

Sri Lanka Institute of Information Technology



Tea Factory Management System

Project Report

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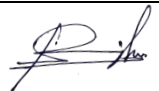

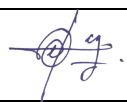


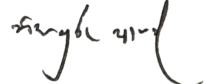
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Project ID	ITP2021_S2_WE_G09

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Abstract

This project is based on a tea factory management system. Through this system, the factory will be able to automate processes like managing employee details, attendance, supplier details, inventory, vehicle records, leaf stock details, final auction stock details, calculating employee salary, supplier payments, vehicle service cost. And, it allows the factory outlet to easily handle their wholesale and stock activities.

The system was developed using Python language and Django framework. With this web-based system, the user can easily access the system through the internet. This is a huge advantage for the user, as it keeps the user updated on the processes that are going on in the factory and in the outlet. Therefore, the productivity and efficiency of the factory is gradually increased through this system.

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Acknowledgement

We would like to express our heartfelt gratitude and appreciation to all those who gave us the opportunity and support to complete this project. First, a special thank you to our lecturer in charge Ms. Kushnara Suriyawansa, who encouraged us to look at our progress from the beginning to the end of this project.

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My heartfelt thanks to the members of my team who contributed to a successful project in this epidemic situation. It must be said that the strength and unity that we have put together as a team has helped us to complete this more successfully than we had hoped for. We would also like to express our sincere gratitude to all the colleagues who provided support and suggestions for the improvement of our project.

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List of Abbreviations

ER – Entity Relationship

1 Introduction

1.1 Problem Statement

'Kaley Tea' is a tea factory management system. It has been developed to cover almost all the functions of a tea factory. Mainly, many functions like manage employee details & attendance, supplier details, inventory, vehicle records, leaf stock details, final auction stock details, calculating employee salary, supplier payments, vehicle service cost etc. are done through this.

1.2 Product Scope

The above-mentioned main functions are done through this project. The system is a web-based application. By selecting a web application without selecting a desktop application, the user can access the system over the Internet from anywhere at any time. This system will provide,

- Employee details, salary, and attendance management
- Supplier details and operations management
- Leaf stock management
- Transport and vehicle repair management
- Inventory management
- Final production auction stock management,
- Sales and Stock management in factory outlet.

Individual Scope

Table 1: Individual Scope

No	Student ID	Name with initials	Work Distribution
01	IT20012724	Ananda R.S.R.G.J. N	Employee Management System <ul style="list-style-type: none">• Add Employee Details to the system• Update Employee details• Delete resigned Employees• Retrieve Employee details and display as profile• Manage Daly attendance of workers• Generate report based on attendance
02	IT20146238	Jayathunga T.M.	Inventory Management System <ul style="list-style-type: none">• Add Inventory Details.• Update Inventory Details.• Delete Inventory Details.• Update Daily and Monthly product Details.• Add and delete tea Grades.• Generate report about the inventory stocks & final product stocks.

03	IT20237240	Prabashwara U.K.A.L	Transport and Vehicle Repair Management <ul style="list-style-type: none"> • Add driver, Vehicle details • Add vehicle repair details • Update Driver details & repair details • Calculate daily travelled distance • Calculate Total meter reading monthly • Calculate total amount spent for vehicle maintenance • Generate meter reading reports • Generate Vehicle maintenance report
04	IT20005108	Edirisooriya N.W	Salary Management System <ul style="list-style-type: none"> • Add OT hours and advances to employees • Update rates of salaries according to the government salary rates • Retrieve full reports of all employee salaries monthly and annually • Delete salary records of resigned employees • Get all the daily attendance of workers and calculate the monthly salary
05	IT20211950	Amarasekara M.G.V.C	Supply Details & Operating Management <ul style="list-style-type: none"> • Add / Register suppliers to the System • Update supplier details • Delete resigned suppliers' details • Calculate suppliers' payments • Generate supplier payment invoices Leaf Stock Management • Add daily stock details • Delete false stock records

06	IT20272654	Rajapaksha R.P.S.V.	Managing tea stocks (Final Production) <ul style="list-style-type: none"> • Add daily tea production details, Tea stock sample details and broker details • Update stock details according to the broker's auction sales report, current stock details • Delete unwanted records • Calculate the production value according to the broker's auction selling report, daily/weekly/monthly production. • Generate reports according to the production details changes.
07	IT20090562	Nagahawatta S.S	Stock management of the factory outlet <ul style="list-style-type: none"> • Add tea category, the weight and number of packets to the system, a new category (when needed) • Update current stock, reorder level • Delete unwanted records • Generate reports of stocks • Calculation stock balance
08	IT20208462	Gunaratne B.S.	Sales Management of the factory outlet <ul style="list-style-type: none"> • Add items to the bill and place an order • Edit and update inserted data if there are any mistake • Delete unwanted records • View all previous sales records • Generate bill • Generate sales report for weekly/ monthly/ yearly

1.3 Project Report Structure

The Introduction part of the report covers the main functions of a tea factory called 'Kaley Tea' and how this system performs those functions.

The middle part of report contains the Methodology with the requirement analysis which contain functional and non-functional requirements, use case diagram, use case scenarios and activity diagrams. And in the design part, high level architecture diagram, class diagram, database diagrams and user interfaces of the project are included. Then the implementation is defined. After that, the testing phase with integrate testing, system testing, and test cases are illustrated. The later part of the report contains the Conclusion and References used in developing the project.

2 Methodology

2.1 Requirements and Analysis

2.1.1 Functional Requirements

○ Employee Details and Attendance Management

- Register new employees to the system.
- Update existing employee details.
- Delete Employee Details.
- View profiles of the employees to get all the details when needed.
- Keep records of employees in the factory.
- Mark daily attendance of the employees.
- Get reports of marked attendance.

○ Salary Management

- Calculate the final employee salary.
- Calculate the EPF and ETF of the employee in the month.
- Generate monthly salary report.
- Generate Individual Employee salary report.
- Add and Edit allowances.
- Delete Allowances.

○ Supplier Management and Leaf Stock Management

- Register new suppliers.
- Update / Delete already added suppliers.
- Add daily leaf stocks.
- View leaf stock details in a table.
- Delete false stock records.
- Calculate Supplier Payments.
- Generate monthly pay slip for suppliers.

○ Leaf Inventory Management

- Add Supplier Products into inventory
- Keep inventory adding history records.
- Keep inventory Updating history records.
- Add new tea grades into Inventory.
- Keep records of all Tea grades history.
- Categorize final products.
- Generate Daily inventory product report.
- Generate Monthly Inventory report.

○ Final Production Auction Stock

- Manage catalog details.
- Manage buyer details.
- Maintain records of sold stocks.
- Calculate total amount of sold stocks.
- Calculate total weights of catalog.
- Generate reports of auction stocks daily, monthly, and annually.
- Generate reports for auction stock details monthly and annually.

○ Transport and Vehicle Repair Management

- Manage driver details, vehicle details and vehicle driving records.
- Manage vehicle maintenance details.
- Calculate total meter readings monthly.
- Calculate total amount spent for vehicle repairs monthly.
- Generate monthly meter readings report.
- Generate monthly vehicle maintenance report.

○ Sales Management in Factory Outlet

- Create invoice to get the total amount of bill.
- Calculate the bill.
- View all the transactions and get bill items from bill record and print the bill.
- Add prices for the tea category and manage the price.
- Generate the sales report.

○ Stock Inventory Management in Factory Outlet

- Keep records of the tea packet stock
- Update packet stock
- View available stock
- Generate monthly, annual report of stock

2.1.2 Non-Functional Requirement

- Security – Admin can add users and they cannot access or view information without login to the system. System checks the real- time identity of the user when they are using the system. Only a valid user can login to the system by providing valid credentials.
- Reliability – In order to log in correctly, the user must have a legitimate account.
- Speed – Accurate user event response time.
- Portability and Scalability – This website can run on different computers with compatible operating systems and processors without installation.
- Availability – With an Internet connection, the user can access the system 24/7.

2.1.3 Use Case Diagram

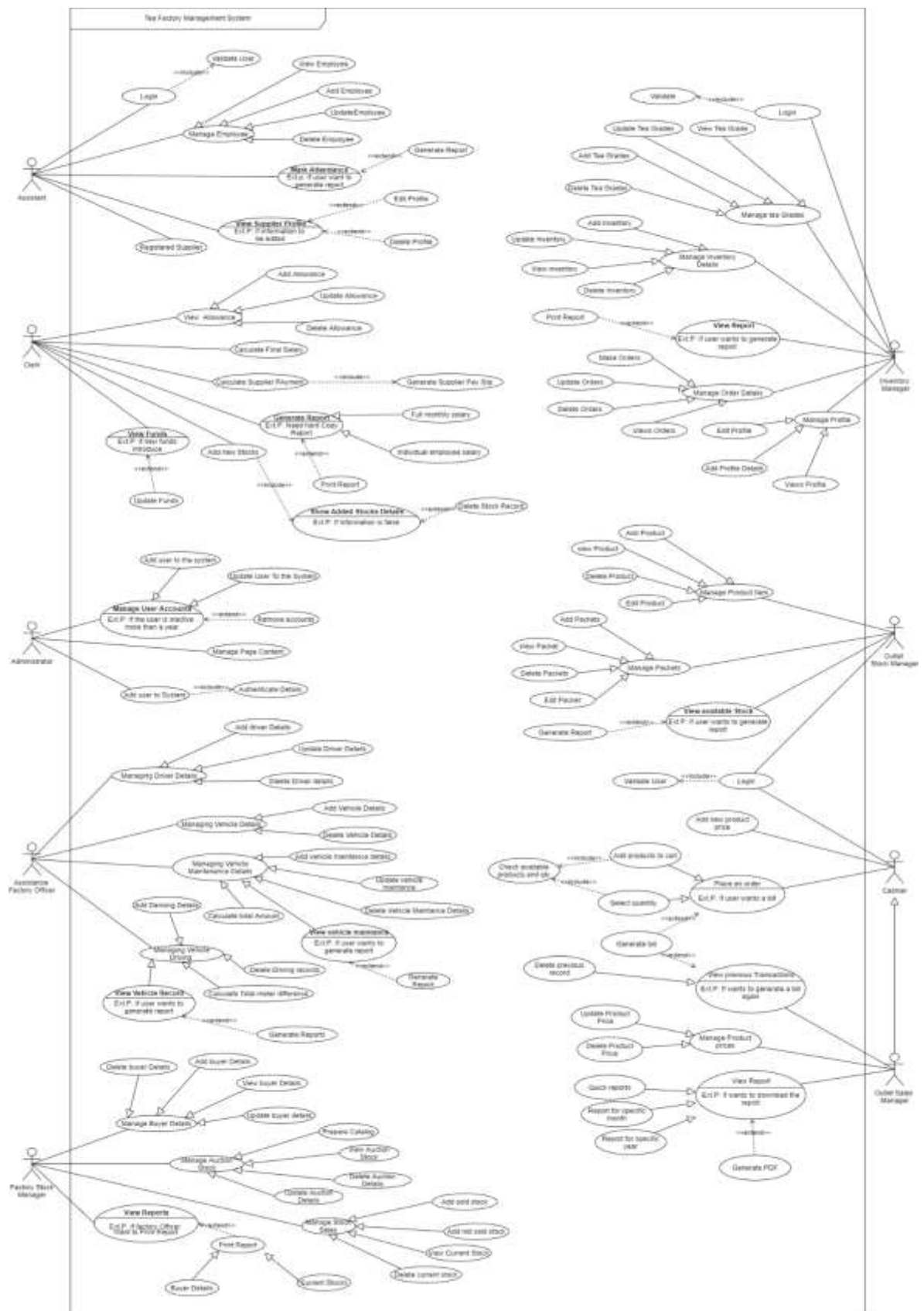


Figure 1: Use Case Diagram

2.1.4 Activity Diagram

Table 2: Use Case Scenario-Login

Use Case ID	U001	
Use Case Name	Login	
Pre-Condition(s)	<ul style="list-style-type: none"> • The system should be in operation • Factory users must be registered to system 	
Post -Condition(s)	<ul style="list-style-type: none"> • Logged in to the user profile 	
Primary Actor(s)	Registered User, Administrator	
Main Success Scenario	Step	Action
	1	Use case begins when the user wishes to login.
	2	Users enter the username.
	3	Users must enter Valid Password.
	4	System validates the login information.
	5	System displays Administrator page.
Extensions	Step	Branching Action
	2.a	<ul style="list-style-type: none"> • If the username is incorrect, display an error message
	3.a	<ul style="list-style-type: none"> • If the Password is incorrect, display an error message
	3.b	<ul style="list-style-type: none"> • User will be requested to enter the username and password again
	3.c	<ul style="list-style-type: none"> • User will be requested to select the forgot password option

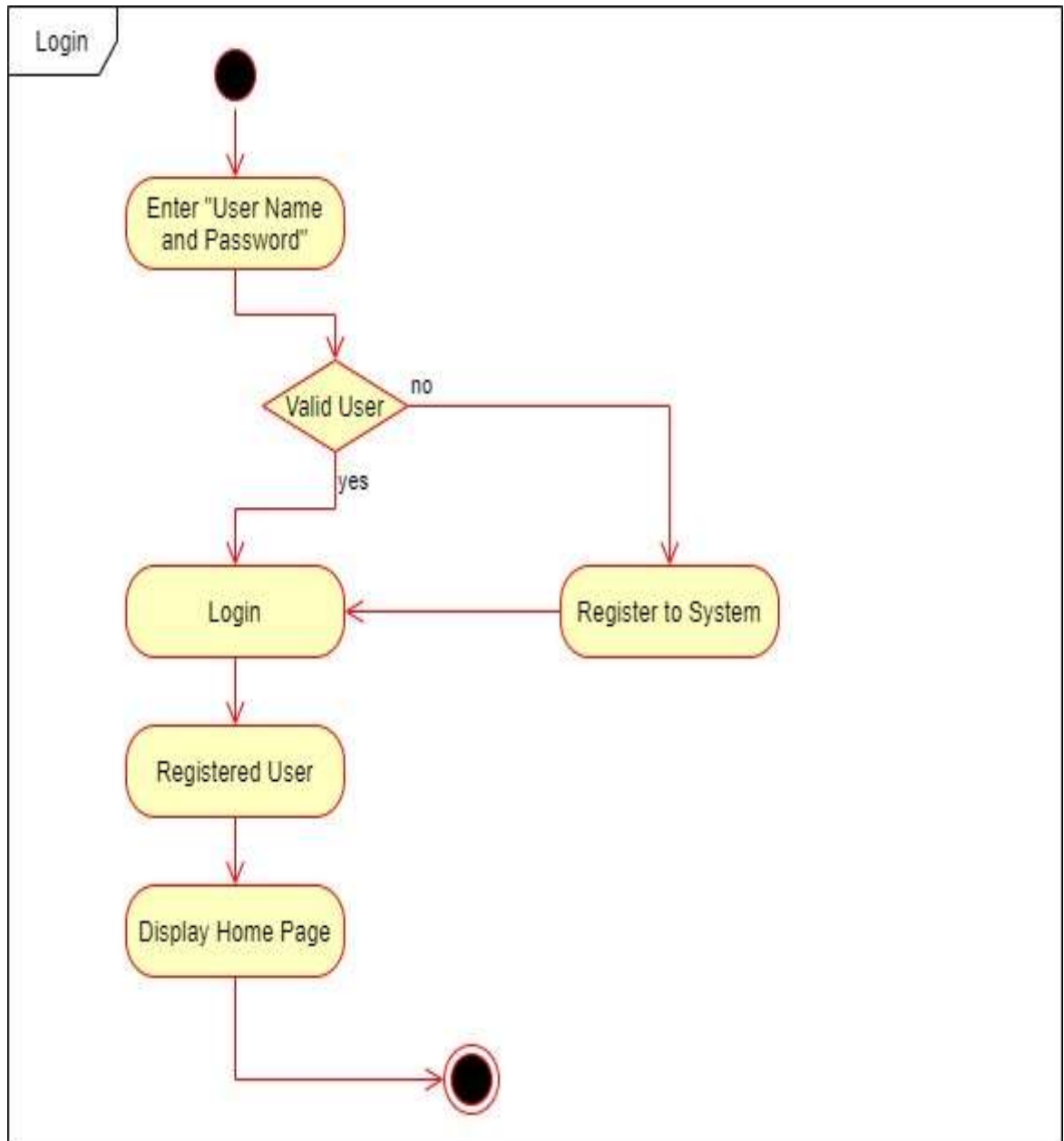


Figure 2:Activity Diagram-Login

Table 3: Use Case Scenario- Employee Management System

Use Case ID	U002	
Use Case Name	Mark Attendance of factory workers	
Pre-Condition	User must log into the system as a valid user	
Post -Condition	Attendance marked successfully	
Primary Actor(s)	Clerk, Assistant	
Main Success Scenario	Step	Action
	1	Go to the application.
	2	Include: (Login).
	3	User Clicks on the “Tea Factory” from the Admin Home Page.
	4	User Clicks on the “Employee Management” from the Tea Factory Home Page.
	5	User selects a date from the attendance page
	6	User clicks on “Mark attendance” button
	7	System redirect user to the mark attendance page with all factory worker details
	8	User mark attendance of the factory workers
	9	System removes marked attendance details from the list
	10	User clicks on “View All” button
	11	System displays all marked attendance
	12	Users click on “Generate Report”
	13	System displays report of marked attendance
	14	User clicks on the document and download the report
Extensions	Step	Branching Action
	11.a	If user marked present for an absent employee, user change the attendance status to absent.
	11.b	If user marked absent for a present employee, user change the attendance status to present.
	11.c	If user marked day type of the employee incorrectly. users correct the day type.

