



Sri Lanka Institute of Information Technology

Vehicle Service Station Management System for Motorox Automobile (pvt) Ltd

Project Report

Information Technology Project 2021

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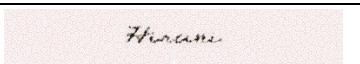
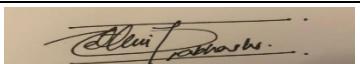
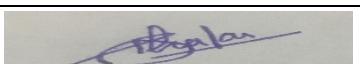
Declaration

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Project Details

Project Title	Vehicle Service Station Management System for Motorox Automobile
Project ID	ITP2021_S2_B04_G04

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Abstract

Motorox Automobiles is one of the best automobile workshops in Moratuwa which offers large range of services for vehicles. Currently, whole system is running in a manual way and because of that so many problems have occurred. With this proposed web application, all the data registrations will be done in more manageable way, so that vehicle, customer, employee, and supplier details will be stored in more secure manner. All the stock details and job sheets are much feasible in this web application. And also, calculations will be in invoice management and purchase order management without any issue. Without any paperwork all the data will be stored in database and can be accessed easily. All the services provided by Motorox automobiles will be done efficiently.

Acknowledgement

We would like to pay our gratitude to our client, owner of the Motorox Automobile service station Mr. Sanjaya Dodanduwa and Mrs. Preashi Dodanduwa. This project would not have been possible without our lecturers, instructors, senior students, batch mates and parents.

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List of Acronyms and Abbreviations

ER – Entity Relationship

DB – Data Base

1. Introduction

1.1 Problem Statement

1.1.1 Background of the problem or situation.

Motorox Automobiles is one of the best automobile workshops in Moratuwa which offers large range of services for vehicles such as auto maintenance, system diagnosis and repair etc. Over 50 employees are working on multiple ramps. Motorox is currently using a manual work for management tasks. It has become difficult to achieve the expected effectiveness and productivity with the manual system. Workstation is facing many problems and challenges due to the current system. Paperwork need a significant amount of space and it is time consuming and not efficient. There is not any organized method to keep track of registration details. Difficulty in modification of data is another drawback. The editing process can be more time consuming and costly than working with digital copies. [7] Apart from that, the misplacement of documents can easily be happened, and it can cause lack of security. In addition to that, client is willing to have more branches island wide in near future. So, there should be an efficient method to have access to the system from anywhere. Customer interaction should also be increased.

1.1.2 How the problem affects company operations or costs.

There is not any secure and organized method to keep track of customer details, vehicle details, employee details and supplier details. And the misplacement of confidential documents can cost a big amount. [7] Sometimes one customer has more than one vehicle, therefore it is difficult to keep multiple records for vehicles for same customer. Apart from that, in this workshop, it has a huge number of items, therefore it is difficult to keep track of all the details of items and it is difficult to update items regularly. In this workshop, inspection management is the major task and currently it is done manually using a job sheet. All the important repair details of the vehicles are included there. So, it is not safe to use a paper. As mentioned above, there is not any way to show the job sheet to the customer even it is necessary. In addition to that, there is a high usage of items in the workshop. There is not any proper way to place an order and it will give a negative effect. Throughout the vehicle

repairing process, the invoice should be updated regularly by admin, stock keeper and manager. It is difficult to link all these details with each other. Currently the calculation of bill is done manually, and it is not accurate. And also, there is no proper way to share the details among the other branches of the workshop. Sometimes the communication methods currently used, are not cost effective. With all these manual works, it is difficult to get weekly, monthly reports as well. Documentation, record keeping, and storage are costly processes in manually managed system. [7]

1.1.3 Why the problem requires a solution

Fully computerized system can be used to overcome above challenges faced by the current system. Therefore, web-based application is the most suitable solution to accomplish the goals of Motorox. It will save the staff time [8] and will help to manage their tasks more efficiently and effectively. Additionally, customer interaction will be increased with web base application. By using this web-based application customers, vehicles, suppliers, employees, and stock can be managed remotely from anywhere. Inventory management, purchasing order management, job sheet management can be easily done.

1.2 Product Scope

1.2.1 Overall scope

In this web application customer details management, vehicle details management, employee details management, supplier details management, invoice management, job sheet management, stock management, and purchase order management are implemented.

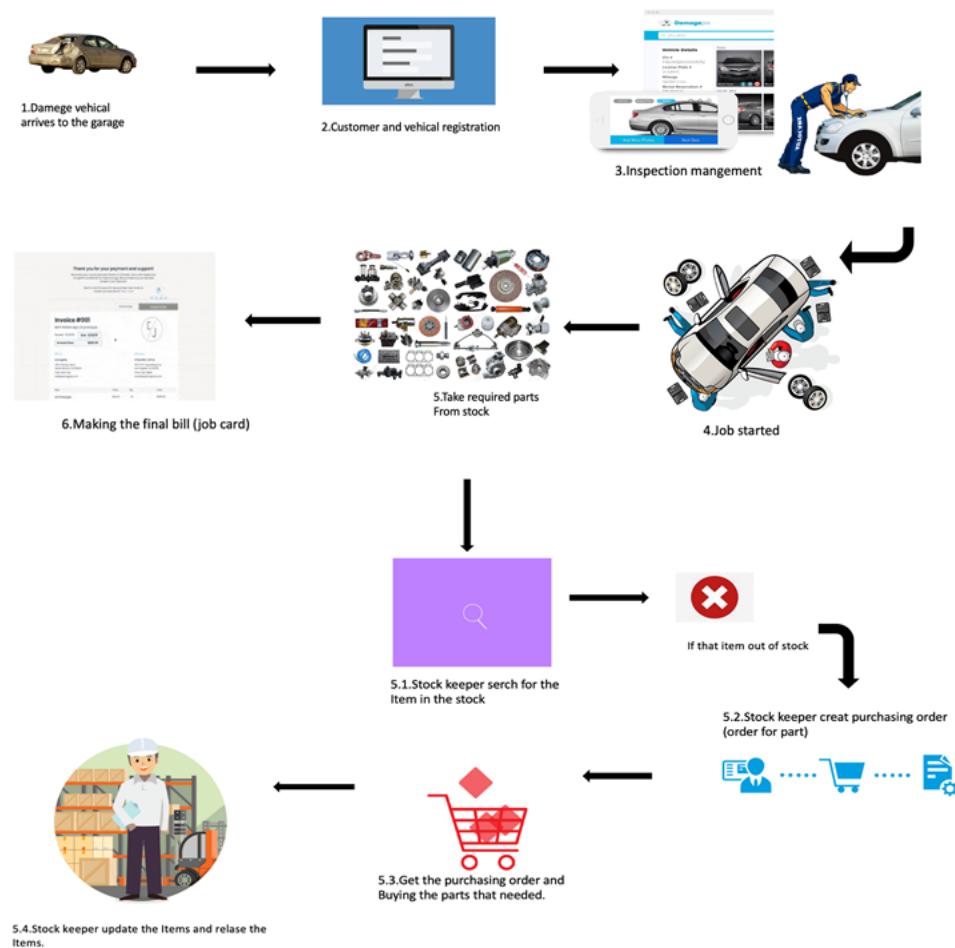


Figure 1: Overall scope

1.2.2 Individual scope

1.2.2.1 Invoice management – IT20045326

Job card and inventory management function deals with the final billing part of the work. In here job card means the final bill. It contains the all the work and related amounts for that. With manual work it hard to note down all the items and prices. It can be time taken and less security. Finalization of the billing is harder with calculation sometimes bill amounts (prices) can be too large and difficult to calculate the total. There for it is essential to have job card management faction in workshop like this.

Only the admin, stockkeeper and manger can access this feature. In here admin can select or choose the specific item with relevant prices or can add all the prices of the work including the items and the amount of quantity. When adding those items to the bill it automatically calculates the total bill. After finishes the final part of the bill it can generate pdf of bill or can print the final bill. the bill is unique to the specific customer and vehicle. there for bill should need to contain bill number, vehicle number and customer name. by using bill number and vehicle number we can search specific bill related to that. at any point in the time of job it can be search the specific bill and can update, delete and save.

