GLA UNIVERSITY

FULL STACKPROJECT SYNOPSIS ON

HOSPITAL MANAGEMENT SYSTEM

Submitted by   **Submitted to**

Pranjul Maheshwari   Mr. Akash Kumar Choudhary
(201500502)   Technical Trainer

Saksham Gangwar
(201500603)

Yuvraj Soni
(201500837)

DECLARATION

It gives us a great sense of pleasure to present the synopsis of the <u>Full Stack With NodeJs</u> undertaken during B.Tech III Year. This project is going to be an acknowledgement to the inspiration, drive and technical assistance will be contributed to it by many individuals. We owe special debt of gratitude to <u>Mr.Akash Kumar Choudhary</u> (Technical Trainer) for providing us with an encouraging platform to develop this project, which thus helped us in shaping our abilities towards a constructive goal and for her constant support and guidance to our work.

Her sincerity, thoroughness and perseverance has been a constant source of inspiration for us. We believe that she will shower us with all her extensively experienced ideas and insightful comments at different stages of the project & also taught us about the latest industry-oriented technologies. We also do not like miss the opportunity to acknowledge the contribution of all faculty members of the department for their kind guidance and co-operation.

Saksham Gangwar(201500603)

Yuvraj Soni(201500837)

Pranjul Maheshwari(201500502)

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INTRODUCTION

The "Hospital Management System" has been developed to override the problems prevailing in the practicing manual system. This software is supported to eliminate and in some cases reduce the hardships faced by this existing system. Moreover this system is designed for the particular need of the company to carry out operations in a smooth and effective manner.

The application is reduced as much as possible to avoid errors while entering the data. It also provides error message while entering invalid data. No formal knowledge is needed for the user to use this system. Thus by this all it proves it is user-friendly. Hospital Management System, as described above, can lead to error free, secure, reliable and fast management system. It can assist the user to concentrate on their other activities rather to concentrate on the record keeping. Thus it will help organization in better utilization of resources.

About the Project:

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Primary Reason to choose this Project:

The purpose of Hospital Management System is to automate the existing manual system by the help of computerized equipments and full-fledged computer software, fulfilling their requirements, so that their valuable data/information can be stored for a longer period with easy accessing and manipulation of the same. The required software and hardware are easily available and easy to work with.

Hospital Management System, as described above, can lead to error free, secure, reliable and fast management system. It can assist the user to concentrate on their other activities rather to concentrate on the record keeping. Thus it will help organization in better utilization of resources. The organization can maintain computerized records without redundant entries. That means that one need not be distracted by information that is not relevant, while being able to reach the information.

The Main Objective of the Project:

The aim is to automate its existing manual system by the help of computerized equipments and full-fledged computer software, fulfilling their requirements, so that their valuable data/information can be stored for a longer period with easy accessing and manipulation of the same. Basically the project describes how to manage for good performance and better services for the clients.

The main objective of the Project on Hospital Management System is to manage the details of Hospital, Doctors, Patient. Employee, Test. It manages all the information about Hospital, Medicine, Test, Hospital. The project is totally built at administrative end and thus only the administrator is guaranteed the access. The purpose of the project is to build an application program to reduce the manual work for managing the Hospital, Doctors, Medicine, Patient. It tracks all the details about the Patient, Employee, Test.

Scope of the Project:

It may help collecting perfect management in details. In a very short time, the collection will be obvious, simple and sensible. It will help a person to know the management of passed year perfectly and vividly. It also helps in current all works relative to Hospital Management System. It will be also reduced the cost of collecting the management & collection procedure will go on smoothly.

Our project aims at Business process automation, i.e. we have tried to computerize various processes of Hospital Management System.

In computer system the person has to fill the various forms & number of copies of the forms can be easily generated at a time.

In computer system, it is not necessary to create the manifest but we can directly print it, which saves our time.

To assist the staff in capturing the effort spent on their respective working areas.

To utilize resources in an efficient manner by increasing their productivity through.

Details About the Hardware and the Software

The Software Requirements Specification is produced at the culmination of the analysis task. The function and performance allocated to software as part of system engineering are refined by establishing a complete information description, a detailed functional and behavioral description, an indication of performance requirements and design constraints, appropriate validation criteria, and other data pertinent to requirements.

Software Requirements:

Name of component	Specification
Operating System	Windows 98, Windows 7,8,10,11 and Linux
Language	Java 2 Runtime Environment
Database	MySQL Server
Browser	Mozilla,chrome,edge etc.
A stable internet Connection	

Hardware Requirements:

Name of component	Specification
Processor	630MHz
RAM	128MB
Hard Disk	20GB

Frontend and backend
- Front-end– Html, Css, JS, Bootstrap, Angular JS,React
- Back-end - NodeJs, SQL

Project Description/Module Description

Modules of Hospital Management System:

- Hospital Management Module: Used for managing the Hospital details.

