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MINI PROJECT REPORT

ON

"New Patient Enrollment"

Submitted By :-

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UID :- 24MCA20343

Branch / Semester :- MCA 1st

Subject :- PL/SQL

Subject Code :- 24CAP-602

Date of Performance :- 24/10/2024

Submitted To :-

Ms. Sweta

Assistant Professor

Date of Submission: 6/11/2024

University Institute of Computing

Chandigarh University, Gharuan, Mohali

DECLARATION

We hereby declare that this submission is our own work and that, to the best of mine knowledge and belief, it contains no material previously published or written by another person nor material which to a substantial extent has been accepted for the award for any other degree or diploma of the university or other institute of higher learning, except where acknowledgement has been made in the text.

Name :- Moirangthem Satyabrata

UID :- 24MCA20343

Session 2024 – 25

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CERTIFICATE

It is to certify that Moirangthem Satyabrata of class MCA 1st Year under University Roll Number :- 24MCA20343 has completed the project titled " New Patient Enrollment " in which the language used is HTML, CSS, PHP, MySQL for the Masters of Computer Application 1st Semester under my supervision. The work done in project is a result of the candidate's own efforts and report maintains is satisfied as per requirement.

Project Guide :-

Ms. Sweta

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Abstract

The "New Patient Enrollment" system is designed to streamline the process of registering patients in healthcare facilities. This system improves the accuracy and efficiency of data collection for new patients, ensuring essential information like personal details, medical history, and emergency contacts are readily available. Using this system allows healthcare providers to maintain a secure database that is easily accessible, reducing the time and paperwork involved in traditional patient registration processes. Moreover, the system minimizes human errors in data entry by implementing validation and security measures during the enrollment process.

The primary objective of this project is to develop a user-friendly, efficient tool for healthcare staff to register patients swiftly and accurately. The system provides a digital interface for both patients and administrative staff to enter necessary information, from demographic data to medical history and medication lists. By storing the information in a structured database, this project aims to support healthcare providers in accessing patient data quickly during routine check-ups, emergency situations, and for general record-keeping purposes.

This project also includes an integrated validation mechanism, allowing staff to verify the accuracy of patient information during the registration process. Additionally, the system generates alerts for incomplete entries, which helps ensure that patient data is thorough and reliable. With this tool, healthcare facilities can improve their administrative efficiency, reduce paperwork, and improve the overall patient experience by simplifying the initial registration process.

Introduction

The "New Patient Enrollment" system is an essential tool for modern healthcare facilities, developed to simplify and improve the process of onboarding new patients. In traditional settings, patient registration is often time-consuming, relying on manual data entry and physical paperwork. This system aims to digitize and streamline the enrollment process, allowing healthcare providers to collect comprehensive patient data efficiently. By centralizing data in a digital database, the system ensures quick access to patient information, ultimately reducing waiting times and improving service delivery.

The project focuses on providing a user-friendly, accessible platform where healthcare administrative staff can enter and manage new patient data seamlessly. The enrollment form captures various patient details, including personal information, medical history, current medications, and emergency contacts. Additionally, data validation measures help ensure the accuracy and reliability of information being entered, minimizing the risk of errors that are common in manual processes. This contributes to a more accurate record-keeping system, enabling healthcare staff to make informed decisions and provide better care.

Another significant aspect of the "New Patient Enrollment" system is its potential to improve the patient experience. By reducing paperwork and time spent on initial registrations, patients can enjoy a smoother, faster process when visiting healthcare facilities. Furthermore, the system’s secure database protects patient confidentiality, complying with data protection standards to safeguard sensitive information. This project, therefore, not only enhances operational efficiency but also reinforces the trust and comfort of patients, marking a vital step forward in the digitization of healthcare services.

Objective

The primary objective of the "New Patient Enrollment" system is to streamline the patient registration process, making it faster, more accurate, and user-friendly. By digitizing data entry, the system aims to reduce the reliance on physical forms and manual data processing, which are both time-consuming and prone to errors. This project envisions an efficient enrollment system where healthcare providers can quickly access reliable and well-organized patient information. The ultimate goal is to create a seamless registration experience for both patients and administrative staff, enhancing overall healthcare efficiency and data integrity.