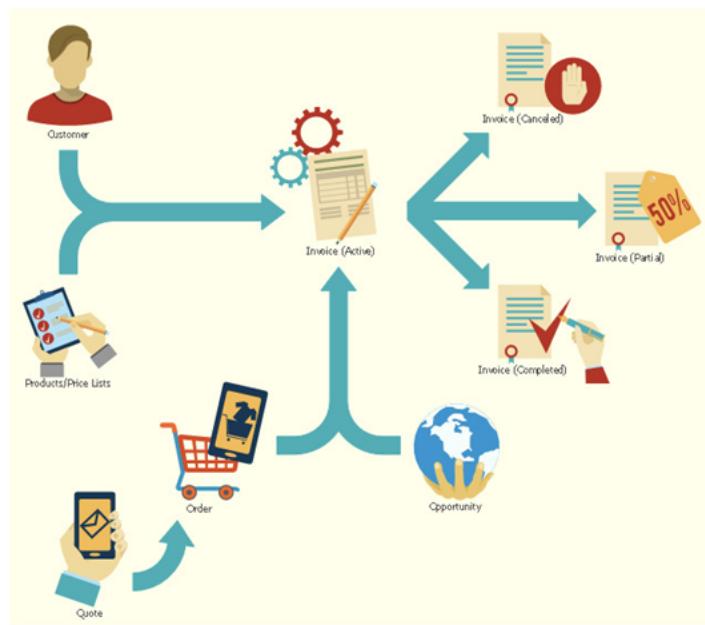


Figure 2: Invoice Management

1.2.2.2 Job sheet Management – IT20005580

In this Motorox system, currently all the things are doing manually. When doing manually they were faced lot of problems. The problems are lack of security, misplacing documents, wasting time etc. And we can consider these things as a disadvantage also. Currently the job sheet process is happening as shown in this below image. After inspecting the vehicle, employee tick the parts that need to change in vehicle. If we systemize this process, we can solve these all the problems. In this system this inspection and job sheet management is handle by the employee in the system.

To work with this function customer must register first. Through this function, worker or any employee can inspect customer's vehicle and mark the vehicle parts that need to be changed in the vehicle by the form. That form is called job sheet. Worker can add a job sheet for that particular customer and this job sheet includes all the parts that need to be changed in detail. After adding all the job sheets, worker can view list of details. If there is any change in the job sheet, it can be updated. Worker can get job sheet of particular customer by giving Job sheet id number in the search bar. Finally, customer can get the overall idea by getting the final report. After doing that customer part, it can also delete that particular customer details in the list.

Figure 3: Jobsheet

1.2.2.3 Stock Management – IT20055530

Motorox automobile workshop storing some essential and highly demand items. Currently they are handling their stock manually. They are facing to many difficulties when they manage the stock manually. There are many disadvantages like lack of security, time consuming, difficult to modify data, etc. But if we systemized this process, we can be avoided from above disadvantages.

In this system the stock is managing by the stock keeper. Only stock keeper and admin can access to this stock management section. Stock keeper can add all the required details of an item such as item name, item code, cost price, quantity, etc. And by giving item name and item code stock keeper can search any item details that currently in the system. If stock keeper wants to change any data of an item, he/she can update the details. Stock keeper can remove any item from the stock if he/she want. If any item is out of stock, stock keeper can identify those items separately and admin can place an order to the supplier in relevant item. Finally, can generate a report for each item.

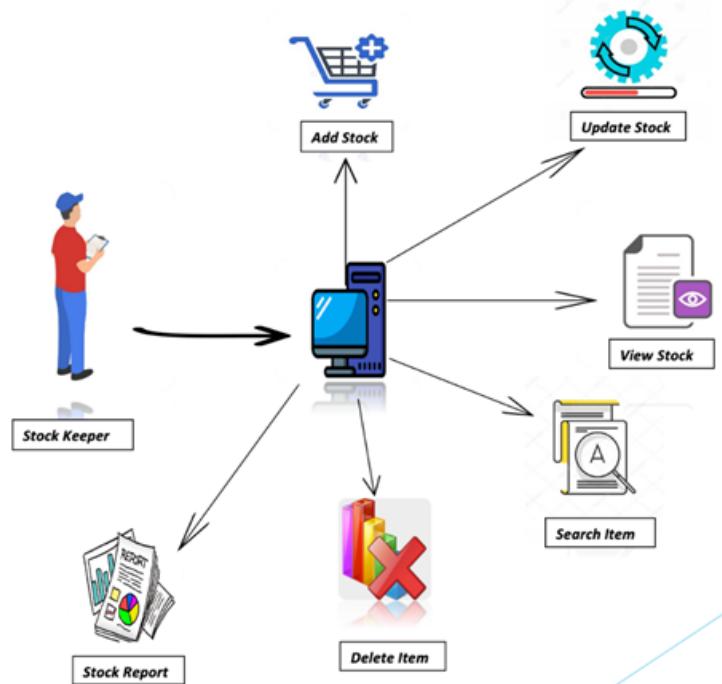


Figure 4: Stock management

1.2.2.4 Purchasing Order Management – IT20121488

A purchase order is an official contract between the supplier and a business for the purchase of goods. It ensures that the supplier delivers assured quality and quantity of goods in the given time frame. Purchase order not only eases the purchasing process but is a fantastic tool to simplify the workflow of your wholesale inventory management system. It helps to maintain accurate and complete financial records and track the expenses of your business. A well-managed purchase order system can significantly improve the efficiency of your inventory management process. In short, purchase order management is the process of obtaining the materials required for our web application. For ex: - (according to our web application) Engine oil, Paints, A/C filter, Break oil.

Mainly the purchasing order management function deals with the manage stock function. And it also deals with the inventory management function. Only the stock keeper and admins can access this feature. The purchase order management system is mainly operated by the stock keeper. Through this function, an authorized operator can easily purchase materials when needed for our system. In addition, Operator can add or remove materials to the order, Operator can search materials from the name or code, Operator can select the quantity of the material, Operator can select the supplier for the order, Operator can get a print or download a pdf copy of the order. When the order is successfully received to the company, the operator can mark it as completed from the system. An authorized operator can view the history of purchased order list. The operator can print or download the pdf of any order. The operator can also obtain a financial statement for any order. Additionally, the operator can add or remove items to orders received

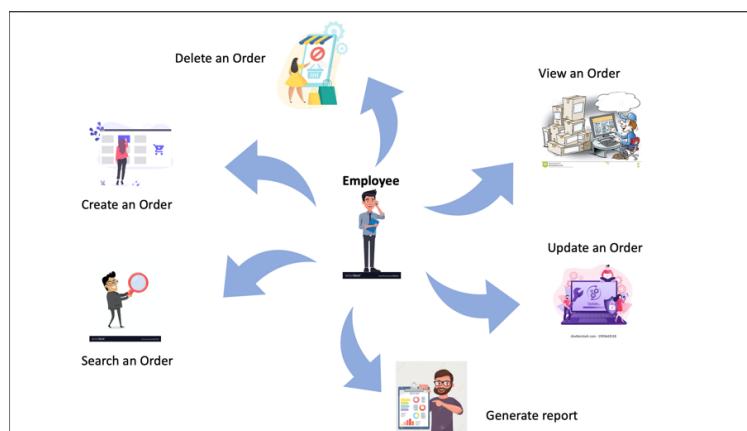


Figure 5: Purchasing order management

1.2.2.5 Customer Registration Management – IT20005962

A lot of customers come to Motorox Automobiles, so it is not advisable to do this manually. It wastes a lot of time and a lot of files so when we put some information in a web application it is very easy for us to manage. Customer registration is a collection of methods used to manage and analyze customer information. This function mainly maintains all the customer related data such as name, address, telephone number, email address, vehicle registration number, and NIC.

Through this function, admin can add customer, update customer details and view all the details of a particular customer. And also admin can view list of customers. At last admin can delete any customer account. From the customer list admin can easily search any record by given a particular customer name. For any purpose admin can generate a report of all of the customers.

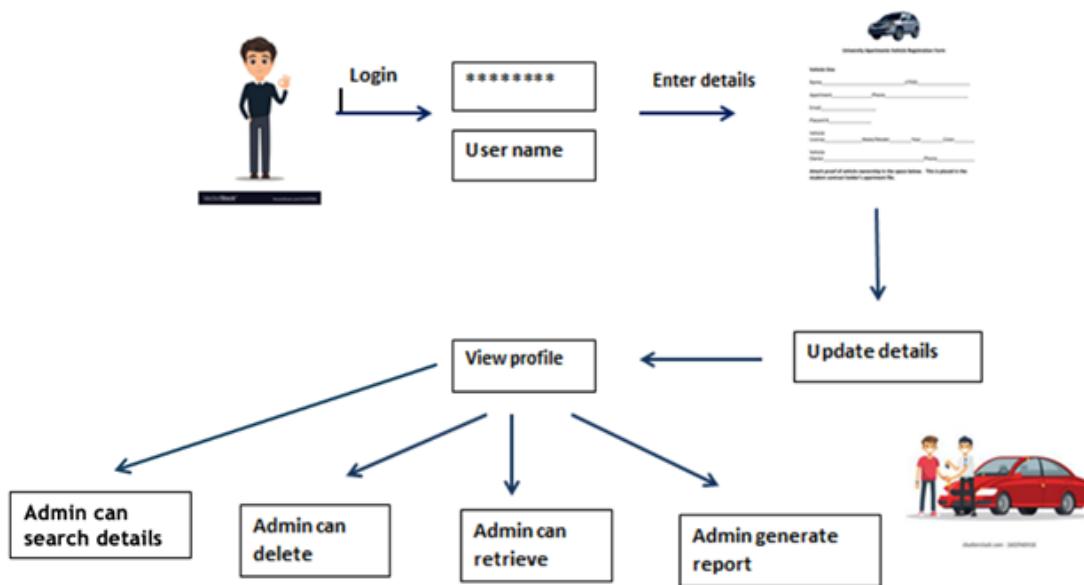


Figure 6: Customer Registration Management

1.2.2.6 Vehicle Registration Management – IT20017088

At Motorox automobiles all the vehicles being registered in manual way that a person must write all the details about a vehicle separately in card like vehicle number, registration number, name of the owner, seating capacity, make (ex: TOYOTA), date of registration along with any other required details. All these things were handwritten and after some times the letters maybe faded or cannot recognize. Most of the time these cards are misplaced so cannot find when it needs urgently. Even there is separate files accordingly it is hard to find the needed one fast. Because of the huge number of vehicles this method is very time consuming. And there is not any proper way to secure these documents.

