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*by Authord Authora*

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## **ABSTRACT**

The project titled “WORKFORCE MANAGEMENT WEBSITE FOR YELLOWBAG FOUNDATION” has been initiated for the community known as the “YellowBag Foundation”. YellowBag Foundation is a non-governmental organization that intertwines consciousness with women empowerment. The primary objective of this project is to minimize manual work and reduce time consumption. The community faces challenges such as a lack of access to employee data, difficulties in attendance management, addressing basic client queries, salary calculations, and understanding employee performance. This project includes modules such as an employee database, attendance processing, customer E-form, automated salary calculation, and performance analysis.

We have provided solutions for their problems in each module, and each module has its own functionalities. Accessing the details of the employee can be done through the employee database module. The attendance processing module is designed to process and filter the attendance data from the biometric system. The customer E-form module facilitates interactions between administrators and customers. The salary calculation module automatically calculates the salary of the employees in the context of piece rate and per day. Analyze the feedback data from customers to extract insights through the performance analysis module. The project utilizes HTML, CSS, JavaScript, PHP, Bootstrap, and MySQL to create a user-friendly interface and effectively manage data. The beneficiary of the project includes everyone involved. Employees will get easier tasks, clients will receive better services, and the community benefits from the more efficient YellowBag Foundation.

# **INTRODUCTION**

## **1. INTRODUCTION**

### **1.1) ABOUT THE COMMUNITY**

#### **COMMUNITY PROFILE**

<b>Community Name</b>	YellowBag Foundation
<b>Co-Founder</b>	Mrs.Gowri R G, Mr.Krishnan
<b>Founded In</b>	2014
<b>Place</b>	Madichiyam, Madurai
<b>Pin code</b>	625020
<b>Purpose</b>	To foster local women's empowerment and environmental consciousness while adhering to principles of happiness, transparency, efficiency, honesty, and safety in business practices.
<b>Contact persons</b>	Mrs.Gowri, Ms.Deepika, Ms.Harini, Ms.Sakthi Priya
<b>Telephone number</b>	98401 66905
<b>Address</b>	3B, Middle St, Mathichiyam, Shenoy Nagar, Madurai, Tamil Nadu 625020
<b>Email</b>	<u><a href="mailto:ncyellowpages@gmail.com">ncyellowpages@gmail.com</a></u>

YellowBag Foundation is a non-governmental organization committed to intertwining environmental consciousness with women's empowerment. With a dual mission of combating plastic pollution through sustainable practices and uplifting women by providing them with valuable skills and employment opportunities.

The geographic community, focusing on local empowerment, believes their impact will resonate far beyond their immediate surroundings, contributing to a more sustainable and interconnected world.

The YellowBag Foundation's objectives encompass an eco-friendly approach through the manufacture of cloth bags, directly combatting plastic pollution, and a commitment to women's empowerment by imparting skills in stitching and bag making to women in slum areas, providing stable income and enhancing self-worth. As more than just an organization, YellowBag Foundation represents a movement towards a greener, more equitable world. Their ethical manufacturing practices prioritize happiness, transparent communication, streamlined processes, honest pricing, and safe working conditions, reflecting their dedication to sustainability and social responsibility.

## **1.2) ABOUT THE PROJECT**

Our project's objective is to minimize the amount of manual labor that our community must perform by offering methods to improve workforce management procedures. It provides a comprehensive platform with multiple important capabilities, which benefit our community. It does this by centralizing personnel records into a very effective database management system and automating the compensation computations for two different categories of employees. To track late hours and enable accurate salary calculations, the system also makes use of biometric attendance data. Employing forms for preliminary talks and gathering feedback for after-product deliveries, further improves customer relations. Ultimately, a user-friendly dashboard facilitates the analysis of employee performance and customer happiness, allowing users to make well-informed decisions.

### **Employee database management:**

With CRUD operations for record administration, the project provides a special admin panel module for handling employee data. Search functionality by name and birthdate is integrated for speedy data retrieval, and a display function allows access to particular employee data. For improved sharing and accessibility, users can also export personnel data in CSV format.

### **Customer interaction and feedback E-form:**

Creating an E-form that can be accessed through the customer or user panel to collect customer data is the main focus of this module. The first E-form gathers background data, and standard details, and displays product categories via a PDF catalog that the admin can modify via the admin panel. To collect client ratings after delivery, it also incorporates a feedback form, which stores information in a database for further review.

### **Tracking delayed hours:**

When an employee arrives late, returns late from a break, or leaves early, this module accounts for the delayed hours. Every month, the admin uploads biometric data to be processed and stored on the backend. To display calculated data, the admin can choose the month, year, and names of the employees. Red highlights indicate 30-minute or more delays for early or late departures, as well as 15-minute or more delays for breaks. A clean function also makes it possible to remove superfluous records. Regular late hours and breaks are calculated independently.

### **Salary calculation:**

The project's main goal is to reduce the burden of wage computation, which is a laborious activity in our community. Piece rate and daily pay computation are the two employee kinds for which it provides salary computation. The project's design incorporates administrative

decision-making, and administrators can enter essential data, including computed late hours from the attendance processing module. For accurate computation, Sunday working hours and overtime are also accounted for. Salary calculations are instantly saved in the database for easy management.

### **Performance analysis:**

We have an analytical module to evaluate consumer input in addition to our primary objectives. Module 2 feedback data is used for customer satisfaction analysis. Bar graphs are one example of a visualization tool that helps with data comprehension and promotes productivity and community improvement. By identifying areas for improvement, these insights assist stakeholders in creating a community climate that is more effective and responsive.

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## **SYSTEM ANALYSIS**

## **2. SYSTEM ANALYSIS**

### **2.1) EXISTING SYSTEM**

- In the first module, the current system is that they are manually recording employee details on physical documents and need to maintain a separate hard copy of each employee. This method leads to slower processes, potential data errors, and limited accessibility.
- In the second module, the current system is that the attendance details of employees are recorded using a biometric system and stored in an Excel sheet. The second module involves the manual calculation of regular late time and breaks late time based on the recorded data.
- In the current system of the third module, they have a bag order system on their website, which falls short in capturing essential customer details, such as the background, purpose of buying, and bags with or without print. Additionally, it may lack the necessary features to effectively address basic customer queries.
- In the fourth module, the current system involves maintaining employee salary details in an Excel sheet. However, the process for calculating overtime, Sunday working hours, and delayed hours is manual. They need to handle both piece rate and per-day salary calculations.
- In the fifth module, there's currently no established framework for analyzing feedback from the customers.

## **2.2) PROPOSED SYSTEM**

Our project aims to enhance overall organizational efficiency through the five modules.

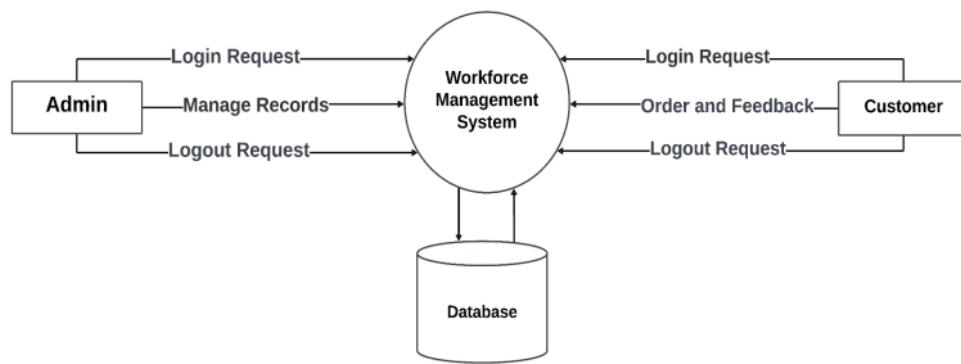
- The Employee Database Management module includes an admin panel that offers a user-friendly environment for executing CRUD operations on employee records, enhancing overall data management efficiency.
- It includes insert, and delete functionality.
- It provides a view function for accessing specific employee data and search functionality by name and date of birth for quick data retrieval.
- It provides an edit function for modifying specific employee data.
- Admin has the provision to export employee data in CSV format, promoting enhanced accessibility and effortless sharing of information.
- The Attendance Processing module focuses on calculating the delayed hours of both late arrivals in the morning and late returns from breaks. This information can be stored in separate fields called 'late' and 'break\_late'.
- Monthly biometric data is uploaded by the administrator for backend storage and subsequent processing. Admin has a provision to view the calculated delay hours of employees by selecting a specific month and year. Delayed hours of an employee can be highlighted in red. Additionally, a clean function enables admins to remove unwanted records.
- The customer E-form is designed to offer users a convenient electronic form accessible from the user panel.
- The initial E-form collects basic details like customer name, address, phone number, background, purpose, and date, and includes product types through the catalog PDF, which can be downloaded by the customer, and the admin can update the catalog pdf from the admin panel.
- It includes a customer feedback form with ratings. This information can be stored in a database for customer satisfaction analysis. Admin can have access to search for and view specific customer's login and feedback details.