Another important objective of this project is to implement effective data validation and security measures. The system is designed to guide users in entering complete and accurate information through mandatory fields and pre-set data validation checks. By ensuring that patient records are correct and comprehensive, the system minimizes the risk of errors in treatment, medical history, or contact information, thereby supporting more reliable healthcare delivery. Furthermore, data security is prioritized to protect sensitive patient information from unauthorized access, in compliance with healthcare privacy standards.

Additionally, the project seeks to improve accessibility and convenience for healthcare providers by offering centralized storage for patient records. By maintaining patient data in a secure, digital format, the system allows authorized personnel to retrieve records easily, whether for routine check-ups or emergency situations. This centralization of data reduces administrative workload, facilitates continuity of care, and enables providers to make informed medical decisions quickly. Overall, the project’s objectives center around enhancing data accuracy, safeguarding patient information, and promoting operational efficiency in healthcare facilities.

Benefits :-

1. **Efficient Patient Registration :-** The system speeds up the registration process, reducing wait times and allowing healthcare staff to manage patient data efficiently.
2. **Improved Data Accuracy :-** Automated data validation minimizes errors in patient records, ensuring that information is accurate and up-to-date, which is critical for effective healthcare delivery.
3. **Enhanced Data Security :-** The system stores sensitive patient information in a secure database, complying with privacy standards and protecting patient confidentiality.
4. **Centralized Access to Records :-** Authorized healthcare providers can easily retrieve patient information from a central database, facilitating quick and informed medical decisions.
5. **Reduced Paperwork :-** By digitizing the enrollment process, the system reduces the need for physical paperwork, saving resources and contributing to environmentally friendly practices.

Limitations :-

1. **Initial Setup and Training Costs :-** Implementing the system may require initial investment in software and training for staff, which can be costly for smaller healthcare facilities.
2. **Dependence on Technology :-** The system relies on stable internet and power sources any disruptions can hinder access to patient records.

3. **Data Security Risks :-** While the system is designed for secure storage, there remains a risk of data breaches, which could compromise sensitive patient information.

4. **Limited Accessibility in Rural Areas :-** In regions with limited technological infrastructure, access to such a digital system may be challenging, limiting its effectiveness.

5. **Potential Resistance to Change :-** Some staff may be resistant to adopting new technologies, which could affect the overall effectiveness of the system without adequate training and support.

Technology used :-

Introduction to HTML, CSS, PHP, and MYSQL :-

HTML (Hypertext Markup Language) :- HTML is the standard language for creating and structuring content on the web. It allows developers to define elements like headings, paragraphs, forms, and links to make information accessible on web pages.

Use in the Project :- HTML is used to structure the user interface of the New Patient Enrollment system. It defines form fields for patient details, contact information, medical history, and other essential data. By organizing content with HTML, the application ensures a structured and readable interface for users.

CSS (Cascading Style Sheets) :- CSS (Cascading Style Sheets) is a style sheet language used to control the visual appearance of HTML elements on a web

page. It allows for the styling of fonts, colors, layouts, and other visual elements to enhance the user experience.

Use in the Project :- CSS is employed to style the New Patient Enrollment form, making it visually appealing and easy to navigate. By using CSS, the project customizes colors, layouts, spacing, and font sizes, ensuring a consistent look that improves user experience and readability.

PHP (Hypertext Preprocessor) :- PHP (Hypertext Preprocessor) is a widely-used server-side scripting language designed for web development. It allows developers to build dynamic, data-driven websites by interacting with databases, managing sessions, and handling form data.

Use in the Project :- PHP is used to handle form submissions and process patient information submitted via the enrollment form. It connects the user interface with the MySQL database, performing data validation, insertion, updates, and retrieval, allowing seamless data flow between the front-end and the back-end.

MySQL :- MySQL is a relational database management system (RDBMS) used for managing and organizing data. It provides structured storage, querying capabilities, and is known for reliability and performance in handling large databases.

Use in the Project :- MySQL is used to store all patient-related information, including personal details, contact information, and medical history. PHP scripts interact with the MySQL database to add, retrieve, and update patient records, enabling efficient data management within the New Patient Enrollment system.