So, in this proposed system without having any of those problem all the vehicles can be registered by admin. Whenever a new vehicle taken to the Motorox automobiles it can be added to the system by filling all those required details. And if there is a mistake or need to change anything system will simply give the facility to update details. If there is unnecessary account of a vehicle it can be deleted. All the details of a certain vehicle can be searched by vehicle registration number without much trouble and retrieve all the details about that vehicle. And lastly according as requirements system can generate a report of all of the vehicles to use for any purpose. Using this system client will be able to keep a detailed track of a vehicle with ease.

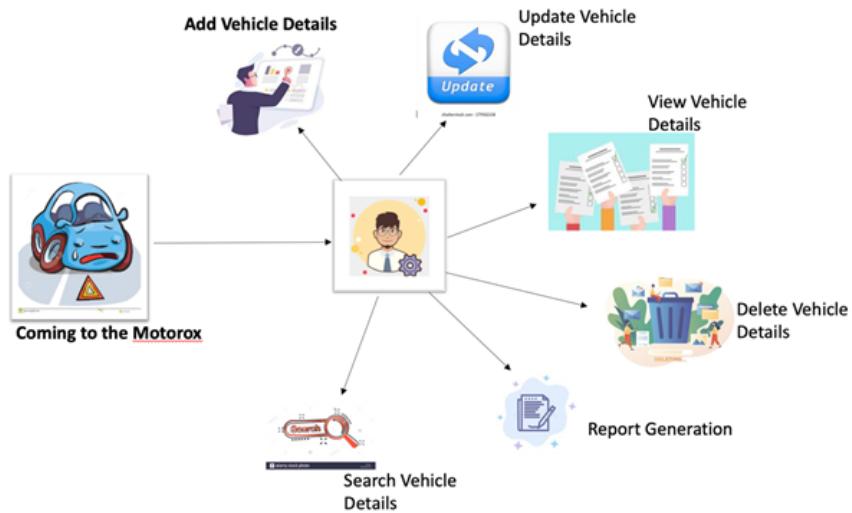


Figure 7: Vehicle Registration Management

1.2.2.7 Employee Registration Management - IT19169736

There are over 50 employees working in the Motorox Automobiles. Currently, the details of employees are written in documents and kept inside separate files. This method is time consuming, and the important documents can be misplaced easily. By using this web application, all the necessary details can be managed easily and securely.

Employees are registered and added to the system by entering their personal details, contact details, technician category, basic salary, join date and other important details. Admin can view the list of employees who are currently working in the workshop. Admin can view their details which are stored in the system. If any changes are required, updating details can also be done. Additionally, admin can remove resigned employees by deleting their details from the system. This web application provides the facility to search the employees by using the employee name. This will be an efficient way to find the most suitable employee for a given work. At the end of the month, a detailed report of employees can be generated as well. It will be helpful to get a comprehensive idea about all the employees. This web application will ease the maintenance and the management of employees in the workshop.



Figure 8: Employee Registration Management

1.2.2.8 Supplier Registration Management – IT19994406

In this workshop to do the vehicle repairs there is a need to purchase vehicle parts from suppliers. To do that client needs to contact many suppliers. With this current manual system, they faced a lot of difficulties to keep all the records of these suppliers. Because now they are doing these things in paperwork. It can cause some security threats. And this manual work took so much time to keep records of suppliers. To avoid these kinds of situations client asks for a system for supplier registrations too. The risk of losing details of suppliers can be avoided by using this system. And it does not take much time to do the registration parts.

When a supplier purchases vehicle parts for this workshop for the first time, the administrator can add that supplier's details to the system such as supplier name/company name, contact details, address and item details. After entering these details, if the supplier asks to do a change for their provided details, then admin can update the details without any issue. And, if someone asks to show the details of a particular supplier, the system can search and retrieve the details. When the supplier is no longer supplying any vehicle parts, it needs to stop keeping records for them. So, with this system admin has the facility to remove the particular supplier. At the end of the day or month the administrator can generate a report about all the suppliers. So, the client can get an overall idea about these facts by looking at these reports. After providing this system, client can manage the work in an efficient and reliable way.



Figure 9: Supplier Registration Management

1.3 Project Report Structure

Rest of the project report includes following sections.

1. Methodology

a)Requirement Analysis

Functional requirements are described using user stories and non-functional requirements are also explained. Use case diagram represents the interaction between system and actors. Activity diagram shows the behavior of this system.

b)Design

High level architecture diagram will give an overall idea about this system. Class diagram describes the classes and their relationships used in this system. Structure of the database is described using the ER diagram. Sequence of messages between objects of the system will be shown in a sequence diagram. At last user interfaces of this web application are included in this section.

c)Implementation

This section contains the details about languages used to implement this system. And the database that used to store data.

d)Testing

For all the functions, test cases are included in tabular format. Furthermore, the snapshots of the particular error messages that displayed when testing this system are also included.

2. Conclusion

Summary of this whole project will be in this section. It will discuss the realization of the original goals. And also, it will highlight the limitations of this system and suggestions to overcome them.

3. References

List of sources referred to write the report is included in this section.

4. Appendixes

Additional details such as tools used to organize the project and some other information about this workstation.

2. Methodology

2.1 Requirements and Analysis

2.1.1 Functional Requirements

2.1.1.1 User Stories

As an admin I need to enter employee details.

As an admin I want able to edit the details about customers, so that I can change the details.

As an admin I need to delete an employee

As an admin, I want able to generate report of customers, so that I can keep records of all customers.

As an admin I need to search employee, so that I can view details about a particular employee

As an admin I need to search the vehicle details, so that I can view the details of that vehicle

As a stock keeper I need to add an item, so that it appears in the list

As an admin I need to edit details of a vehicle

As a stock keeper I need to generate a report of the items, so that I can get the overall idea about the items

As a worker I want to fill the job sheet, so that I can get an idea about repair details.

As a stock keeper I need to delete items

As an admin I need to insert vehicle details

As an admin I need to create a supplier account so that I can enter all the supplier details

As an admin I need to remove suppliers

As a stock keeper I should be able to search system items to add to the order, so that I can view the details of the item.

As an admin I want able to get total price of items, so that I can get total of items and final bill.

As an admin, I want able to add items to job card (bill), so that I can make the final bill with specifically.

As a worker I need to view repair details entered by the customer, so that I can get the details of that specific vehicle.

As a stock keeper, I should be able to delete any existing order, so that I can delete my order from system.

As a stock keeper I should be able to create an order, so that I can make an order

As a worker I need to edit repair details.

As an admin I need to register customer, so that I can add customer to our system

As an admin I need to edit supplier details so that I can change their details according to their purposes

As an admin I want able to get a pdf or report of the job card (bill), so that I can get hard copy of bill