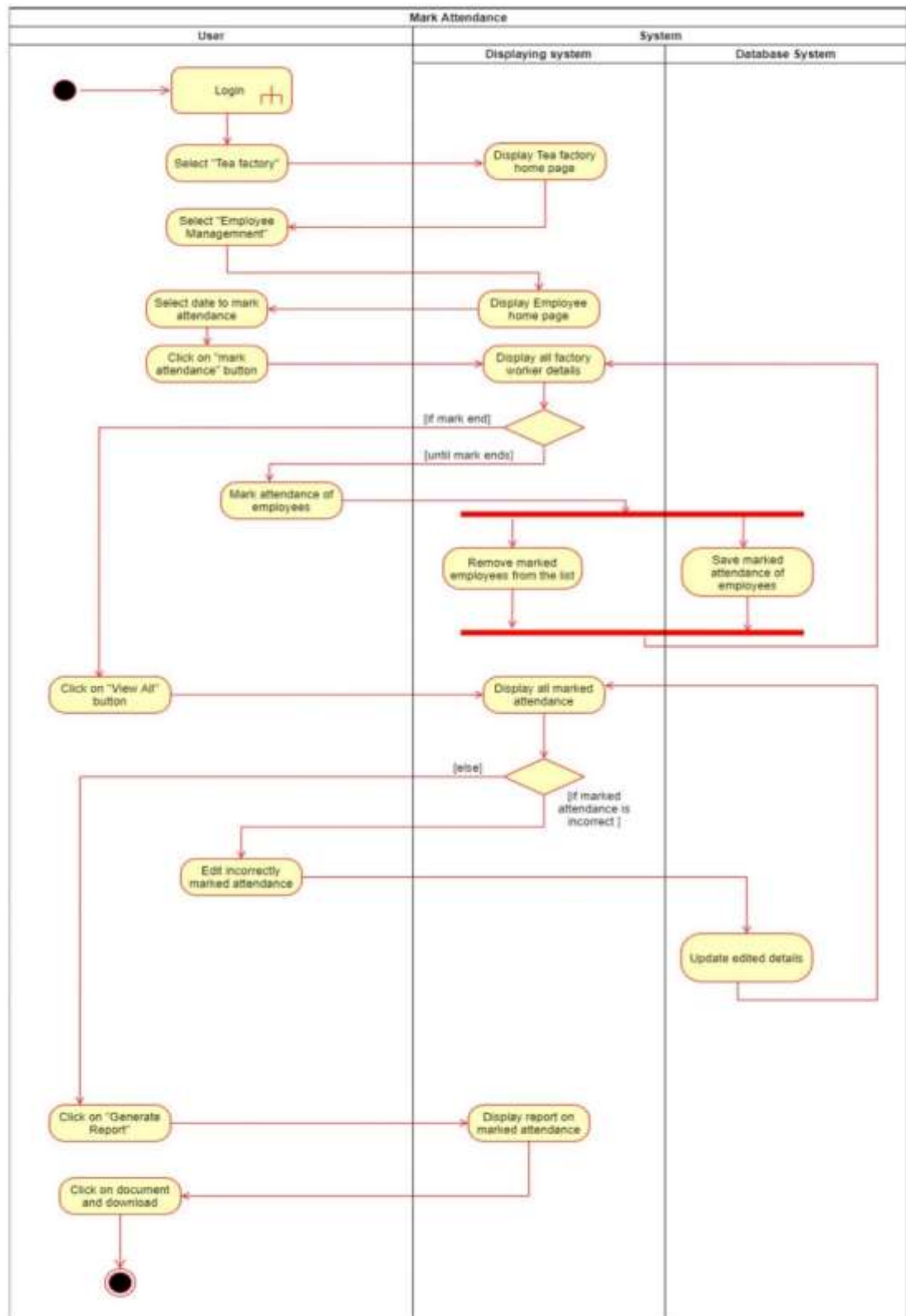


Figure 3: Activity Diagram-Employee Management System

Table 4: Use Case Scenario-Inventory Management System

Use Case ID	U003	
Use Case Name	Inventory Management System	
Pre-Condition	User must log into the system as a valid User	
Post -Condition	Add Inventory Product Details Successfully.	
Primary Actor(s)	Inventory Manager	
Main Success Scenario	Step	Action
	1	Go to the Web Application.
	2	Include: (Login).
	3	User Clicks on the “Inventory Management” from the Admin Home Page.
	4	System navigates to “Inventory Login” Page.
	5	User must Login or Register to the inventory.
	6	System navigates to “Inventory Dashboard” page
	7	User can Add Tea Grades and Add Inventory Product into Inventory System.
	8	User can Update Adding Inventory Product Details.
	9	User can Remove Inventory Product and Tea Grades.
	10	User clicks on “View Inventory” button to view All Product.
	11	System displays Inventory Product.
	12	Users click on “Generate Report”
	13	System Generate report of Daily Inventory Product Details.
	14	User clicks on the document and download the report
Extensions	Step	Branching Action
	4.a	If user Input invalid Username Password System will display an error message.
	7.a	If the out date is less than in date input by user, system display an error message.

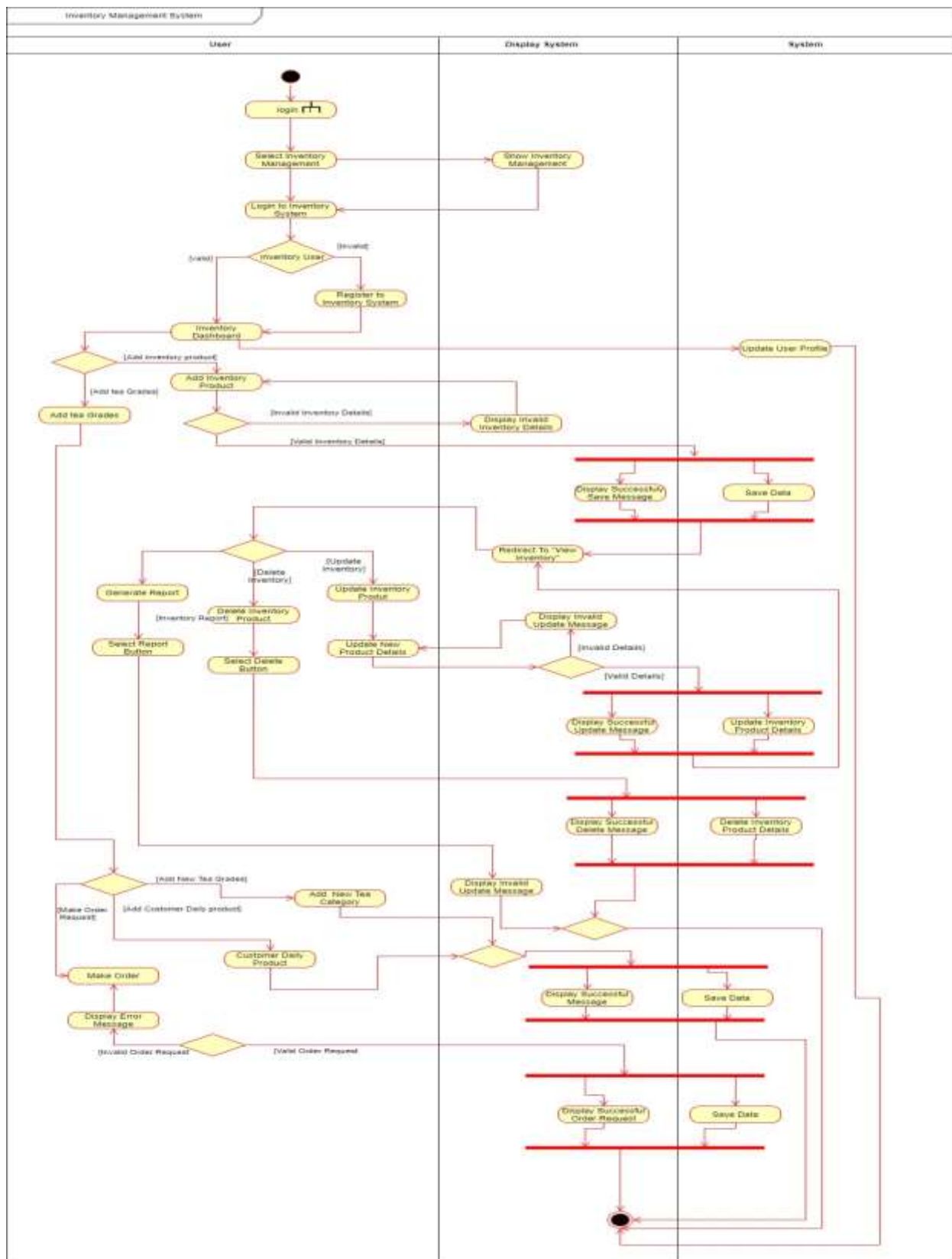


Figure 4:Activity Diagram-Inventory Management System

Table 5: Use Case Scenario-Supplier Management System

Use Case ID	U004	
Use Case Name	Register the suppliers to the system	
Pre-Condition	User should be logged in to the system	
Post-Condition	Suppliers registered to the system successfully	
Primary Actor	Clerk	
Main Success Scenario	Step	Action
		Go to the website
		Include: :(Login)
		User clicks on “Supplier Management” button on home page
		System navigates to “Registered Suppliers” page
		User clicks on “Add a new supplier” button on registered suppliers page
		System navigates to “Supplier Registration” page
		User inputs the relevant supplier information to relevant fields given in the registration form
		User clicks “Submit” button to submit the form
		System validates the user inputs
	0	System saves the input data and re-navigates to “Registered Suppliers” page
Extensions	Step	Branching Action
	7.a	If any given input mismatched with validation, system would show an error message
	8.a	If any compulsory input fields have null values, warning message will be generated and stop the form submission
	4.c	If any mismatch found, print error message

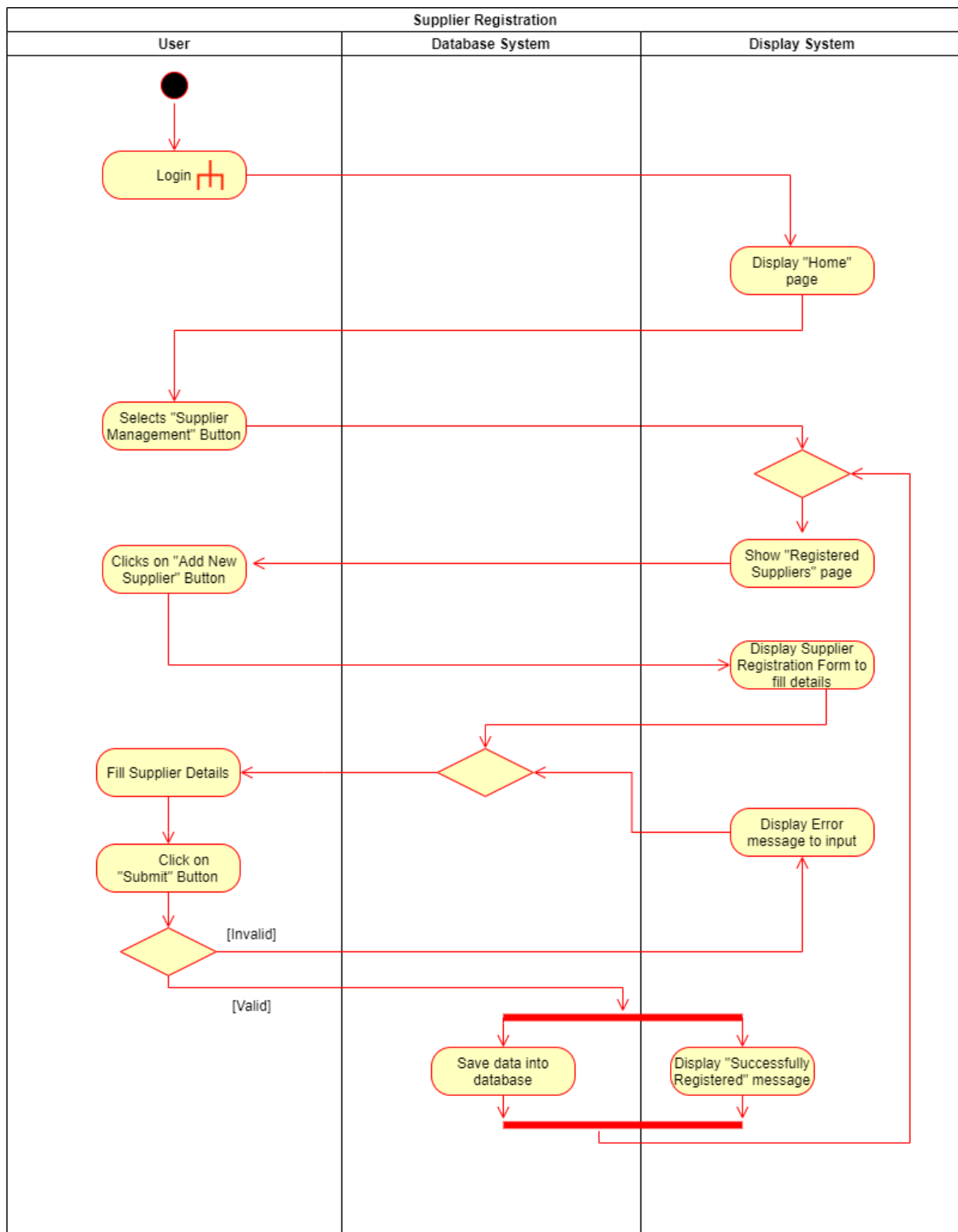


Figure 5:Activity Diagram-Supplier Management System

Table 6: Use Case Scenario-Outlet Stock Management

Use Case ID	U005	
Use Case Name	Add tea packets in Tea Shop	
Pre-Condition	User must login to the system as a valid user	
Post -Condition	Details added successfully	
Primary Actor(s)	Admin, Outlet Stock Manager	
Main Success Scenario	Step	Action
	1.	Go to the application.
	2.	Login to the system
	3.	Users click on the ‘Outlet Inventory Management’ from the admin home page.
	4.	System redirect user to reports page.
	5.	Users click on the ‘Category Product’ button on the side bar.
	6.	Users add category product details.
	7.	System displays “Successfully Added” message.
	8.	User Click on the “Add Packets” button on the side bar.
	9.	Users add packet details.
	10.	System displays “Successfully Added” message.
	11.	User Click on the “View Tea Packets” button on the side bar.
	12.	User view tea packet details.
	13.	User Click on the “Available Stock” button on the side bar.
	14.	User View current available stock.
	15.	User Click on the “Reports” button on the side bar.
	16.	User input month, year and click button to generate reports.
	17.	System display report
Extensions	Step	Branching Action
	6.a	If user input same category product details, system generates an invalid message (“Error Invalid Details”).
	9.a	If user input characters to date field in add packet details page, system generates an invalid message (“Enter a valid date”).

9.b

If user input a number less than 1 to number of packets field in add packet details page, system generate invalid message ("Invalid Details").

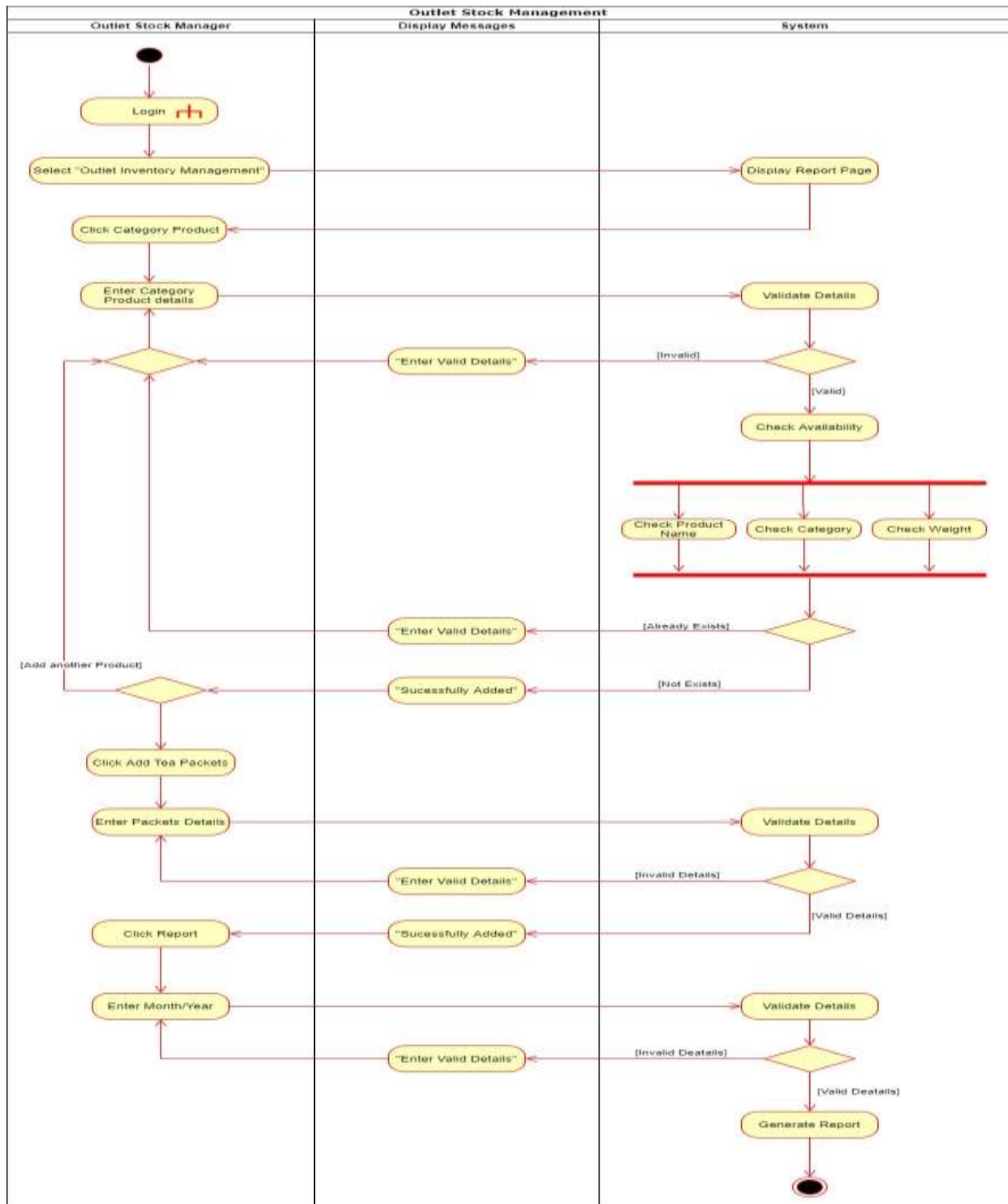


Figure 6: Activity Diagram-Outlet Stock Management

Table 7: Use Case Scenario-Salary Management System

Use Case ID	U006
Use Case Name	Calculating a single Employee Salary
Pre-Conditions	<ul style="list-style-type: none"> • User must log into the system as a valid user • Fund rates must be recorded in the Funds page • Any allowances for the employee must be recorded in the Allowances page
Post-Condition	Salary record will be successfully added for the given employee for the given month.
Primary Actor	Clerk

	Step	Action
	1	Go to the application.
	2	Include: (Login).
	3	Clerk Clicks on the “Salary Management” from the Admin Home Page.
	4	Clerk Clicks on the “Calculate Salary” from the side navigation in the Salary management page.
	5	Clerk enters the Employee ID, Month and Year
	6	Clerk enters the relevant data about the salary in the fields.
	7	Clerks presses the Calculate button
	8	System displays “Employee salary added successfully”
Extension s	Steps	Branching action
	8.a	If there is no employee from the entered employee ID, then the system will display “Employee ID invalid”.
	8.b	If there is a salary record in the database for the entered employee Id, month, and year, then the system will display “This employee salary already calculated”

