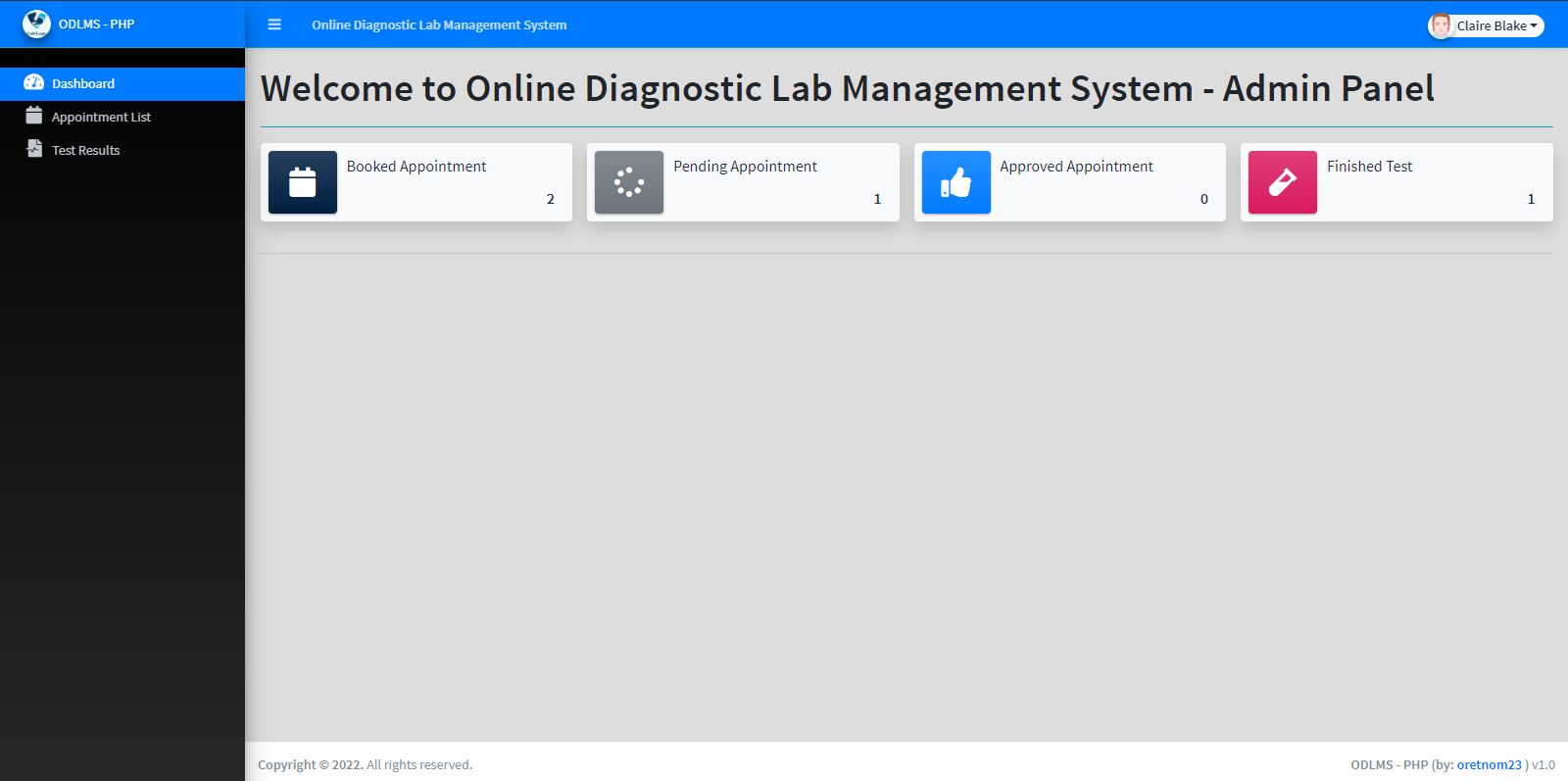