2.1.1.2 Use Case Diagram

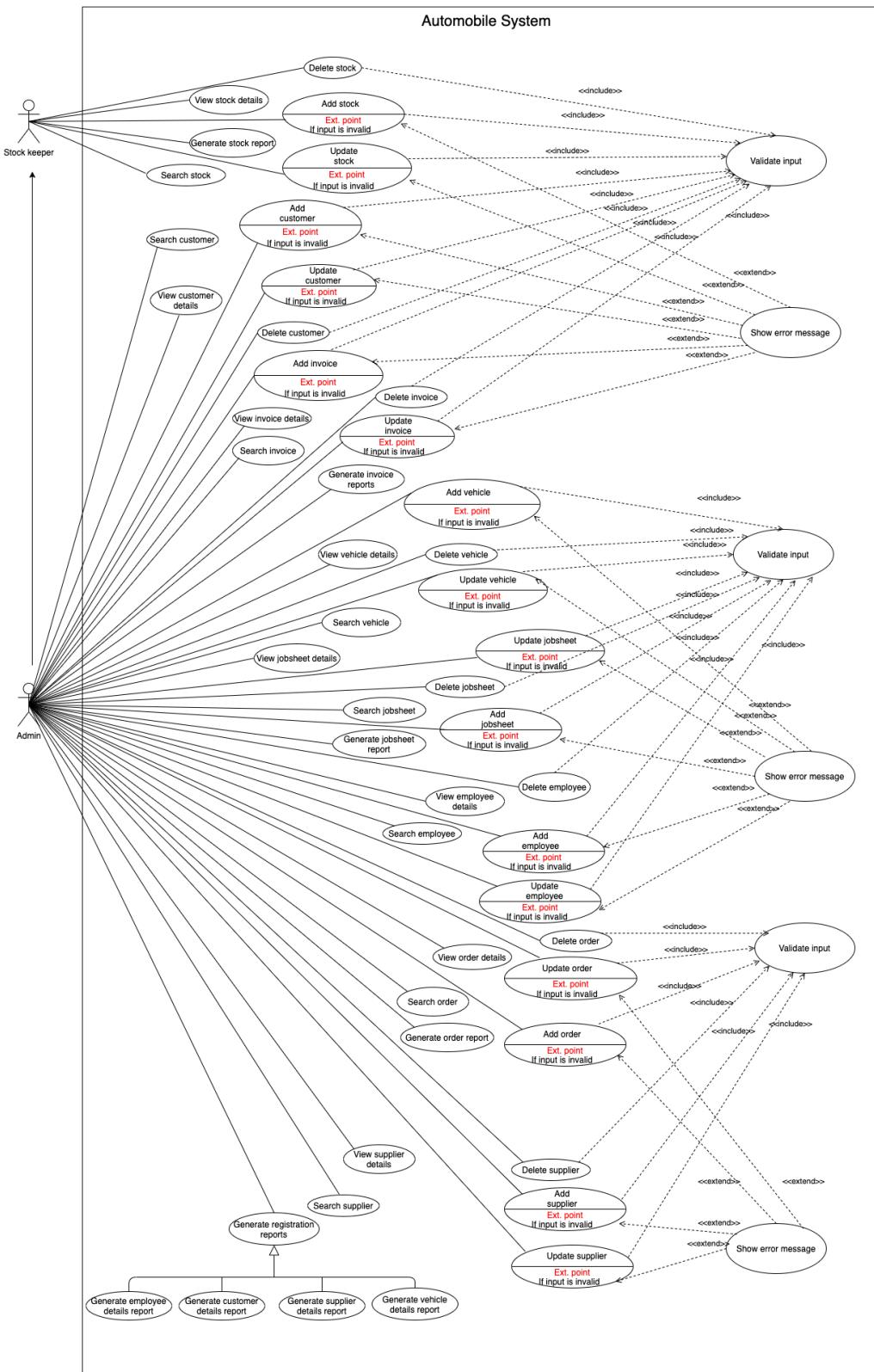


Figure 10: Use case diagram

2.1.1.3 Activity Diagrams

Invoice Management – IT20045326

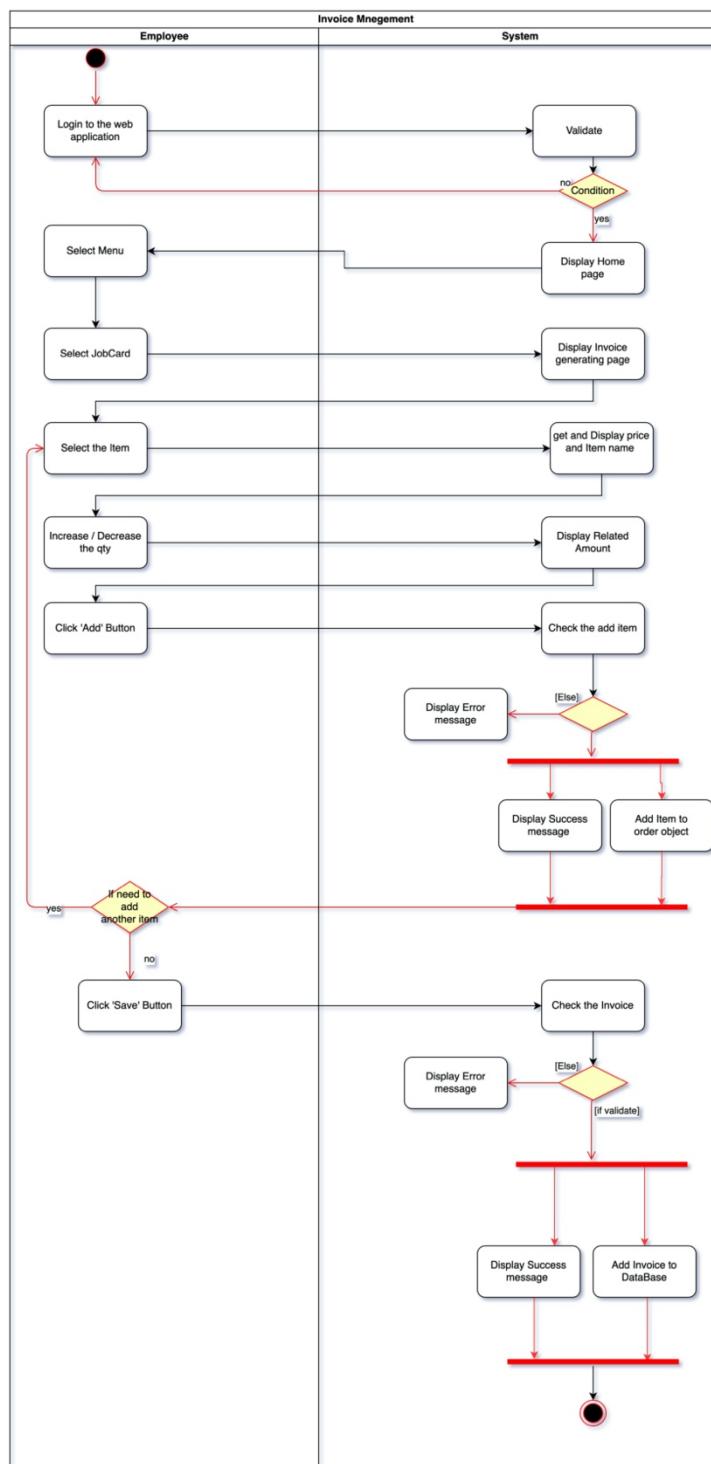


Figure 11: Activity diagram_add invoice

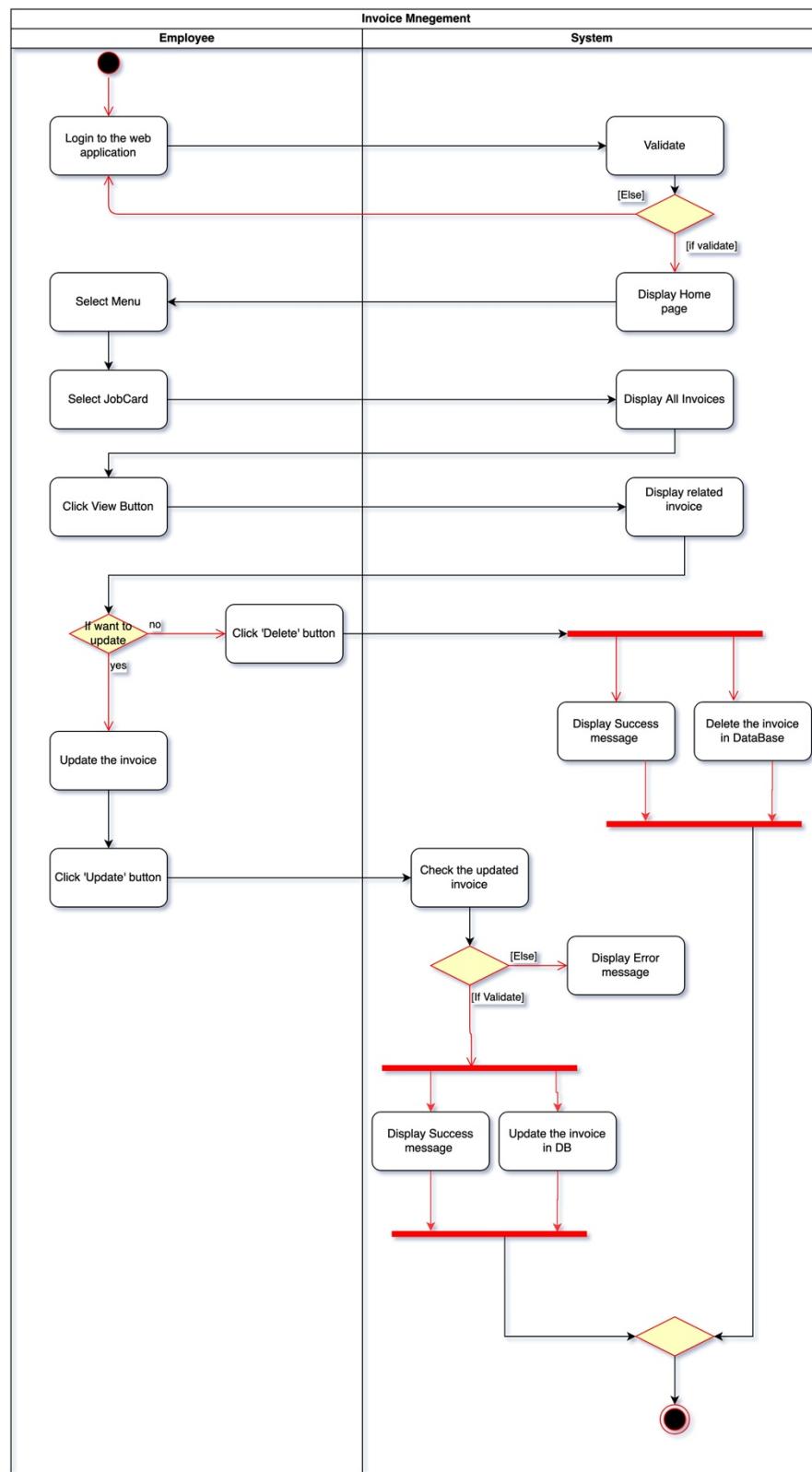