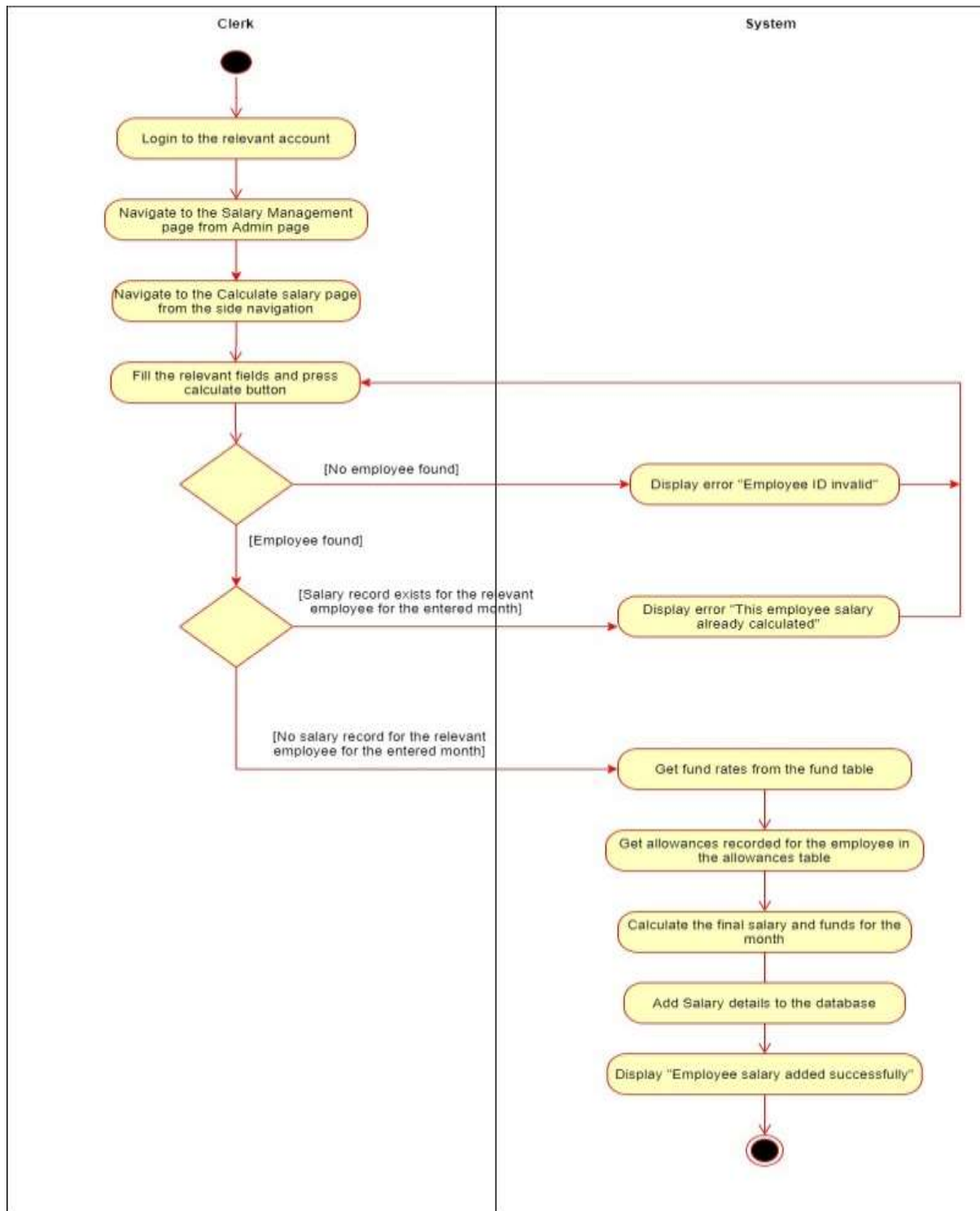


Figure 7: Activity Diagram-Salary Management System

Table 8: Use Case Scenario-Final production Management

Use Case ID	U007	
Use Case Name	Manage final production auction stock details.	
Pre-Condition	User has to login to the system	
Post -Condition	Manage auction stock details	
Primary Actor(s)	Factory Stock Manager	
Main Success Scenario	Step	Action
	1	Go to the application.
	2	Include: :(Login)
	3	User selects “Tea Factory”
	4	System displays tea factory home page
	5	User selects “Final Production Menu”
	6	System displays final production home page
	7	User selects “Auction Stock Menu”
	8	User selects “Prepare Catalog”
	9	User adds new catalog details
	10	System displays added stocks in catalog
	11	User displays added stock in catalog

	12	User submits catalog details
	13	System displays successful message
	14	System displays all catalog details
	15	Users select report
	16	System prints report
	17	User gets report
Extensions	Step	Branching Action
	9.A	If user added auction stock details are invalid a) Repeat from step 8
	15.A	If user want to update catalog a) User selects auction stock b) User updates auction stock details c) Update auction stock
	15.B	If user want to delete catalog a) User selects auction stock details b) User deletes auction stock c) While deleting auction stock details from the database, system update relevant catalog details in the database

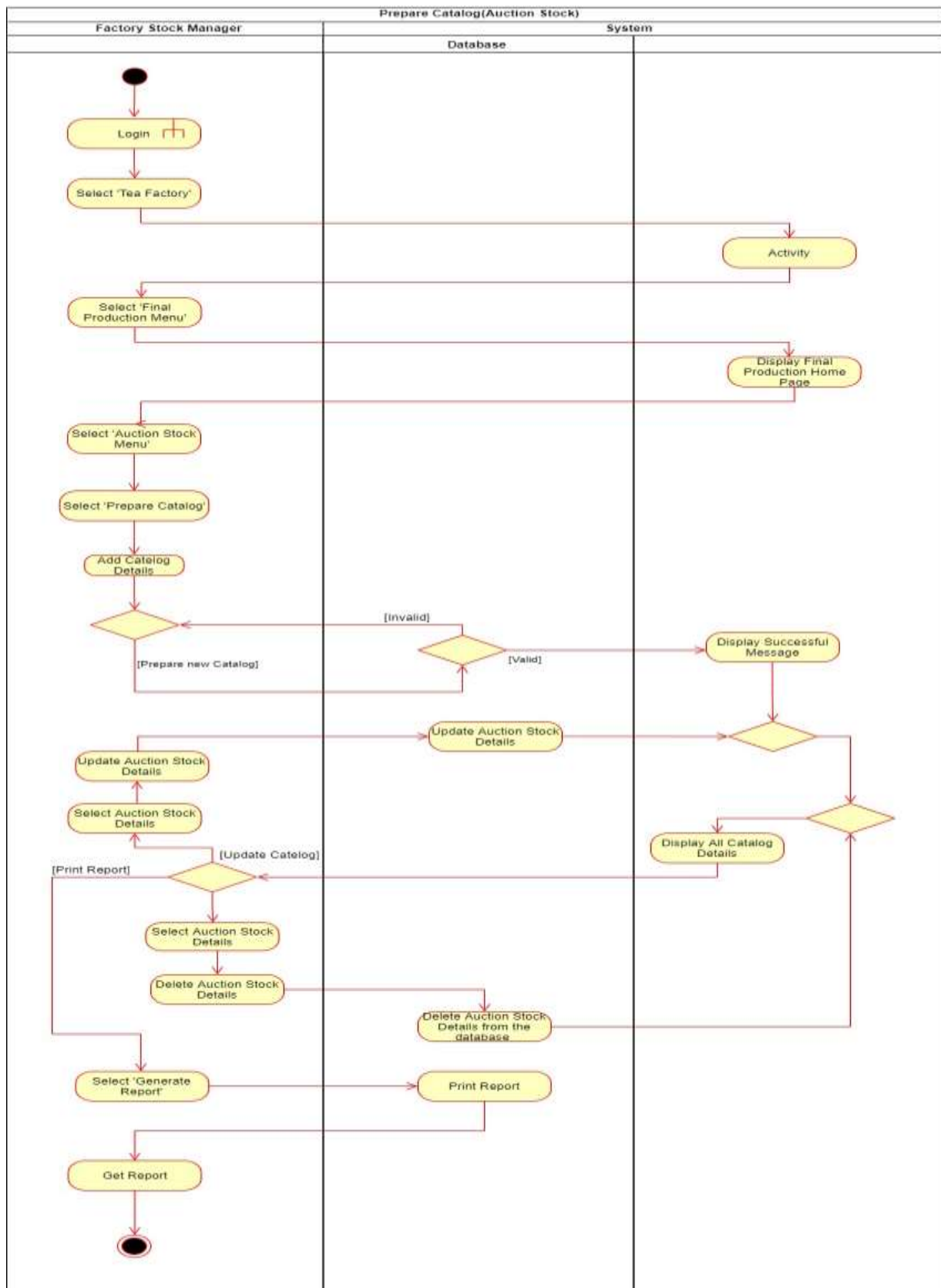


Figure 8:Activity Diagram-Final Production Management

Table 9: Use Case Scenario-Place an Order

Use Case ID	U008	
Use Case Name	Place an order	
Pre-Condition(s)	User must login as a cashier or a super user	
Post-Conditions(s)	Generate a bill for the order	
Primary Actor(s)	Cashier	
Main Success Scenario	Step	Action
	1	User login to the system
	2	Go to 'New Bill' page in Sales Management of Tea Shop
	3	Select the product from the dropdown menu in the 'Add to cart' section, that wants to buy
	4	Enter the quantity
	5	Press 'Add Item' to add product to the cart
	6	System checks the availability of the product that has selected
	7	System calculates the sub total of the product and the total amount of the bill
	8	The product will show in the cart with the sub total and the total amount of the bill
	9	Press 'Checkout' button to place the order
	10	System popup the Complete Payment box
	11	Enter the amount that customer gave
	12	Press 'CONFIRM PAYMENT'
	13	Check the entered cash amount
	14	Save data in the database and redirect to the bill details
Extensions	Step	Action
	4.a	If quantity keeps empty, get quantity is 1 as the default value
	6.a	If there are not any stock available, it notifies the user that there are no stock available
	6.b	If there are not enough stock available that customer requested, it notify the user how many stocks available at that time
	13.a	If entered cash amount is less than the total bill amount, it shows an error that the cash amount should be greater than the total bill amount

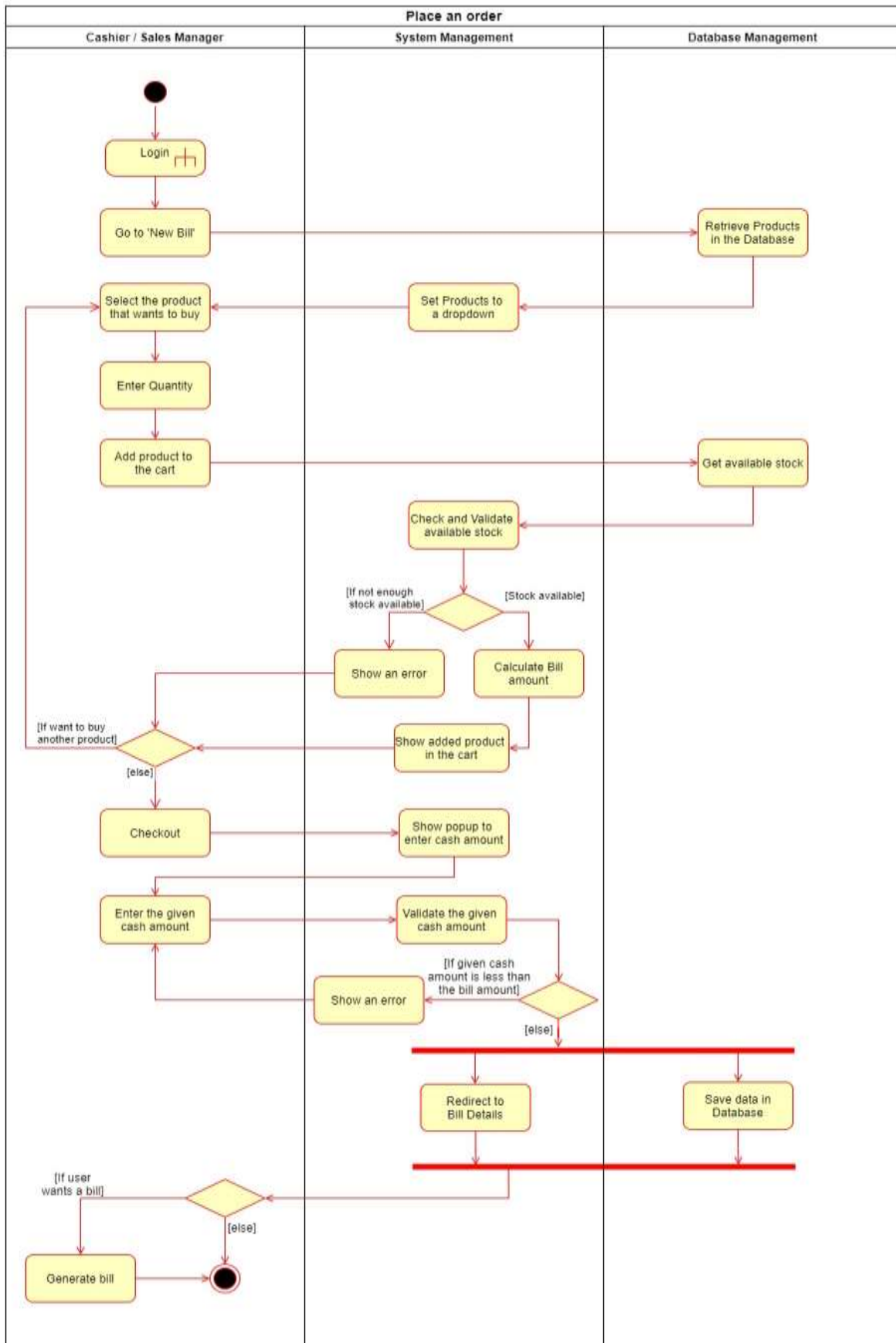


Figure 9:Activity Diagram-Place an Order

Table 10: Use Case Scenario-Transport Management System

Use Case ID	U009	
Use Case Name	Manage Monthly Vehicle Driving Records.	
Pre-Condition	User must log in to the system.	
Post -Condition	Details added successfully save.	
Primary Actor(s)	Assistant Factory Officer.	
Main Success Scenario	Step	Action
	1	Go to the Factor Web application.
	2	Include: (Login).
	3	User navigates to “Factory Home Panel” from the Admin Home Page.
	4	User navigates to “Transportation Management” from the Tea Factory Home Page.
	5	User navigates to Vehicle Driving Records page.
	6	User add vehicle driving records to system successfully.
	7	System will validate the added details and display added vehicle record in “Driving records table”.
	8	User delete unwanted vehicle driving records.
	9	User search vehicle driving records and get records of the vehicle.
	10	User Click on the “Analysis” button on the side bar.
	11	User input data to Meter difference report.
	12	System generates monthly Meter Readings Report.
Extensions	Step	Branching Action
	6.a	If user input characters to input fields in vehicle records page system generates an invalid message (“start reading and end reading must contain only numbers.
	6.b	If user input less number to end reading in vehicle records system generates an error message.

