SIET LAUNDRY

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ABSTRACT

The SIET Laundry Management System is a comprehensive solution developed to modernize and streamline laundry services within institutional environments such as colleges and universities. Traditional laundry management often relies on manual processes, which are time- consuming, error-prone, and inefficient. This system addresses these issues by introducing an automated platform that enhances operational efficiency and user convenience. The system allows users, including students and staff, to easily book laundry services, schedule pickups and deliveries, and track the status of their orders in real time through an intuitive web or mobile interface. Additionally, integrated digital payment options ensure a seamless transactional experience. On the administrative side, the system offers functionalities such as efficient order management, staff task allocation, and workflow monitoring, enabling a more organized and productive service environment. By leveraging data analytics, the system also provides insights into usage patterns and trends, facilitating informed decision-making for resource optimization and service improvement. The implementation of the SIET Laundry Management System demonstrates the potential of technology in transforming traditional service operations into highly efficient, scalable, and user-friendly models. This paper delves into the design, architecture, implementation, and impact of the system, highlighting its role in enhancing service quality, operational effectiveness, and customer satisfaction in an institutional setting.

CHAPTER 1 INTRODUCTION

1.1 INTRODUCTION TO PHP & MySQL PHP

PHP, which stands for Hypertext Preprocessor, could be a broadly utilized open-source scripting dialect particularly outlined for web improvement. Made by Rasmus Lerdorf in 1994, PHP has advanced into a effective server-side scripting dialect able of making energetic and intuitively web pages. It consistently coordinating with HTML and can be implanted inside it, permitting designers to blend PHP code with HTML for proficient server-side preparing.

MySQL

MySQL could be a prevalent open-source social database administration framework (RDBMS) known for its vigor, unwavering quality, and ease of utilize. Created by MySQL AB, and afterward procured by Prophet Organization, MySQL has gotten to be a foundation within the world of database administration.

1.2 INTRODUCTION TO HTML &CSS HTML

HTML, or Hypertext Markup Dialect, is the standard markup dialect utilized to form and plan web pages. It gives a fundamental structure for web substance by employing a set of labels that characterize components such as headings, passages, joins, pictures, and more.

CSS

CSS, or Cascading Fashion Sheets, could be a styling dialect utilized in web advancement to improve the introduction and appearance of HTML archives. It gives a set of rules that characterize how components on a webpage ought to be shown, permitting engineers to control format, typography, colors, and other visual perspectives that work in pair with HTML, permitting designers to partitioned the structure (HTML) from the fashion (CSS) of a web page.

1.3 INTRODUCTION TO SIET LAUNDRY

"In institutional settings like colleges and universities, where a sizable population depends on laundry services for convenience and time management", these services are an integral part of everyday life. However, manual record-keeping, service delays, and a lack of transparency are just a few of the inefficiencies that traditional laundry management systems frequently face. These difficulties may cause users to become dissatisfied and service providers to face more operating burdens. The SIET Laundry Management System was developed as a technological solution to these problems, with the goal of automating and modernizing the laundry process as a whole.

CHAPTER 2 LITERATURE REVIEW

2.1 Title: Improving Customer Retention in Service-Based Industries: A Synthesis of Literature

Author: Vincent Tinto

Application: SIET Laundry Project

Summary: This synthesis of literature explores customer retention in service-based industries, emphasizing factors such as service quality, customer satisfaction, and trust in fostering loyalty. For SIET Laundry, maintaining strong communication with customers, Drawing parallels to Tinto's retention model, the focus shifts to building customer commitment through excellent service, customer-provider interaction, and creating a personalized laundry experience.

Advantages: Provides a comprehensive review of strategies to enhance customer loyalty.

Disadvantages: May generalize strategies without fully addressing specific customer demographics or preferences unique to SIET Laundry.

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2.2 The Impact of Early Alert Systems on Customer Retention

Authors: James P. Campbell and Diana G. Oblinger

Summary: This adaptation examines the role of early alert systems that use data analytics to identify at-risk customers and provide targeted interventions. It highlights how technology can help reduce customer churn by enabling proactive responses to customer dissatisfaction or disengagement. **Advantages**: Provides objective evidence for identifying at-risk customers. Enables timely interventions, such as personalized offers or improved service experiences.