- The salary Calculation module mainly focuses on reducing the manual calculation of salary. This is considered to be a major problem in our community. This module handles both piece rate and per-day salary calculations.
- This module enables administrators to input essential data, such as late hours, sourced from the attendance processing module, to compute an employee's salary accurately. Overtime working hours are also considered for accurate salary calculations.
- Salary calculation also considers the Sunday working hours, it can be done by checking whether the employee has an entry on Sunday from the attendance processing module. Sunday and overtime working hours can significantly improve efficiency in payroll processing.
- The Performance Analysis module analyzes customer satisfaction for the overall improvement of the organization.
- Customer analysis is done by retrieving customer feedback data from a database. We used Chart.js to present the data through bar charts for better understanding. This analysis approach evaluates workforce efficiency.

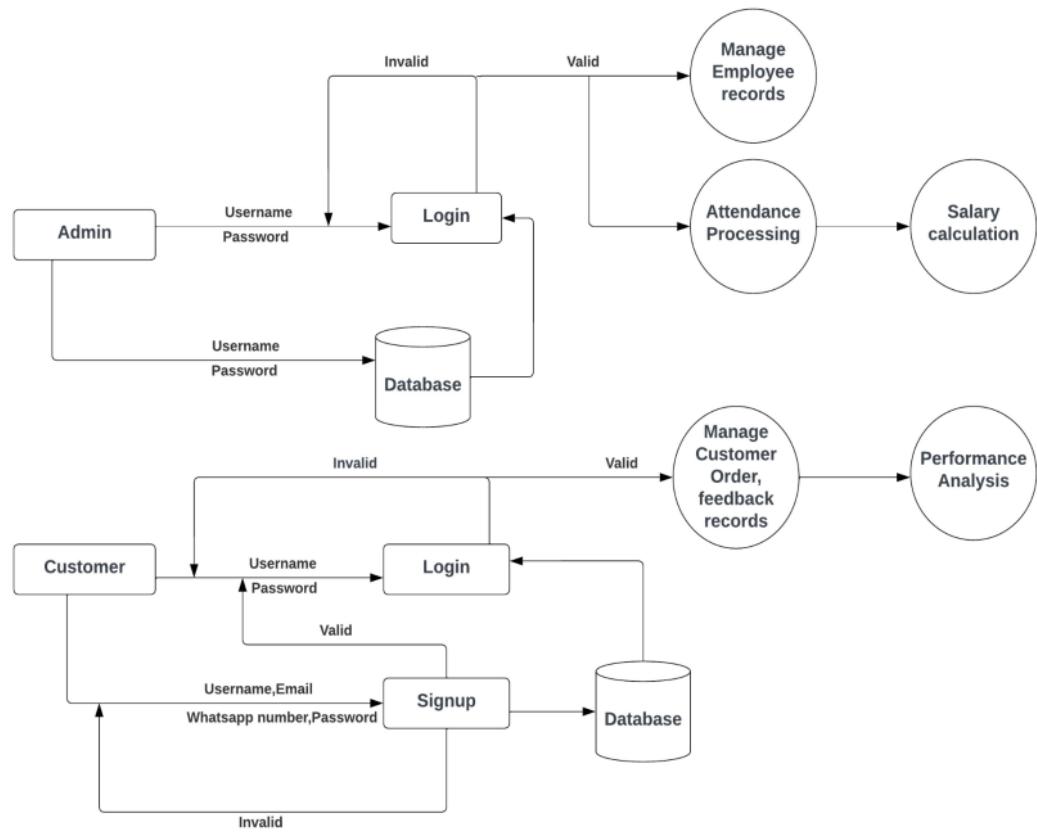
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### 2.3) DATA FLOW DIAGRAM