Figure 12: Activity diagram_update and delete invoice

Jobsheet Management – IT20005580

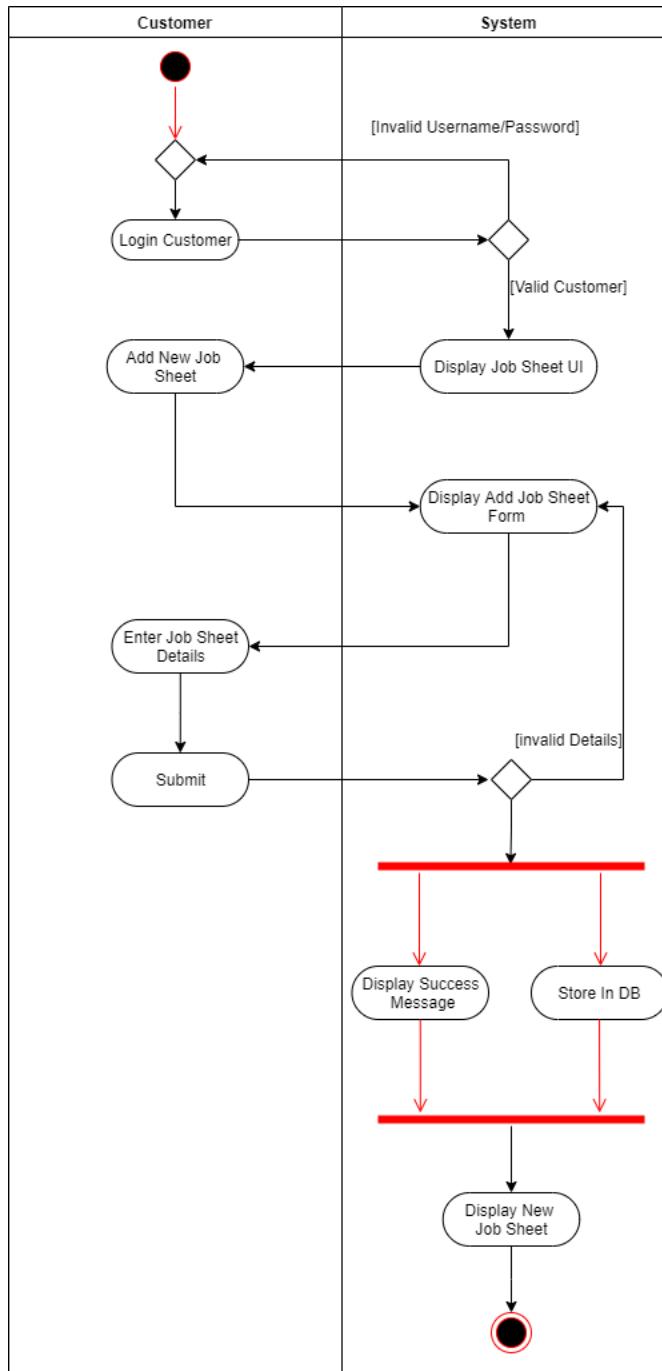


Figure 13: Activity diagram_add jobsheet

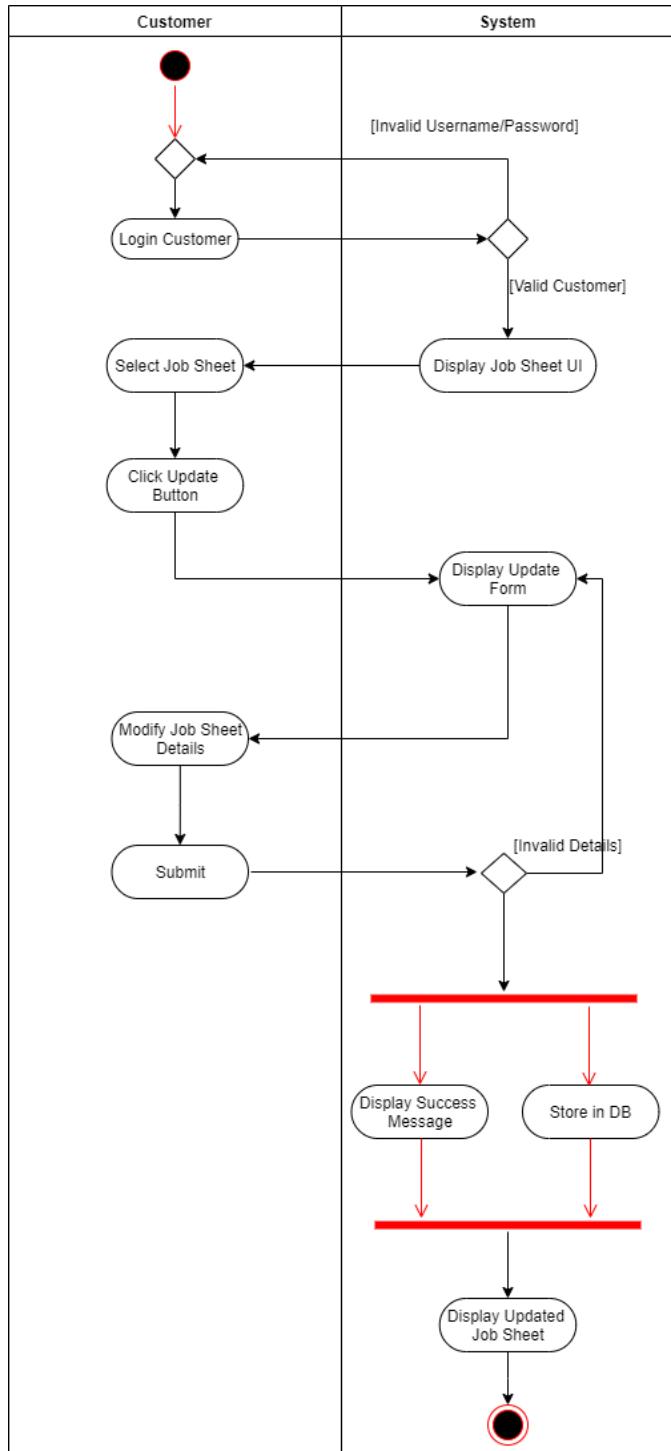


Figure 14: Activity diagram_update jobsheet

Stock Management – IT20055530