- Test Module: Used for managing the details of Test
- Medicine Module: Used for managing the details of Medicine

- Doctors Management Module: Used for managing the information and details of the Doctors.

- Patient Module: Used for managing the Patient details

- Employee Module: Used for managing the Employee information Login Module: Used for managing the login details

- Users Module: Used for managing the users of the system

Identification of need:

The old manual system was suffering from a series of drawbacks. Since whole of the system was to be maintained with hands the process of keeping, maintaining and retrieving the information was very tedious and lengthy. The records were never used to be in a systematic order, there used to be lots of difficulties in associating any particular transaction with a particular context. If any information was to be found it was required to go through the different registers, documents there would never exist anything like teport generation. There would always be unnecessary consumption of time while entering records and retrieving records. One more problem was that it was very difficult to find errors while entering the records.
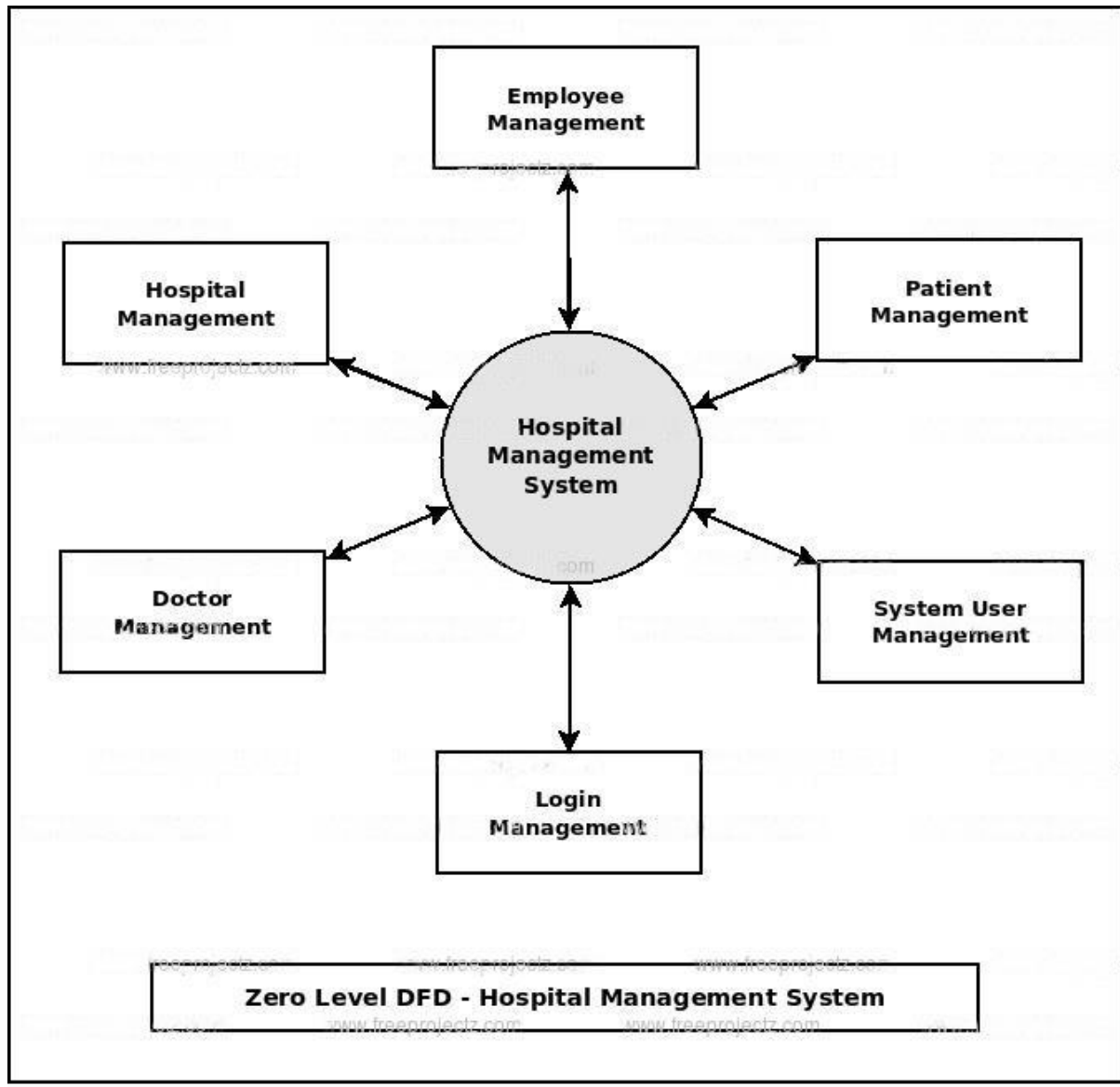
User Interface Design:

User Interface Design is concerned with the dialogue between a user and the computer. It is concerned with everything from starting the system or logging into the system to the eventually presentation of desired inputs and outputs. The overall flow of screens and messages is called a dialogue.
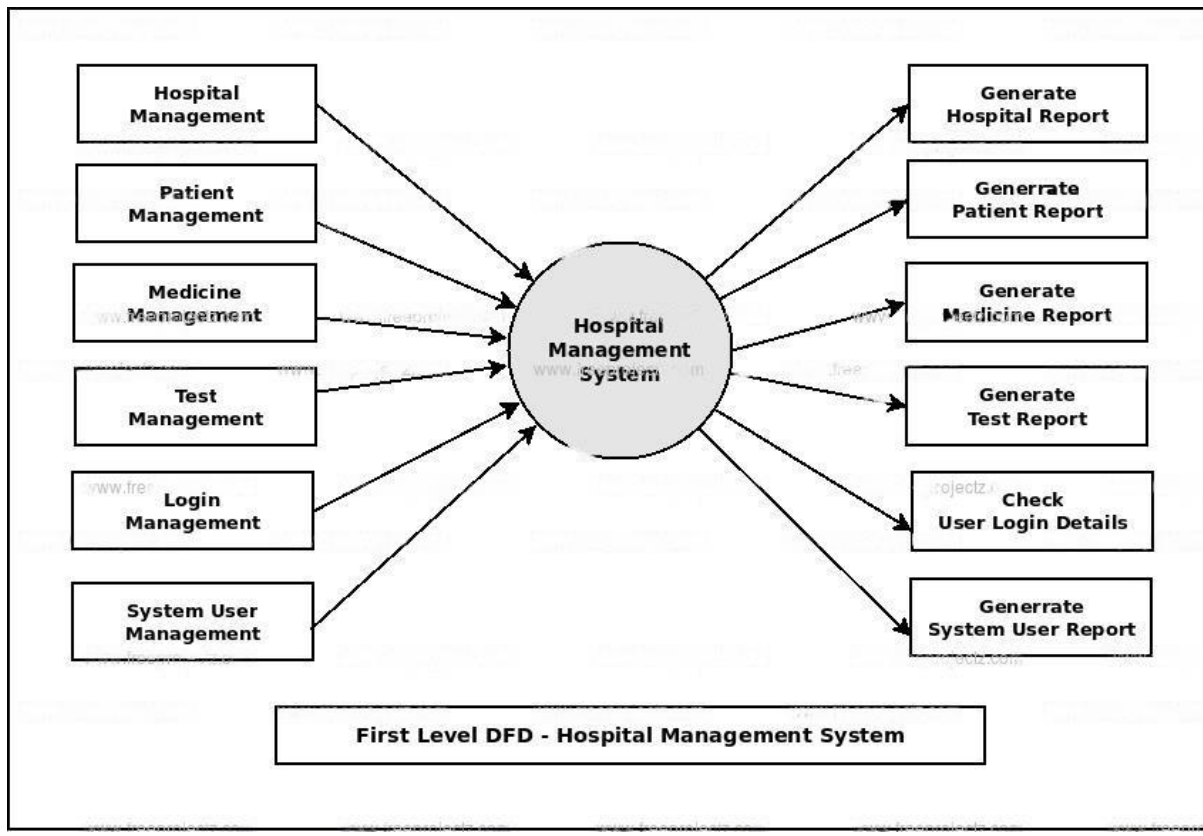
The following steps are various guidelines for User Interface Design:

1. The system user should always be aware of what to do next.

2. The screen should be formatted so that various types of information, instructions and messages always appear in the same general display area.

3. Message, instructions or information should be displayed long enough to allow the system user to read them.

4. Use display attributes sparingly.

5. A User should not be allowed to proceed without correcting a error.

Data Flow Diagrams

Zero Level DFD - Hospital Management System

First Level DFD - Hospital Management System

REFERENCES

Books:

- Full-Stack

  Modern Full-Stack

  DevelopmentPro

  MEAN Stack

- Full-Stack React Projects

Websites:

- https://AngularJs.org/

- https://www.w3schools.com/
  https://reactjs.org/

- www.google.com

Faculty Guidelines:

Mr. Akash Kumar Choudhary (Technical Trainer , GLA University)

GitHub Repository link:
https://github.com/Yuvraj2172/FullStack_Project