UNIVERSITY INSTITUTE OF COMPUTING

PROJECT REPORT
ON
Hospital Management System

Program Name: BCA

Subject Name/Code: Data Base Management
System (23CAT-251)

Submitted by:

Name: Abhinav Makhija
        Anshul

UID: 23BCA10657

        23BCA10632

Section: 23BCA – 2(B)

Submitted to:

Name: Mrs. Harkamal Kaur

Designation:

1. <u>INTRODUCTION</u>

The Hospital Management System is a web-based application developed to simplify and organize the daily operations of a hospital. It offers features for managing patient information, doctor schedules. By digitizing these functions, the system aims to improve the accuracy, speed, and overall efficiency of hospital workflows.

This system replaces traditional manual methods of record-keeping, which are often time-consuming and error-prone. It provides a centralized platform where data is stored securely and can be easily accessed or updated by authorized users. Different user roles such as administrators, doctors, and receptionists are supported, each having access to specific features based on their role.

The main goal of this project is to enhance hospital management by reducing paperwork, improving patient care, and ensuring smooth coordination between departments. With the help of technologies like PHP, SQL, and CSS

2. <u>OBJECTIVE</u>

The primary objective of the Hospital Management System is to digitize hospital operations, reduce paperwork, and provide a user-friendly platform for managing patient details, doctor information, and appointments. This system aims to minimize human errors, enhance productivity, and facilitate easy access to information.

Additionally, it seeks to streamline communication between different departments, improve data accuracy, and ensure that essential records are maintained securely. By automating routine tasks, the system allows hospital staff to focus more on patient care and less on administrative burdens.

3.About The Language

1. PHP (Hypertext Preprocessor)

PHP is a widely used open-source scripting language that is especially suited for web development and can be embedded into HTML. In this project, PHP is used as the server-side language to handle the backend logic such as user authentication, session management, database operations, and dynamic content rendering.

2. HTML (Hypertext Markup Language)

HTML is the standard language for creating web pages. It structures the content on the web. In this project, HTML is used to design the structure of the user interface including forms, buttons, tables, and other visual elements.

3. CSS (Cascading Style Sheets)

CSS is used to control the appearance and layout of HTML elements. It enhances the visual design and user experience by applying styles like colors, fonts, spacing, and responsiveness to the web pages.

4. MySQL

MySQL is an open-source relational database management system. It is used in this project to store and manage all the data, including user information, course details, assignments, grades, and more. PHP communicates with the MySQL database using SQL queries to perform operations like insert, update, delete, and retrieve data.

5. XAMPP (Development Environment)

XAMPP is a free and open-source cross-platform web server solution stack package developed by Apache Friends. It provides a local server environment to run PHP and MySQL applications. This project was developed and tested locally using XAMPP.