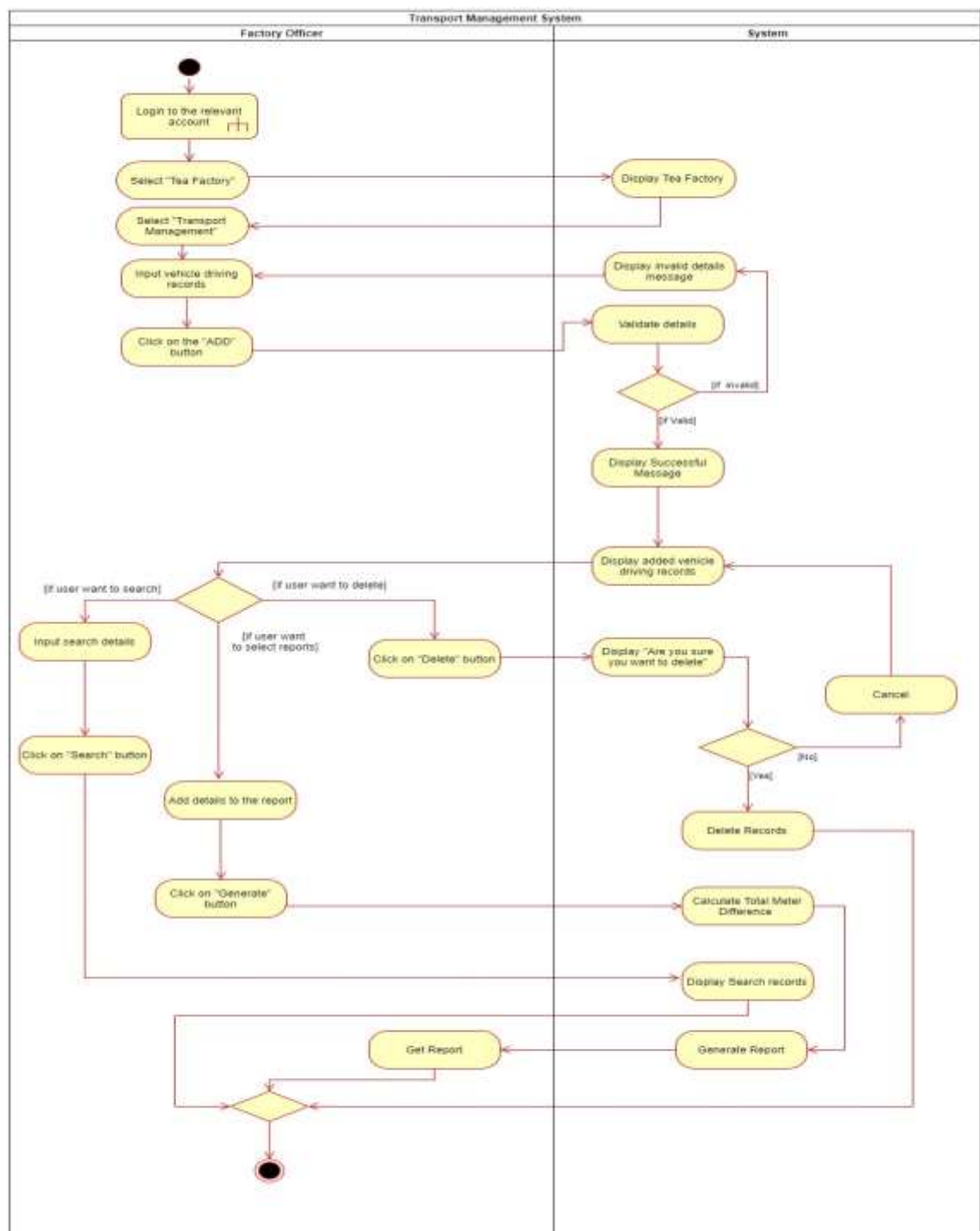


Figure 10: Activity Diagram-Transport Management System

2.2 Design

2.2.1 High Level Architecture Diagram

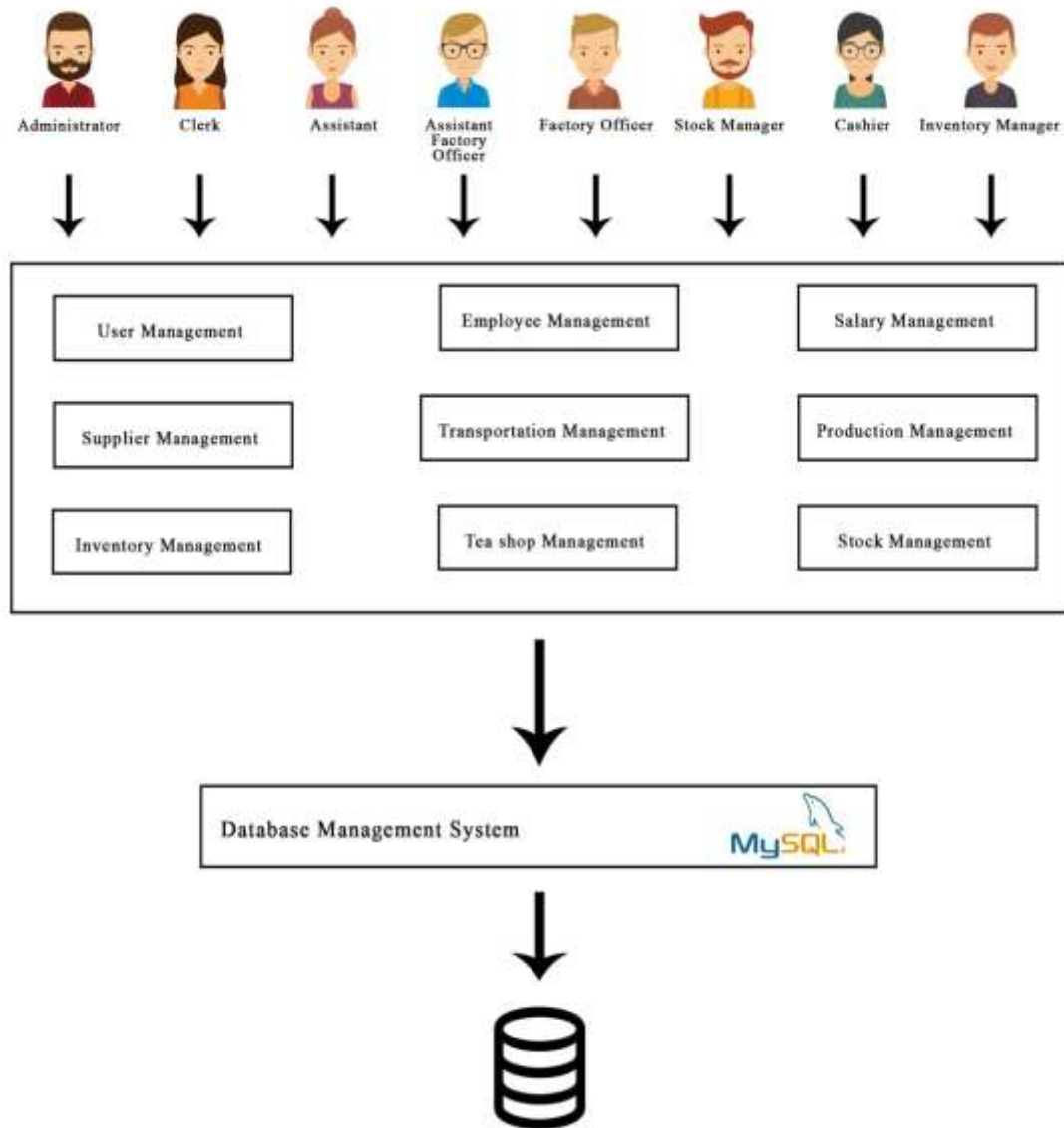


Figure 11: High Level Architecture Diagram

2.2.2 Class Diagram

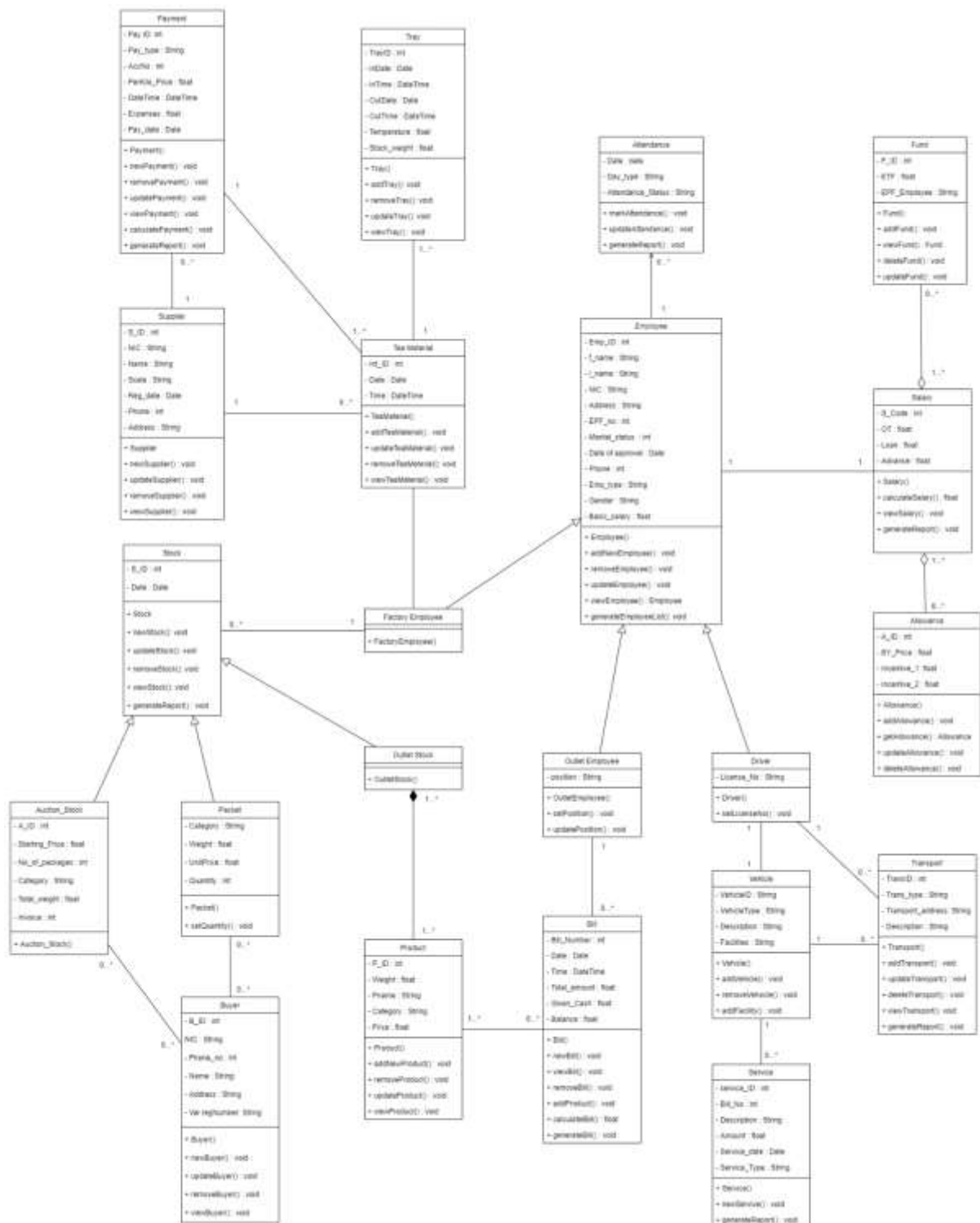


Figure 12: Class Diagram

2.2.3 Database Diagram

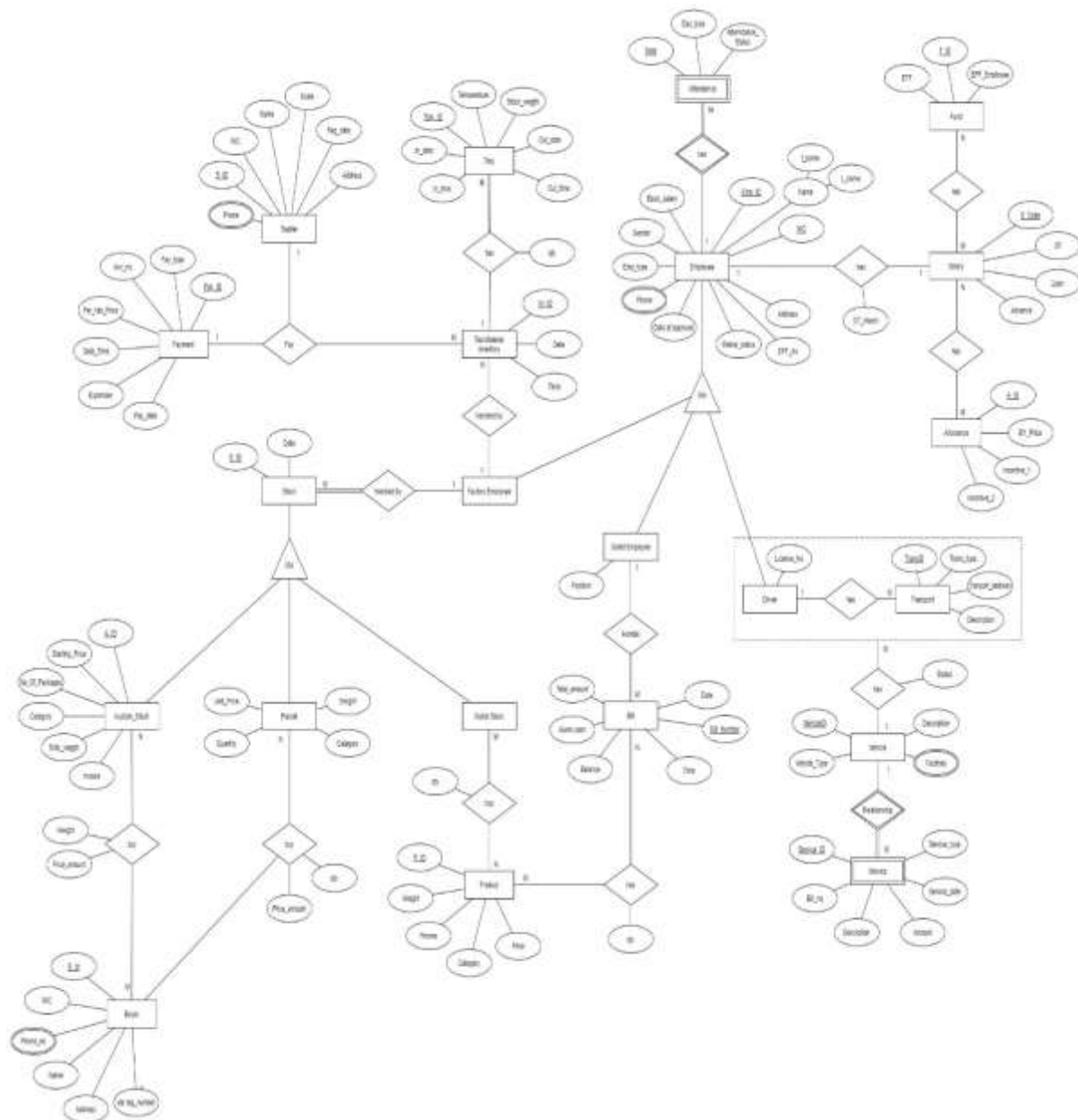
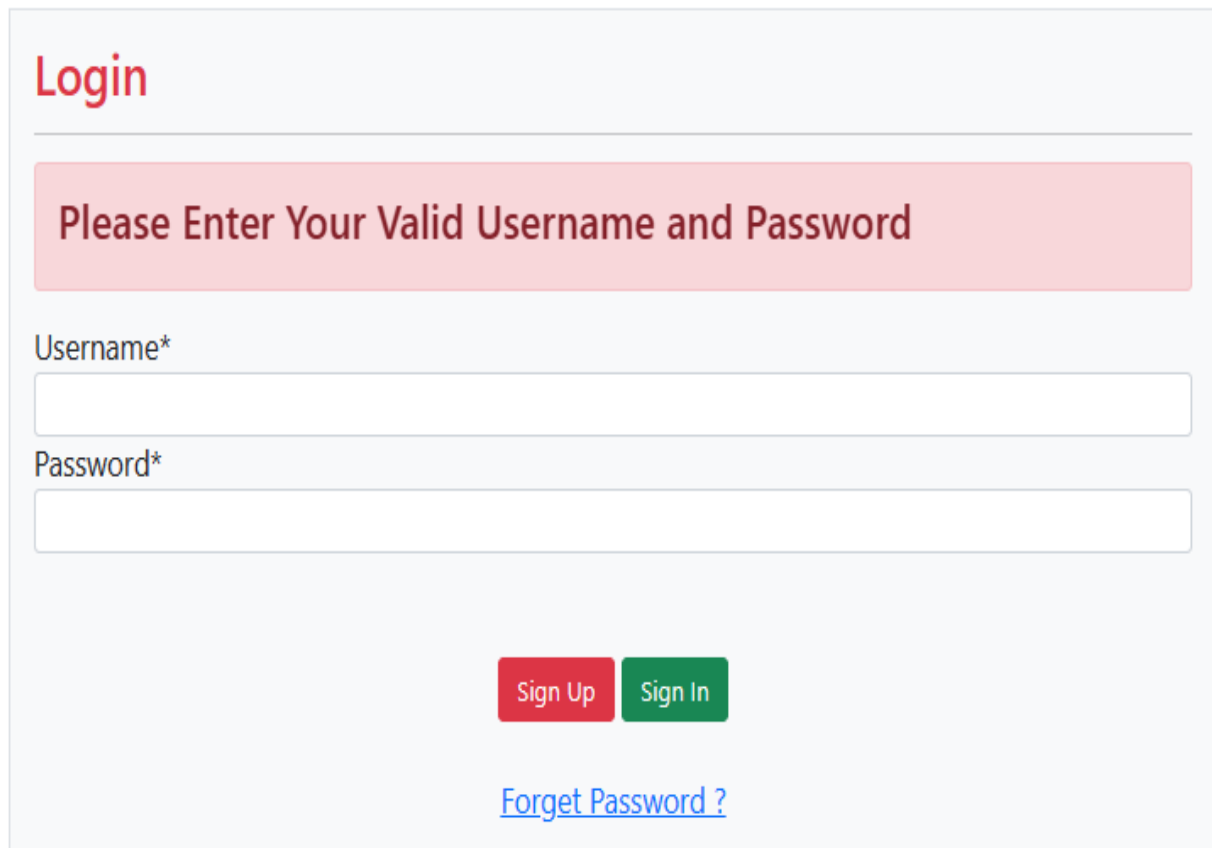


Figure 13:ER Diagram

2.2.4 User Interfaces



The login interface is contained within a light gray rectangular box. At the top left of this box, the word "Login" is written in a bold, red font. Below it, a horizontal line separates the header from the main content area. A prominent pink rectangular banner with rounded corners is positioned below the line, containing the text "Please Enter Your Valid Username and Password" in a dark red font. Underneath the banner, the label "Username*" is placed to the left of a white text input field. Below the username field, the label "Password*" is placed to the left of another white text input field. At the bottom of the form, there are two buttons: a red button with the text "Sign Up" and a green button with the text "Sign In". Below these buttons, the text "[Forget Password ?](#)" is displayed in a blue, underlined font.