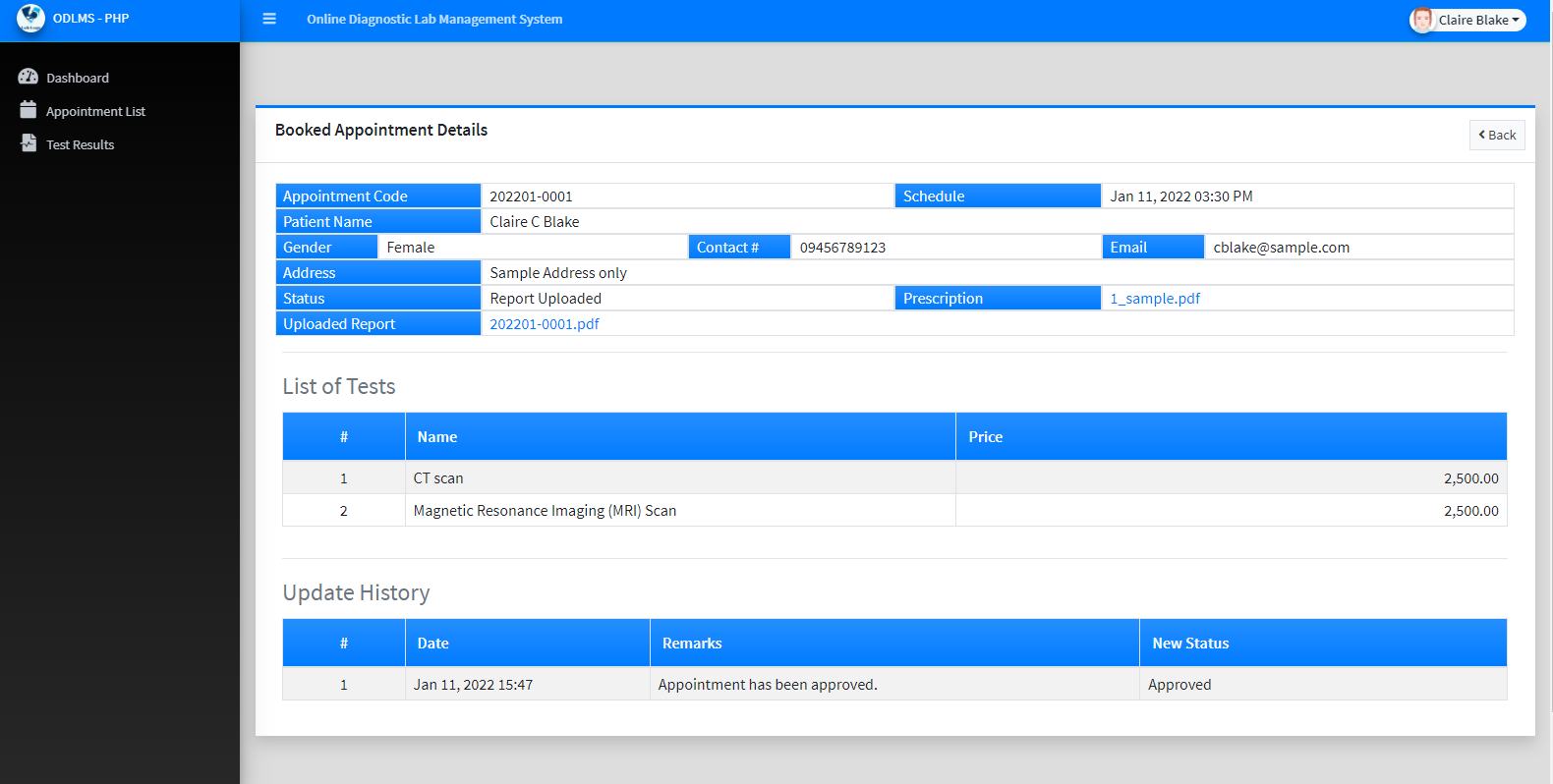
**System Snapshots of some Features**