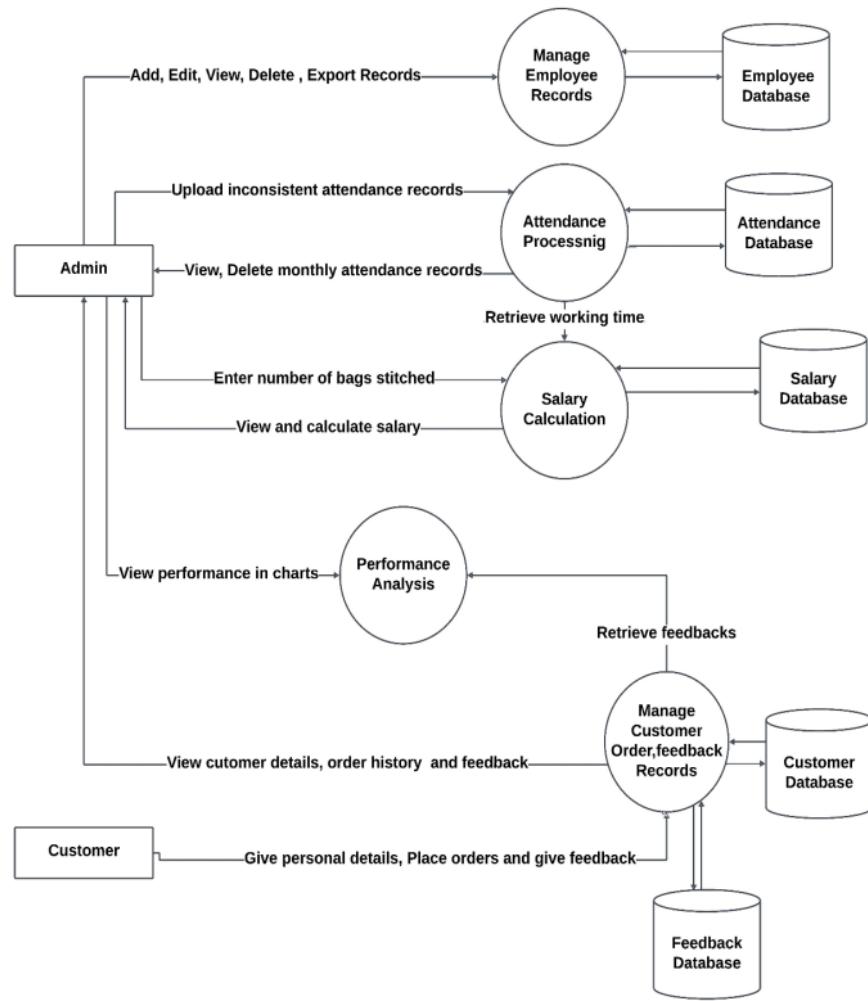
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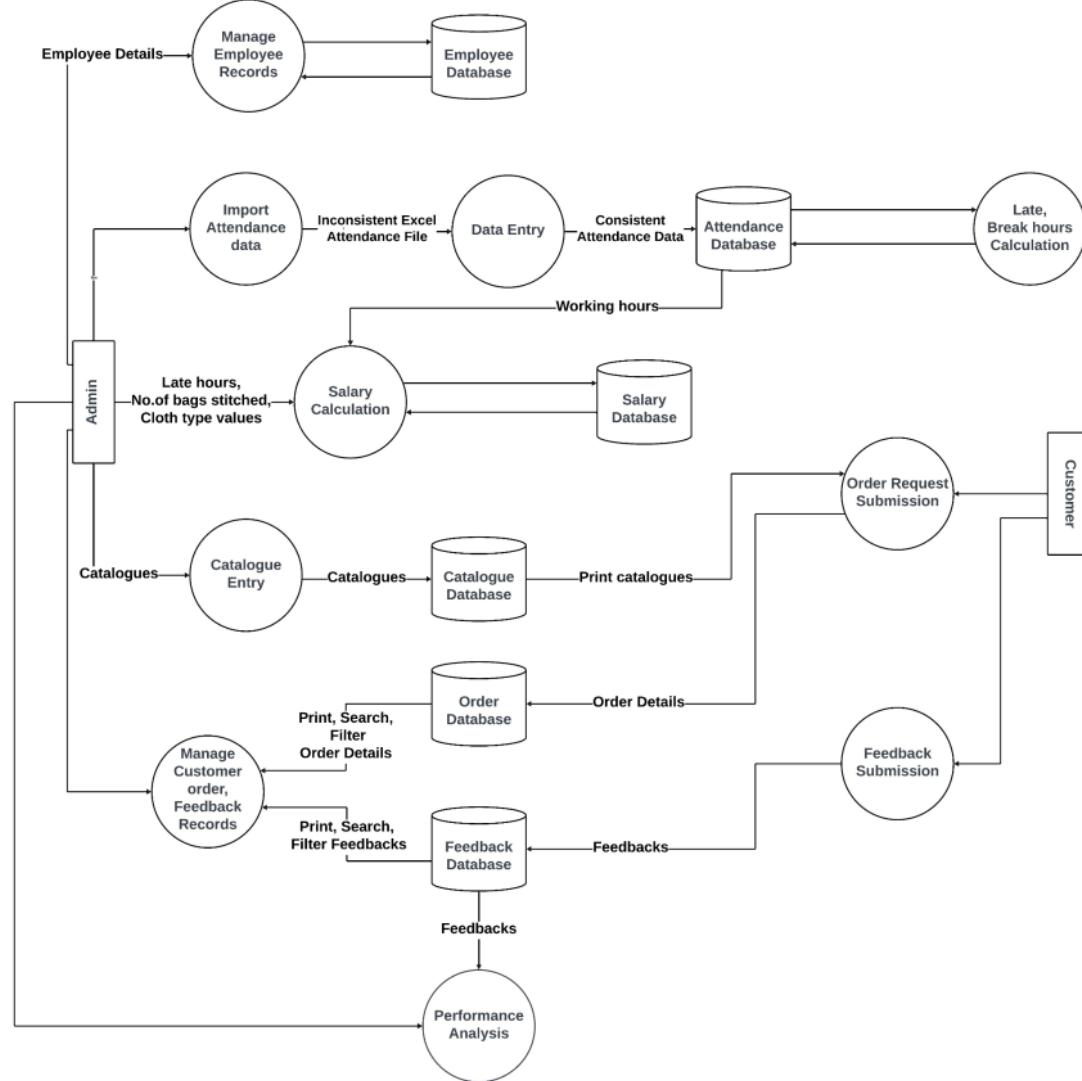
## Level 1:



### Level 1.1:



## Level 2:



## **METHODOLOGY**

## **3. METHODOLOGY**

### **3.1) DATA COLLECTION:**

Through the methodical process of data gathering, individuals can obtain information from multiple sources to obtain a comprehensive and precise picture of a particular topic of interest.<sup>14</sup> To obtain information from our community, we choose to use three distinct data collection techniques.

#### **Telephone interview:**

A telephone interviewing strategy was selected for the first exchange of information. In a conference call with our team, we interviewed Mr. Krishnan, the co-founder of YellowBag Foundation. It became clear from the talk that they were happy for us to help with the management field or get involved in their kids' schooling. We also learned some fundamental information about their background and body of work. For more planning and discussion, a visit to the neighborhood was planned.

#### **Observation:**

Mr. Mohamed Gani, the YellowBag Foundation's Project Lead for Education Initiatives, was one of the people we spoke with during our community tour. We learned more about the working conditions and procedures of the foundation. To push technology solutions, our team identified problems and clarified our goals. We visited the education tutorial center and became acquainted with production and management procedures through observation. Mr. Gani brought up the difficulties that kids in impoverished communities encounter in their academic lives. The production/management or education efforts were our two possible areas of problem-solving. Following debate within the team, we decided to match our skills with a tough opportunity and concentrate on offering solutions in the production/management field.

### **Direct interview:**

We spoke with a variety of people on our many visits to the community to get the information we needed. To obtain the necessary input data and to comprehend how our business functions, we spoke with a variety of people through interviews. One of the co-founders, Mrs. Gowri Krishnan, met with us to discuss the needs of the community and how we may be of assistance. To obtain further information, we also had in-person interviews with Ms. Sakthi Priya, the production manager; Ms. Harini, the finance team member; and Ms. Deepika, the sales and marketing representative.

### **Interview Questions:**

- How is employee information currently maintained in your organization?
- Which platform is currently used for calculating the salaries of the employees?
- What specific information fields do you currently collect and maintain in the employee database?
- Are there any specific fields that would be valuable to include in the employee database?
- What operations or functionalities, like viewing or deleting records, do you believe would enhance the efficiency of the employee database?
- How do you think we can enhance your interaction with customers?
- Would you find it beneficial to have digital forms where clients can provide answers to essential questions before placing an order?
- What specific questions can be provided in the customer E-form?
- Considering feedback received from customers, can we implement a dedicated module for analyzing that feedback?
- Do you prefer using a star rating system or another type of rating (e.g., numerical rating, satisfaction scale) for feedback form?
- What specific types of charts or graphs do you prefer for displaying feedback metrics?
- How do you currently track attendance in your organization?
- Could you provide a sample representation of how attendance data is recorded?
- How is this attendance information related to the calculation of employee salaries?

- Could you provide a sample representation(Google Sheets), illustrating the components involved such as base salary, overtime hours, and the overall formula for determining the total salary for an employee?
- How is the salary calculation structured differently for line helpers compared to piece rate workers in your organization?

### **3.2) ANALYSIS OF DATA:**

Analyzing data is looking through gathered information to get insightful conclusions and guide decision-making. To find patterns, trends, and correlations, data must be arranged, analyzed, and summarized.

We were able to gather information regarding the community's operations through observation and telephone interviews. We learned about the two issues for which the community is looking for solutions.

#### **In the management sector:**

Our community faced difficulties in manually determining pay for different kinds of workers, which involved laborious procedures like figuring out working hours by hand using biometric data. This computation was intricate since it took into account other elements including bonuses, overtime, late hours, and Sunday working hours. Furthermore, there was no digital storage available for employee data, meaning that editing information on any employee record is challenging. Instead, employee records were only kept in hardcopy format.

#### **In education initiatives:**

We learned about the difficulties slum children in the community encounter in their schooling through our participation in tutoring programs. Parental involvement in monitoring their children's educational development is restricted to paying tuition, as both parents frequently work to support their families. To empower women, mothers are also allowed to work as tailors

in the community. In addition, the pupils' lack of background knowledge in the subject necessitates longer class periods to assist them in understanding fundamental ideas. We deduced that there aren't many ways that technology can assist in this situation.

We decided to concentrate on offering solutions for the management industry after taking into account these factors. This choice was made in light of our evaluation.