4. CODING

Below are sample snippets of the code used in the project:
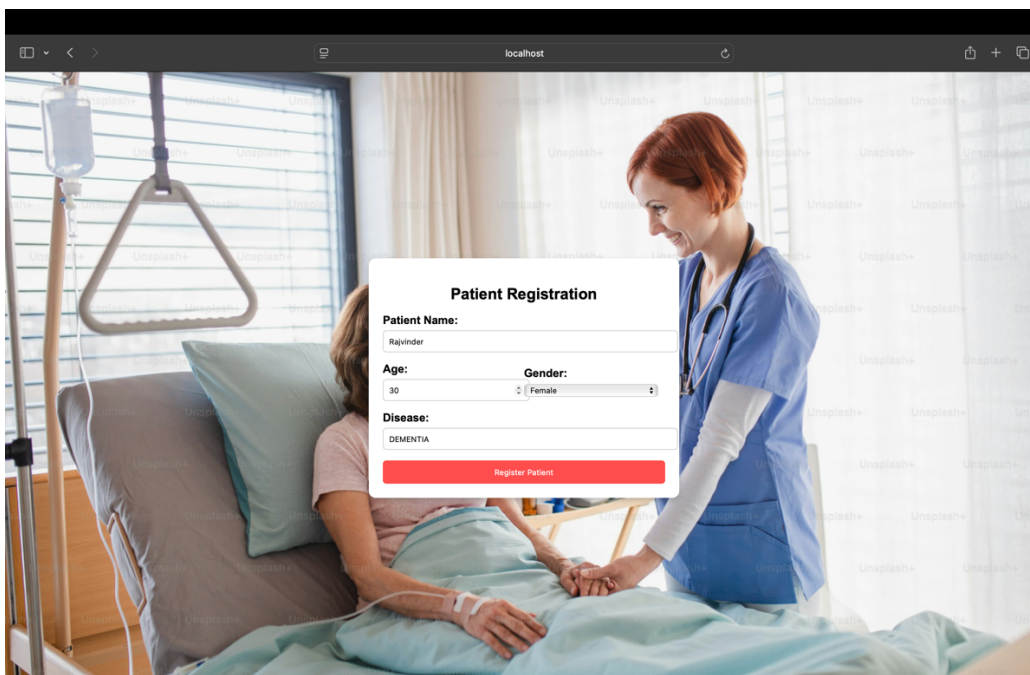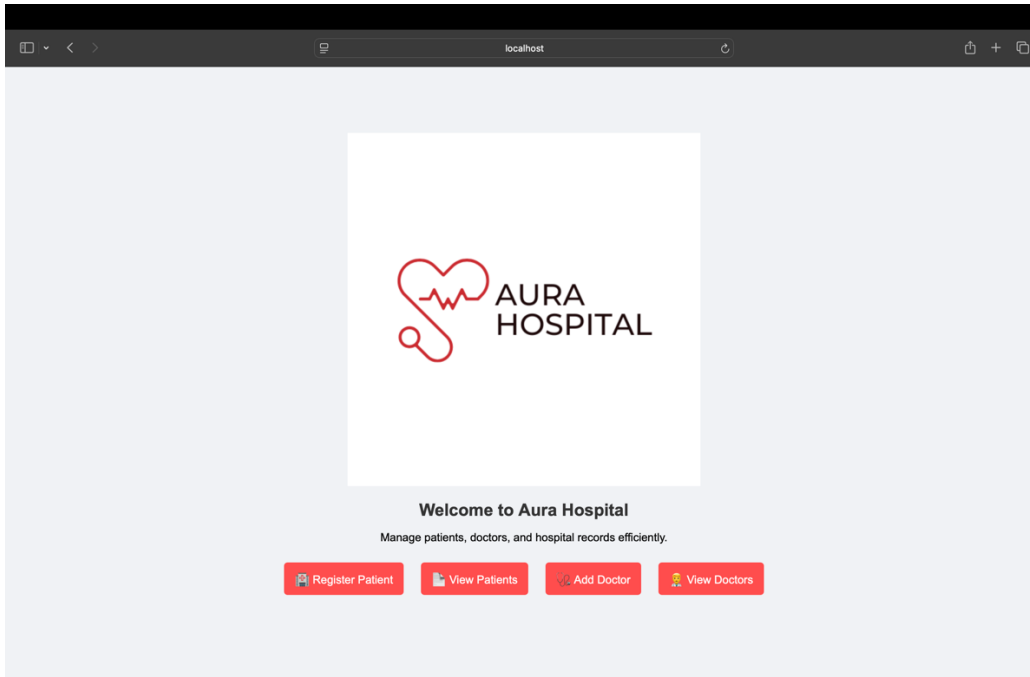
• PHP Code Sample (Connecting to Database):

```php
<?php
$servername = "localhost";
$username = "root";
$password = "";
$dbname = "hospital_db";

$conn = new mysqli($servername, $username, $password,
$dbname);
if ($conn->connect_error) {
    die("Connection failed: " . $conn->connect_error);
} ?>
```

