A Project Report on

**Online Laundry Management System**

Submitted in the Partial Fulfilment of the Requirements for the Degree of

## BACHELOR OF TECHNOLOGY

in

COMPUTER SCIENCE & ENGINEERING

by

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1. **Name / Title of the Project**
2. **Statement about the Problem**
3. **Why is the particular topic chosen?**
4. **Objective and scope of the project**
5. **Methodology (including a summary of the project)**
6. **Hardware & Software to be used**
7. **Testing Technologies used**
8. **What contribution would the project make?**
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**Project Synopsis for "Online Laundry Management System"**

**2. Statement about the Problem**

Managing laundry services manually can be inefficient, errorprone, and timeconsuming. Traditional methods like manual entry of laundry orders, service tracking, and communication with customers often result in delays and miscommunication. The absence of realtime updates makes it difficult for customers to track the status of their laundry, leading to dissatisfaction. This project seeks to develop an automated online laundry management system that will streamline the process for both users and administrators, providing realtime updates and minimizing human error.

**3. Why is the particular topic chosen?**

Laundry services have traditionally been slow to adopt automation, which can lead to mismanagement and inefficiency. With the rise of digital solutions for service management, there is a clear need for an online laundry management system that automates the process, reduces errors, and enhances user satisfaction. This project aims to bridge this gap by providing a comprehensive, automated solution that benefits both laundry service providers and customers.

**4. Objective and Scope of the Project**

**Objective:**

Develop a webbased platform for managing laundry requests efficiently.

Automate the process of receiving and processing laundry requests.

Provide realtime updates on the status of laundry to users.

**Scope:**

**Users can register, log in, and submit laundry requests.**

The system will provide status updates such as "Pending" or "Completed" and track the completion date and time.

Admins will manage all user requests, update statuses, and track progress.

The system will be accessible via any internetenabled device and is scalable for larger services.

**5. Methodology**

1. Requirement Gathering: Collect the requirements from users and administrators, understanding the workflow for laundry management.
2. Database Design: Design the database to store user profiles, laundry requests, and status information.
3. Frontend Development: Develop a userfriendly interface using HTML, CSS, and JavaScript.
4. Backend Development: Build the logic using PHP and MySQL to manage the system's functionalities.
5. Integration: Integrate both user and admin modules, ensuring smooth interaction.
6. Testing: Conduct unit and integration testing to ensure that all modules work as expected.
7. Deployment: Final deployment on a local server using XAMPP or similar software.

**6. Hardware & Software to be used**

**Hardware:**

Laptop/Desktop with at least 8GB RAM for development and testing.

Local server setup (e.g., XAMPP).

**Software:**

**Operating System:** Windows 10 / Linux

**Programming Languages:** PHP, HTML, CSS, JavaScript

**Database:** MySQL

**Server:** Apache via XAMPP

**IDE:** Visual Studio Code

**Browser:** Google Chrome or Mozilla Firefox

**7. Testing Technologies Used**

* Unit Testing: Each component (user registration, request submission, etc.) is tested individually to ensure functionality.
* Integration Testing: Ensuring smooth communication between user and admin modules.
* User Acceptance Testing (UAT): Testing with real users to verify that the system meets their needs.
* Database Testing: Ensuring correct storage, retrieval, and updates of user and request data.

**8. What contribution would the project make?**

This project will significantly improve the efficiency and accuracy of laundry management services. It will automate the process of receiving laundry requests, updating statuses, and notifying users about their order's progress. This system not only reduces the workload for administrators but also improves the user experience by providing real time updates. Furthermore, the system can be adapted for similar service based industries.

**10. Conclusion**

The Online Laundry Management System project is designed to enhance laundry service management through automation. By reducing manual processes and providing realtime updates, the system will improve efficiency, transparency, and customer satisfaction. Its scalable nature ensures that it can be expanded to handle larger volumes and different service types, making it a versatile solution.