### **Final analysis:**

- Provide easy access to employee details.
- Simplify customer order management with an electronic order acquisition form.
- Providing Customer feedback E-form for improvement in production lines.
- Handle piece rate and per-day salary calculations accurately.
- Ensure precise and transparent salary computations to minimize discrepancies.
- Exhibit performance analysis to offer insights for workforce evaluation and strategy adaptation.
- Foster continuous improvement and support organizational growth for the YellowBag Foundation.

# **SYSTEM SPECIFICATION**

## **SYSTEM SPECIFICATION**

### **4.1) SOFTWARE SPECIFICATION:**

#### **INTRODUCTION:**

The project “Workforce Management Website for YellowBag Foundation” is developed to enhance the operational efficiency within the YellowBag community. The project addressed challenges such as manual employee data management, and attendance tracking to create a more efficient work environment.

#### **FUNCTIONAL REQUIREMENTS:**

The software encompasses various functional modules tailored to meet the specific needs of the YellowBag Foundation community. In the realm of Employee Database Management, the system enables the seamless addition, editing, and removal of employee records. This includes the efficient storage and retrieval of critical employee details, positions, and contact information.

The Attendance Processing module facilitates the collection and processing of attendance data sourced from the biometric system. Additionally, it empowers users to generate comprehensive attendance reports with flexible filtering options, providing a detailed overview of attendance patterns.

The Customer Order E-Form module introduces an electronic form, enabling customers to submit orders conveniently. Ensuring the secure storage and easy retrieval of customer order information, this feature enhances the community's ability to manage client interactions.

Automated Salary Calculation stands out as a key functionality, automating the computation of salaries based on piece rate and per-day criteria. The system generates transparent and detailed salary reports, offering clarity and efficiency in financial processes.

The Performance Analysis module provides a comprehensive dashboard for feedback analysis.

## **NON-FUNCTIONAL REQUIREMENTS:**

In terms of usability, the software prioritizes the development of an intuitive and user-friendly interface. This facilitates easy navigation, ensuring accessibility for all users. Security measures are integral to the software's design. The implementation of secure user authentication and authorization mechanisms is used to protect against unauthorized access.

## **HARDWARE AND SOFTWARE REQUIREMENTS:**

### **HARDWARE:**

#### **Server:**

- Dual - core processor
- 4 GB RAM
- 100 GB SSD storage
- Reliable internet connection

#### **Client Side:**

- Any modern device
- Updated web browser

### **SOFTWARE:**

#### **Server:**

- OS: Windows
- Database: MySQL
- Server side script: PHP

#### **Client Side:**

- Web browser: Chrome,Firefox,Microsoft edge etc(Any one of these)

## **USER INTERFACE DESIGN:**

Creating an inviting and easy-to-use interface is a crucial part of our software. We use HTML, CSS, JavaScript, PHP, and Bootstrap to build a visually appealing and user-friendly platform. Our focus is on making the design simple and clear, ensuring that users find it easy to navigate. This emphasis on simplicity enhances the overall user experience, encouraging engagement and making the software easy to use.

## **SYSTEM ARCHITECTURE:**

The software follows a three-tier architecture, consisting of a user interface layer, data storage layer and business logic layer. This architecture ensures scalability, maintainability, and flexibility, forming a robust foundation for effective data management and system functionality.

## **DATA MODEL:**

The data model, a crucial component of the software, includes well-structured tables for the employee database. These tables encompass a range of information, including personal details, positions, and contact information. Relationships are carefully established to facilitate efficient data retrieval and ensure a comprehensive employee database. Similarly, the attendance data component involves structured tables securely storing biometric attendance data.

## **DEPENDENCIES:**

For optimal functionality, the software relies on specific external libraries and tools. These dependencies, which include [jQuery], and [Font Awesome] play a crucial role in enhancing the overall performance and user experience of the software. Each dependency is carefully selected and integrated to contribute to the software's effectiveness.

**jQuery:**

A rapid and feature-rich JavaScript library that streamlines tasks such as DOM manipulation and event handling. It streamlines the process of writing JavaScript code, making it more efficient and concise.

**Font Awesome:**

A comprehensive icon set and toolkit that includes a wide range of scalable vector icons. Font Awesome is commonly used to enhance the visual appeal of websites and applications by incorporating stylish and customizable icons.

**4.2) PROJECT SPECIFICATION:****PROJECT DESCRIPTION:**

Our main goal is to make things easier for the YellowBag Foundation when it comes to managing its workforce.

**ADMIN PANEL:****Login page:**

After successful authentication on the login page, administrators are seamlessly redirected to the Dashboard interface. Here, they gain access to a centralized platform where they can efficiently manage various aspects of the project.

**Dashboard page:**

The dashboard comprises five distinct card buttons that represent crucial functionalities essential for smooth organizational operations. Each card serves as a gateway to a specific module, providing users with quick access to pertinent information and tools. The cards, labeled with their respective module names - "Employee Records," "Attendance Processing," "Customer E-Form," "Salary Calculation," and "Performance Analysis" - offer a streamlined interface for managing personnel, attendance, customer interactions, payroll, and performance analysis.

Through intuitive design and layout, the dashboard empowers users to navigate effortlessly and efficiently accomplish tasks, enhancing overall productivity and decision-making processes.

#### **Employee records page:**

The employee records page directs the admins to the main interface displaying all employee names along with essential details. The interface features a tabular format with rows representing individual employees. Each row contains options to view, edit, or delete the respective employee's details, facilitating efficient management. At the top of the interface, prominent buttons allow administrators to perform additional actions. The "Insert" button enables the addition of new employees to the database, streamlining the process of onboarding new personnel. The "Search" button offers a convenient way to locate specific employees within the database, enhancing accessibility and organization. Furthermore, administrators have the option to export the current employee details into a CSV file for external use or record-keeping purposes, ensuring data portability and compatibility with other systems. Lastly, a "Dashboard" page link is provided at the header, allowing administrators to seamlessly navigate back to the main dashboard interface for comprehensive management of various project modules. The header contains logout functionality. This logout redirects the admin to the login page.

#### **Attendance processing page:**

The Attendance Processing interface provides administrators with a user-friendly platform to manage attendance-related tasks efficiently. The header of the page features essential functionalities such as a quick link back to the dashboard. At the top panel of the interface, administrators encounter three tabs:

- **Import tab:** This tab facilitates the importation of attendance data from CSV files. Administrators can utilize the "Browse" option to locate and select the desired CSV file, followed by the "Upload" button to transfer the attendance records into the attendance database.

- **Individual attendance tab:** Within this tab, administrators can search for individual employee attendance details based on specified criteria such as month and year. Upon entering the search parameters, the interface displays a list of employee names. A "Display Attendance" button allows admins to visualize the selected employee's attendance data, including in-time, out-time, breaks, and lateness by clicking on a particular employee's name.
- **Clean tab:** The "Clean" tab provides functionality for clearing and exporting recently uploaded CSV files from the system, ensuring optimal data management and organization.

#### **Customer E-form page:**

Initially, the user credentials of the public who uses the user panel are displayed. Admins are also presented with a page featuring five buttons:

- **Catalogs:** Allows admins to upload saree bags and promotional bag catalogs.
- **Orders:** Allows admins to view customer details and order requests.
- **Feedback:** Provides access to view feedback details submitted by customers.
- **Search:** Enables admins to search for specific customer orders and feedback using unique usernames.
- **Filter:** Offers functionality to filter order and feedback details based on specific date ranges.

#### **Salary calculation page:**

The Salary Calculation page presents two tabs: "Day Workers" and "Piece Rate Workers," catering to different types of employees.

- **Piece rate workers tab:** Users can input the month and year and click the "Search" button to display a list of employee names. Upon selecting a particular employee, administrators can click the "Display Salary" button. This action generates a table displaying relevant salary details, including date, overtime salary, number of bags, cloth type value, Sunday salary, and an "Action" column with a "Calculate" button for computing the daily salary. The monthly salary of the specific employee is displayed.