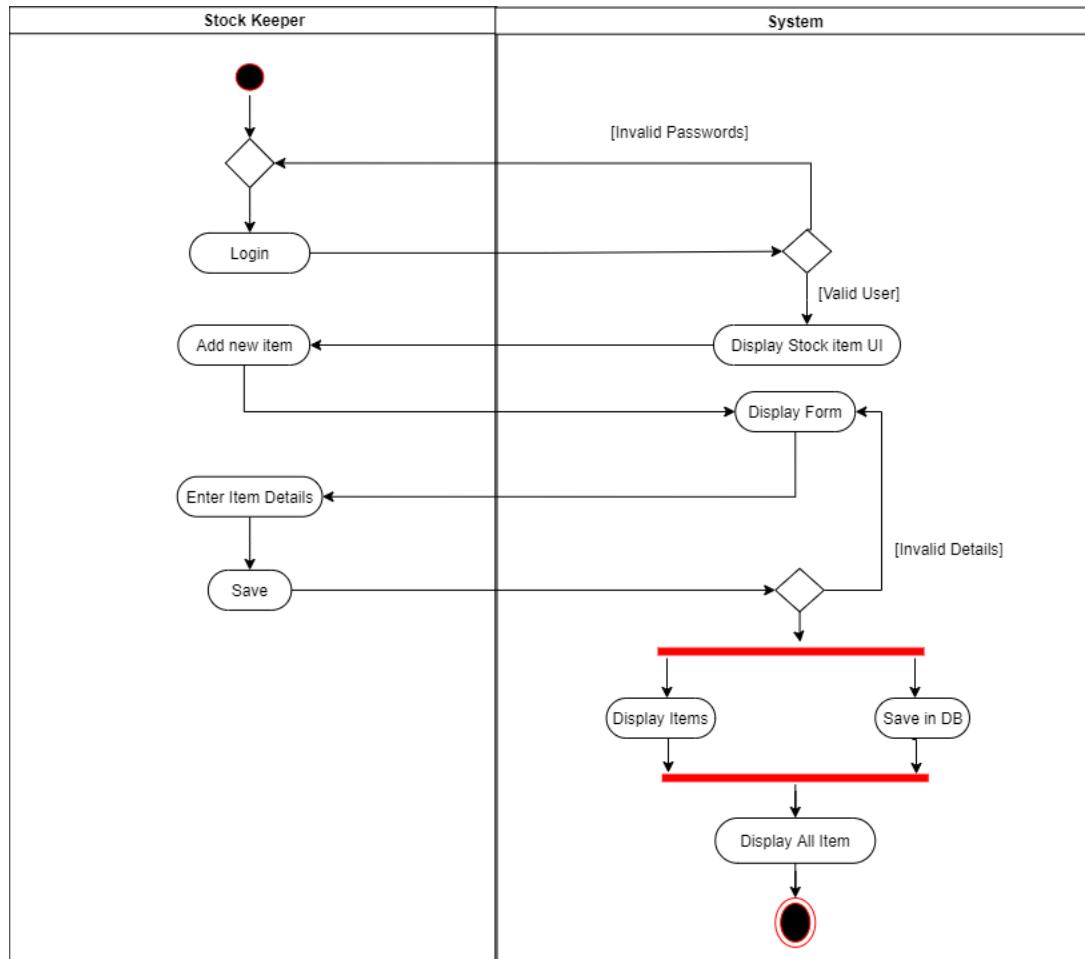


Figure 15: Activity diagram_add stock

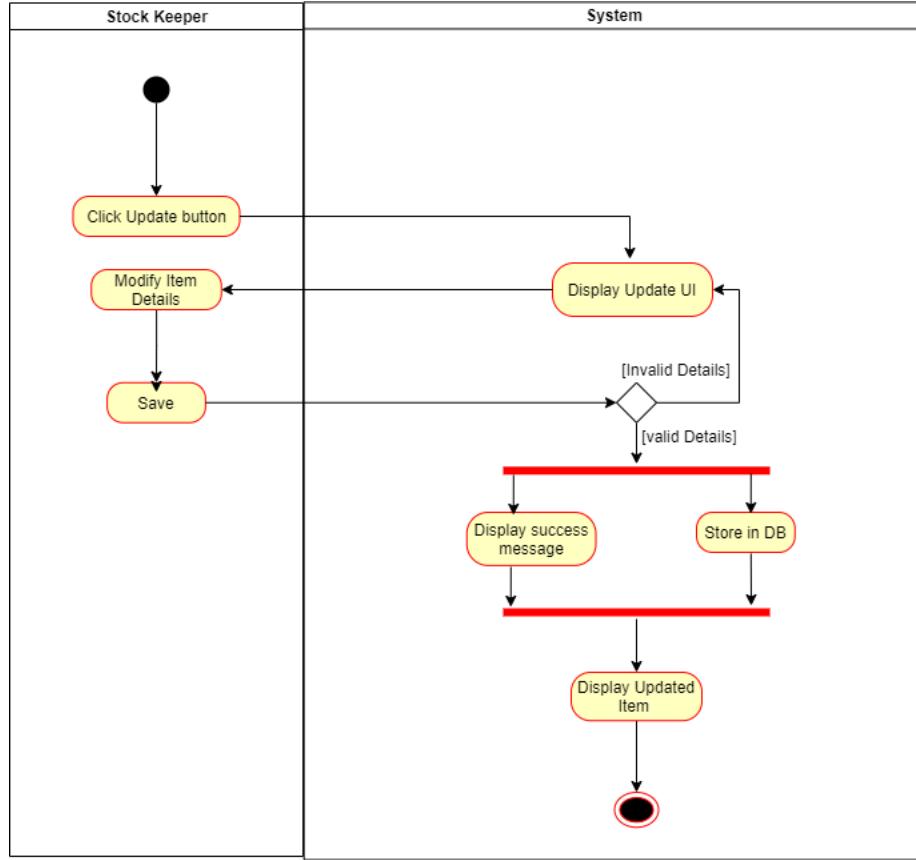


Figure 16: Activity diagram_update stock

Purchase Order Management – IT20121488

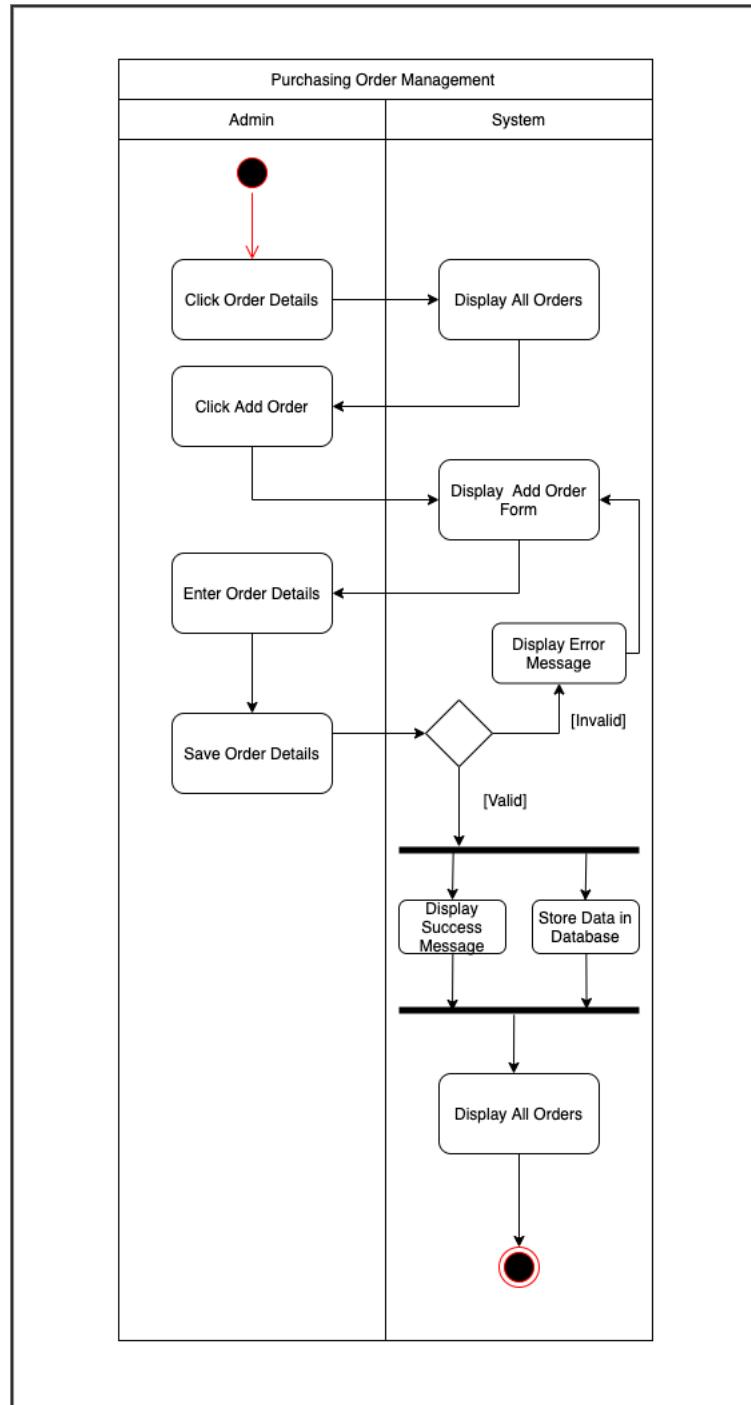


Figure 17: Activity diagram_add order