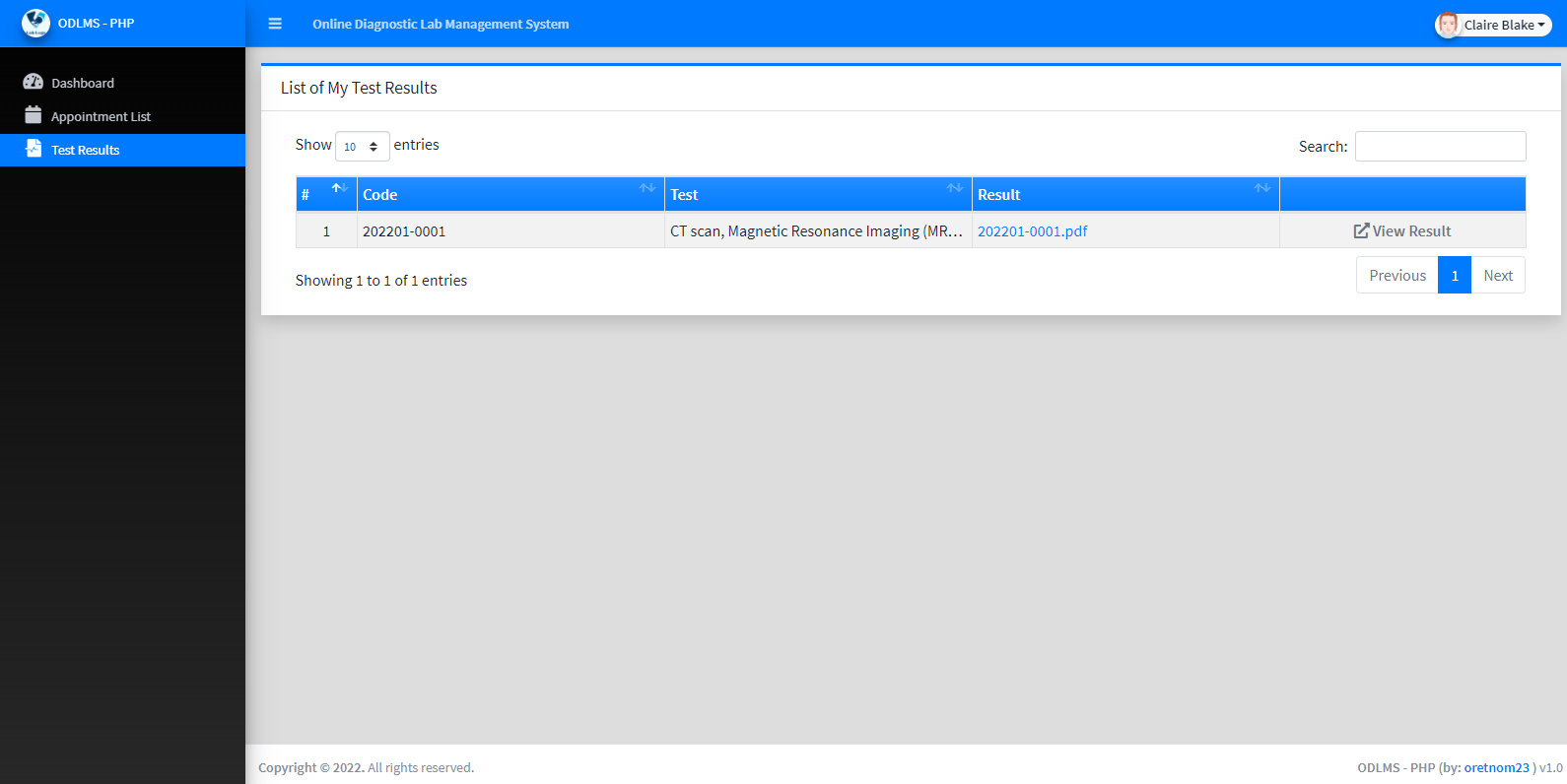
**Dashboard (User-Side)**

****

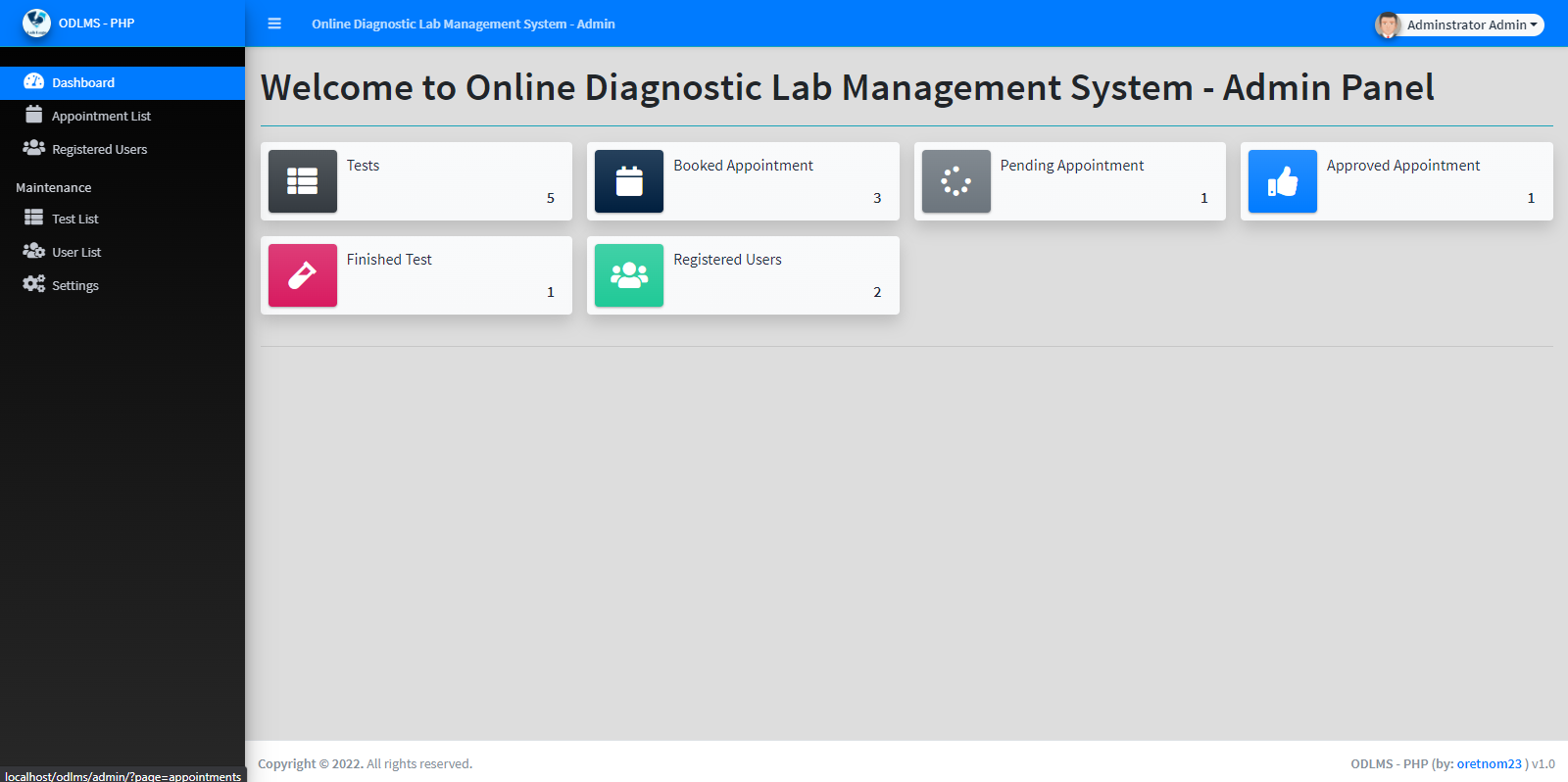