Login

Please Enter Your Valid Username and Password

Username*

Password*

Sign Up Sign In

[Forget Password ?](#)

Figure 14: Factory System Login

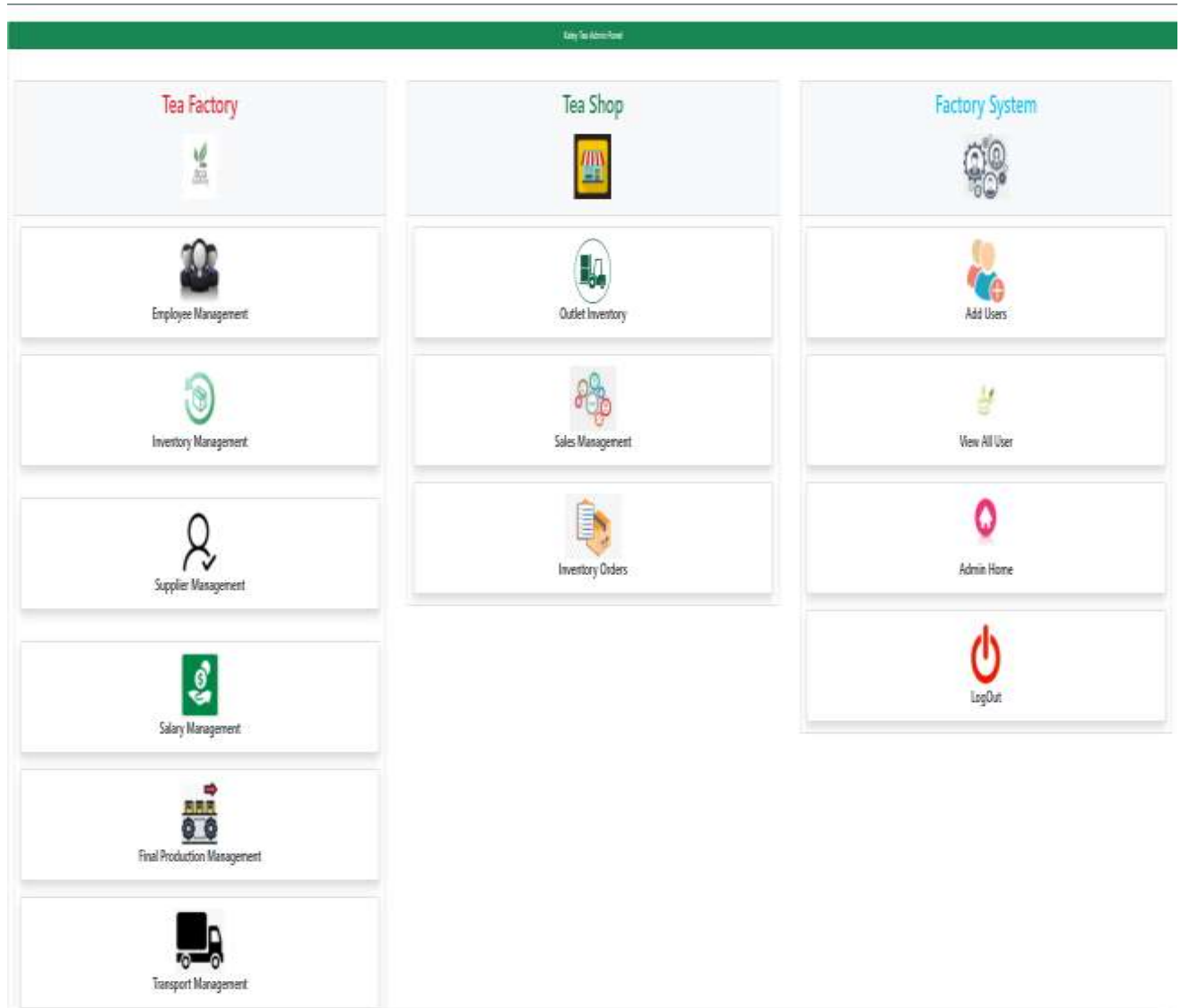


Figure 15:Admin Home Panel



Name
 EPF No
 NIC No
 Address
 Gender
 Marital Status
 Contact No
 Date of Birth YYYY-MM-DD
 Date of Approval YYYY-MM-DD
 Employee Group
 Employee Type
 Designation
 Basic Salary
 Add

Figure 16: Add Employee Details



Name
 EPF No
 NIC No
 Address
 Gender
 Marital Status
 Contact No
 Date of Birth YYYY-MM-DD
 Date of Approval YYYY-MM-DD
 Employee Group
 Employee Type
 Designation
 Basic Salary
 Save Changes

Figure 17: Edit Employee Details



Factory Worker Details

Staff Details

Attendance

Back To HOME

Employee Management

View Employee

Nisayuru Ananda

General Information

Date of Birth : June 30, 1999
 Gender : Male
 Marital Status : UnMarried
 Date of Approval : Jan. 18, 2020
 Employee Group : factory_Worker
 Employee Type : Permanent
 Designation : Clerk
 Basic Salary : 20000.0

EPF No : 4
NIC No : 991644845V

Contact Information

Contact No : 0712652938
 Address : Galle

Figure 18:View Employee Details



Factory Worker Details

Staff Details

Attendance

Back To HOME


Employee Management

Factory Worker's Details

+ Add New Worker

EPF No	NIC	Name	Contact No	Action
4	861156234V	Mahefa Sampath	0701133292	View Edit Delete
27	991644845V	Nisayuru Ananda	0712652938	View Edit Delete
52	986434678V	Keyara Jayakody	0769541264	View Edit Delete
16	927633523V	Vidath Rajapaksha	0771979922	View Edit Delete

Figure 19:Factory Workers Details



Factory Worker Details

Staff Details

Attendance

Back To HOME


Employee Management

Staff Details

+ Add New Staff

EPF No	NIC	Name	Contact No	Designation	Action
6	975044820V	Janith Gamage	0711264454	Supervisor	View Edit Delete
23	981834286V	Shenaya Pathirana	0775984334	AssistantFactory_Officer	View Edit Delete
49	941832155V	Wanindu de Silva	0769374532	Factory_Officer	View Edit Delete
71	883422276V	Ashani Perera	0708195432	Supervisor	View Edit Delete

Figure 20: Factory Staff Details



Factory Worker Details

Staff Details

Attendance

Back To HOME

Employee Management


Attendance Management

Select Date

Date

Mark Attendance

Figure 21: Select Date to Mark Attendance



**KALEY
TEA**

Factory Worker Details

Staff Details

Attendance

Back To HOME

Employee Management

Mark Attendance

2021-10-13

View All

EPF No	NIC	Name	Day Type	Attendance	
8	975044820V	Janith Gamage	Full Day ▼	Present	Absent
23	981834285V	Shenaya Pathirana	Full Day ▼	Present	Absent
4	861156234V	Mahela Sampath	Full Day ▼	Present	Absent
27	991644845V	Nisayuru Ananda	Full Day ▼	Present	Absent
52	986434678V	Keyara Jayakody	Full Day ▼	Present	Absent

Figure 22: Mark Attendance



**KALEY
TEA**

Factory Worker Details

Staff Details

Attendance

Back To HOME

Employee Management

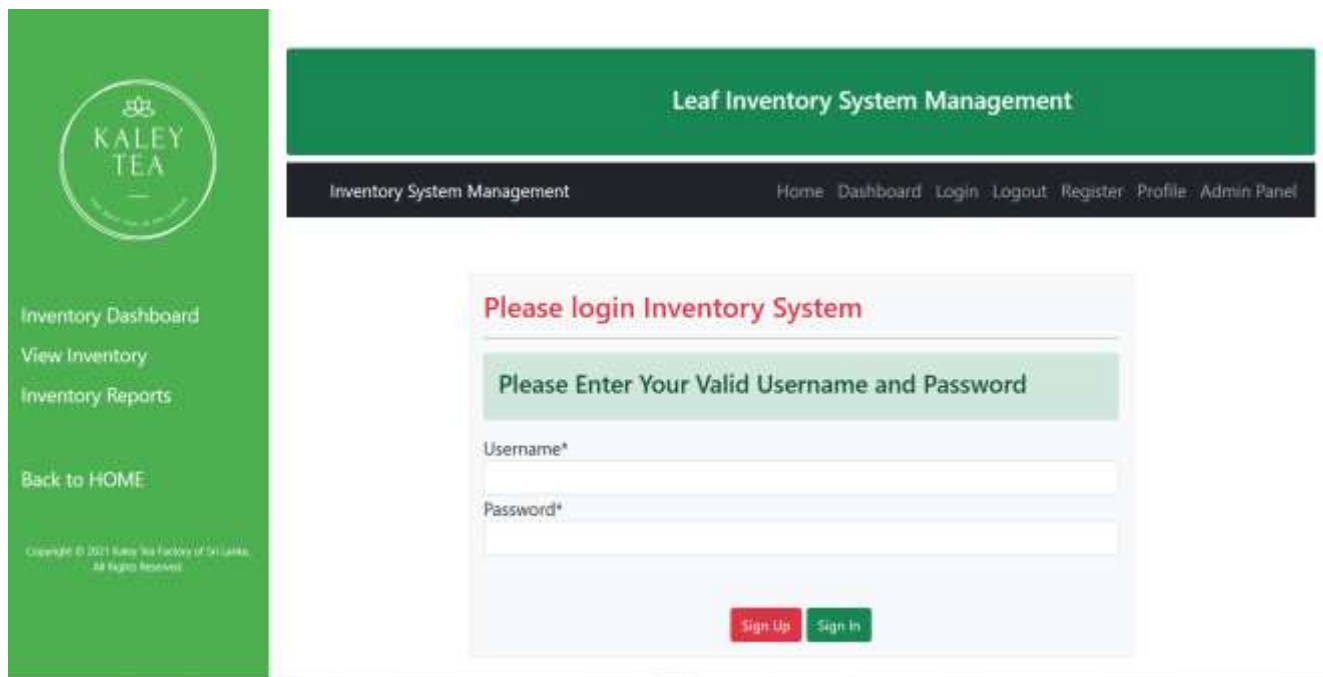
Attendance Management


2021-10-13

Generate Report

EPF No	NIC	Name	Marked Day Type	Marked Attendance	Day Type	Edit
8	975044820V	Janith Gamage	FullDay	Present	Full Day ▼	<div style="background-color: #2e8b57; color: white; padding: 2px 5px;">Present</div> <div style="background-color: #ff0000; color: white; padding: 2px 5px;">Absent</div>
4	861156234V	Mahela Sampath		Absent	Full Day ▼	<div style="background-color: #2e8b57; color: white; padding: 2px 5px;">Present</div> <div style="background-color: #ff0000; color: white; padding: 2px 5px;">Absent</div>
27	991644845V	Nisayuru Ananda	HalfDay	Present	Full Day ▼	<div style="background-color: #2e8b57; color: white; padding: 2px 5px;">Present</div> <div style="background-color: #ff0000; color: white; padding: 2px 5px;">Absent</div>
52	986434678V	Keyara Jayakody	FullDay	Present	Full Day ▼	<div style="background-color: #2e8b57; color: white; padding: 2px 5px;">Present</div> <div style="background-color: #ff0000; color: white; padding: 2px 5px;">Absent</div>

Figure 23: View Mark Attendance





Inventory Dashboard

View Inventory

Inventory Reports

Back to HOME

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Leaf Inventory System Management

Inventory System Management Home Dashboard Login Logout Register Profile Admin Panel

Please login Inventory System

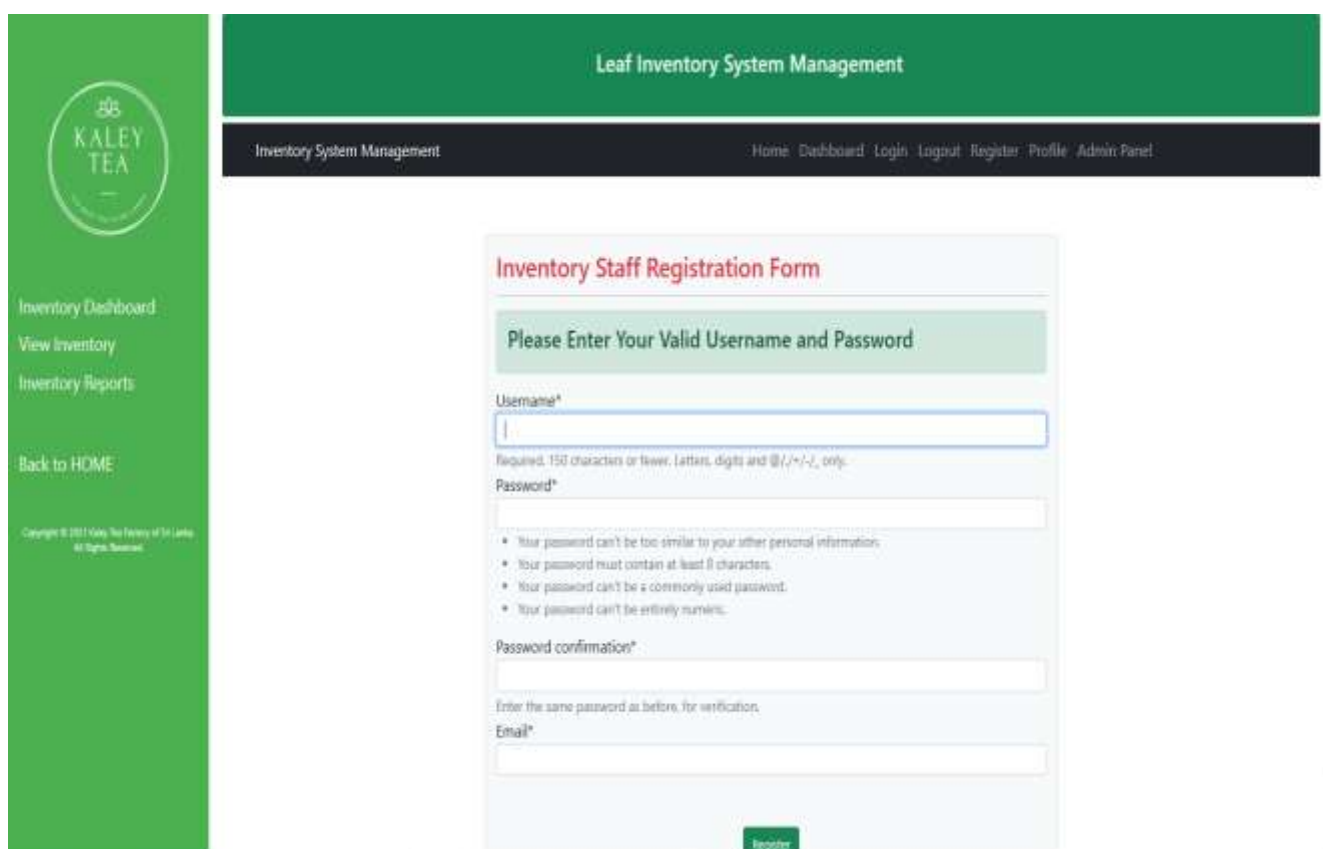
Please Enter Your Valid Username and Password


Username*

Password*

Sign Up Sign In

Figure 24: Inventory Login





Inventory Dashboard

View Inventory

Inventory Reports

Back to HOME

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Leaf Inventory System Management

Inventory System Management Home Dashboard Login Logout Register Profile Admin Panel

Inventory Staff Registration Form

Please Enter Your Valid Username and Password

Username*

Required: 150 characters or fewer. Letters, digits and @/./+/-/_ only.

Password*

- Your password can't be too similar to your other personal information.
- Your password must contain at least 8 characters.
- Your password can't be a commonly used password.
- Your password can't be entirely numeric.

Password confirmation*

Enter the same password as before, for verification.

Email*

Register

Figure 25: Inventory Dashboard Registration

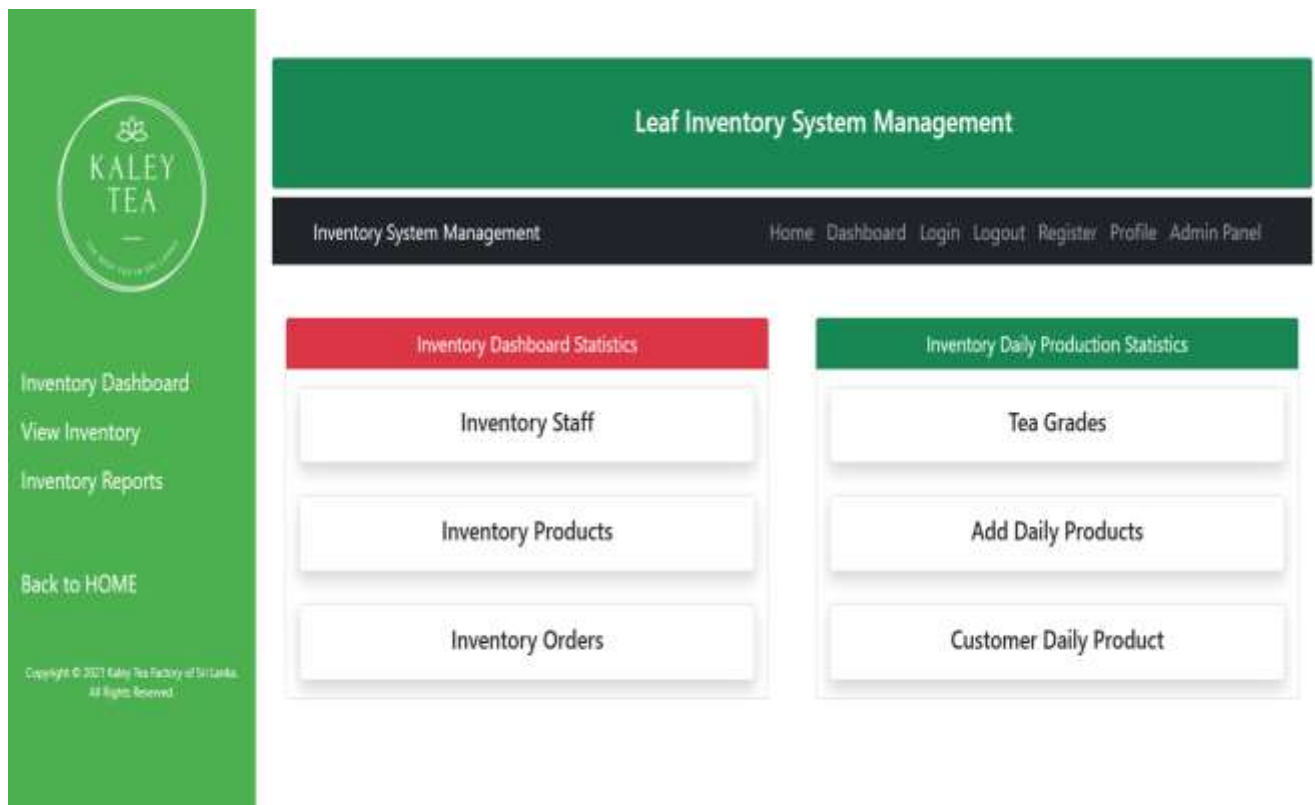


Figure 26: Inventory Dashboard

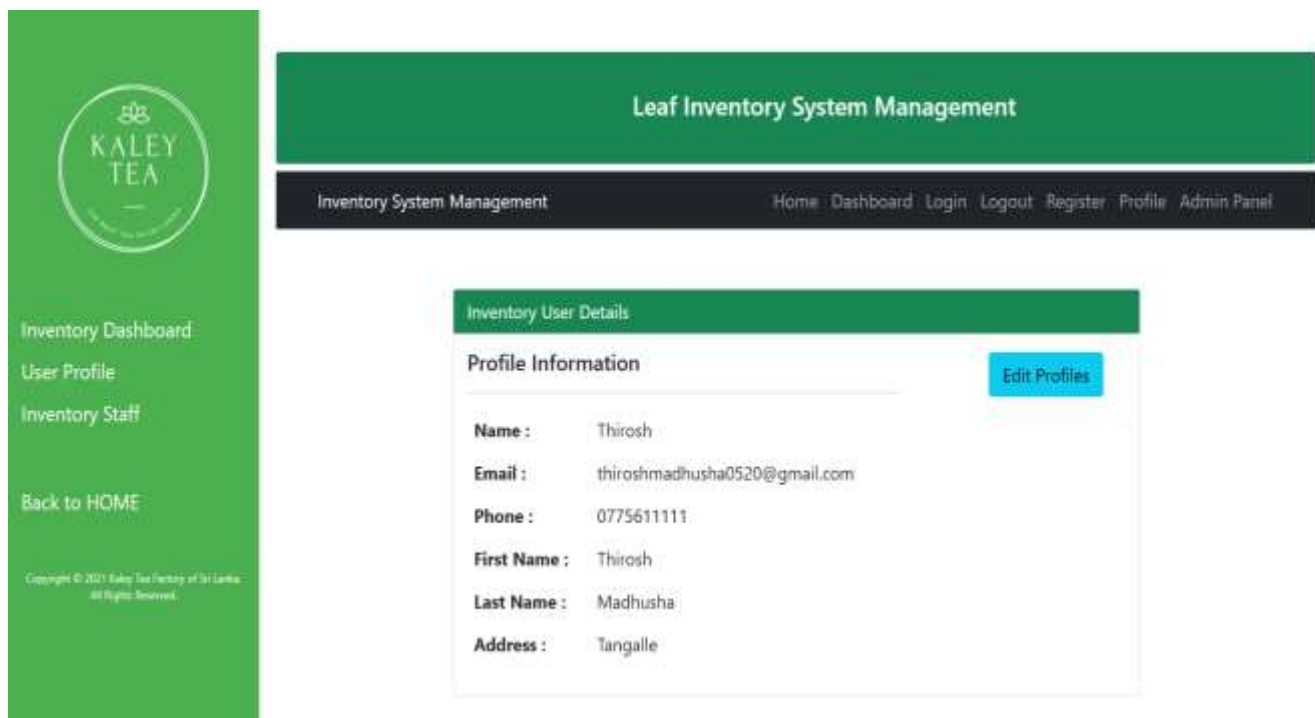



Figure 27:Edit Inventory User Profile Details



Inventory Dashboard

User Profile

Inventory Staff

Back to HOME

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Leaf Inventory System Management