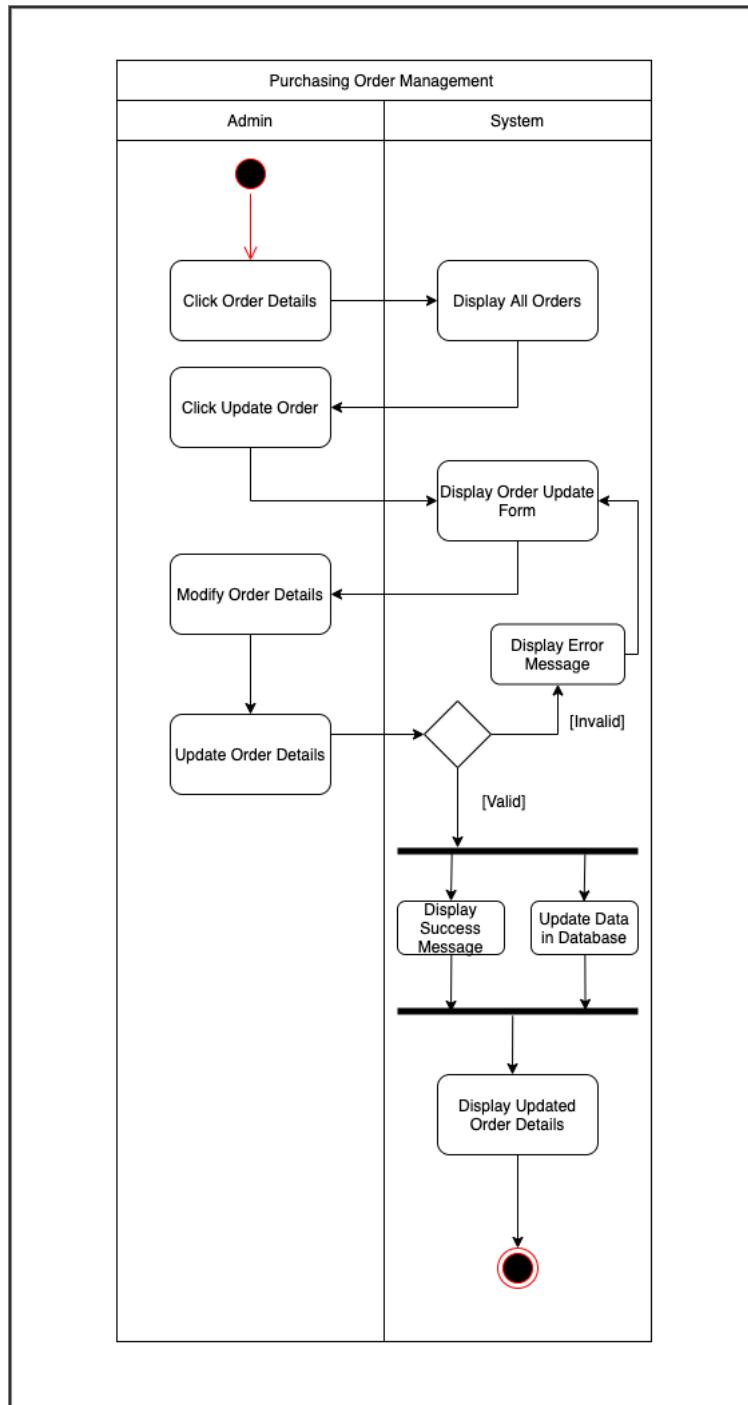


Figure 18: Activity diagram_update order

Customer Registration Management – IT20005962

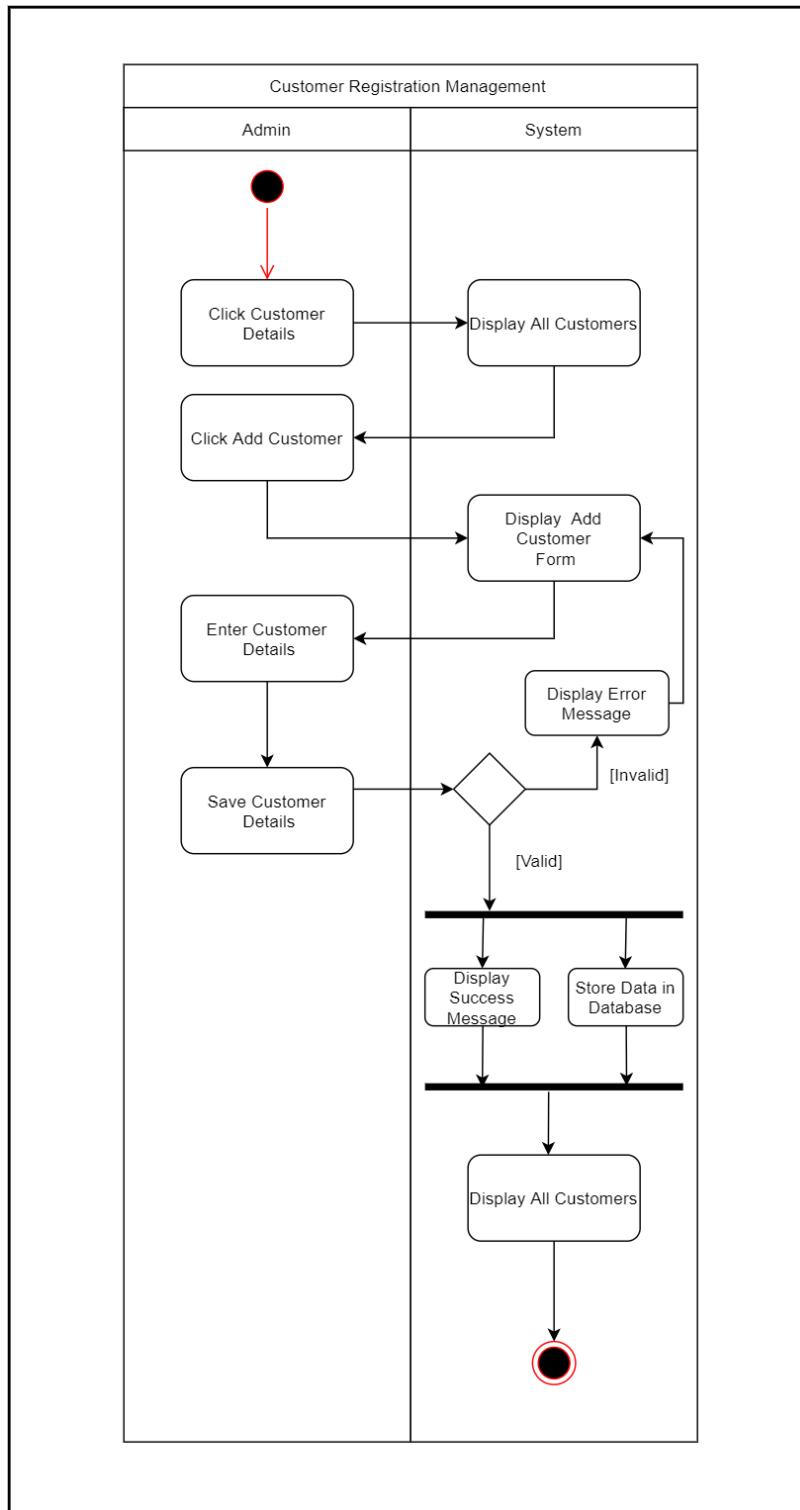


Figure 19: Activity diagram_add customer

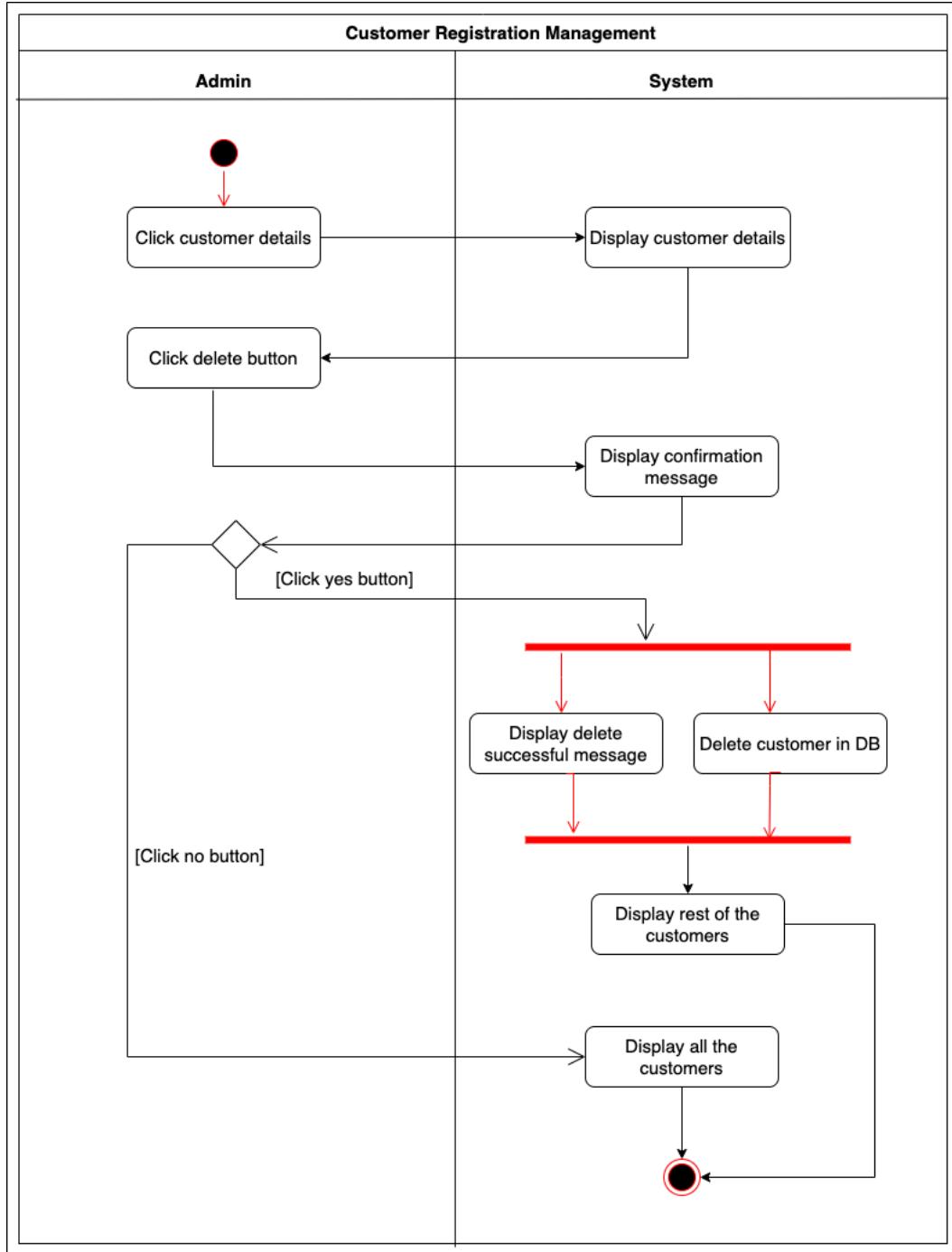