**Project Code**

1. Database Setup (SQL for MySQL)

sql

CREATE DATABASE laundry\_management;

USE laundry\_management;

CREATE TABLE users (

id INT AUTO\_INCREMENT PRIMARY KEY,

username VARCHAR(100) NOT NULL,

password VARCHAR(255) NOT NULL,

email VARCHAR(100),

registration\_date TIMESTAMP DEFAULT CURRENT\_TIMESTAMP

);

CREATE TABLE requests (

id INT AUTO\_INCREMENT PRIMARY KEY,

user\_id INT,

request\_date DATE,

completion\_date DATE,

completion\_time TIME,

status ENUM('Pending', 'Completed') DEFAULT 'Pending',

FOREIGN KEY (user\_id) REFERENCES users(id)

);

CREATE TABLE admins (

id INT AUTO\_INCREMENT PRIMARY KEY,

username VARCHAR(100) NOT NULL,

password VARCHAR(255) NOT NULL

);

2. User Registration and Login

user\_register.php:

php

<?php

include 'db.php';

if ($\_SERVER["REQUEST\_METHOD"] == "POST") {

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

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

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

$sql = "INSERT INTO users (username, password, email) VALUES (?, ?, ?)";

$stmt = $conn>prepare($sql);

$stmt>bind\_param("sss", $username, $password, $email);

if ($stmt>execute()) {

echo "User registered successfully!";

} else {

echo "Error: " . $stmt>error;

}

}

?>

user\_login.php:

php

<?php

include 'db.php';

session\_start();

if ($\_SERVER["REQUEST\_METHOD"] == "POST") {

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

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

$sql = "SELECT FROM users WHERE username = ?";

$stmt = $conn>prepare($sql);

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

$stmt>execute();

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

if ($result>num\_rows > 0) {

$user = $result>fetch\_assoc();

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

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

header('Location: dashboard.php');

} else {

echo "Invalid password.";

}

} else {

echo "No user found with this username.";

}

}

?>

3. Admin Dashboard

admin\_dashboard.php:

php

<?php

session\_start();

include 'db.php';

if (!isset($\_SESSION['admin\_id'])) {

header('Location: admin\_login.php');

}

$sql = "SELECT requests.id, users.username, requests.status, requests.completion\_date, requests.completion\_time

FROM requests JOIN users ON requests.user\_id = users.id";

$result = $conn>query($sql);

if ($\_SERVER["REQUEST\_METHOD"] == "POST") {

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

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

$completion\_date = null;

$completion\_time = null;

if ($status == 'Completed') {

$completion\_date = date('Ymd');

$completion\_time = date('H:i:s');

}

$sql = "UPDATE requests SET status = ?, completion\_date = ?, completion\_time = ? WHERE id = ?";

$stmt = $conn>prepare($sql);

$stmt>bind\_param("sssi", $status, $completion\_date, $completion\_time, $request\_id);

if ($stmt>execute()) {

header('Location: admin\_dashboard.php');

}

}

?>

HTML for `admin\_dashboard.php`:

html

<!DOCTYPE html>

<html>

<head>

<title>Admin Dashboard</title>

</head>

<body>

<h1>Admin Dashboard</h1>

<table>

<tr>

<th>Request ID</th>

<th>Username</th>

<th>Status</th>

<th>Completion Date</th>

<th>Completion Time</th>

</tr>

<?php while ($row = $result>fetch\_assoc()): ?>

<tr>

<td><?php echo $row['id']; ?></td>

<td><?php echo $row['username']; ?></td>

<td><?php echo $row['status']; ?></td>

<td><?php echo $row['completion\_date'] ? $row['completion\_date'] : 'N/A'; ?></td>

<td><?php echo $row['completion\_time'] ? $row['completion\_time'] : 'N/A'; ?></td>

