay and increase the number of patients that can be treated accurately. Requirements statements in this document are both functional and non-functional. The document only covers the requirement specification for the hospital management system. This document does not provide any references to the other component of the hospital management system. All the external interfaces and the dependencies are also identified in this document.

1.3 Definitions, acronyms, and abbreviations

- HMS Hospital Management System
- SRS Software Requirement and Specifications
- SDS System Design Specifications

1.4 References

- IEEE Standard Design Document Format
- IEEE SRS Document Format

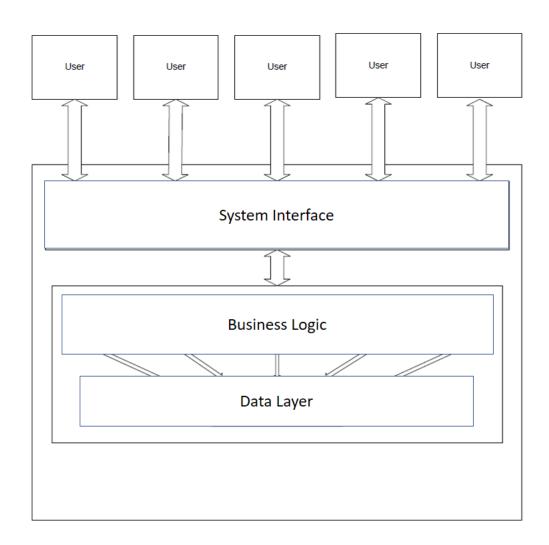
UML Standards

1.4 Overview of document

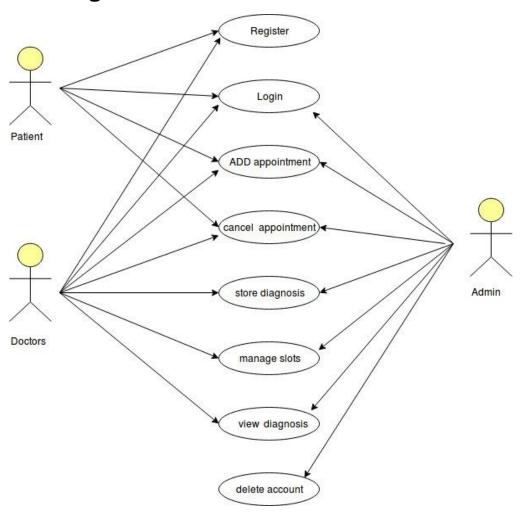
We have covered following diagrams in this SDS –

- Block Diagram
- Use case diagrams
- Use Case scenario
- Package diagram
- Context diagram
- Data flow diagram

Block Diagrams:



Use Case Diagrams:



Use case scenario:

1) Registor

Purpose	Account Creation		
User	Patient or Doctor		
Input Data	Data entered by the Patient or Doctor		
Output Data	Updated Patient Or Staff database		
Pre-conditions	Patients or doctors is connected to the Internet and on the HMS account creation page.		
Post-conditions	Patients or doctors is connected to the internet and on the account creation confirmation page.		
Basic Flow:	Patients or doctors create their account and their details are fed into the Patient or Staff database		

2) <u>Login</u>

Purpose	Access Account	
User	Patients or doctors	
Input Data	Data entered by Patients or doctors	
Output Data	Corresponding Account web Access	
Pre-conditions	Patients or doctors has access to the Patients or staff database.	
Post-conditions	Web Account webpage has been generated.	
Basic Flow:	Administrator validate staff or Patient And they are able to access this accounts	

3) Add Appointment

Purpose	Add patient's appointment		
User	Patients or doctors		
Input Data	Data entered by patients or doctors		
Output Data	Updated patients database		
Pre-conditions	Patient or Doctor is connected to the Internet find the website URL.		
Post-conditions	patient is connected to the Internet and assign a appointment time.		
Basic Flow:	patients feed their details to the appointment database.		

4) Cancel Appointment

Purpose	Cancel appointment	
User	Administrator/doctor/patient	
Input Data	Appointment database	
Output Data	Appointment database	

Pre-conditions	Administrator/doctor/patient has access to the event and appointment database.		
Post-conditions	Events page has been updated.		
Basic Flow:	Administrator disseminates the appointment of patient.		