Disadvantages: Analytics may overlook individual customer preferences or unique service needs. Dependence on data accuracy and quality for effective results.

2.3 Title: "Retention Strategies in Service Industries: An Overview of Effective Practices"

Authors: John M. Braxton, Stephen A. McClendon

Summary: This article explores strategies to improve customer retention, including proactive engagement, personalized support. It highlights the importance of staff involvement in building long-term customer relationships to reduce attrition.

Advantages: Provides actionable strategies for improving customer loyalty

Disadvantages: Resource-intensive approaches, such as personalized support,

2.4 Title" Keeping guests pious to Your Laundry Service Best Practices"

Author: John J. Lee

Summary: This composition explores how

laundry businesses can retain guests by perfecting service quality, enhancing client engagement,

and furnishing robust support to address client enterprises effectively. **Advantages:** Focuses on specific challenges in client retention for laundry services, where churn rates can frequently be advanced than asked .

Disadvantages: Suggested strategies may not always be doable for lower laundromats

or businesses with limited budgets.

CHAPTER 3

EXISTING METHODS

Smart Laundry Systems Devices equipped with IoT sensors can track machine usage, operational status, and send notifications when machines are free or laundry is complete.

3.1 Manual Queue Systems:

Manual Queue Systems First-Come, First-Served: Users manually check for available machines and wait their turn. Sign-Up Sheets: Residents sign up for time slots on a physical sheet posted near the laundry area.

3.2 Smart Laundry System:

Smart Laundry Systems IoT-Enabled Machines Machines equipped with sensors to monitor usage, cycle status, and report availability. Mobile Notifications Users receive alerts when machines are free or their laundry is done. Online Reservation: Mobile apps or web platforms allow users to book machines remotely.

3.3 Payment Integration:

Payment Integration Coin-Operated Machines: Users insert coins to activate the machines. Card or Digital Payments: Payment is made via credit/debit cards or mobile wallets. Prepaid Laundry Cards: Users load money onto a card specific to the laundry system.

3.4 Reservation and Queue Management:

Digital Queue Systems: Users can join a queue via an app or on-site kiosk. Time Slot Booking: Allocating fixed time slots to users to avoid conflicts and waiting times.

3.5 Community Laundry Services:

On-Site Laundry Staff: Staff manage laundry operations for users who drop off their clothes. Subscription-Based Services: Users pay a flat fee for a set number of laundry loads per month.

3.6 Maintenance and Feedback Systems:

Routine Machine Servicing: Regular inspection and cleaning of machines to ensure efficiency and hygiene. Feedback Mechanisms: Users can report issues via apps, QR codes, or suggestion boxes.

CHAPTER 4 PROPOSED METHOD

4.1 Purpose: Implementation:

The purpose of a college laundry website is to streamline and enhance the laundry experience for students living on campus or nearby. It offers a convenient, efficient, and affordable platform tailored to the unique needs of students, enabling them to focus on academics and campus life without worrying about laundry-related hassles.

Expected Outcome:

A dedicated college laundry website not only simplifies laundry management but also ensures a reliable, stress-free, and affordable solution for students, allowing them to focus on their studies and campus activities.

4.2 ECO-FRIENDLY LAUNDRY SOLUTIONS

Purpose:

To promote sustainability by offering eco-friendly washing practices and biodegradable detergents, contributing to environmental conservation.

Implementation:

Use energy-efficient machines and water-saving technologies. Offer incentives for customers who opt for green laundry practices, such as discounts or loyalty points.

Expected Outcome:

Reduced environmental impact and increased customer preference for sustainable laundry services.

4.3 DATA AND USAGE ANALYTICS

Purpose:

To effectively manage college laundry services by leveraging data analytics to understand usage trends, identify patterns in student behavior, and optimize operations. This ensures resources are allocated efficiently, services are tailored to meet student needs, and the overall experience is improved for all users

Implementation:

Monitor peak usage hours and adapt staff and resources accordingly. Use data to identify popular service combinations and introduce tailored packages. Share usage stats with the administration to propose infrastructure improvements if needed.

