Hospital Management System

Vision

# Introduction

As a team we hope to build up a system which mostly important in the real world when working with patients and hospitals. Our main thought is to build a hospital Management System to enrich the quality of the service carried out by the doctors and nurses toward the patient.

The main goal of this project is, use the new online system instead of the old legacy system used by the Hospitals to treat the patients. However we identify our stakeholders as the Patient, Doctor, Nurse and instead of that we are going to count the details about the Staff members including the nurses, details of the wards, details of the rooms, Handling of appointments, Handling all the schedules of the operating rooms, Payment details, medical reports and lastly the system would handle all the invoices.

Any way this computerized system would be really speed when considering to the old legacy system. All the functionalities and the explanation about the system would be done below in this document.

# Positioning

## Problem Statement

|  |  |
| --- | --- |
| The problem of | The problem with the old legacy system.  Very difficult to retrieve, find and process information  The generated information from various transactions takes time and effort to be stored at right place  Specific details of the information such as patient details or child's immunization details are difficult to make because it requires paperwork.  Preparing reliable and timely reports. This is a daunting activity as information from various registers is difficult to obtain.  Manual calculations are prone to error and this can lead to accurate information taking a lot of time. |
| Affects | Patients, Doctors, Staff members |
| the impact of which is | The accuracy of the details of on-going old legacy system is doubtful and it takes more time to decide as it needs to check with different registers.  The payments would be wrong as all these functionalities are handled by a human being. |
| a successful solution would be | The successful solution is the Online web-based Hotel management system which facilitates the patients, doctors, and the staff members to have a reliable service.  This allows the management to maintain the patients easily and help to provide prescriptions, precautions, and other advices.  Except this it maintains the level of users. |

## Product Position Statement

|  |  |
| --- | --- |
| For | Patient |
| Who | Hospital |
| The (product name) | The hospital management system |
| That | Good solution for the past legacy system.  Easily recognize the needed information and generate the needed outputs.  Maintain different types of user levels.  Manage all the functionalities inside the hospital to make the system convenient and reliable.  Easy to handle  Maintain all the billings, prescriptions etc. |

# Stakeholder Descriptions

## Stakeholder Summary

| **Name** | **Description** | **Responsibilities** |
| --- | --- | --- |
| Project Manager | The person who manages the project | Organizing and motivating the project team  Resource planning  Time management  Cost estimating and developing the budget  Ensuring the customer satisfaction  Analyzing and managing the project risk  Monitoring the progress  Producing the reports and necessary documentation |
| Business Analyst | The person who analyses a business domain | Planning and monitoring the project  Eliciting the requirements  Organization of the requirements  Translating and simplifying the requirements  Requirement analysis |
| Software Engineer | The person who design, develop, maintain and evaluate the system | Developing and directing the software system  Improve the system quality and resolving the issues.  Identifying the opportunities for improvement  Maintain and improve the code |
| Software Analyst | The person who study about the software domain and prepare software requirement document | Maintain and manage all the system  Interfere with the end users  Resolve the complex issues  Analyze and develop the testing  Develop the modifications and the changes needed. |
| Administrator | The person who control the system in the hospital | Register patient, staff, room, ward, Operating room, payments, appointments, admission, medical report  Update patient, staff, room, ward, Operating room, payments, appointments, admission, medical report  Search the details of patient, staff, room, ward, Operating room, payments, appointments, admission, medical report  Delete patient, staff, room, ward, Operating room, payments, appointments, admission, medical report |
| Front Officer | The person who handles the system without the staff handling | Register patient, room, ward, Operating room, payments, appointments, admission, medical report  Update patient, room, ward, Operating room, payments, appointments, admission, medical report  Search the details of patient, room, ward, Operating room, payments, appointments, admission, medical report  Delete patient, room, ward, Operating room, payments, appointments, admission, medical report |
| Patient | The person who get the service from the system | Register to the system.  Update the necessary details when needed.  Making the appointment  Settle down the payments |
| Doctor | The person who treat the patient | Update the patient details.  Add the medical reports and update and delete them  Search the medical reports |

## User Environment

This is a web-based application that uses the web browsers as clients. And this includes

* Display reports in Graphical Form
* Provide product information online
* Provide task information for workers on site via mobile devices
* Allow remote works to enter job completion and get sign off on site
* Order Goods with Online Catalogue, easy searching allows customer to keep track of orders and budgets

# Product Overview

## Needs and Features

|  |  |  |  |
| --- | --- | --- | --- |
| **Need** | **Priority** | **Features** | **Planned Release** |
| Add the details of the patients | 1 | Using a database to add the details of the patients. | 20/04/2020 |
| Search the details of the patients easily | 2 | Using the search bar, it can easily search the details of the patient. | 25/04/2020 |
| Update the content of a patient | 3 | Use the feature of the update to make any changes of the patient details. | 04/05/2020 |
| Delete the patient details | 4 | Under a given circumstance if the patient is not necessary to the database, there is a feature which can make the data removed | 06/05/2020 |
| Register a new staff member to the company | 8 | Use the register member option in the system to add the member details. | 23/05/2020 |
| Search the details of the staff member to make a change to his address (update and search) | 9 | Use the search bar given to the staff member and change the given address of the staff member to the new address and save it properly | 25/05/2020 |
| Delete the details of the staff member | 10 | Use the delete option which available for the staff member to delete the data of the staff member when needed. | 03/06/2020 |
| A new building was made and need to add the details of the building and need to add the count of operating rooms that have and need to update the details of the current rooms and wards available | 12 | Still in the system we have an option named the Operating rooms and the rooms and the ward. So then from those options you can add all the details of the new buildings and the changes done to the current buildings could be included. | 04/06/2020 |
| The patient needs to make the payment | 7 | The front person can log in to the system and he has a option to pay the bill. Then he can ask the details of the patient while taking his patient ID to find all the necessary details input to the system to finalize the bill. | 19/05/2020 |
| The front person has mistakenly inputted the persons bill. So, he needs to re do the payment by deleting the followed bill and need to update the relevant field | 11 | This can be done by the Payment option and this make the front person to edit the details of the patient and remake the mistake by deleting the wrong payment details. | 03/06/2020 |
| A new patient needs to make an appointment and he need to change the appointment made his mother and once the same time he needs to delete the appointment made for his father as he was passed away. | 6 | This can be done using the appointment register. At the same time, the user can add his patient details, update the mother’s details and delete the father’s details. | 15/05/2020 |
| Doctor need to search for a specific report of a patient, and he need to update the details of the patient. | 5 | Doctor can able to use the medical report section to handle all the tasks like delete update, add and search. | 09/05/2020 |

# Other Product Requirements

|  |  |  |
| --- | --- | --- |
| **Requirement** | **Priority** | **Planned Release** |
| Security | 4 | 05/06/2020 |
| Audit | 5 | 07/06/2020 |
| Performance | 3 | 06/06/2020 |
| Capacity | 10 | 15/06/2020 |
| Availability | 2 | 06/06/2020 |
| Reliability | 6 | 10/06/2020 |
| Integrity | 9 | 13/06/2020 |
| Recovery | 11 | 14/06/2020 |
| Compatibility | 7 | 10/06/2020 |
| Maintainability | 8 | 10/06/2020 |
| Usability | 1 | 06/06/2020 |
| Documentation | 12 | 15/06/2020 |