- **Day workers tab:** The process is similar to that of Piece Rate Workers, with the omission of the "Number of Bags" and "Cloth Type Value" columns in the salary calculation table. Otherwise, the functionality remains consistent across both tabs.

#### **Performance analysis page:**

The Performance Analysis page has two tabs: "Dashboard" and "Feedbacks".

- **Dashboard:** An animated dashboard with numbers representing various metrics such as orders, feedback, admins, employees, customers, and catalogs can be visually appealing and informative.
- **Feedback:** Feedback analysis displays satisfaction scores using charts. Admins can select a specific month for analysis.

#### **CUSTOMER PANEL:**

##### **Login, Signup, Forgot password, Reset password pages:**

Customers access the system through a login page requiring a username and password. New users have the option to sign up via a provided link, leading to a signup page. The signup page requests essential information such as username, password, phone (WhatsApp number), and email. Additionally, a "Forgot Password" link is available to reset the password by entering the email and username. The user will be directed to the reset password page for setting a new password with confirmation.

##### **Order request form page:**

Upon successful login, customers are directed to a form page where they can input basic information about their orders. The form collects customers' information and enables customers to choose their order preferences.

##### **Feedback page:**

The form allows users to select a star rating and add comments to assist the administrators of the YellowBag Foundation in enhancing their services.

## **PROJECT DELIVERABLES:**

### **Fully functional website:**

The final output will be a comprehensive website tailored specifically for YellowBag Foundation members. The design prioritizes user-friendliness, ensuring easy navigation across all modules.

## **PROJECT CONSTRAINTS :**

### **Timeline:**

Timely completion is imperative. The project is structured with well-defined milestones and deadlines, ensuring adherence to the agreed-upon timeframe.

## **PROJECT ASSUMPTIONS:**

### **User access:**

We proceed with the assumption that users will possess the necessary credentials for system access. To secure this access, robust login and authentication mechanisms are being implemented.

### **Data accuracy:**

Our project works under the assumption that the data entered into the system is accurate. To maintain this accuracy, validation procedures are also integrated.

## **SOFTWARE PROFILE:**

### **HTML:**

HTML is the fundamental language used to create the structure of web pages. It employs a markup system using tags to define elements such as headings, paragraphs, images, and links.

**Reason to choose HTML:**

HTML was chosen because of its simplicity and universality in creating the basic structure of web pages. It ensures easy integration and compatibility across various platforms and browsers, contributing to a consistent user experience.

**CSS:**

CSS is used to style and format the visual representation of HTML elements on a web page. It allows for the customization of colors, fonts, layouts, and overall aesthetics.

**Reason to choose CSS:**

CSS is essential for enhancing the visual appeal of our website. By separating the presentation from the structure (HTML), CSS provides flexibility and maintainability in design. This ensures a visually attractive and consistent appearance across various pages.

**Javascript:**

JavaScript is a scripting language that enables web pages with interactive and dynamic functionalities. It allows for the creation of responsive elements and enhances user engagement.

**Reason to choose Javascript:**

JavaScript is selected to add interactivity and dynamic functionalities to our website. It enables features such as form validation, real-time updates, and improved user interfaces, enhancing the overall user experience.

**PHP:**

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PHP is a server-side scripting language utilized in web development. It facilitates the creation of dynamic web pages by processing data on the server before delivering it to the client's browser.

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### **Reason to choose PHP:**

PHP is a suitable choice for server-side processing in our project. It helps in automating tasks, handling forms, and interacting with databases. Its versatility and compatibility with various databases make it an ideal tool for building dynamic web pages.

### **12 MySql:**

MySQL is a relational database management system (RDBMS) used for storing and handling data. It is widely used for creating, querying, and managing databases.

### **Reason to choose MySql:**

MySQL is selected for its reliability and efficiency in handling database operations. It provides a robust and scalable solution for storing and retrieving data, ensuring optimal performance for our web application. By integrating HTML, CSS, JavaScript, PHP, and MySQL, we create a well-rounded and efficient web solution that addresses the specific needs of our project while ensuring a seamless and engaging user experience.

# **SOFTWARE DESIGN**

## 5. SOFTWARE DESIGN

### 5.1) INPUT AND OUTPUT DESIGN:

#### INPUT DESIGN:

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Input design is the process of converting a user-centric description of input into a computerized system.

#### Admin Panel:

- **Login Page:** Admins input user credentials (username and password) for accessing other tabs.
- **Employee Records Page:** Admins input comprehensive employee details ensuring accurate storage in the database.
- **Attendance Processing Page:** Admins utilize CSV file import to input attendance data for the month, processed to calculate in-time, out-time, late hours, and break late hours for each employee daily.
- **Customer E-Form page:** Admins upload PDF files within the Customer E-Form tab to showcase various catalogs for users in the user panel.
- **Salary Calculation Page:** Admins select a month, year, and employee, inputting hours worked per day for day workers or items stitched and their values for piece-rate workers, computing daily salaries accordingly.

#### User Panel:

- On the login page, users enter their credentials to access the system.
- A sign-up option allows new users to create an account.
- The forgot password feature verifies the username and email match before enabling password reset.
- Users can reset their password by entering a new password and confirming it. Access to the order requests and feedback forms is granted upon successful authentication.
- In the Order Request Form, essential details like customer name, purpose, background information, and printing preferences (with print/without print) etc are collected. These details are stored in the database for administrators to view and initiate further contact if

needed. Similarly, feedback from users is gathered through the Feedback Form, and all feedback data is stored in the database for analysis and reference.

### **OUTPUT DESIGN:**

Output design is crucial for presenting information, emphasizing clarity and interactivity through a combination of textual and graphical elements to ensure effective communication with users. Employee, orders, feedback, attendance, and salary details are presented in a tabular format for easy comprehension. This design facilitates efficient data retrieval and management. Administrators can utilize search and filter features to locate specific records. Administrators can export employee records as CSV files, allowing for seamless data sharing, analysis, and integration with other systems. Generated charts like bar graphs offer visual insights into feedback analysis. By representing data graphically, administrators can gain a deeper understanding of customer sentiment and workforce efficiency, facilitating informed decision-making and strategic planning.

### **5.2) TABLE DESIGN**

#### **Database name: yellow bag**

Table name: admin ( for storing Admin details )

S.No	Variable name	Datatype	Constraint	Description
1.	id	int(11)	Primary Key, Notnull, auto_increment	Unique id
2.	user	varchar(20)	Not null	Name of the admin
3.	password	varchar(20)	Not null	Password of the admin

Table name : employee ( for storing Employee details )

S.No	Variable name	Datatype	Constraint	Description
1.	id	int(11)	Primary Key, Notnull, auto_increment	Unique id
2.	name	varchar(250)	Not null	Name of the employee
3.	photo	long blob	Not null	Photo of the employee
4.	age	int(11)	Not null	Age of the employee
5.	gender	varchar(250)	Not null	Gender of the employee
6.	dob	date	Not null	DOB of the employee
7.	joining_date	date	Not null	Company joining date
8.	education	varchar(250)	Not null	Education qualification of the employee
9.	job_designation	varchar(250)	Not null	Job designation of the employee
10.	current_address	varchar(500)	Not null	The current address of the employee
11.	permanent_address	varchar(500)	Not null	Permanent address of the employee
12.	phone_no	varchar(20)	Not null	Phone number of the employee

13.	contact_person_no	varchar(20)	Not null	Relative's / Friend's phone number
14.	aadhaar	varchar(12)	Unique, Not null	Aadhaar number of the employee
15.	pan_number	varchar(250)	Not null	Pan number of the employee
16.	spouse	varchar(250)	Default null	Spouse name of the employee
17.	rejoining_date	date	Default null	Company rejoining date
18.	rejoin_reason	varchar(500)	Default null	Company rejoining reason
19.	g-pay	varchar(20)	Default null	G-pay number of the employee
20.	<sup>4</sup> recipient_name	varchar(250)	Not null	The recipient name of the employee in a bank
21.	bank_name	varchar(500)	Not null	Bank name
22.	ifsc_code	varchar(250)	Not null	-IFSC code
23.	bank_account_no	varchar(250)	Not null	Bank account number
24.	entry_date	date	Not null	Date of data entry