Code

HTML :-

```
<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <title>New Patient Enrollment</title>
    <link rel="stylesheet" href="style.css">
</head>
<body>

<div class="container">
    <form action="project.php" method="POST">
        <div class="header">
            <h2>New Patient Enrollment</h2>
            <p>Dr. Moirangthem Satyabrata</p>
        </div>
```

```
<!-- Name -->
<label for="first-name">Name</label>
<div class="name-fields">
    <input type="text" id="first_name" name="first_name" placeholder="First Name" required>
    <input type="text" id="last_name" name="last_name" placeholder="Last Name" required>
</div>

<!-- Date of Birth and Sex -->
<label for="dob">Date of Birth</label>
<input type="date" id="dob" name="dob" required>

<label for="sex">Sex</label>
<select id="sex" name="sex" required>
    <option value="">Please Select</option>
    <option value="male">Male</option>
    <option value="female">Female</option>
    <option value="other">Other</option>
</select>
```

```
        <!-- Height and Weight -->
        <label for="height">Height (inches)</label>
        <input type="number" id="height" name="height"
placeholder="Height" required>

        <label for="weight">Weight (pounds)</label>
        <input type="number" id="weight" name="weight"
placeholder="Weight" required>

        <!-- Marital Status -->
        <label for="marital-status">Marital Status</label>
        <select id="marital-status" name="marital_status" required>
            <option value="">Please Select</option>
            <option value="single">Single</option>
            <option value="married">Married</option>
            <option value="divorced">Divorced</option>
            <option value="widowed">Widowed</option>
        </select>

        <!-- Contact Number and Email -->
        <label for="contact-number">Contact Number</label>
```

```
        <input type="tel" id="contact-number" name="contact_number" placeholder="(000) 000-0000" required>

        <label for="email">E-mail</label>

        <input type="email" id="email" name="email" placeholder="example@example.com" required>

        <!-- Address -->

        <label for="address">Address</label>

        <input type="text" id="address-line1" name="address_line1" placeholder="Street Address" required>

        <input type="text" id="address-line2" name="address_line2" placeholder="Street Address Line 2">

        <input type="text" id="city" name="city" placeholder="City" required>

        <input type="text" id="state" name="state" placeholder="State / Province" required>

        <input type="text" id="zip" name="zip" placeholder="Postal / Zip Code" required>

        <!-- Medications -->

        <label>Taking any medications, currently?</label>
```

```
            <label><input type="radio" name="medications" value="yes"
required> Yes</label>

            <label><input type="radio" name="medications" value="no"
required> No</label>


            <label for="medication-list">Please list it here</label>

            <textarea id="medication-list" name="medication_list" rows="4"
placeholder="List medications here..."></textarea>


            <!-- Emergency Contact -->

            <h3>In case of emergency</h3>

            <label for="emergency-contact">Emergency Contact</label>

            <div class="name-fields">

                <input type="text" id="emergency-first-name"
name="emergency_first_name" placeholder="First Name" required>

                <input type="text" id="emergency-last-name"
name="emergency_last_name" placeholder="Last Name" required>

            </div>


            <label for="relationship">Relationship</label>

            <input type="text" id="relationship" name="relationship"
placeholder="Relationship" required>
```

```
            <label for="emergency-contact-number">Contact Number</label>
            <input type="tel" id="emergency-contact-number"
name="emergency_contact_number" placeholder="(000) 000-0000" required>

            <!-- Submit Button -->
            <input type="submit" value="Submit">
        </form>
    </div>
    </body>
    </html>
```

CSS :-

```
    * {
        box-sizing: border-box;
        margin: 0;
        padding: 0;
        font-family: Arial, sans-serif;
    }
```

```
body {
    background-color: #f3f4f6;
    display: flex;
    justify-content: center;
    align-items: center;
    height: 100vh;

    margin-top: 20px;
}

.container {
    /* overflow-y: scroll; */
    width: 1000px;
    background-color: #fff;
    padding: 20px;
    border-radius: 8px;
    box-shadow: 0 4px 8px rgba(0, 0, 0, 0.2);
    padding-top: 20px;
    z-index: 1;
    margin-top: 920px;
```

```
}

.header {
    text-align: center;
    margin-bottom: 20px;
}

form h2 {
    color: #0b5394;
}

form label {
    margin-top: 10px;
    display: block;
    font-weight: bold;
    color: #333;
}

form input[type="text"],
form input[type="email"],
```

```
form input[type="tel"],
form input[type="date"],
form input[type="number"],
form select,
form textarea {
    width: 100%;
    padding: 10px;
    margin-top: 5px;
    margin-bottom: 10px;
    border: 1px solid #ccc;
    border-radius: 5px;
}

form input[type="radio"] {
    margin-right: 5px;
}

form .name-fields {
    display: flex;
    gap: 10px;
```

```
}

form .name-fields input {
    width: 48%;
}

form textarea {
    resize: vertical;
}

form input[type="submit"] {
    background-color: #0b5394;
    color: #fff;
    padding: 10px;
    border: none;
    border-radius: 5px;
    cursor: pointer;
    width: 100%;
}
```

```
form input[type="submit"]:hover {
    background-color: #084a7b;
}
```