**Appointment Details *(User-Side)***

****

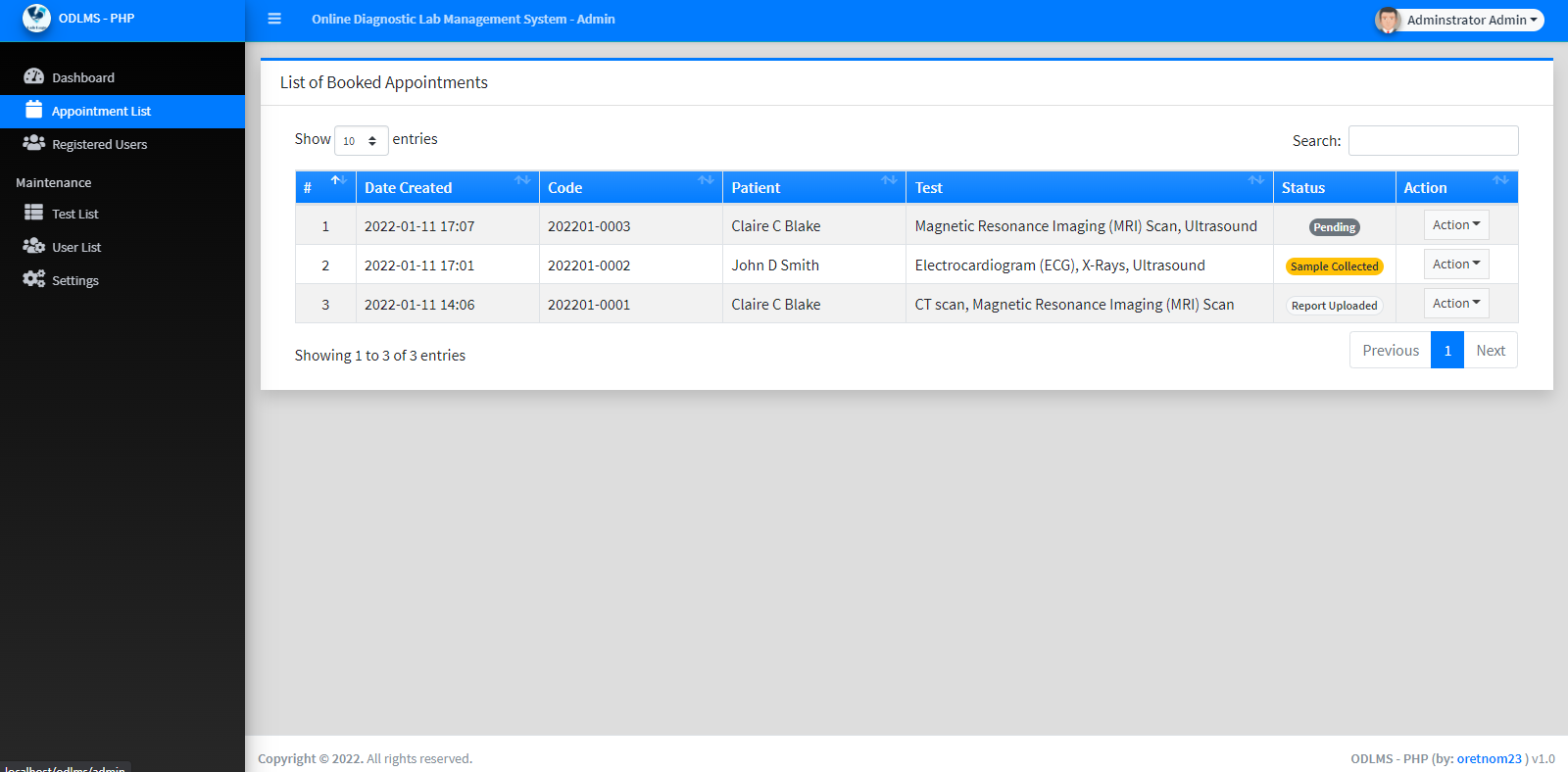
### Test Result List Page (User-Side)