Expected Outcome:

Efficient service management and enhanced user satisfaction through data-driven decisions.

CHAPTER 5 SOFTWARE DESCRIPTION

5.1 HTML

HTML, or Hypertext Markup Dialect, is the standard markup dialect utilized to form and plan records on the World Wide Web. It structures the substance of a web page by employing a framework of labels and qualities, permitting browsers to interpret and show thesubstance fittingly. HTML may be a foundational innovation for web advancement, giving the essential structure that's improved and styled by CSS (Cascading Fashion Sheets) and made intuitively by JavaScript.

5.2 CSS (CASCADING STYLE SHEETS)

CSS could be a fashion sheet dialect utilized to control the introduction and layout of HTML or XML archives on the internet. It permits designers to characterize styles for components, indicating perspectives such as colors, textual styles, dispersing, and situating. CSS employments selectors to target particular components and affirmations to set their styling properties. Key concepts incorporate the box demonstrate, which characterizes how components are outwardly spoken to, and responsive plan standards to adjust formats to diverse screen sizes.

5.3 PHP (HYPERTEXT PREPROCESSOR)

PHP may be a server-side scripting dialect broadly utilized for web improvement. Initially outlined for making energetic web pages, PHP is implanted inside HTML code and executed on the server, creating HTML yield sent to the client's browser. Key highlights and ideas of PHP incorporate Server-Side Scripting, Factors and Information Sorts, Control Structures Capacities, Database Integration, Server Interaction Object-Oriented Programming (OOP), Security Highlights, Community and Extensibility, Cross-Platform Compatibility.

5.4 MYSQL (STRUCTURED QUERY LANGUAGE)

MySQL could be a social database administration framework (RDBMS) that plays a crucial part in web improvement ventures, counting the grocery store administration framework. It serves as the backend database where information related to items, clients, exchanges, and other essential data is put away. Key highlights and ideas of MySQL incorporate Social Database Administration Framework (RDBMS), Information Capacity and Recovery, Organized Inquiry Dialect (SQL), Information Judgment and Corrosive Properties,Versatility, Security Highlights, and Community Bolster.

5.5 JAVASCRIPT

JavaScript may be a lightweight, cross-platform, single-threaded, and translated compiled programming dialect. It is additionally known as the scripting dialect for web pages. It is well-known for the improvement of web pages, and numerous non-browser situations moreover utilize it. JavaScript may be a pitifully written dialect (powerfully written).
JavaScript can be utilized for Client-side advancements as well as Server-Side advancements.

CHAPTER 6 SOURCE CODE

6.1 PHP CODE

```
<?php session_start();

if ($_SERVER["REQUEST_METHOD"] == "POST") {
$admin_email = $_POST['admin_email'];
$admin_password = $_POST['admin_password'];

$host = "localhost";
$dbusername = "root";
$dbpassword = ""; // Use your MySQL password
```

```
$dbname = "siet_laundry";
$conn = new mysqli($host, $dbusername, $dbpassword, $dbname); if ($conn->connect_error) {
die("Connection Error: " . $conn->connect_error);
}

$stmt = $conn->prepare("SELECT username FROM admin_table WHERE admin_email = ? AND admin_password =
?");
$stmt->bind_param("ss", $admin_email, $admin_password);
$stmt->execute();
$result = $stmt->get_result();

if ($result && $result->num_rows > 0) {
$row = $result->fetch_assoc();
$_SESSION['admin_email'] = $admin_email;
$_SESSION['username'] = $row['username'];

echo "<script> alert('Login successful'); location.href='admin.php'; </script>";
} else {
echo "<script> alert('Invalid email or password'); location.href='login.php'; </script>";
}

$stmt->close();
$conn->close();
}

?>
```