PHP :-

```
<?php
// project.php

// Database connection details
$servername = "localhost";
$username = "root"; // Replace with your database username
$password = ""; // Replace with your database password
$dbname = "patient_registration";

// Create a connection
$conn = new mysqli($servername, $username, $password, $dbname);

// Check connection
if ($conn->connect_error) {
    die("Connection failed: " . $conn->connect_error);
```

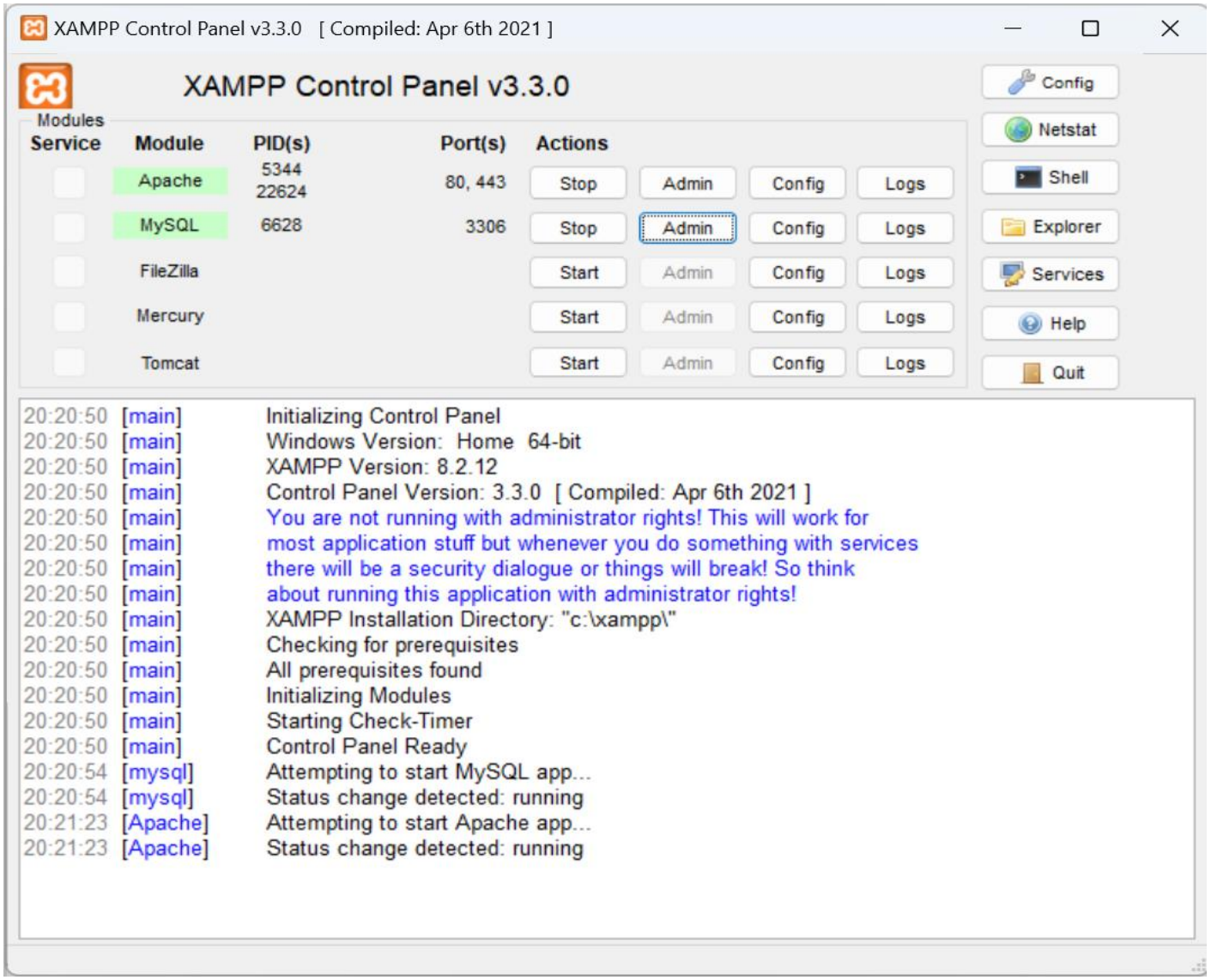
```
}

// Check if form is submitted
if ($_SERVER["REQUEST_METHOD"] == "POST") {
    // Patient information
    $first_name = $_POST['first_name'];
    $last_name = $_POST['last_name'];
    $dob = $_POST['dob'];
    $sex = $_POST['sex'];
    $height = $_POST['height'];
    $weight = $_POST['weight'];
    $marital_status = $_POST['marital_status'];
    $contact_number = $_POST['contact_number'];
    $email = $_POST['email'];
    $address_line1 = $_POST['address_line1'];
    $address_line2 = $_POST['address_line2'];
    $city = $_POST['city'];
    $state = $_POST['state'];
    $zip = $_POST['zip'];
    $medications = $_POST['medications'];
```

```
$medication_list = $_POST['medication_list'];

// Emergency contact information
$emergency_first_name = $_POST['emergency_first_name'];
$emergency_last_name = $_POST['emergency_last_name'];
$relationship = $_POST['relationship'];
$emergency_contact_number = $_POST['emergency_contact_number'];

// Insert patient data into `patients` table
$sql_patient = "INSERT INTO patients (first_name, last_name, dob, sex, height, weight, marital_status, contact_number, email, address_line1, address_line2, city, state, zip, medications, medication_list)
VALUES ('$first_name', '$last_name', '$dob', '$sex', '$height', '$weight', '$marital_status', '$contact_number', '$email', '$address_line1', '$address_line2', '$city', '$state', '$zip', '$medications', '$medication_list')";

if ($conn->query($sql_patient) === TRUE) {
    $patient_id = $conn->insert_id;

