**Hospital Management System**

**ABOUT**

Hospital Management System is a customised working model of a hospital. It is a computerized Front Office Management of Hospital to develop software which is user friendly simple, fast, and cost-effective. It deals with the collection of patient’s information, diagnosis details, etc. Traditionally, it was done manually. The main function of the system is register and store patient details and doctor details and retrieve these details as and when required, and also to manipulate these details meaningfully. System input contains patient details, diagnosis details, while system output is to get these details on to the screen. The Hospital Management System can be entered using a username and password. It is accessible either by an administrator or receptionist. Only they can add data into the database. The data can be retrieved easily. The data are well protected for personal use and makes the data processing very fast.

**REQUIREMENTS**

* **Hardware Requirements**

The most common set of requirements defined by any operating system or software application is the physical computer resources, also known as hardware. A hardware requirements list is often accompanied by a hardware compatibility list (HCL), especially in case of operating systems. An HCL lists tested, compatibility and sometimes incompatible hardware devices for a particular operating system or application. The following sub-sections discuss the various aspects of hardware requirements.

PROCESSOR: AMD A4 quad-core/Intel

RAM: 1Gb(min)

HARD DISK: >50Gb

* **Software Requirements**

Software Requirements deal with defining software resource requirements and pre-requisites that need to be installed on a computer to provide optimal functioning of an application. These requirements or pre-requisites are generally not included in the software installation package and need to be installed separately before the software is installed.

OS: Windows 8.1

FRONT END: HTML, CSS, Java Script

SERVER SIDE: Node.js

DATABASE: Mysql

**FUNCTIONS**

* Appointment of Doctor: The patients need to book an appointment of the doctor for a check-up and treatment for their diseases. Based on the availability of the doctor, the receptionist books the slot for the patient at his available time.
* Consulting with doctor: After the appointment has been booked the patient consults the doctor with his diseases and problems.
* Diagnosis/Treatment: The doctor diagnoses/treats the patients’ diseases. He cures the diseases providing proper prescription.
* Operation/Delivery: If the disease/problem cannot be cured by a regular prescription. Then the doctor states for an operation/Delivery.
* Payment of bills: After the process of admission, the patient needs to pay the bills of medicine, doctor fees and the operation fees at the accounts section using a cash pay or card payment.

**DISADVANTAGES**

**EXISTING SYSTEM:**

Hospitals currently use a manual system for the management and maintenance of critical information. The current system requires numerous paper forms, with data stores spread throughout the hospital management infrastructure. Often information is incomplete or does not follow management standards. Forms are often lost in transit between departments requiring a comprehensive auditing process to ensure that no vital information is lost. Multiple copies of the same information exist in the hospital and may lead to inconsistencies in data in various data stores.

**ADVANTAGES**

**PROPOSED SYSTEM:**

The Hospital Management System is designed for any hospital to replace their existing manual paper based system. The new system is to control the information of patients. Room availability, staff and operating room schedules and patient invoices. These services are to be provided in an efficient, cost effective manner, with the goal of reducing the time and resources currently required for such tasks.

The feasibility of the project is analysed in this phase and business proposal is put forth with a very general plan for the project and some cost estimates. During system analysis the feasibility study of the proposed system is to be carried out. This is to ensure that the proposed system is not a burden to the company. For feasibility analysis, some understanding of the major requirements for the system is essential.

**Economic Feasibility**: This study is carried out to check the economic impact will have on the system will have on the organization. The amount of fund that the company can pour into the research and development of the system is limited. The expenditures must be justified. Thus the developed system as well within the budget and this was achieved because most of the technologies used are freely available. Only the customised products have to be purchased.

**Technical Feasibility**: This study is carried out to check the technical feasibility, that is, the technical requirements of the system. Any system developed must not have a high demand on the available technical resources. This will lead to high demands being placed on the client. The developed system must have a modest requirement, as only minimal or null changes for the implementing this system.

**Operational Feasibility**: The aspect of study is to check the level of acceptance of the system by the user. This includes the process of training the user to use the system efficiently. The user must not feel threatened by the system, instead must accept it as a necessity. The level of acceptance by the users solely depends on the methods that are employed to educate the user about the system and to make him familiar with it. His level of confidence must be raised so that he is also able to make some constructive criticism, which is welcomed, as he is the final user of the system.

**PROBLEM**

How will the Hospital Management System help in assisting an emergency case patient?

**SOLUTION**

The patient can state an “Emergency “through the system. Knowing the situation, hospital will release a quick rapid action force to assist the patient. The force will trace the location of the patients using global positioning system (gps) and supplement him aid.