Table name: user ( for storing User details )

S.No	Variable name <sup>5</sup>	Datatype	Constraint	Description
1.	Id	int(11)	Primary Key, Notnull, auto_increment	Unique Id <sup>2</sup>
2.	Username	varchar(50)	Not null	Username
3.	Password	varchar(150)	Not null	Password
4.	Email	varchar(50)	Unique, Not null	Email ID of the user <sup>3</sup>
5.	Phone	varchar(10)	Not null	WhatsApp number of the user

Table name: catalog ( for storing Catalog pdf )

S.No	Variable name	Datatype	Constraint <sup>4</sup>	Description
1.	pdf_id	int(11)	Primary Key, Notnull, auto_increment	Unique pdf id
2.	file1	long blob	Not null	Saree Bags catalogue pdf
3.	file2	long blob	Not null	Promotional Bags catalog pdf

Table name : order ( for storing Order details )

S.No	Variable name	Datatype	<sup>4</sup> Constraint	Description
1.	order_id	int(11)	Primary Key, Notnull, auto_increment	Unique order id
2.	<sup>21</sup> user_id	int(11)	Foreign Key, Not null	User id
3.	order_date	timestamp	Not null, Default current_timestamp()	Date of order request entry
4.	name	<sup>3</sup> varchar(255)	Not null	Name of the user
5.	address	varchar(255)	Not null	Address of the user
6.	phone	varchar(20)	Default null	Resident / Office phone number of the user
7.	background	varchar(50)	Not null	Background of the user
8.	purpose	varchar(250)	Not null	Purpose for order request
9.	occurrence	varchar(255)	Not null	Engagement type of the user with the company
10.	gst	<sup>2</sup> varchar(50)	Not null	GST information
11.	print_type	varchar(50)	Not null	Print information
12.	print_option	varchar(50)	Default null	Specific print option

Table name : feedback ( for storing Feedback details )

S.No	Variable name	Datatype	Constraint	Description
1.	id	int(11)	Primary Key, Notnull, auto_increment	Unique feedback id
2.	user_id	int(11)	Foreign Key, Not null	User id
3.	printrev	varchar(255)	Not null	Printing review
4.	stitchrev	varchar(255)	Not null	Stitching review
5.	clothrev	varchar(255)	Default null	Cloth review
6.	custservice	varchar(255)	Not null	Service review
7.	otd	varchar(255)	Not null	Delivery review
8.	osatisfy	varchar(255)	Not null	Overall experience
9.	comments	text	Not null	Comments
10.	feedback_date	timestamp	Not null, Default current_timestamp()	Date of feedback entry

Table name: dayworker\_salary ( for storing salary details of day workers )

S.No	Variable name	Datatype	Constraint	Description
1.	id	int(11)	Primary Key, Notnull, auto_increment	Unique id
2.	employee_name	varchar(255)	Not null	Name of the employee
3.	date	date	Not null	Specific date
4.	overtime	decimal(10,2)	Default null	Overtime salary
5.	late_hours	decimal(10,2)	Default null	Total late hours
6.	per_day_salary	decimal(10,2)	Default null	Per day salary

Table name: piecerate\_salary ( for storing salary details of piece rate workers )

S.No	Variable name	Datatype	Constraint	Description
1.	id	int(11)	Primary Key, Notnull, auto_increment	Unique id
2.	employee_name	varchar(255)	Not null	Name of the employee
3.	date	date	Not null	Specific date
4.	overtime	decimal(10,2)	Default null	Overtime salary

5.	no_of_bags_stitched	int(11)	Default null	No. of. bags stitched
6.	bag_value	decimal(10,2)	Default null	Cloth type value
7.	per_day_salary	decimal(10,2)	Default null	Per day salary

#### Database name: attendance

The table names are dynamically generated based on the month and year, for example, "December 2023". Multiple tables are created according to the imported CSV file to store attendance and salary details.

S.No	Variable name	Datatype	Constraint	Description
1.	id	int(11)	Primary Key, Notnull, auto_increment	Unique id
2.	user	varchar(255)	Not null	Employee name
3.	date	date	Not null	Specific date
4.	time_in	time	Not null	Time in
5.	time_out	time	Not null	Time out
6.	late	varchar(30)	Default null	Total late hours
7.	break	text	Default null	Break late details
8.	break_late	time	Default null	Total late hours

20

## **TESTING AND IMPLEMENTATION**

## **6. TESTING AND IMPLEMENTATION**

### **6.1) TESTING**

#### **8 UNIT TESTING**

Unit Testing is a crucial aspect of software testing, focusing on examining individual units or components of software to ensure they function as intended. Developers conduct unit testing during website development to verify the performance of each module. In our project, thorough testing of every module revealed no errors, affirming their proper functionality.

#### **INTEGRATION TESTING**

Integration Testing is a stage of software testing where separate units or components are merged and tested collectively. The objective is to detect any flaws in how these integrated units interact. During the integration of modules, we made certain that the expected responses directed users to the correct pages.

#### **PERFORMANCE TESTING**

Performance testing evaluates various aspects such as speed, response time, stability, and reliability. Every data that needs to be stored in the database is stored immediately without any delay. All the submit events are triggered without any holdup.

#### **USABILITY TESTING**

Usability testing is a form of non-functional testing that evaluates the ease with which users can interact with a system. Less time is enough to get used to the application. The application is designed in a user-friendly manner to interact easily.

## **SECURITY TESTING**

Security testing is a method used to assess whether an information system effectively safeguards data and operates as expected. For instance, when an unauthorized user tries to log in, the system should notify them of incorrect credentials after verifying the details against the database. It directs the user to the Dashboard page only if the user is authorized.

## **VALIDATION TESTING**

Validation testing is the testing that checks the software whether it satisfies all the needs of the user.

### **REQUIRED FIELD VALIDATOR**

Ensure each field is filled and accepts only CSV files in the Attendance Processing module using HTML's required and 'accept' attributes. This is vital for both admin and user panels. If a CSV file isn't selected upon submission, display an error message to halt further processing.

### **COMPARE VALIDATOR**

Implement password matching in the Change Password page using HTML forms. This ensures coherence between the password and confirm password fields, bolstering security and user experience.

### **RANGE VALIDATOR**

Enforce a minimum age requirement of 18 or older in the Employee Records module. Employ server-side validation in PHP or similar languages to verify age compliance. If the age falls below this threshold, trigger an appropriate error message to prevent record insertion or processing.

## **6.2) IMPLEMENTATION**

Implementation is the pivotal stage where the conceptual design of a system is transformed into a practical, operational system. This phase places a strong emphasis on catering to the needs and expectations of end users. Through implementation, the aim is to build and test a system that fulfills user requirements effectively.

The construction phase within implementation encompasses two primary objectives: the actual development of the system and the assessment of its performance. This phase commences with detailed planning from the design stage, including the formulation of an implementation strategy delineating coding methodologies, required tools, and equipment.

The successful execution of this project attests to its effective implementation, meeting both the specified requirements and garnering community satisfaction. Implementation entails translating the theoretical blueprint of a project into a tangible framework, executing the planned actions accordingly.

During the construction process, a detailed implementation plan guides the coding stage. This plan specifies coding methods, software, and equipment necessary for development.

The coding stage involves translating a detailed description into a programming language realization. The choice of programming language and coding style significantly influences software quality and maintainability, as it serves as a medium for human-computer communication.