    // Insert emergency contact data into `emergency_contacts` table
```

```
        $sql_emergency = "INSERT INTO emergency_contacts (patient_id, first_name, last_name, relationship, contact_number)
        VALUES ('$patient_id', '$emergency_first_name', '$emergency_last_name', '$relationship', '$emergency_contact_number')";

        if ($conn->query($sql_emergency) === TRUE) {
            // Display success alert and redirect back to the registration form
            echo "<script>
                    alert('Registration successful!');
                    window.location.href = 'index.php';
                  </script>";
            exit();
        } else {
            echo "Error: " . $sql_emergency . "<br>" . $conn->error;
        }
    } else {
        echo "Error: " . $sql_patient . "<br>" . $conn->error;
    }
}

// Close the connection
```

```
$conn->close();

?>
```

Output of Project



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New Patient Enrollment

Dr. Moirangthem Satyabrata

Name

First Name | Last Name

Date of Birth

dd-mm-yyyy

Sex

Please Select

Height (inches)

Height

Weight (pounds)

Weight

Marital Status

Please Select

Contact Number

(000) 000-0000

E-mail

example@example.com

Address

Street Address

Street Address Line 2

City

State / Province

Postal / Zip Code

Taking any medications, currently?

- ○ **Yes**
- ○ **No**

Please list it here

List medications here...

In case of emergency

Emergency Contact

First Name | Last Name

Relationship

Relationship

Contact Number

(000) 000-0000

Submit

New Patient Enrollment

Dr. Moirangthem Satyabrata

Name

Moirangthem | Satyabrata

Date of Birth

05-08-2003

Sex

Male

Height (inches)

165

Weight (pounds)

70

Marital Status

Single

Contact Number

9366191922

E-mail

satyabratamoirangthem@gmail.com

Address

Wangkhei Ningthem Pukhri Mapal Makha Leirak Lane 5

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Street Address Line 2

Imphal

Manipur

795005

Taking any medications, currently?