****

### Admin Dashboard (Admin-Side)

****

### Booked Appointment List (Admin-Side)

****

**Sample coding**

### ****Database Schema (MySQL)****

Create a database named **diagnostic\_lab** and run this SQL script:

sql

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CREATE DATABASE diagnostic\_lab;

USE diagnostic\_lab;

CREATE TABLE users (

id INT AUTO\_INCREMENT PRIMARY KEY,

name VARCHAR(100) NOT NULL,

email VARCHAR(100) UNIQUE NOT NULL,

password VARCHAR(255) NOT NULL,

role ENUM('admin', 'patient', 'technician', 'receptionist') NOT NULL

);

CREATE TABLE tests (

id INT AUTO\_INCREMENT PRIMARY KEY,

test\_name VARCHAR(100) NOT NULL,

description TEXT,

price DECIMAL(10,2) NOT NULL

);

CREATE TABLE appointments (

id INT AUTO\_INCREMENT PRIMARY KEY,

patient\_id INT,

test\_id INT,

appointment\_date DATETIME,

status ENUM('pending', 'confirmed', 'completed', 'cancelled') DEFAULT 'pending',

FOREIGN KEY (patient\_id) REFERENCES users(id) ON DELETE CASCADE,

FOREIGN KEY (test\_id) REFERENCES tests(id) ON DELETE CASCADE

);

CREATE TABLE reports (

id INT AUTO\_INCREMENT PRIMARY KEY,

appointment\_id INT,

report\_file VARCHAR(255),

uploaded\_at TIMESTAMP DEFAULT CURRENT\_TIMESTAMP,

FOREIGN KEY (appointment\_id) REFERENCES appointments(id) ON DELETE CASCADE

);

### ****1. User Authentication (Login & Registration)****

#### register.php (User Registration)

php

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<?php

include 'config.php';

if (isset($\_POST['register'])) {

$name = $\_POST['name'];

$email = $\_POST['email'];

$password = password\_hash($\_POST['password'], PASSWORD\_BCRYPT);

$role = $\_POST['role'];

$stmt = $conn->prepare("INSERT INTO users (name, email, password, role) VALUES (?, ?, ?, ?)");

$stmt->bind\_param("ssss", $name, $email, $password, $role);

if ($stmt->execute()) {

echo "Registration successful. <a href='login.php'>Login Here</a>";

} else {

echo "Error: " . $stmt->error;