5) Store Diagnosis

Purpose	Store diagnosis	
User	doctor	
Input Data	Data entered by doctor	
Output Data	diagnosis Database	
Pre-conditions	patient is connected to the Internet and get the appointment.	
Post-conditions	patient is connected to the Internet and he is get the diagnosis.	
Basic Flow:	Patient get the diagnosis about the medical problem.	

6) Manage Slots

Purpose	Manage slot		
User	Doctor		
Input Data	Calendar & slot Database		
Output Data	Feedback regarding action		
Pre-conditions	Doctor is connected to the Internet and see the slot information.		
Post-conditions	Doctor is connected to the Internet and get the feedback.		
Basic Flow:	Doctor see the slot information and get the feedback.		

7) View Diagnosis

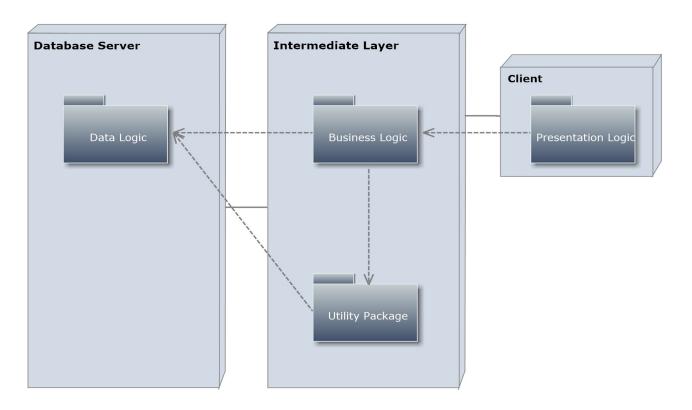
Purpose	View diagnosis
User	Patient &doctor
Input Data	Calendar or Slot and diagnosis Database
Output Data	Corresponding page data.
Pre-conditions	Doctor & patient is connected to the Internet and see the diagnosis information.
Post-conditions	Doctor/patient is connected to the Internet and get the feedback.
Basic Flow:	Doctor provide the diagnosis and patient get the diagnosis information.

8) Delete Account

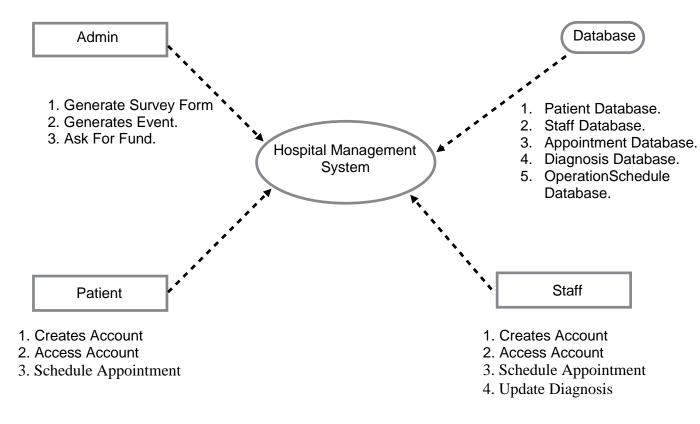
Purpose	Remove patient & Doctor account	
User	Adminstrator	
Input Data	Patient & Staff Database	
Output Data	Corresponding FeedBack Of Action.	
Pre-conditions	patient is connected to the Internet and have an account.	
Post-conditions	Admin is connected to the Internet and Has to be on Delete Acoount Page	
Basic Flow:	doctor has remove the patient & staff account.	

Package Diagram:

HMS Package Diagram

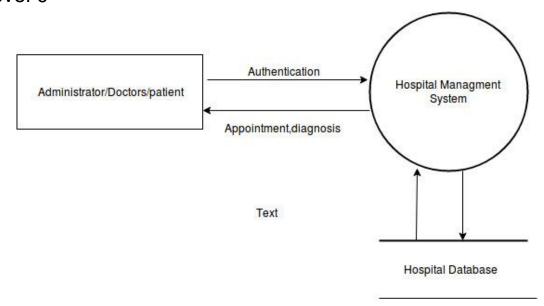


Context Diagram:



Data Flow Diagram:

1. Level 0



2. Level 1