Inventory System Management Home Dashboard Login Logout Register Profile Admin Panel

Inventory Staff Member Details

View	Name	Phone No	First Name	Last Name	Email Address	Address
Update	Admin	0772547785	System	Admin	admin0520@gmail.com	Colombo
Update	Admin0520	0775145562	Admin	-	admin0520@gmail.com	Galle
Update	Thirosh	0775611111	Thirosh	Madhusha	thiroshmadhusha0520@gmail.com	Tangalle
Update	Sachi	0775555656	Sachi	Perera	sachi0520@gmail.com	Galle
Update	Nagahawatta	0773458844	Senal	Nagahawatta	nagahawatta@gmail.com	Galle

Figure 28: View all Inventory User Profile Details



Inventory Dashboard

View Inventory

Inventory Reports

Back to HOME

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Leaf Inventory System Management

Inventory System Management Home Dashboard Login Logout Register Profile Admin Panel

Add Inventory Products

Name :

Category :

In Date :

In Time :


Tray ID :

Temp :

Weight(Kg):

Out Date :

Figure 29:Add Product into Inventory



Inventory Dashboard
View Inventory
Inventory Reports

Back to HOME

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Leaf Inventory System Management


Inventory System Management Home · Dashboard · Login · Logout · Register · Profile · Admin Panel

Search Inventory Tray ID

View Inventory Products Details

Name	Category	In Date	IN Time	Tray ID	Temperature	Weight(Kg)	Out Date	Action
Thirosh	Dry Tea Leaves	Oct. 7, 2021	8:05 a.m.	Tra001	25.0	100	Oct. 8, 2021	<input type="button" value="Update"/> <input type="button" value="report"/> <input type="button" value="Delete"/>
Karu	Light Tea Leaves	Oct. 8, 2021	11:52 p.m.	Tra002	22.0	150	Oct. 9, 2021	<input type="button" value="Update"/> <input type="button" value="report"/> <input type="button" value="Delete"/>
Chamuditha	Dry Tea Leaves	Oct. 8, 2021	11:54 p.m.	Tra003	25.0	10	Oct. 8, 2021	<input type="button" value="Update"/> <input type="button" value="report"/>

Figure 30: View All Inventory Products



Inventory Dashboard
View Inventory
Inventory Reports

Back to HOME

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Leaf Inventory System Management

Inventory System Management Home · Dashboard · Login · Logout · Register · Profile · Admin Panel

Update Inventory Items

Name:

Category:

In Date:

In Time:


Tray ID:

Temperature:

Weight(Kg):

OutDate:

Figure 31: Update Inventory Product Details



Inventory Dashboard

Inventory Orders

Make Requests

Back to HOME

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Leaf Inventory System Management

Inventory System Management Home Dashboard Login Logout Register Profile Admin Panel

Make Request

Staff*


Leaves category*

Order quantity*

Time*

Make Request

Figure 32:Make an Order Request



Inventory Dashboard

Inventory Orders

Make Requests

Back to HOME

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Leaf Inventory System Management

Inventory System Management Home Dashboard Login Logout Register Profile Admin Panel

Inventory Order Details

Category	Quantity	Ordered by	Date	Time
Tea Leaves Jars	100	Admin	Oct. 9, 2021	6:09 p.m.
Tea Leaves Jars	50	Admin0520	Oct. 9, 2021	6:09 p.m.
Tea Bags	120	Thirosh	Oct. 9, 2021	6:09 p.m.
Tea Leaves Jars	152	Sachi	Oct. 9, 2021	6:10 p.m.
Tea Leaves Jars	152	Nagahawatta	Oct. 9, 2021	7:12 p.m.

Figure 33:View All Order Request



Tea Grades

Add Daily Production

Customer Daily Product

Back to HOME

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Leaf Inventory System Management

Inventory System Management Home Dashboard Login Logout Register Profile Admin Panel


Add New Tea Grades Category

Add new category: Add Tea Grades

Tea Grades

ID	Tea Category	Action
2	BOP	Delete
3	BOPF	Delete
5	BOPF1	Delete
1	FF	Delete
4	FOF	Delete
6	PD	Delete

Figure 34: Add New Tea Grades



Tea Grades

Add Daily Production

Customer Daily Product

Back to HOME

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Leaf Inventory System Management

Inventory System Management Home Dashboard Login Logout Register Profile Admin Panel

Add Sub Products

Sub Product ID:

Tea Grade:

Weight:


Add Product

Add Sub Products

Main ID	Sub ID	Tea Grade	Weight	actions
7	5	OPD	100.0	Delete
8	5	FF	200.0	Delete

Date: Done

Figure 35: Add Daily Sub Products



Tea Grades

Add Daily Production

Customer Daily Product

Back to HOME

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Leaf Inventory System Management

Inventory System Management

Home Dashboard Login Logout Register Profile Admin Panel

Customer Daily Products Details

Daily prod. ID	Sub id	Date	Total Weight	Action
1	1	Oct. 7, 2021	150.0	View
2	2	Oct. 8, 2021	120.0	View
3	3	Oct. 8, 2021	150.0	View
4	4	Oct. 9, 2021	150.0	View
6	5	Oct. 11, 2021	300.0	View

Figure 36: View Customer Daily Product Details



[Profiles](#)
[Registration](#)
[Stock](#)
[Payments](#)

[Back to HOME](#)

Kaley Tea Factory

Supplier Register

Please fill in this form to create an account.

Full Name

Enter Your Full name

NIC No

Enter Your NIC No

Address

Enter Your Address

Date Of Birth

mm / dd / yyyy

Email Address

Ex:myname@example.com

Contact Number

Enter Your Contact Number

Payment type

Enter Your Payment Type

Bank Name


Enter Your Bank Name

Account No

Enter Your Account No

Register

Figure 37:Supplier Register



Profiles
Registration
Stock
Payments

Back to HOME

Supplier Details

Supplier ID

2

Full Name

Vidath Chamikara

NIC No

992990864V

Address

"Bamwasa", Raduwana

Date Of Birth

18/25/1999

Email Address

vidathchamikara99@gmail.com

Contact Number

0776004918

Payment type

Cheque

Bank Name


Sampath Bank

Account No

88888

Update

Figure 38:Update Supplier Details



Profiles
Registration
Stock
Payments

Back to HOME

Kaley Tea Factory


Supplier Management

Registered Suppliers

+ Add New Supplier

Supplier ID	NIC	Supplier Name	Contact No	Action
2	992990864V	Vidath Chamikara	0776004918	<div style="display: inline-block; background-color: #2e8b57; color: white; padding: 2px 5px; border-radius: 3px;">Update</div> <div style="display: inline-block; background-color: red; color: white; padding: 2px 5px; border-radius: 3px;">Delete</div>
3	923458765V	Nisala Amarasekara	0771304569	<div style="display: inline-block; background-color: #2e8b57; color: white; padding: 2px 5px; border-radius: 3px;">Update</div> <div style="display: inline-block; background-color: red; color: white; padding: 2px 5px; border-radius: 3px;">Delete</div>
14	992990864V	Chathila Pinsara	0771304569	<div style="display: inline-block; background-color: #2e8b57; color: white; padding: 2px 5px; border-radius: 3px;">Update</div> <div style="display: inline-block; background-color: red; color: white; padding: 2px 5px; border-radius: 3px;">Delete</div>

Figure 39:View Supplier Details



- Profiles
- Registration
- Stock
- Payments

Back to HOME

Kaley Tea Factory

Add Supplier Leaf Stock

Supplier NIC

Total Weight

Received Date

Received Time

Submit

Figure 40: Add Supplier Leaf Stock



- Profiles
- Registration
- Stock
- Payments

Back to HOME

Kaley Tea Factory


Supplier Management

Leaf Stock Details

+ Add New Stock

Stock ID	Supplier NIC	Weight	Date	Time	Action
1	992990864V	100 Kg	2021.09.01	05.30	Delete
2	99765097V	120 Kg	2021.09.11	05.00	Delete
12	986549874V	50 Kg	2021.08.14	05.30	Delete

Figure 41: View Leaf Stock Details



- Profiles
- Registration
- Stock
- Payments
- Back to HOME

Kaley Tea Factory

Add Supplier New Payment

Supplier NIC

Supplier ID

Total Kilograms

Total Payment

Date

Time

Submit

Figure 42:Add New Supplier Payment



- Profiles
- Registration
- Stock
- Payments
- Back to HOME

Kaley Tea Factory

Supplier Management


Payment Details

+ Add New Payment

Payment ID	Supplier NIC	Weight	Payment	Date	Time	Action
1	992990864V	400 Kg	Rs.75000.00	2021.09.01	10.50	Delete
2	962991364V	500 Kg	Rs.90000.00	2021.08.10	11.50	Delete
10	962991364V	120 Kg	Rs.55000.00	2021.09.01	08.50	Delete

Print Payment Slip

Figure 43:View Supplier Payment Details



- Category Product
- Add tea packets
- View Tea Packets
- Available Stock
- Reports
- Back To HOME

Sales Inventory Management

Category product

Category Product Name:

Tea Category:

Category Weight:

ADD

Category Product Name	Category	Weight	Edit	Delete
BOPF 1	BOPF	1kg	EDIT	DELETE
BOPF 2	BOPF	500g	EDIT	DELETE
OPA 1	OPA	1kg	EDIT	DELETE
OPA 2	OPA	500g	EDIT	DELETE

Figure 44: Add Tea Category



- Category Product
- Add tea packets
- View Tea Packets
- Available Stock
- Reports
- Back To HOME

Sales Inventory Management

Edit Category Product


Category Product Name:

Tea Category:

Category Weight:

SAVE

Figure 45:Edit Tea Category



Category Product

Add tea packets

View Tea Packets

Available Stock

Reports

Back To HOME

Sales Inventory Management

Add Tea Packets


Date:

Category Product Name:

Number of packets:

ADD

Figure 46:Add Tea Packets



Category Product

Add tea packets

View Tea Packets

Available Stock

Reports


Back To HOME

Sales Inventory Management

View Tea Packets

Date	Category	Weight	Number of Packets	Edit	Delete
July 18, 2021	BOPF	500g	100	EDIT	DELETE
Sept. 1, 2021	OPA	1kg	200	EDIT	DELETE
Sept. 2, 2021	BOPF	1kg	250	EDIT	DELETE
Sept. 10, 2021	BOPF	1kg	100	EDIT	DELETE
Oct. 9, 2021	OPA	500g	100	EDIT	DELETE
Oct. 9, 2021	BOPF	1kg	50	EDIT	DELETE

Figure 47:View Tea Packets



- Category Product
- Add tea packets
- View Tea Packets**
- Available Stock
- Reports
- Back To HOME

Sales Inventory Management

Edit Tea Packets

Date:

Sept. 2, 2021

Tea Category:

BOPF

Category Weight:

1kg

Number of packets:

250

Update

Figure 48:Edit Tea Packets



- Category Product
- Add tea packets
- View Tea Packets
- Available Stock**
- Reports
- Back To HOME

Sales Inventory Management

Available Stock

Category	Weight	Available Stock
BOPF	500g	100
OPA	1kg	200
BOPF	1kg	400
OPA	500g	0
BOP	500g	210
BOP	1kg	80

Figure 49:Available Tea Category Stock Details

- Category Product
- Add tea packets
- View Tea Packets
- Available Stock
- Reports**
- Back To HOME

Sales Inventory Management Reports

Monthly Report

Annual Report

Figure 50:Monthly and Annual Report

- Auction Stock
- Stock Sales
- Back to HOME

Kaley Tea Factory Final Production Management

Auction Stock | Prepare Catalog

Prepare A Catalog
Auction Details
Buyer Details

Add Main Auction Stock(Catalog)

Stock ID


Tea Category

Total Weight

No of Packages

Date Prepared

Figure 51:Add auction Stock Details



Auction Stock
Stock Sales

Back to HOME

Kaley Tea Factory

Final Production Management


Auction Stock | All Catalog

[Prepare A Catalog](#)
[Auction Details](#)
[Buyer Details](#)

Auction Details

ID	Stock ID	Tea Category	Total Weight	No of Packages	Date Prepared	Edit
2	Q57F	opa	100kg	200	2021-08-10	Update Delete
6	T32G	ip	250kg	300	2021-09-28	Update Delete
7	H34T	topf	200kg	500	2021-09-31	Update Delete
8	G34Y	ip	200kg	150	2021-09-28	Update Delete
9	H32W	opa	250kg	50	2021-09-28	Update Delete
10	D34R	topf	200kg	300	2021-10-10	Update Delete
11	S23E	topf	23kg	123	2021-10-10	Update Delete

Figure 52:View auction Stock Details



Auction Stock
Stock Sales

Back to HOME

Kaley Tea Factory

Final Production Management

Auction Stock | Prepare Catalog

[Prepare A Catalog](#)
[Auction Details](#)
[Buyer Details](#)

Update Main Auction Stock(Catalog)

ID

9

Stock ID

H32W

Tea Category

OPA

Total Weight

250kg

No of Packages


50

Date Prepared

29/09/2021

Update Auction Stock Details

Figure 53:Update auction Stock Details



Auction Stock
Stock Sales

Back to HOME

Kaley Tea Factory

Final Production Management

Auction Stock | Buyers


[Prepare A Catalog](#)
[Auction Details](#)
[Buyer Details](#)

Buyer Details

ID	Company Name	Register ID	Address	Phone Number	Edit
1	Rajapaksha Brothers PVT	2351	No. 234, Colombo 10	060-342-2341	Update Delete
12	Hedlo PVT	9874	No. 234, Colombo 10	088-234-2345	Update Delete
13	Raja Brothers PVT	0554	No. 234, Colombo 10	345-345-3452	Update Delete
15	Rajapaksha Brothers PVT	3445	No. 234, Colombo 10	076-546-4532	Update Delete
16	Raja Brother PVT	1234	No. 234, Colombo 10	032-233-3216	Update Delete

[Add Buyer](#)
[Generate Report](#)

Figure 54:Buyer Details



Auction Stock
Stock Sales

Back to HOME

Kaley Tea Factory

Final Production Management

Auction Stock | View Catalog


[Prepare A Catalog](#)
[Auction Details](#)
[Buyer Details](#)

Add New Buyer

Company Name
Register No
Address
Phone No

[Insert Record](#)

Figure 55:Add New Buyer



Auction Stock
Stock Sales

Back to HOME

Kaley Tea Factory

Final Production Management

Auction Stock | Update Buyer

[Prepare A Catalog](#)
[Auction Details](#)
[Buyer Details](#)

Update Buyer Form

Buyer ID

13

Company Name

Raja Brother PVT

Register No

5554

Address


No. 234, Colombo 10

Phone No

345-345-3452

Insert record

Figure 56:Update Buyer Details



Auction Stock
Stock Sales

Back to HOME

Kaley Tea Factory

Final Production Management

Stock Sales | Current Stocks


[Current Stock](#)
[Sold Stock Details](#)
[Not Sold Stock Details](#)
[Buyer Details](#)

Current Stock Details

ID	Stock ID	Tea Category	Total Weight	No of Packages	Date Prepared	Status	Edit
7	H34T	brpf	200kg	100	2021-08-31	Pending	Sold NotSold Delete
8	D34Y	or	300kg	150	2021-09-28	Pending	Sold NotSold Delete
9	H32W	ape	350kg	35	2021-09-28	Pending	Sold NotSold Delete
10	D34R	brpf	200kg	200	2021-10-10	Pending	Sold NotSold Delete
11	S23E	brpf	20kg	100	2021-10-10	Pending	Sold NotSold Delete

Generate Report

Figure 57:Generate Current Stock Report



Auction Stock
Stock Sales

Back to HOME

Kaley Tea Factory

Final Production Management

Stock Sales | Sold Stocks


[Current Stock](#)
[Sold Stock Details](#)
[Not Sold Stock Details](#)
[Buyer Details](#)

Add Sold Stocks

Company ID	<input type="text" value="T"/>
Stock ID	<input type="text" value="HS4T"/>
Tea Category	<input type="text" value="CPA"/>
Total Weight	<input type="text" value="200kg"/>
No of Packages	<input type="text" value="100"/>
Company Name	<input type="text" value="Enter Company Name"/>
Register ID	<input type="text" value="Enter register no. (Format should be xxxx)"/>
Date Sold	<input type="text" value="11/08/2021"/>

Add sold stock details

Figure 58:Add Sold Stock Details



Auction Stock
Stock Sales

Back to HOME

Kaley Tea Factory

Final Production Management

Stock Sales | Not Sold Stocks


[Current Stock](#)
[Sold Stock Details](#)
[Not Sold Stock Details](#)
[Buyer Details](#)

Add Not Sold Stock

Company ID	<input type="text" value="T"/>
Stock ID	<input type="text" value="HS4T"/>
Tea Category	<input type="text" value="CPA"/>
Total Weight	<input type="text" value="200kg"/>
No of Packages	<input type="text" value="100"/>
Not Sold Date	<input type="text" value="11/08/2021"/>

Add not sold stock details

Figure 59:Add Not Sold Stock Details



Auction Stock
Stock Sales

Back to HOME

Kaley Tea Factory

Final Production Management


Stock Sales | Sold Stocks

[Current Stock](#)
[Sold Stock Details](#)
[Not Sold Stock Details](#)
[Buyer Details](#)