6.2 HTML CODE FOR LOGIN PAGE

```
<!DOCTYPE html>
<html lang="en">

<head>
<meta charset="UTF-8">
<meta name="viewport" content="width=device-width, initial-scale=1.0">

<link rel="stylesheet" href="style.css">

<link href='https://unpkg.com/boxicons@2.1.4/css/boxicons.min.css' rel='stylesheet'> <!--

<title>Login</title>
</head>

<body>

<div class="container" id="container">
<div class="form-container sign-up">
<form >
<img src="EE\images\banner-removebg-preview.png" alt="">
<h1>WORKER</h1>
```

```
<p>Please Login To Worker Page</p>
<input type="text" placeholder="Enter Username">
<input type="password" placeholder="Enter Password">
<a href="#">Forget Password?</a>
<button type="submit">Login</button>
</form>
</div>
<div class="form-container sign-in">
<form action="admin.php" method="POST">
<img  src="EE\images\banner-removebg-preview.png"  alt="">
<h1>Admin</h1>
<p>Please Login To Admin Dashboard</p>
<input type="text" placeholder="Enter Username" name="admin_email">
<input type="password" placeholder="Enter Password" name="admin_password">
<a href="#">Forget Password?</a>
<button type="submit">Login</button>
</form>
</div>
<div class="toggle-container">
<div class="toggle" style="opacity: 1;">
<div class="toggle-panel toggle-left">
<h1 style="opacity: 1;" >SIET <br> LAUNDRY</h1>
<button style="opacity: 1;" class="hidden" id="login">Admin</button>
</div>
<div class="toggle-panel toggle-right">
<h1 style="opacity: 1;"> SIET <br> LAUNDRY</h1>
<button style="opacity: 1;" class="hidden" id="register">Worker</button>
</div>
</div>
</div>
</div>
<script src="script.js"></script>
</body>
</html>
```

CHAPTER 7 RESULT AND ANALYSIS

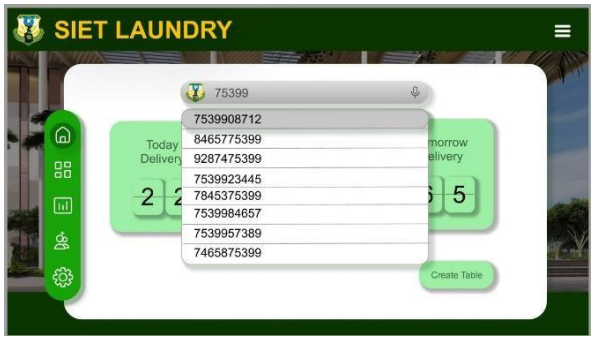
7.1 ADMIN LOGIN PAGE

7.2 WORKER LOGIN PAGE

7.3 ADMIN DASHBORD PAGE

7.4 WORKER DASHBORD PAGE

7.5 WORKER PAGE 1



7.6 WORKER PAGE 2

CHAPTER 8 CONCLUSION AND FUTURE SCOPE

8.1 CONCLUSION

The SIET Laundry Management project takes a comprehensive approach to simplifying laundry services for students by fostering collaboration among service providers, students, and technology. Service providers ensure quality, affordability, and timely delivery, while the system offers an organized platform with booking slots, order tracking, and feedback mechanisms. This integrated model creates a seamless and efficient laundry management experience, enhancing student convenience and satisfaction.

8.1.1 CONNECTING STUDENTS WITH SERVICE PROVIDERS:

The platform bridges the gap between students and laundry service providers, offering streamlined communication, reliable services, and flexible payment options. This connection ensures timely laundry services, reduces hassle, and enhances overall satisfaction.

8.1.2 FINANCIAL OPTIONS:

Affordable and flexible pricing plans are introduced to address students' budget constraints. With transparent pricing and occasional discounts, the platform ensures students can access quality laundry services without financial strain.

8.1.3 SUPPORT SERVICES :

The system provides students with a support structure that includes real-time order tracking, reminders, and customer service. These features help students manage their laundry efficiently, avoid delays, and focus on their academic and personal commitments.

8.1.4 VIRTUAL BOOKINGS, NOTIFICATIONS, FEEDBACK PORTAL, AND ENGAGING FEATURES :

The inclusion of virtual booking systems, automated notifications, a feedback portal, and engaging features like reward points ensures a smooth and interactive experience. These tools help
students stay organized, informed, and connected with the laundry service, fostering trust and loyalty while improving service standards.This adaptable platform not only addresses the current challenges of laundry management but also sets a foundation for future enhancements to meet evolving student needs.

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