

# HOSPITAL MANAGEMENT SYSTEM

## A MINI PROJECT REPORT

*Submitted by*

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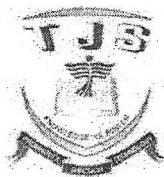
*in partial fulfillment for the award of the degree*

*of*

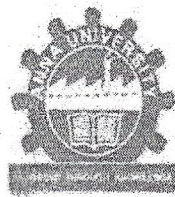
**BACHELOR OF ENGINEERING**

*in*

**COMPUTER SCIENCE AND ENGINEERING**



**T.J.S ENGINEERING COLLEGE**



**ANNA UNIVERSITY: CHENNAI 600 025**


**APRIL 2022**

  
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Peruvoyal, Kavaraipeetai,  
Gummidipoondi Taluk,  
Thiruvallur Dist - 601 206.

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**BONAFIDE CERTIFICATE**

Certified that this project report "HOSPITAL MANAGEMENT SYSTEM" is the bonafide work of "G.SAI KUMAR (112819104013), CHIMMILI BHANU CHANDRA (112819104009), RAYI PAVAN (112819104041), MARTHALA VAMSI KRISHNA (112819104022)" who carried out the project work under my supervision.



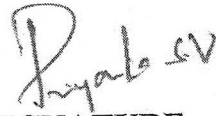
**SIGNATURE**

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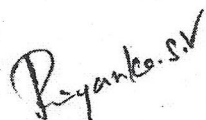
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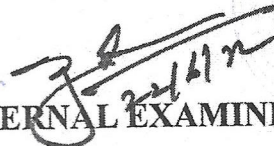
Submitted for project viva - voce examination held on 18/06/2022 at T.J.S Engineering College, Peruvoyal.



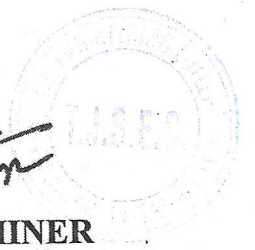
**INTERNAL EXAMINER**



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**EXTERNAL EXAMINER**



## ABSTRACT


Our project **Hospital Management system** includes registration of patients, storing their details into the system, and also booking their appointments with doctors.

Our software has the facility to give a unique id for every patient and stores the details of every patient and the staff automatically. User can search availability of a doctor and the details of a patient using the id. 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 interface is very user-friendly. The data are well protected for personal use and makes the data processing very fast.

It is having mainly two modules. One is at Administration Level and other one is of user I.e. of patients and doctors. The Application maintains authentication in order to access the application. Administrator task includes managing doctors information, patient's information. To achieve this aim a database was designed one for the patient and other for the doctors which the admin can access. The complaints which are given by user will be referred by authorities.

The Patient modules include checking appointments, prescription. User can also pay doctor's Fee online.

  
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**OBJECTIVES:**

- To understand Object Oriented Programming concepts and basic characteristics of Java
  - To know the principles of packages, inheritance and interfaces
  - To define exceptions and use I/O streams
  - To develop a java application with threads and generics classes
  - To design and build simple Graphical User Interfaces

**UNIT I INTRODUCTION TO OOP AND JAVA FUNDAMENTALS 10**

Object Oriented Programming - Abstraction – objects and classes - Encapsulation- Inheritance - Polymorphism- OOP in Java – Characteristics of Java – The Java Environment - Java Source File -Structure – Compilation. Fundamental Programming Structures in Java – Defining classes in Java – constructors, methods-access specifiers - static members -Comments, Data Types, Variables, Operators, Control Flow, Arrays , Packages - JavaDoc comments.

**UNIT II INHERITANCE AND INTERFACES 9**

Inheritance – Super classes- sub classes –Protected members – constructors in sub classes- theObject class – abstract classes and methods- final methods and classes – Interfaces – defining an interface, implementing interface, differences between classes and interfaces and extending interfaces - Object cloning -inner classes, Array Lists - Strings

**UNIT III EXCEPTION HANDLING AND I/O 9**

Exceptions - exception hierarchy - throwing and catching exceptions – built-in exceptions, creating own exceptions, Stack Trace Elements. Input / Output Basics – Streams – Byte streams and Character streams – Reading and Writing Console – Reading and Writing Files

**UNIT IV MULTITHREADING AND GENERIC PROGRAMMING 8**

Differences between multi-threading and multitasking, thread life cycle, creating threads,synchronizing threads, Inter-thread communication, daemon threads, thread groups. Generic Programming – Generic classes – generic methods – Bounded Types – Restrictions and

**UNIT V EVENT DRIVEN PROGRAMMING 9**

Graphics programming - Frame – Components - working with 2D shapes - Using color, fonts, and images - Basics of event handling - event handlers - adapter classes - actions - mouse events -AWT event hierarchy - Introduction to Swing – layout management - Swing Components – Text Fields , Text Areas – Buttons- Check Boxes – Radio Buttons – Lists- choices- Scrollbars – Windows –Menus – Dialog Boxes.

**TOTAL: 45 PERIODS****OBJECTIVES:**

Upon completion of the course, students will be able to:

- Develop Java programs using OOP principles
- Develop Java programs with the concepts inheritance and interfaces
- Build Java applications using exceptions and I/O streams
- Develop Java applications with threads and generics classes
- Develop interactive Java programs using swings

**TEXT BOOKS:**

1. Herbert Schildt, –Java The complete reference||, 8th Edition, McGraw Hill Education, 2011.
2. Gary S. Hartzmann, Gary cornell, –Core Java Volume –I Fundamentals||, 9th Edition, Prentice Hall, 2013.



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