### **6.3) REFLECTION**

Effective time management and collaboration among team members played pivotal roles in ensuring the success of this project. Maintaining open communication channels and engaging in regular discussions enabled the sharing of ideas and effective problem-solving. Collaborative efforts tested our decision-making skills and our ability to navigate pressure and challenges adeptly.

This project not only contributed to building a strong relationship between the community and the students but also provided an opportunity for personal and professional growth. Despite the project being broken down into individual modules, frequent discussions among team members helped overcome difficulties encountered along the way.

Throughout the project, we acquired new programming languages and software skills, as well as developed various soft skills such as leadership, teamwork, patience, responsibility, and time management. Engaging with the community and gathering data enhanced our communication abilities significantly.

The experience gained from working on this project serves as a valuable platform for future job opportunities, enabling us to identify and utilize our talents and abilities effectively. It provided us with practical, hands-on learning experiences, allowing us to gain experimental knowledge and deepen our understanding of various concepts.

Ultimately, our ability to complete the project within the allocated time frame underscored the importance of effective time management and collaboration. Moreover, the project fostered creativity among team members, leading to an increase in the overall creative capacity of each member.

## **CONCLUSION**

## **7. CONCLUSION**

This project gave us a wonderful learning experience and helped us to enrich our knowledge. Our project is designed to enhance employee detail accessibility, track delayed hours in attendance, customer order management through electronic forms, ensure accurate salary calculations and provide performance analysis for workforce evaluation. It simplifies work as well as optimizes efficiency, making daily operations smoother and more effective. This project not only benefited the community but also provided us with valuable experience in developing a real-time project.

## **FINDINGS AND SUGGESTIONS**

## **8. FINDINGS AND SUGGESTIONS**

In the project assessment, several key challenges have been identified:

- **Difficulty in attendance management and salary calculation:** Admins encounter hurdles in managing attendance records and accurately computing salaries.
- **Excessive time spent on addressing basic client queries:** Employers invest significant time in addressing fundamental client queries related to order requests.
- **Lack of enhanced access to employee data:** Admins lack convenient access to comprehensive employee data, leading to time-consuming retrieval of information such as personal and bank details.
- **No access to employee performance tracking and customer satisfaction analysis:** The absence of tools for customer satisfaction analysis impedes effective workforce management and decision-making processes.

Suggestions for improvement include:

- **Implementing an integrated attendance management and payroll system:** Developing a centralized system to automate attendance tracking and salary calculations for both day workers and piece-rate workers.
- **Implementing an electronic order request system:** Establishing an electronic order request system where clients can input their details and preferences directly.
- **Enhancing access to employee data:** Developing a comprehensive employee database supporting CRUD operations for easy access to employee information.
- **Providing performance analysis:** Developing a comprehensive performance dashboard integrating feedback metrics. This dashboard should include customer satisfaction scores from feedback ratings to provide actionable insights. Utilizing graphical representations such as charts and graphs can enhance visualization and analysis.

Future enhancements may involve expanding the capabilities of the performance dashboard to incorporate additional metrics and data sources for more in-depth analysis. Additionally, integrating machine learning algorithms for predictive analytics could further enhance decision-making processes and drive continuous improvement initiatives.

## **BIBLIOGRAPHY**

## **9. BIBLIOGRAPHY**

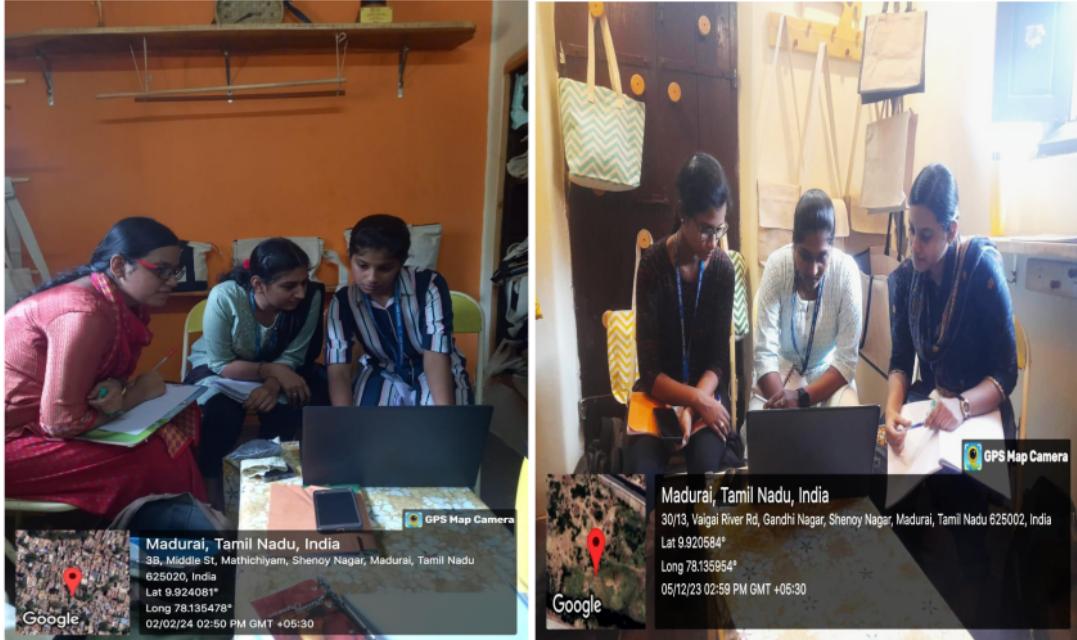
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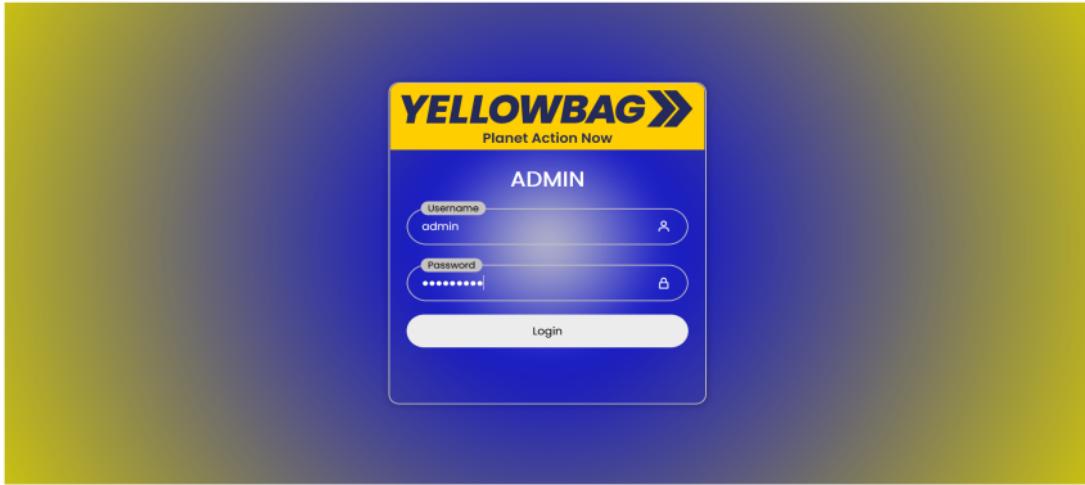
## **APPENDIX**

## 10. APPENDIX

### 10.1) SAMPLE REPORTS







YELLOWBAG Planet Action Now

Admin Panel [Logout](#)

**Employee Records**

Employee Records

**Attendance Processing**

Attendance Processing

**Customer E-form**

Customer E-form

**Salary Calculation**

Salary Calculation

YELLOWBAG Planet Action Now

[Dashboard](#) [Logout](#)

Employee List							EXPORT	SEARCH	ADD
Photo	ID	Name	Age	Gender	Date of birth	Job designation	Operations		
	34	Nivashini.S	31	Female	2001-01-17	Tailor	<a href="#">VIEW</a>	<a href="#">EDIT</a>	<a href="#">DELETE</a>
	41	Balasanthosini	31	Female	2004-04-30	Tailoring and stitching	<a href="#">VIEW</a>	<a href="#">EDIT</a>	<a href="#">DELETE</a>
	45	Nivashini	34	Female	1998-02-15	Tailoring and stitching	<a href="#">VIEW</a>	<a href="#">EDIT</a>	<a href="#">DELETE</a>