</tr>

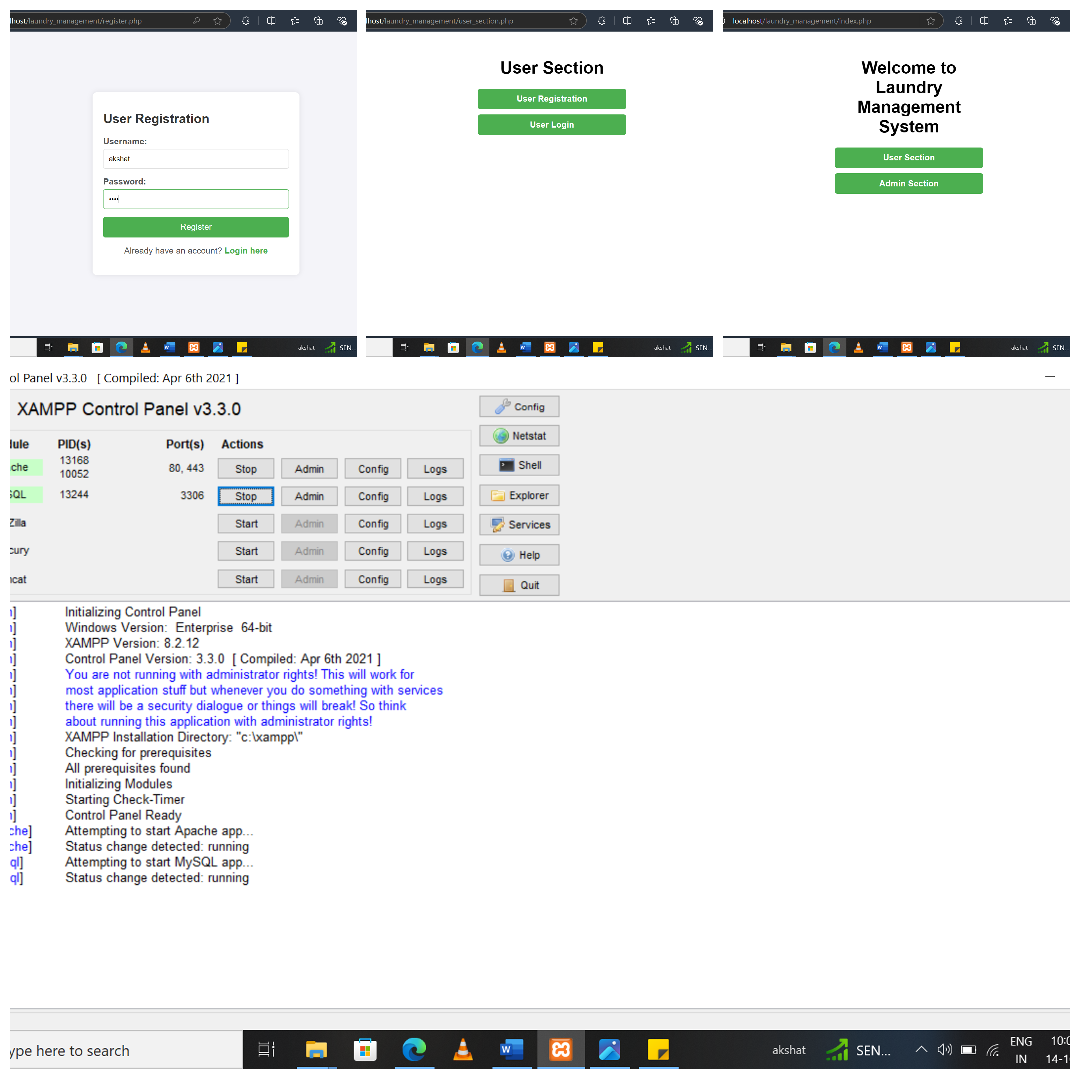
<?php endwhile; ?>

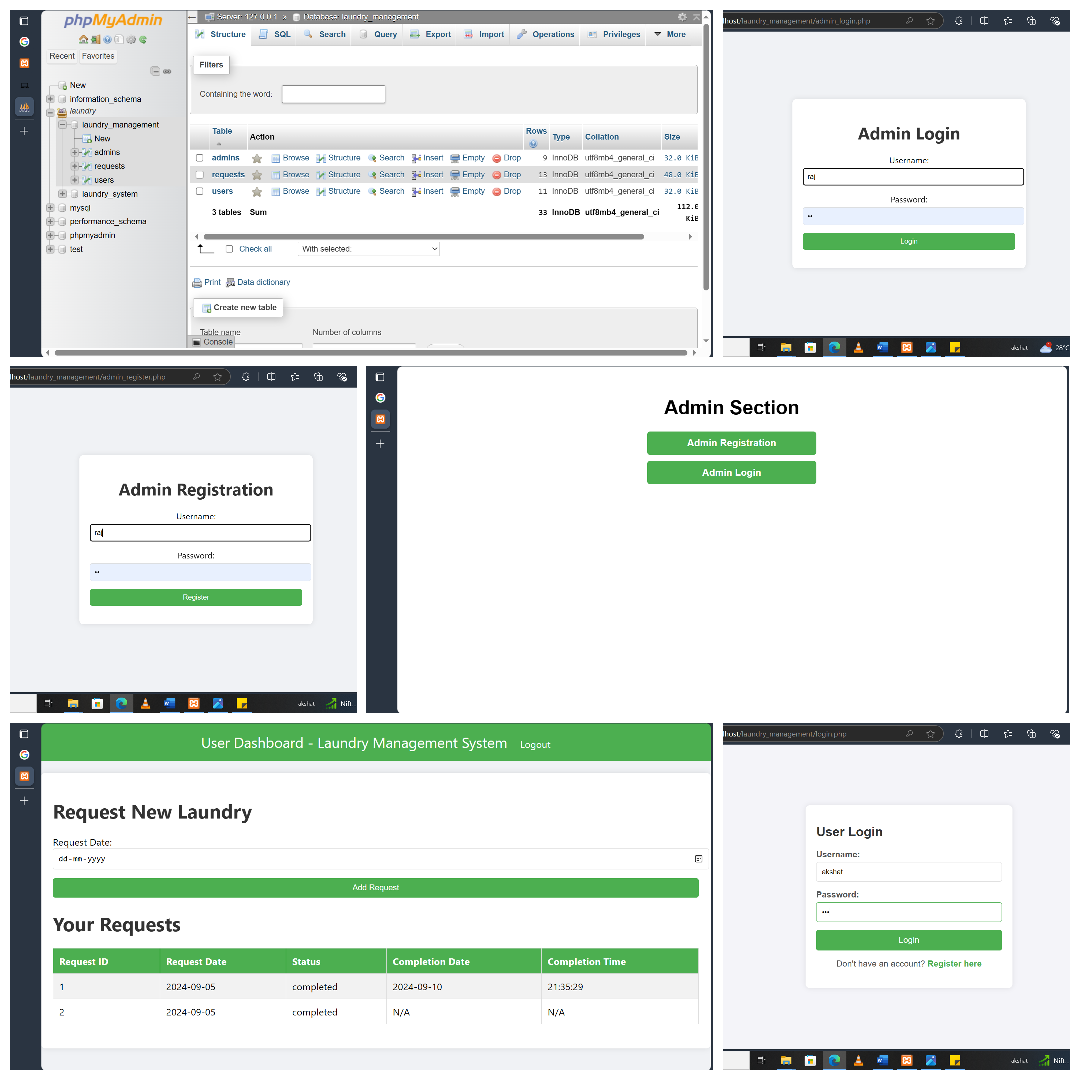
</table>

</body>

</html>

**OUTPUT**

****



**Github :-** https://github.com/itsaxat7479

*end*