• SQL Code Sample (Creating a Table):

```sql
CREATE TABLE patients (
 id INT AUTO_INCREMENT PRIMARY KEY,
    name VARCHAR(100),
      age INT,

      gender VARCHAR(10),

    diagnosis TEXT

    );
```
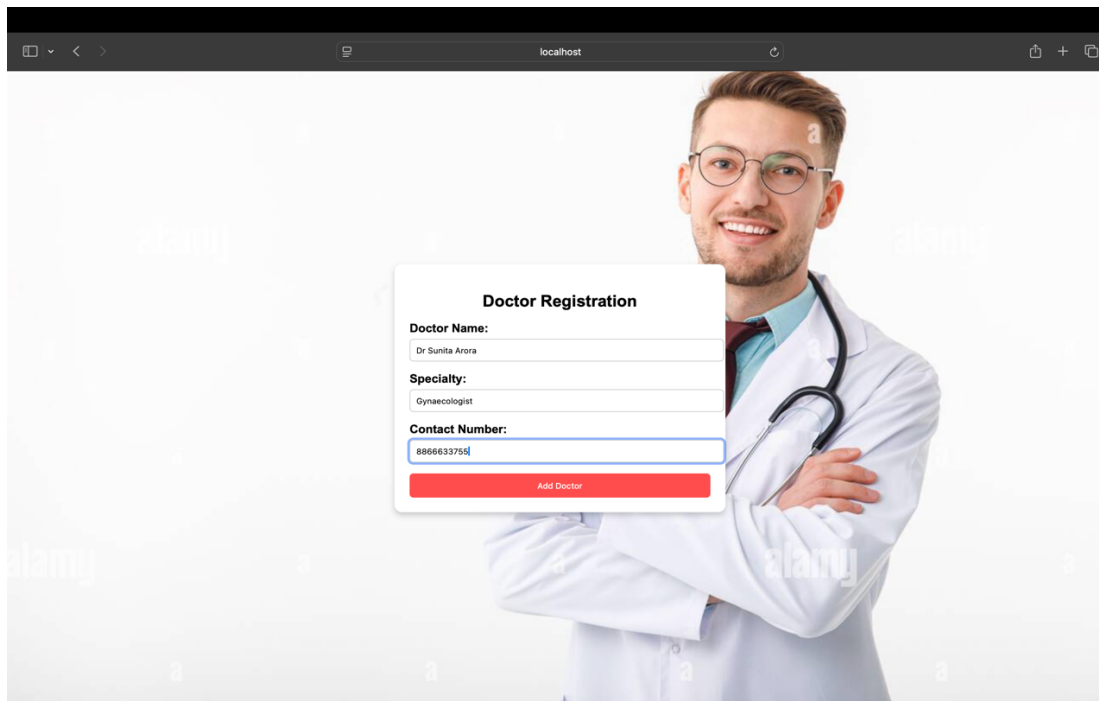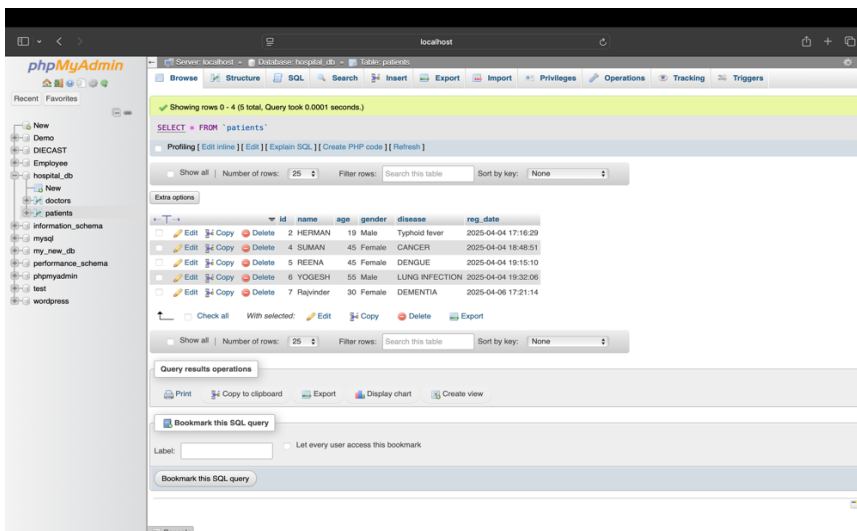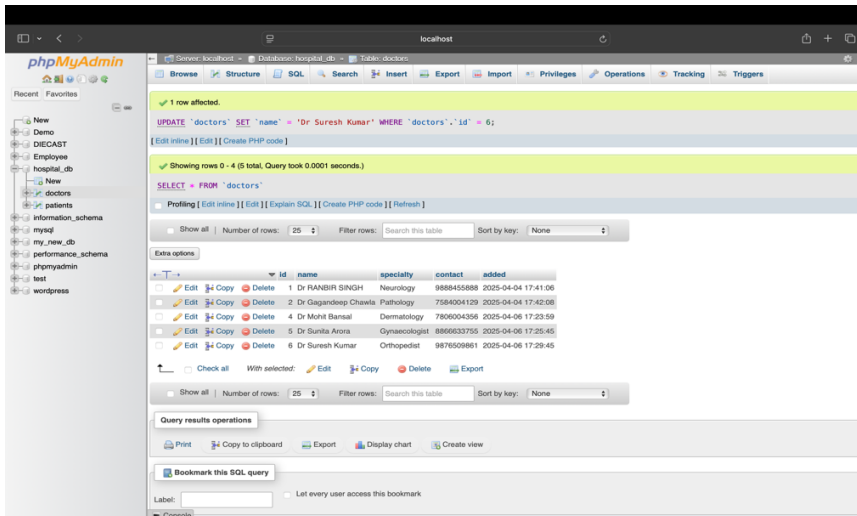
5. Screenshots (Output)

Registered Patients

ID	Name	Age	Gender	Disease	Reg Date
2	HERMAN	19	Male	Typhoid fever	2025-04-04 17:16:29
4	SUMAN	45	Female	CANCER	2025-04-04 18:48:51
5	REENA	45	Female	DENGUE	2025-04-04 19:15:10
6	YOGESH	55	Male	LUNG INFECTION	2025-04-04 19:32:06
7	Rajvinder	30	Female	DEMENTIA	2025-04-06 17:21:14

Doctor Registration

Doctor Name:

Dr Sunita Arora

Specialty:

Gynaecologist

Contact Number:

8866633755

Add Doctor

localhost

Doctor List

ID	Name	Specialty	Contact	Added
1	Dr RANBIR SINGH	Neurology	9888455888	2025-04-04 17:41:06
2	Dr Gagandeep Chawla	Pathology	7584004129	2025-04-04 17:42:08
4	Dr Mohit Bansal	Dermatology	7806004356	2025-04-06 17:23:59
5	Dr Sunita Arora	Gynaecologist	8866633755	2025-04-06 17:25:45
6	Dr Suresh Kumar	Orthopedist	9876509861	2025-04-06 17:29:45

6. <u>Conclusion</u>

The Hospital Management System is a powerful tool for automating hospital operations. With the use of PHP, SQL, and CSS, the project successfully demonstrates how technology can be integrated into healthcare services to improve service delivery, reduce errors, and enhance the overall management process.

By digitizing patient records, appointment scheduling, and administrative workflows, the system not only increases operational efficiency but also improves the accuracy and accessibility of data. It serves as a practical example of how web development skills can be applied to solve real-world problems in the healthcare sector, contributing to better patient experiences and more organized hospital management.