[Import](#)  [Individual Attendance](#)  [Clean](#)

### Search Attendance Records

Month	Year
December	2023

[Search](#)

**Attendance Details**

Month: December	Year: 2023	Employee Name: Bhavani
Date	Late	Break Late
2023-12-01	0hr 0min	00:00:00
2023-12-02	0hr 16min	00:00:00
2023-12-03	0hr 49min	00:00:00
2023-12-04	0hr 5min	00:00:00

**YELLOWBAG** [Dashboard](#) [Logout](#)

[CATALOGUES](#) [ORDERS](#) [FEEDBACKS](#) [SEARCH](#) [FILTER](#)

### User Credentials

User Id	Username	Email ID	Phone
1	Nivashini	21ife017@idc.edu.in	9788166416
2	Shobika	21ife071@idc.edu.in	9894286480
3	Priya	21ife028@idc.edu.in	9788166416
19	hajira	21ife010@idc.edu.in	9788166412
20	Raji	21ife011@idc.edu.in	8148076416
21	kamalesh	21ife089@idc.edu.in	9788166416

[Day workers](#)  [Piece rate workers](#)

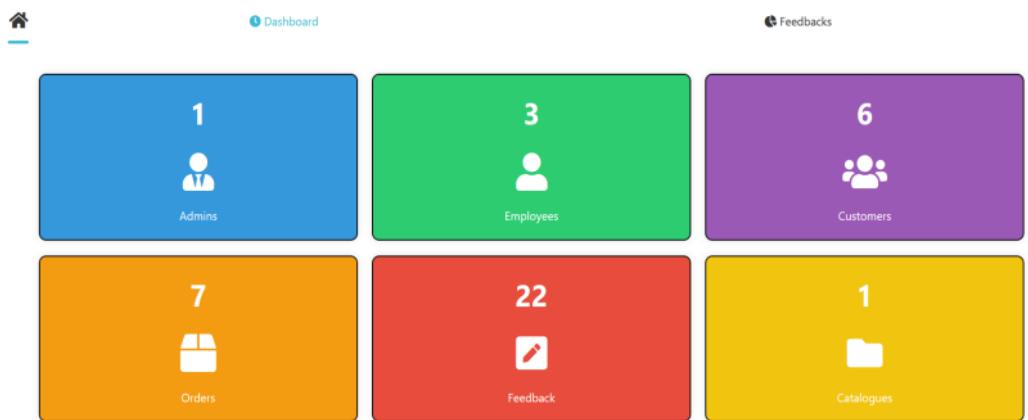
### Day workers' salary

Month	Year
December	2023

[Search](#)

**Salary Details**

Month: December	Year: 2023	Employee Name: Bhavani			
Date	Overtime salary	Late hours	Sunday salary	Action	Per day salary
2023-12-01	30	1	0	<a href="#">Calculate</a>	248.75
2023-12-02	10	2	0	<a href="#">Calculate</a>	197.5
2023-12-03	0	1	423	<a href="#">Calculate</a>	641.75



**Yellowbag**

Need assistance or have questions? Contact: 7339252770

### ORDER REQUEST FORM

Share your details and interests for personalized bag delivery. Expect a follow-up from our team soon.

**Customer Name:**  
Shobika Saravanan

**Residential / Office Address:**  
137/6,  
Heenahalli Avenue,  
Kamrajpet, Salal, Maduraj

**Office Phone Number (Optional) :**  
9788166416

**Background:**

- Corporate
- Promotional
- Resellers
- Saree Bags

**Yellowbag**

OrderEase   Feedback   Logout

### CUSTOMER FEEDBACK FORM

Please rate your experience with our service

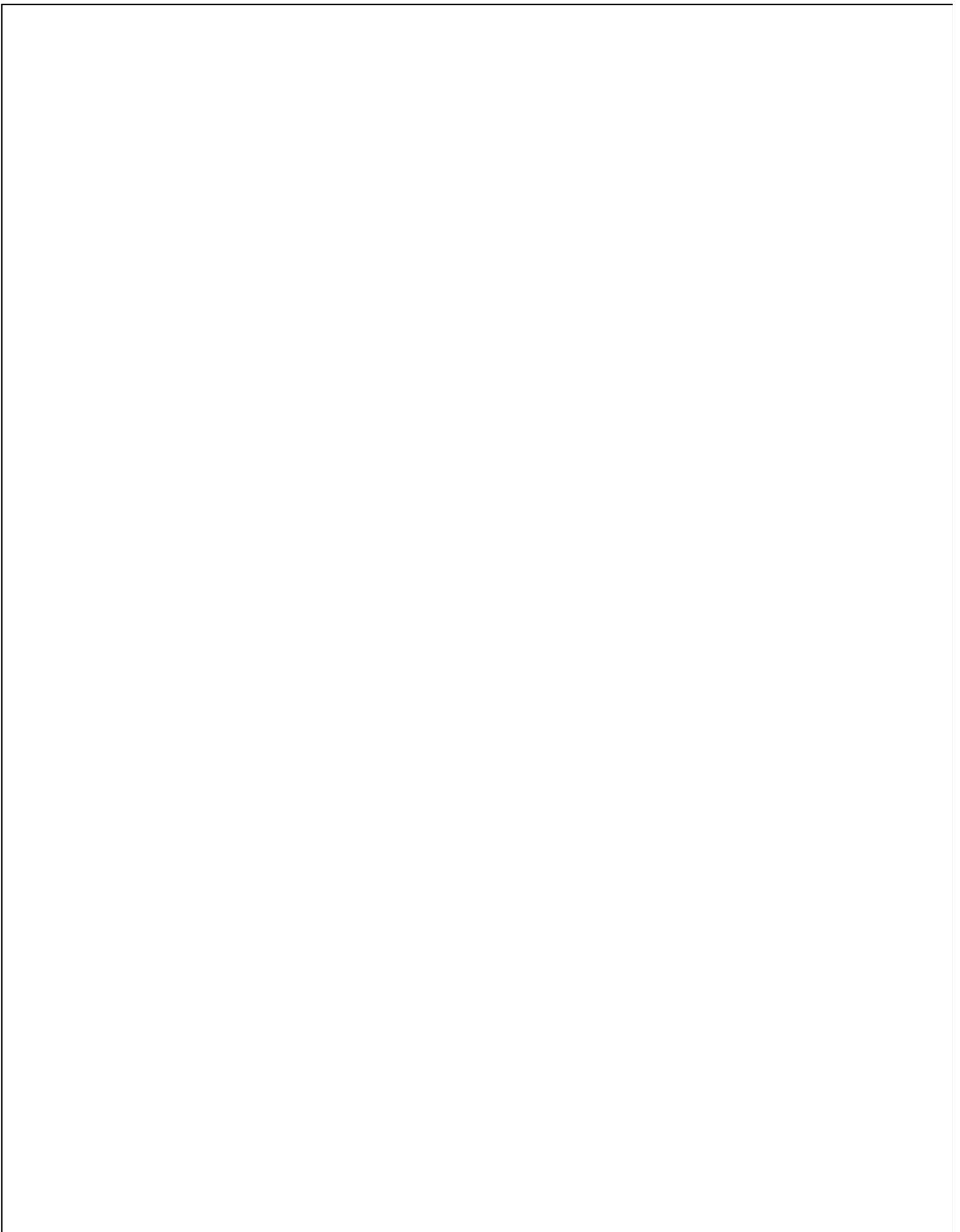
**Printing Review:**

★★★☆☆

**Stitching Review:**

★★★★★

**Cloth Review:**



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