}

}

?>

<form method="POST">

<input type="text" name="name" placeholder="Full Name" required>

<input type="email" name="email" placeholder="Email" required>

<input type="password" name="password" placeholder="Password" required>

<select name="role">

<option value="patient">Patient</option>

<option value="technician">Technician</option>

<option value="receptionist">Receptionist</option>

<option value="admin">Admin</option>

</select>

<button type="submit" name="register">Register</button>

</form>

#### login.php (User Login)

php

CopyEdit

<?php

include 'config.php';

session\_start();

if (isset($\_POST['login'])) {

$email = $\_POST['email'];

$password = $\_POST['password'];

$stmt = $conn->prepare("SELECT \* FROM users WHERE email = ?");

$stmt->bind\_param("s", $email);

$stmt->execute();

$result = $stmt->get\_result();

if ($row = $result->fetch\_assoc()) {

if (password\_verify($password, $row['password'])) {

$\_SESSION['user\_id'] = $row['id'];

$\_SESSION['role'] = $row['role'];

header("Location: dashboard.php");

} else {

echo "Invalid password.";

}

} else {

echo "No user found.";

}

}

?>

<form method="POST">

<input type="email" name="email" placeholder="Email" required>

<input type="password" name="password" placeholder="Password" required>

<button type="submit" name="login">Login</button>

</form>

### ****2. Test Booking (Patients)****

#### book\_test.php

php

CopyEdit

<?php

include 'config.php';

session\_start();

if (!isset($\_SESSION['user\_id']) || $\_SESSION['role'] != 'patient') {

header("Location: login.php");

exit();

}

if (isset($\_POST['book'])) {

$test\_id = $\_POST['test\_id'];

$appointment\_date = $\_POST['appointment\_date'];

$patient\_id = $\_SESSION['user\_id'];

$stmt = $conn->prepare("INSERT INTO appointments (patient\_id, test\_id, appointment\_date) VALUES (?, ?, ?)");

$stmt->bind\_param("iis", $patient\_id, $test\_id, $appointment\_date);

if ($stmt->execute()) {

echo "Test booked successfully!";

} else {

echo "Error: " . $stmt->error;

}

}

$tests = $conn->query("SELECT \* FROM tests");

?>

<form method="POST">

<select name="test\_id">

<?php while ($row = $tests->fetch\_assoc()) { ?>

<option value="<?= $row['id'] ?>"><?= $row['test\_name'] ?> (₹<?= $row['price'] ?>)</option>

<?php } ?>

</select>

<input type="datetime-local" name="appointment\_date" required>

<button type="submit" name="book">Book Test</button>

</form>

### ****3. Upload Lab Report (Technician)****

#### upload\_report.php

php

CopyEdit

<?php

include 'config.php';

session\_start();

if (!isset($\_SESSION['user\_id']) || $\_SESSION['role'] != 'technician') {

header("Location: login.php");

exit();

}

if (isset($\_POST['upload'])) {

$appointment\_id = $\_POST['appointment\_id'];

$file\_name = $\_FILES['report\_file']['name'];

$file\_tmp = $\_FILES['report\_file']['tmp\_name'];

move\_uploaded\_file($file\_tmp, "reports/" . $file\_name);

$stmt = $conn->prepare("INSERT INTO reports (appointment\_id, report\_file) VALUES (?, ?)");

$stmt->bind\_param("is", $appointment\_id, $file\_name);

if ($stmt->execute()) {

echo "Report uploaded successfully!";

} else {

echo "Error: " . $stmt->error;

}

}

$appointments = $conn->query("SELECT \* FROM appointments WHERE status='completed'");

?>

<form method="POST" enctype="multipart/form-data">

<select name="appointment\_id">

<?php while ($row = $appointments->fetch\_assoc()) { ?>

<option value="<?= $row['id'] ?>">Appointment #<?= $row['id'] ?></option>

<?php } ?>

</select>

<input type="file" name="report\_file" required>

<button type="submit" name="upload">Upload Report</button>

</form>

### ****4. View Test Reports (Patients)****

#### view\_reports.php

php

CopyEdit

<?php

include 'config.php';

session\_start();

if (!isset($\_SESSION['user\_id']) || $\_SESSION['role'] != 'patient') {

header("Location: login.php");

exit();

}

$patient\_id = $\_SESSION['user\_id'];

$reports = $conn->query("SELECT reports.report\_file FROM reports

JOIN appointments ON reports.appointment\_id = appointments.id

WHERE appointments.patient\_id = $patient\_id");

while ($row = $reports->fetch\_assoc()) {

echo "<a href='reports/" . $row['report\_file'] . "' download>" . $row['report\_file'] . "</a><br>";

}

?>