Sold Stock Details

ID	Stock ID	Tea Category	Total Weight	No of Packages	Date Stock Sold	Status	Company Name	Register ID
1	SE3D	opa	250kg	300	2021-09-18	Sold	Rajapaksha Brothers PVT	125
2	Q1NK	opa	320kg	300	2021-09-18	Sold	Raja	234
3	H32W	opa	250kg	50	2021-09-30	Sold	Raja Brother PVT	4352
4	O34R	opa	200kg	300	2021-10-19	Sold	Heta PVT	3452
5	SE3D	opa	200kg	300	2021-09-17	Sold	Raja PVT	2342

Figure 60:View Sold Stock Details



Auction Stock
Stock Sales

Back to HOME

Kaley Tea Factory

Final Production Management


Stock Sales | Sold Stocks

[Current Stock](#)
[Sold Stock Details](#)
[Not Sold Stock Details](#)
[Buyer Details](#)

Not Sold Stock Details

ID	Stock ID	Tea Category	Total Weight	Status	No of Packages	Date Prepared
1	Q6TF	opa	100kg	Not Sold	50	2021-09-14
2	Q6TF	opa	100kg	Not Sold	50	2021-09-15
3	H32W	opa	250kg	Not Sold	50	2021-09-29
4	Q6TF	opa	100kg	Not Sold	200	2021-09-16

Figure 61:View Not Sold Stock Details



- Add & View Prices
- New Bill
- Transactions
- Sales Reports
- Back to HOME

Kaley Tea Factory


Outlet Sales - Add Product Price

Product Name: Price (Rs.):

Outlet Sales - Price Table

Product ID	Product Name	Category	Weight	Price (Rs.)	Update / Delete Price
3	BOPF 01	BOPF	100g	Rs.112.0	<input type="button" value="Update"/> <input type="button" value="Delete"/>
14	BOPF 05	BOPF	500g	Rs.480.0	<input type="button" value="Update"/> <input type="button" value="Delete"/>
4	BOPF 01	BOPF	100g	Rs.120.25	<input type="button" value="Update"/> <input type="button" value="Delete"/>
11	BOPF 02	BOPF	200g	Rs.200.0	<input type="button" value="Update"/> <input type="button" value="Delete"/>
16	BOPF 05	BOPF	500g	Rs.100.0	<input type="button" value="Update"/> <input type="button" value="Delete"/>
1	OP 01	OP	100g	Rs.88.0	<input type="button" value="Update"/> <input type="button" value="Delete"/>
5	OP 02	OP	200g	Rs.182.0	<input type="button" value="Update"/> <input type="button" value="Delete"/>
7	OP 02.5	OP	250g	Rs.240.0	<input type="button" value="Update"/> <input type="button" value="Delete"/>
6	OP 05	OP	500g	Rs.488.0	<input type="button" value="Update"/> <input type="button" value="Delete"/>

Figure 62:Outlet Sales Add Product Price



- Add & View Prices
- New Bill
- Transactions
- Sales Reports
- Back to HOME

Kaley Tea Factory

Outlet Sales - Add to Cart

Product Name: Quantity:

Cart

Total Bill: Rs.1496.0

Product ID	Product Name	Category	Weight	Unit Price (Rs.)	QTY	Sub Total (Rs.)	Remove Item
3	BOPF 01	BOPF	100g	112.0	- 1 +	336.0	X
14	BOPF 05	BOPF	500g	480.0	- 3 +	960.0	X
16	BOPF 05	BOPF	500g	100.0	- 2 +	200.0	X
Total Bill:						Rs.1496.0	

Figure 63:Outlet Sales-Add to Cart



 Add & View Prices New Bill Transactions Sales Reports Back to HOME	Kaley Tea Factory			
	Outlet Sales - Transactions			
	Bill Number	Total (Rs.)	Date	Time
	34	899.0	Oct. 9, 2021	7:54 p.m.
	32	870.0	Oct. 8, 2021	2:16 a.m.
	31	774.0	Oct. 9, 2021	2:35 a.m.
	29	870.0	Oct. 5, 2021	11:26 p.m.
	28	774.0	Oct. 5, 2021	11:26 p.m.
	27	960.0	Oct. 3, 2021	8:13 p.m.
	26	870.0	Oct. 3, 2021	2:22 a.m.
	25	1066.0	Oct. 2, 2021	2:22 a.m.
	24	2918.0	Oct. 1, 2021	10:58 a.m.
	23	1680.0	Sept. 30, 2021	12:18 a.m.
	22	208.0	Sept. 30, 2021	12:18 a.m.
	19	672.0	Sept. 18, 2021	4:55 a.m.

Figure 64:Outlet Sales-Transactions



Add & View Prices

New Bill

Transactions

Sales Reports

Back to HOME

Kaley Tea Factory

Outlet Sales - Bill Details

Bill Number : 25

Date : Oct. 2, 2021

Handled by : Sachintha Gunaratne

Total Price : Rs.1066.0

Cash : Rs.1100.0

Balance : Rs.34.0

Product ID	Product Name	Category	Weight	Unit Price (Rs.)	QTY	Sub Total (Rs.)
1	OP 01	OP	100g	38.0	2	796.0
2	OP 02.5	OP	250g	240.0	2	480.0
13	BCP 02	BCP	300g	195.0	2	390.0

Generate Bill

Delete Record

Go Back

Figure 65:outlet Sales-Bill Details

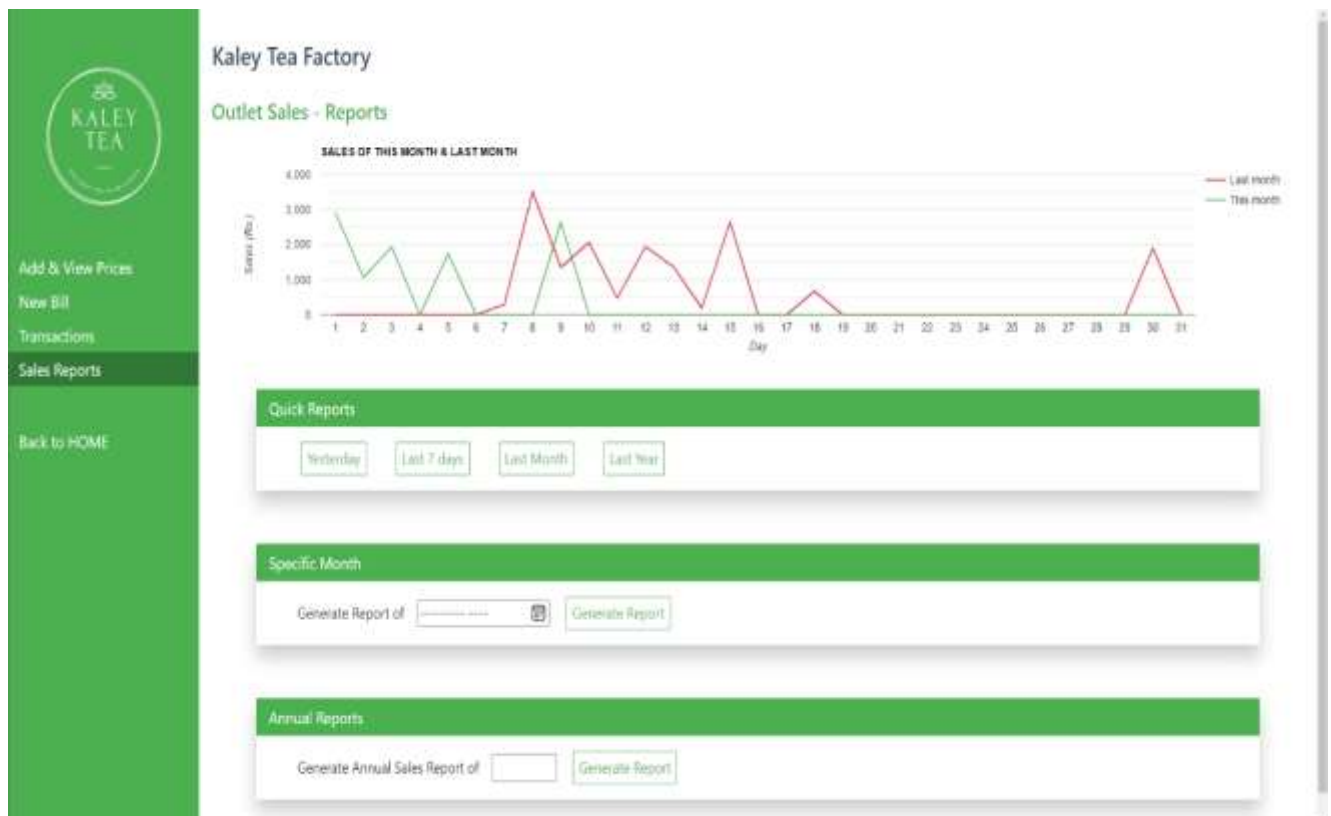


Figure 66:Outlet Sales Monthly Report

Kaley Tea Factory

Outlet Sales - Add Product Price

Product Name: Select Product... Price (Rs.):

Outlet Sales - Price Table

Search... Search Reset

Update Price?

Product ID : 14
Name : BCP 05
Category : BCP
Weight : 500g
Price (Rs.) : 480

UPDATE

Product ID	Product Name	Category	Weight	Price (Rs.)	Update / Delete Price
3	BCP 01	BCP	400g	Rs.112.0	Update Delete
14	BCP 05	BCP	500g	Rs.480.0	Update Delete
4	BCP 01	BCP	100g	Rs.120.25	Update Delete
12	BCP 02	BCP	200g	Rs.228.0	Update Delete
16	BCP 05	BCP	500g	Rs.480.0	Update Delete
1	CP 01	CP	100g	Rs.38.0	Update Delete
5	CP 02	CP	200g	Rs.76.0	Update Delete
7	CP 03	CP	200g	Rs.141.0	Update Delete
9	CP 05	CP	500g	Rs.480.0	Update Delete
6	CP 10	CP	1kg	Rs.970.0	Update Delete
2	CP 01	CP	100g	Rs.108.0	Update Delete

Figure 67:Outlet Sales-Update Price Table

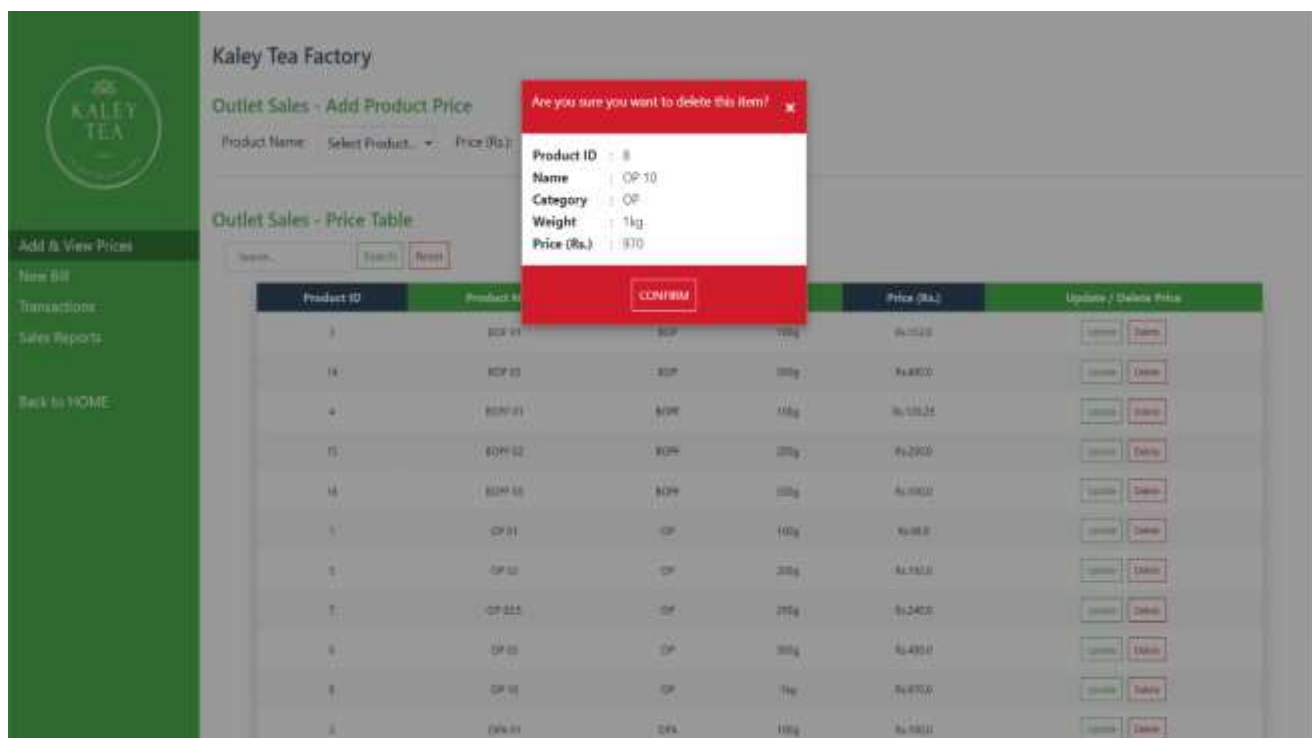


Figure 68:Outlet Sales-Delete Price Table

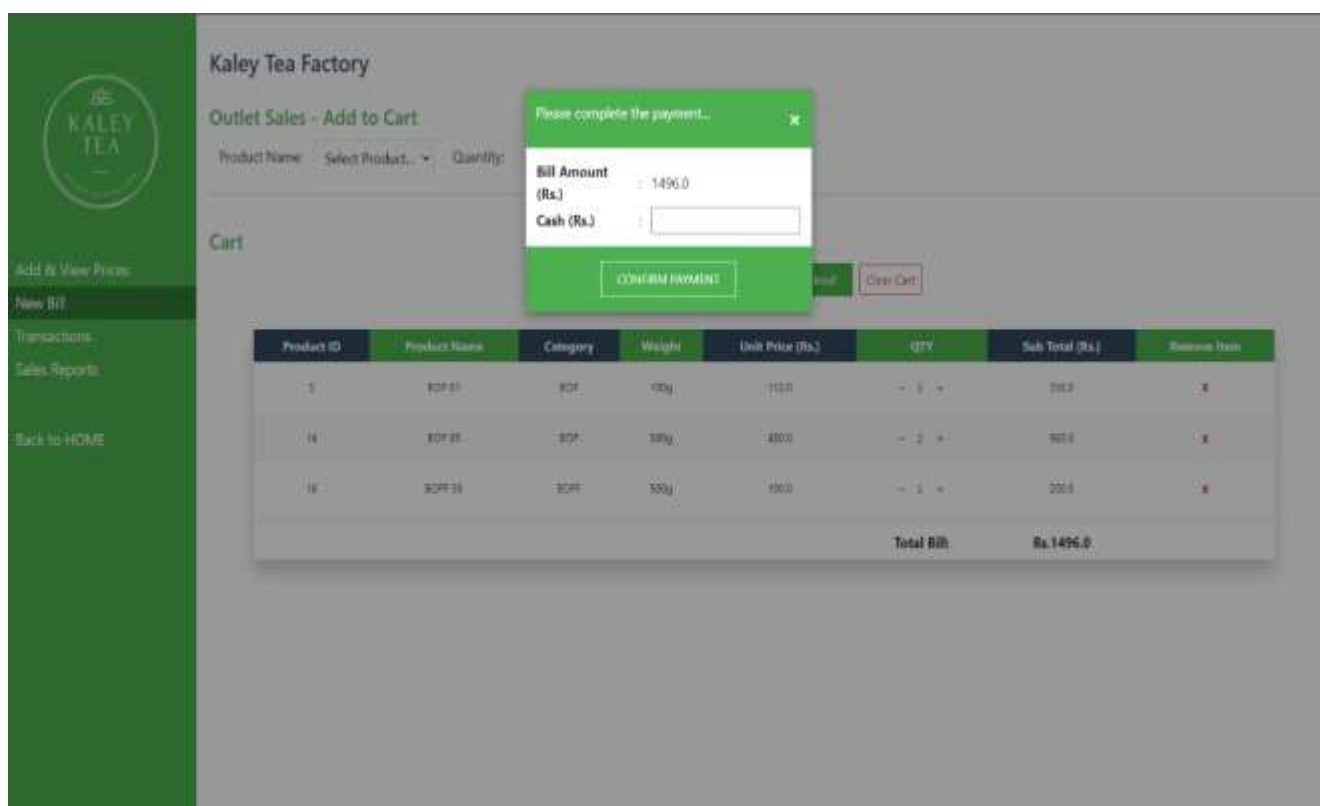


Figure 69:Outlet Sales-Confirm Payment

Download

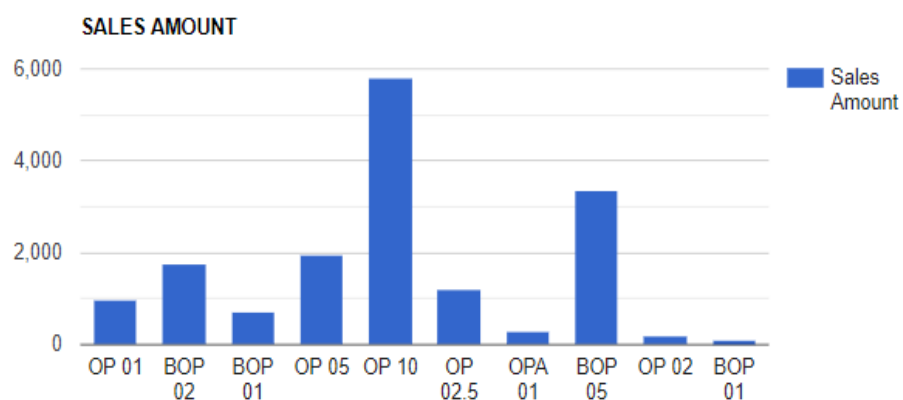
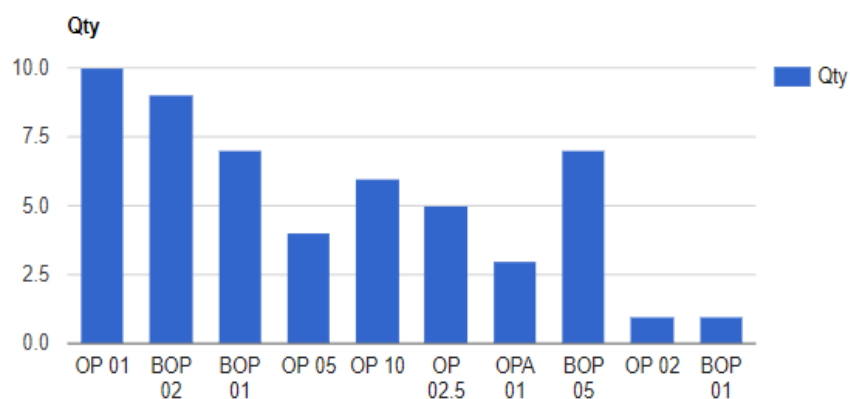
KALEY TEA

— Kaley Tea, Sri Lanka —
Email: support@kaleytea.com

Report for: 2021 - 9
Generated on: Oct. 11, 2021, 5:22 p.m.
Generated by: Sachintha Gunaratne


Summary

Total Sales: Rs.16383.0
Total No. of Items Sold: 53
Most sold item(s): | OP 01 |
No of Bills: 16
Average Price per Bill: Rs.1023.94



(This is a computer generated report.)