- ○ **Yes**
- ◉ **No**

Please list it here

List medications here...

In case of emergency

Emergency Contact

Moirangthem | Dara

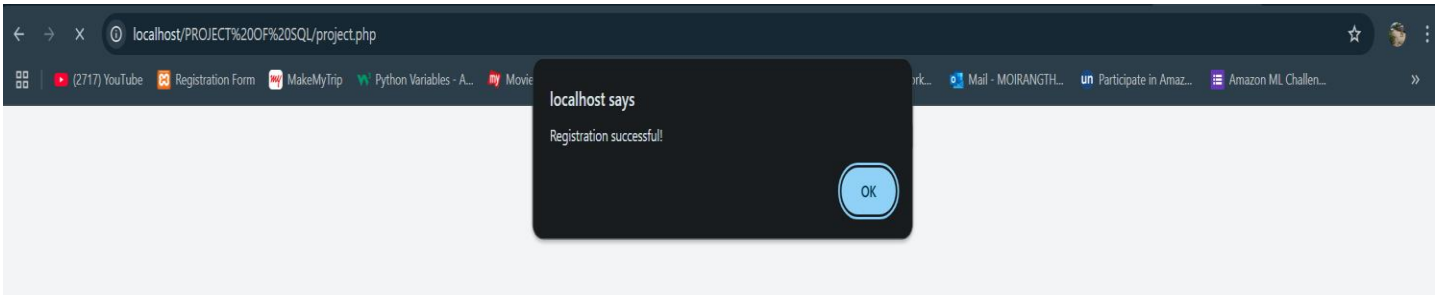
Relationship

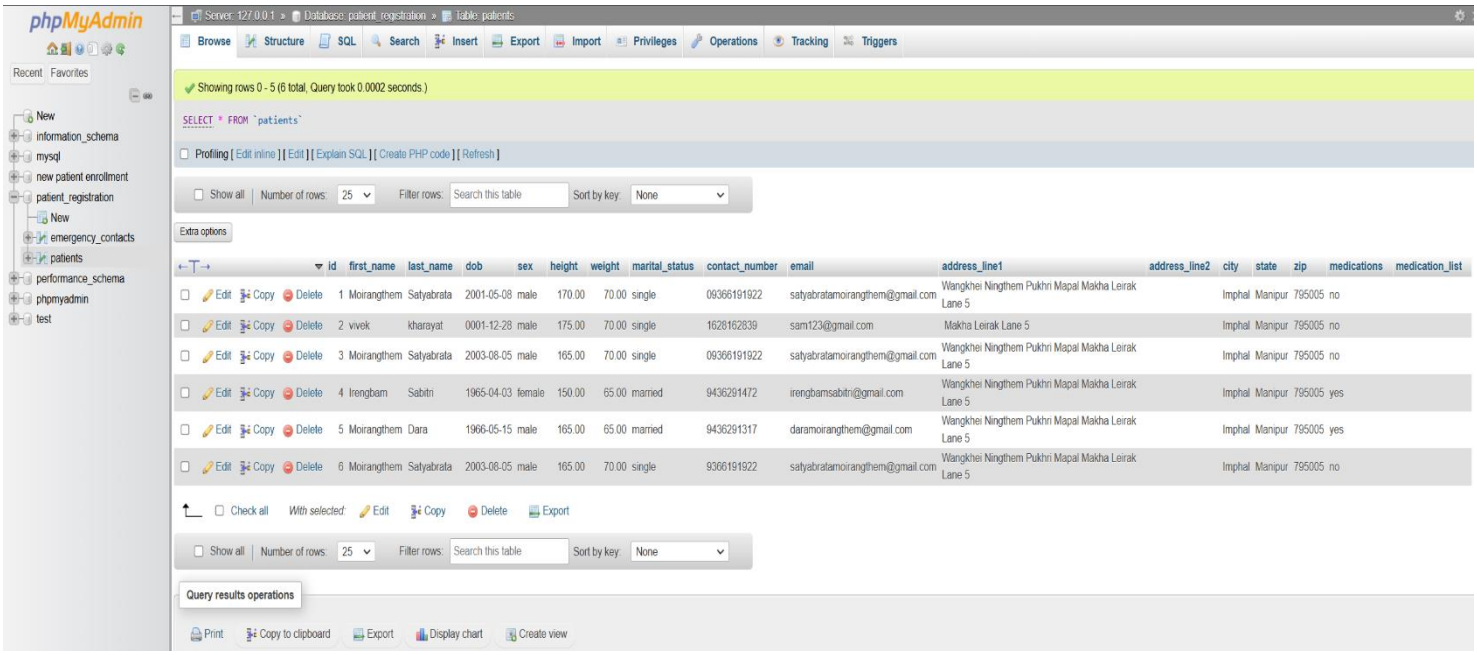
Father

Contact Number

9436291317

Submit



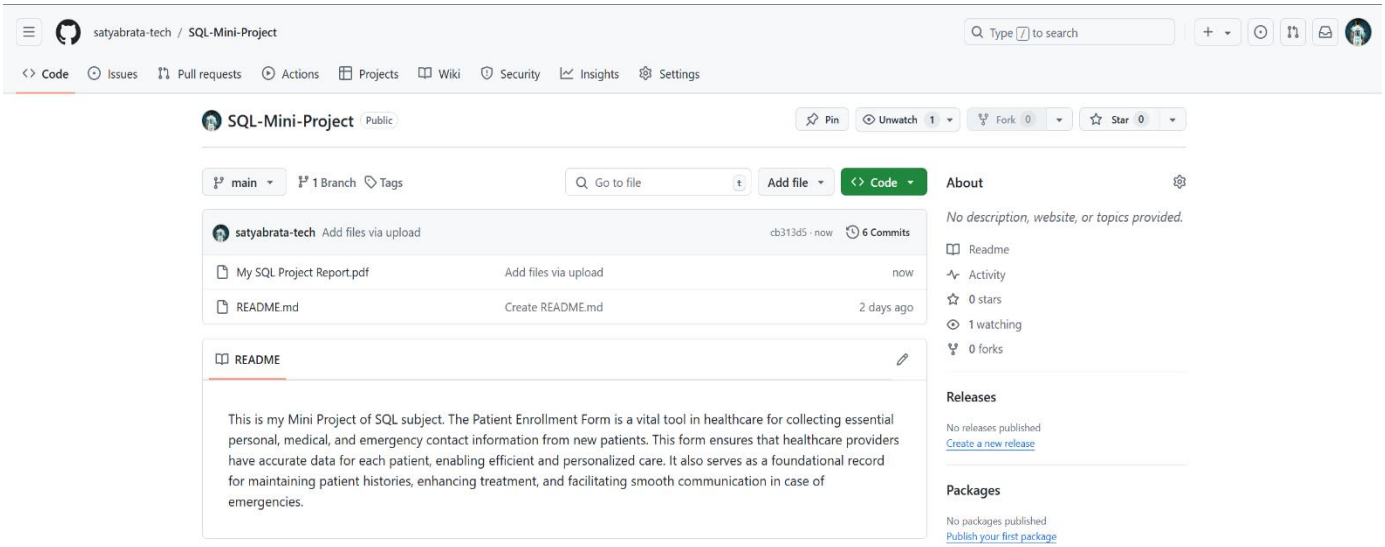


Conclusion

The "New Patient Enrollment" project offers a streamlined approach to managing patient registrations, aiming to improve efficiency, accuracy, and security in healthcare data handling. By transitioning from manual entry to a digital system, healthcare facilities can significantly reduce administrative tasks and errors, ultimately contributing to a more organized and accessible patient data management process. This project not only enhances the patient registration experience but also provides healthcare providers with quick, centralized access to critical information, supporting timely and informed medical decisions.

While the project has notable benefits, such as improved data accuracy and reduced paperwork, it also presents certain limitations, particularly in terms of initial setup and the need for stable technological infrastructure. Addressing these challenges through proper training, investment in secure technologies, and adaptation to digital systems will be essential for successful implementation. Overall, the "New Patient Enrollment" system has the potential to become a foundational tool for healthcare facilities, helping them to provide more efficient and secure patient care while meeting modern healthcare standards.

GitHub



GitHub Link :- https://github.com/satyabrata-tech/SQL-Mini-Project/tree/main