

# Design Document

The System Design Document describes the system requirements, operating environment, system architecture, files and database design, input formats, output layouts, human-machine interfaces, detailed design, processing logic of the Patient Data Management System.

## 1 INTRODUCTION

### *Purpose and Scope*

*This section provides a brief description of the Systems Design Document's purpose and scope.*

### *Project Executive Summary*

*This section provides a description of the project as this application is designed mainly for the Clinical Management that can view the record of the patient, add new patient and also add new test for the patients.*

### *System Overview*

*This section describes the high-level system architecture diagram showing a subsystem breakout of the system. The high-level system architecture or subsystem diagrams show interfaces to external systems.*

### *Project References*

*This section provides a bibliography of key project references.*

[www.google.com](http://www.google.com)

<https://www.w3schools.com/html/default.asp>

<https://firebase.google.com/>

## **SYSTEM ARCHITECTURE**

*In this section, describe the system architecture for the project.*

### **System Software Architecture**

*In this section, the software and the computer programming languages are described as HTML, Javascript, Bootstrap, Ajax.*

## **FILE AND DATABASE DESIGN**

*Interacted with the Database Administrator (DBA) when preparing this section. The data such as patient details are stored in the database. Plus Login information of the nurse with credentials email and password are used. Nurse can add the new patient and also add the new test for patient, which in turn that data will be stored in the database. Firebase, the cloud storage platform provided by Google is used as the primary database.*

## **DETAILED DESIGN**

*This section provides the information needed for a system development team to actually build and integrate the hardware components, code and integrate the software modules, and interconnect the hardware and software segments into a functional product.*

### **Hardware Detailed Design**

*A hardware component is the lowest level of design granularity in the system. Depending on the design requirements, there may be one or more components per system. In this project, only hardware we require is the desktop. But a mobile compatible version is also provisioned.*

### **Software Detailed Design**

*A software module is the lowest level of design granularity in the system. Depending on the software development approach, there may be one or more modules per system. Software programming languages used to build this application are mainly HTML, Javascript and frameworks such as Bootstrap.*

### ***Internal Communications Detailed Design***

First is the login screen, where registered user enter their registered email and password to login to the application.

- To communicate and view the record of the patient, View details screen button is used to access to patient's details.
- To add new patient, nurse can add the name, age, gender and department of the patient.
- To add new test for patient, nurse can add the level of sugar, cholesterol, temperature and also the time and date on which test was conducted on a daily basis.
- If nurse wants to contact to the team, nurse can view the Contact Us section and contact the supervisor.
- Nurse can also use the option to view the personal details in the My Profile section.
- Nurse can log out after viewing the details by clicking on Log out button provided in More dropdown.

### Architectural Diagram