Figure 70: Outlet Sales-Report



Calculate Salary
Clustered Reports
Allowance
Funds

Back to HOME

Kaley Tea Factory

ADD NEW ALLOWANCE

Employee ID :


Allowance by price :

Incentive 1 :

Incentive 2 :

SUBMIT

Figure 71:Add New Allowance



Calculate Salary
Clustered Reports
Allowance
Funds

Back to HOME


Kaley Tea Factory

ALLOWANCE

Allowance_ID	Allowance By Price	Incentive 1	Incentive 2	
2	2500.0	1000.0	500.0	Edit Delete
4	2500.0	1000.0	500.0	Edit Delete

Add New Allowance

Figure 72:View All Allowance



- Calculate Salary
- Clustered Reports
- Allowance
- Funds
- Back to HOME

Kaley Tea Factory

CALCULATE SALARY

Enter Employee ID :

Enter Month :

Enter Year :

Attendance


Basic Salary

OT Hours

Loans

CALCULATE AND ADD

Figure 73:Calculate Salary



- Calculate Salary
- Clustered Reports
- Allowance
- Funds
- Back to HOME

Kaley Tea Factory

EDIT ALLOWANCE

Employee ID : Employee object (2)


Allowance by price : 2500.0

Incentive 1 : 1000.0

Incentive 2 : 500.0

SUBMIT

Figure 74:Edit Allowance



- Calculate Salary
- Clustered Reports
- Allowance
- Funds
- Back to HOME

Kaley Tea Factory

CHANGE RATES

ETF :

EPF Employee :

EPF Employer :

CHANGE

Figure 75:Change Employee Rates



- Calculate Salary
- Clustered Reports
- Allowance
- Funds
- Back to HOME


Kaley Tea Factory

Funds

F_ID	Date	ETF	EPF_Employee	EPF_Employer
1		3.0	6.0	14.0

Change Rates

Figure 76:View Funds Table



Calculate Salary
Clustered Reports
Allowance
Funds


Back to HOME

Kaley Tea Factory

SEARCH BY MONTH

Search By Month Search by Employee

Figure 77:Monthly Search



Calculate Salary
Clustered Reports
Allowance
Funds


Back to HOME

Kaley Tea Factory

EMPLOYEE SALARY

Search By Month Search by Employee

Figure 78:Search Employee Salary



Calculate Salary
Clustered Reports
Allowance
Funds

Back to HOME


Kaley Tea Factory

SEARCH BY MONTH

[Search By Month](#)
[Search by Employee](#)

Emp_ID	Attendance	Year	Month	Basic Salary	ETF	EPF Employee	EPF Employer	OT Hours	OT Amount	Total Salary	
2	22.0	2021	10	30000.0	600.0	2400.0	3600.0	10	1000.0	28100.0	Delete
1	20.0	2021	10	20000.0	800.0	1600.0	2200.0	10	1000.0	20400.0	Delete

Figure 79: Search Employee Monthly Salary



Calculate Salary
Clustered Reports
Allowance
Funds

Back to HOME


EMPLOYEE SALARY

[Search By Month](#)
[Search by Employee](#)

Employee ID : 1 Employee name : Perera Employee NIC : 551623378V

Year	Month	Attendance	Basic Salary	ETF	EPF Employee	EPF Employer	OT Hours	OT Amount	Total Salary	
2021	11	20.0	20000.0	800.0	1600.0	2400.0	10	1000.0	16400.0	Delete
2021	10	20.0	20000.0	800.0	1600.0	2200.0	10	1000.0	20400.0	Delete
2021	12	22.0	20000.0	600.0	1200.0	2800.0	10	1000.0	20400.0	Delete

Figure 80: Generate Monthly Salary Report



- Home
- Vehicle Driving Records
- Maintenance
- Analysis

Transportation Management

Add Driver Details

Add Driver
Add Vehicle
Vehicle Driving Records
Driving Records Table


Add Driver

Licence No:
EPF No:

Driver Details

ID	Licence No	EPF No	Delete	Edit
1	12345679	1	<input type="button" value="Delete"/>	<input type="button" value="Update"/>

Figure 81:Add Driver Details



- Home
- Vehicle Driving Records
- Maintenance
- Analysis

Transportation Management

Vehicle Repairs

Vehicle Repairs
Repair Table

Add Repair Details

Bill No:


Vehicle No:

Description:

Service Date:

Amount:

Figure 82:add Vehicle Repair Details



- Home
- Vehicle Driving Records
- Maintenance
- Analysis

Transportation Management

Add Vehicle Details

Add Driver
Add Vehicle
Vehicle Driving Records
Driving Records Table

Add Vehicle

Vehicle No: Driver ID:

Vehicle Details

Vehicle No	Driver ID	Delete
001	12345679	<input type="button" value="Delete"/>

Figure 83:Add Vehicle Details



- Home
- Vehicle Driving Records
- Maintenance
- Analysis

Transportation Management

Vehicle Records

Add Driver
Add Vehicle
Vehicle Driving Records
Driving Records Table

Add Driving Records

Date:

Start Reading:

End Reading:

Vehicle No:

Figure 84:Add Driving Records



Transportation Management

Vehicle Records Table

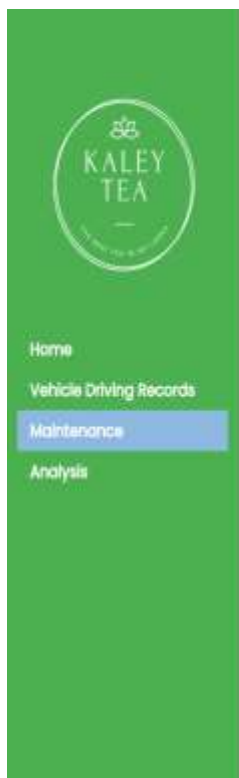
Add Driver Add Vehicle Vehicle Driving Records **Driving Records Table**

Search Vehicle Records

Driving Records

ID	Vehicle No	Date	Start Readings	End Readings	Meter Difference	Delete
----	------------	------	----------------	--------------	------------------	--------

Figure 85:Search Monthly Vehicle Records



Transportation Management


Repair Table

Vehicle Repairs **Repair Table**

Vehicle Repair Details

ID	Bill No	Vehicle No	Description	Service Date	Amount	Update	Delete
----	---------	------------	-------------	--------------	--------	--------	--------

Figure 86:View Vehicle Repair Table



Home

Vehicle Driving Records

Maintenance

Analysis

Transportation Management

Analysis & Reports

Meter Readings Report

Vehicle No	Month	Year	
<input type="text" value="Vehicle Number"/>	<input type="text" value="Input Month"/>	<input type="text" value="Input Year"/>	<input type="button" value="Generate"/>

Vehicle Maintenance Report

Vehicle No	Month	Year	
<input type="text" value="Vehicle Number"/>	<input type="text" value="Input Month"/>	<input type="text" value="Input Year"/>	<input type="button" value="Generate"/>

Figure 87: Meter Reading Reports

2.3 Implementation

- Programming Language: Python 3.9
- IDE: PyCharm Professional 2021.2
- Front End Development: HTML5, CSS, JavaScript
- Server-Side Web Application Framework (Back end): Django
- Database Management System: MySQL WORKBENCH 8.0 CE

This system was developed using Python programming language with Django web framework. Python is an object-oriented programming language. It is easy to learn, more powerful, more secure and can be implemented easily compared to other programming languages. SQL WORKBENCH 8.0 CE was chosen as the database management system because it can relate to PyCharm IDE and easily host in web. Django is a free and open-source web framework which has Model-View Template architecture. Django Administration contains more built-in functionalities which can easily manage web applications.

The project package was divided into 2 main parts to separate Views, URLs. They are “url_mappings” and “view_mappings”. Each member in the group has their own function with unique name which can be identified easily.

Templates directories contain 15 sub directories and “Base.html”. “Base.html” is one of the re-usable files which include all the common attributes of interfaces (html files) as a common template file. Most of the reports in the system are generated in pdf format. In the utils.py” (python file) contains a method called “render_to_pdf” to convert html view to PDF file. All the image uploads are stored in the media directory in main project directory. Static files like company logo images, external CSS and JavaScript files are in the special directory called “static”. After completing all the functionalities, the project was integrated using GitHub.

https://github.com/SLIIT-FacultyOfComputing/itp_project-g09

2.4 Testing

As the features of the structures had been developed by way of special contributors in the group it is a need to look at the gadget the usage of trying out techniques. First the unit trying out used to be completed for every characteristic developed by means of every man or woman and later integration trying out and gadget trying out was once achieved to affirm whether the machine was once working properly. Following are some assessments achieved for the system.

2.4.1 Integration Testing

- After completing the employee details management, it was integrated and tested with the attendance management function to mark the attendance of all the factory workers in the factory.
- Supplier detail's function was integrated and tested with supplier payment and leaf stock separately inside the function.
- In the transport management function, vehicle driving records and maintenance was integrated and tested separately.
- As the employee salary is based on the attendance of the workers, the attendance management and salary management were integrated and tested separately.
- The stock management in factory outlet was integrated with the sales management function, as the sales should be done using the stock produced in the outlet.
- Leaf Inventory, daily production stock integrated and tested to get the inventory details, tea grade details of the daily Production.
- The stock to the factory outlet was supplied by the final production, therefore the final production stock and factory outlet stock was tested.

2.4.2 System Testing

This level of testing was done after fully integrating the system, All the branches were merged to the “master” and merged to the main branch, then the end-to-end system was tested smoothly, and the doubts were resolved and finalized the product.

2.4.3 Test Cases

Table 11: Test Case-Employee Details management

<u>Employee Details Management Testing</u>				
Function: Add employee details to the system Pre-conditions (if there are any): User should log into the system Test Steps: <ol style="list-style-type: none"> 1. Navigate to the employee management in factory page 2. Click “Add employee” button 3. Fill details of the employee 4. Click “Add” button 				
Test ID	Test Inputs	Expected Output	Actual Output	Result
Tes001	Name: Kasun Perera EPF No:01 NIC No:995478965V Address: Colombo Gender: Male Marital Status: Unmarried Date of Birth:1990-10-15 Date of Approval:2001-02-10 Employee Group: Staff Employee Type: Permanent Designation: Factory Officer Basic Salary: 25000	Show Message “Employee added Successfully”	Show Message “Employee added Successfully”	Pass
Tes002	Name: Seshan Gamage EPF No:02 NIC No: 15475 Address: Galle Gender: Male Marital Status: Married Date of Birth:1968-10-15 Date of Approval:2002-05-03 Employee Group: factory worker Employee Type: permanent Designation: Driver Basic Salary: 15000	Show Message “Invalid Details” <ul style="list-style-type: none"> • EPF No already existing • NIC should have at least 10 characters 	Show Message “Invalid Details” <ul style="list-style-type: none"> • EPF No already existing • NIC should have at least 10 characters 	Pass

Table 12: Test Case-Inventory Management System

<u>Inventory Management System</u>				
Testing function: Inventory User Profile				
Pre-conditions: User should be logged into the tea factory management system				
Test Steps: <ul style="list-style-type: none"> • Navigate to Inventory login • Navigate to Inventory dashboard • Click Profile in navigation bar • Fill details of Inventory user • Add details • Submit details 				
Test ID	Test inputs	Expected output	Actual output	Result
Tes003	Name: Perera Email: kaml@gmail.com Phone: 0771324256 Address: Colombo	Show message” Inventory User Profile Added Successfully”	Show message” Inventory User Profile Added Successfully”	Pass
Tes004	Name: Kamal Email: kaml@gmail Phone: 0771324 Address: Colombo	Show Message “Invalid Inventory User Email” and “Invalid Mobile No”	Show Message “Invalid Inventory User Email” and “Invalid Mobile No”	Pass

Table 13: Test Case-Outlet Stock Management

<u>Stock Management in Factory Outlet</u>				
Testing Function: Add tea packets				
Pre-conditions (if there are any): User should be logged into the system				
Test Steps:				
<ol style="list-style-type: none"> 1. Navigate to the outlet inventory management page in the system 2. Add relevant data to the add tea packets form 3. Click “ADD” button 				
Test ID	Test Inputs	Expected Output	Actual Output	Result
Tes005	Date:2021-10-11 Category product name: BOPF 1kg Number of packets:100	Show Message “Successfully Added”	Show Message “Successfully Added”	Pass
Tes006	Date:2021-10-11 Category product name: OPA 1kg Number of packets: -1	Show Message “Ensure this value greater than or equal to 1”	Show Message “Ensure this value greater than or equal to 1”	Pass
Tes007	Date:2021/20/20 Category product name: BOP 500g Number of packets: 50	Show Message “Enter a valid date”	Show Message “Enter a valid date”	Pass

Table 14:Test Case-Salary Management System

<u>Salary Management System</u>				
Testing function: Calculate Salary				
Pre-conditions: User should be logged into the tea factory management system.				
Test Steps:				
<ul style="list-style-type: none"> • Navigate to salary management page. • Navigate Calculate salary. • Fill the Fields. • Press the Calculate button. 				
Test ID	Test inputs	Expected output	Actual output	Result
Tes008	Employee ID:01 Month: 05 Year : 2021 Attendance:20 Basic Salary:10000 OT hours : 8 Loans : 1000	Display message "Employee Salary Added Successfully"	Display message "Employee Salary Added Successfully"	Pass
Tes009	Employee ID:02 Month : 02 Year : 2021 Attendance: 20 Basic Salary:10000 OT hours : 8 Loans : 1000	Display message "This Employee Salary Already Calculated"	Display message "This Employee Salary Already Calculated"	Pass

Table 15: Test Case-Final Product Management System

<u>Final Product Management System</u>				
Testing function: Add new Buyer for auction Stock.				
Pre-conditions: User should be logged into the tea factory management system.				
Test Steps: <ul style="list-style-type: none"> • Navigate to the buyer details page. • Then select 'Add Buyer' button. • Input all the details in given input fields. • Click 'Insert record' button 				
Test ID	Test inputs	Expected output	Actual output	Result
Tes010	Company Name: SEP Register No: 0520 Address: Colombo Phone No: 077-236-5589	Display message "Record Saved Successfully...!"	Display message "Record Saved Successfully...!"	Pass
Tes011	Company Name: SEP Register No: 0520568 Address: Colombo Phone No: 07775268	Display message "Value Must Be less or Equal to 9999" "Please Match the requested Format"	Display message "Value Must Be less or Equal to 9999" "Please Match the requested Format"	Pass

Table 16:Test Case-Outlet Sales Management System

<u>Outlet Sales Management System</u>				
Testing function: Add Item to the cart.				
Pre-conditions: User should be logged into the tea factory management system.				
Test Steps:				
<ul style="list-style-type: none"> • Navigate to the 'New Bill' page. • Select the product from the list that you want to add to the cart. • Enter quantity. • Click 'Add Item' Button. 				
Test ID	Test inputs	Expected output	Actual output	Result
Tes012	Product name: BOP 01/100g Quantity: 1	Display message "Item Successfully Added to the list"	Display message "Item Successfully Added to the list"	Pass
Tes013	Product name: BOP 02/200g Quantity: 1000	Display message "Available stock:398"	Display message "Available stock:398"	Pass

Table 17:Test Case-Transport Management System

<u>Transport Management System</u>				
Testing function: Add Vehicle Driving Records				
Pre-conditions: User should be logged into the tea factory management system.				
Test Steps: <ul style="list-style-type: none"> • Navigate to the Transportation management page in the tea factory home. • Add relevant data to the form • Click “Add” button 				
Test ID	Test inputs	Expected output	Actual output	Result
Tes008	Date :2021-10-07 Start Reading: 87 End Reading: 50 Vehicle No: ABC-112	Display message “End reading number error” “End reading must be greater than start reading”	Display message “End reading number error” “End reading must be greater than start reading”	Pass
Tes004	Date :2021-10-12 Start Reading: 87 End Reading: 100 Vehicle No:ABC-112	Show Message “Successfully Added”	Show Message “Successfully Added”	Pass

Supplier Details Management				
Testing function: Register suppliers to the system				
Pre-conditions: User should be logged into the tea factory management system				
Test Steps:				
1.Navigate to the supplier management section				
2.Click” Add New Supplier” button				
3.Fill supplier registration form				
4.Click “Submit” button				
Test ID	Test inputs	Expected output	Actual output	Result
	Name: Kamal Perera NIC No:992990865V Address:34/A,Colombo Date of Birth:1995-10-24 Email: kaml@gmail.com Contact Number:0771324256 Payment type:Cash Bank Name:Sampath Bank Account No:456523	Show message”Supplier Register successfully”	Show message”Supplier Register successfully”	Pass

	Name: Namal Perera NIC No:952995665V Address:34/A,Colombo Date of Birth:1995-10-24 Email: kaml@gmail.com Contact Number:0771305698 Payment type:Cheque Bank Name:BOC Account No:45698	Show Message” Invalid Supplier Details” Inavalid Email Address	Show Message” Invalid Supplier Details” Inavalid Email Address	Pass	

3 Conclusion

This project is related to a tea factory called Kaley Tea, which provides the user with employee details, attendance management, salary, supplier details, leaf stock and payments, vehicle details, vehicle service record, inventory of the tea factory, final product auction stock.

The main functions of this system were divided into 8 members in our team and the system was developed as a web-based application using python language and Django framework.

This allows a user to access factory operations over the Internet whenever they want. User friendly and simple interface is an added advantage for users. Here the user can efficiently manage key resources such as suppliers, vehicles, sales and wholesale. It also increases the productivity of the tea factory and minimizes time wastage as the user can work automatically through the system.

Therefore, the tea factory system called 'Kaley Tea' provides the user with all the functions required to compete with the business world.

4 References

- [1] "YouTube," [Online]. Available: <https://www.youtube.com/>.
- [2] "Django Documentation," [Online]. Available: <https://docs.djangoproject.com/>.
- [3] "GitHub", [Online]. Available: https://github.com/SLIIT-FacultyOfComputing/itp_project-g09
- [4] "W3School", [Online]. Available: <https://www.w3schools.com/>
- [5] "Bootstrap", [Online]. Available: <https://getbootstrap.com/>