Figure 20: Activity diagram_delete customer

Vehicle Registration Management – IT20017088

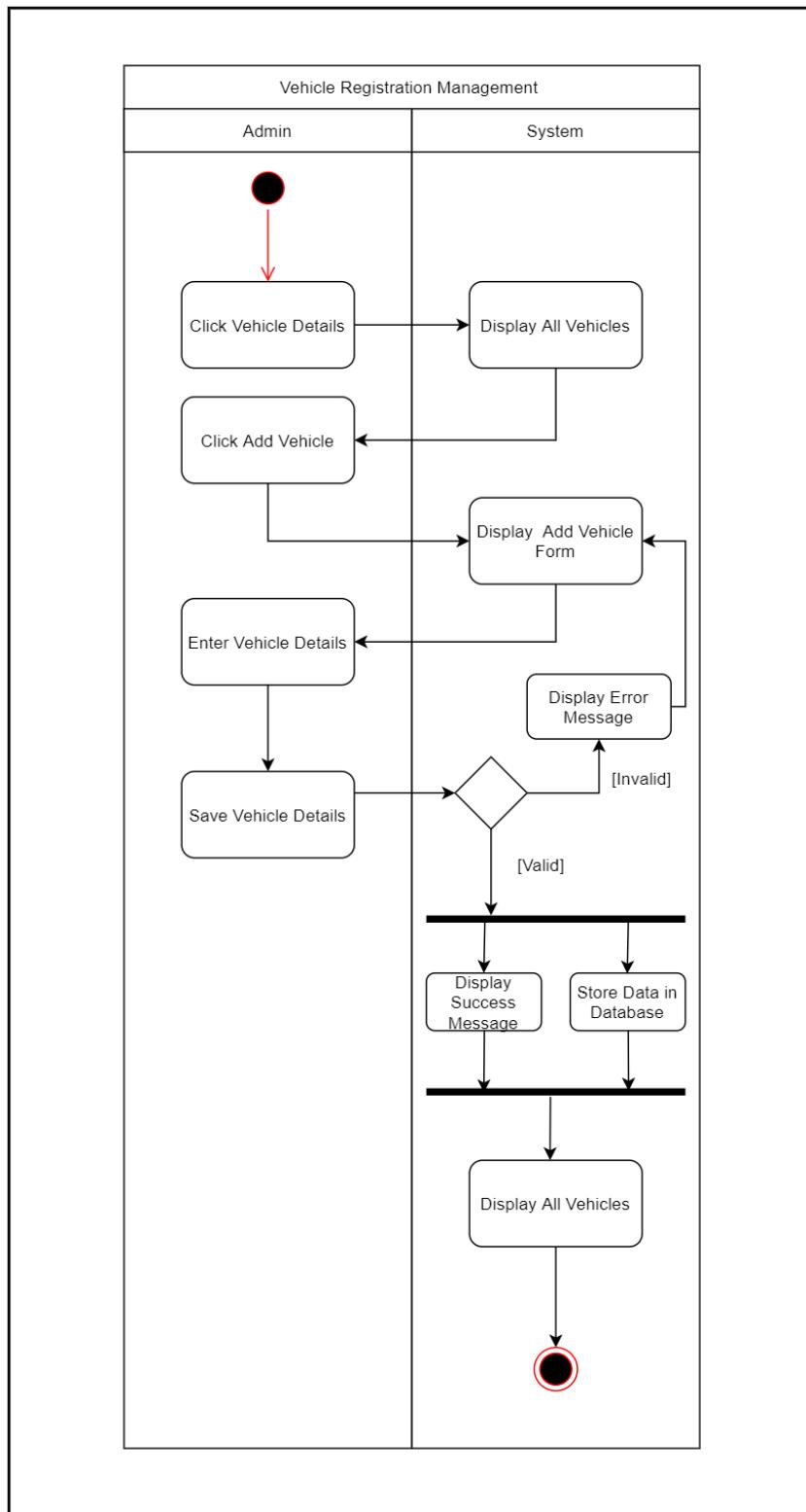


Figure 21: Activity diagram_add vehicle

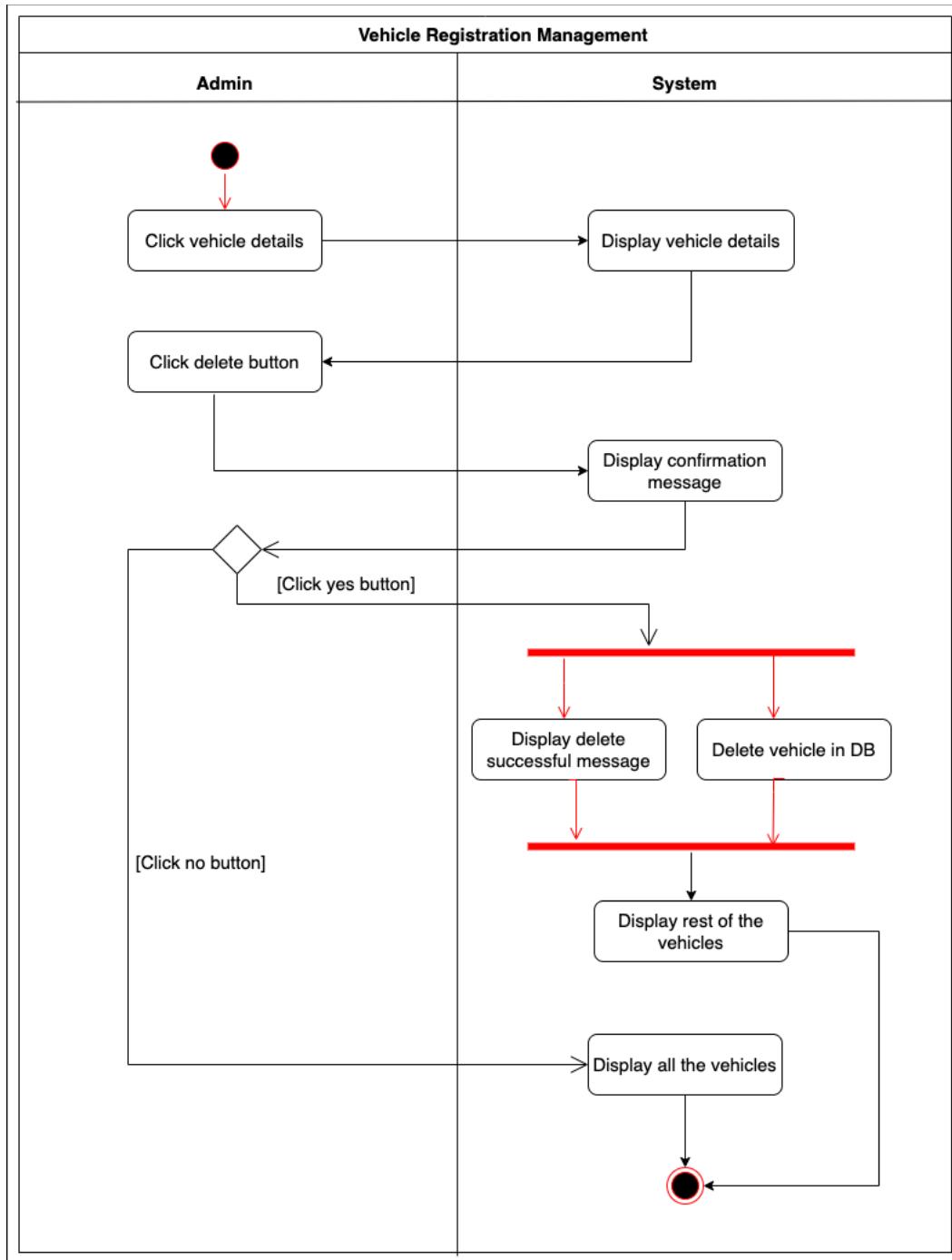


Figure 22: Activity diagram_delete vehicle

Employee Registration Management – IT19169736

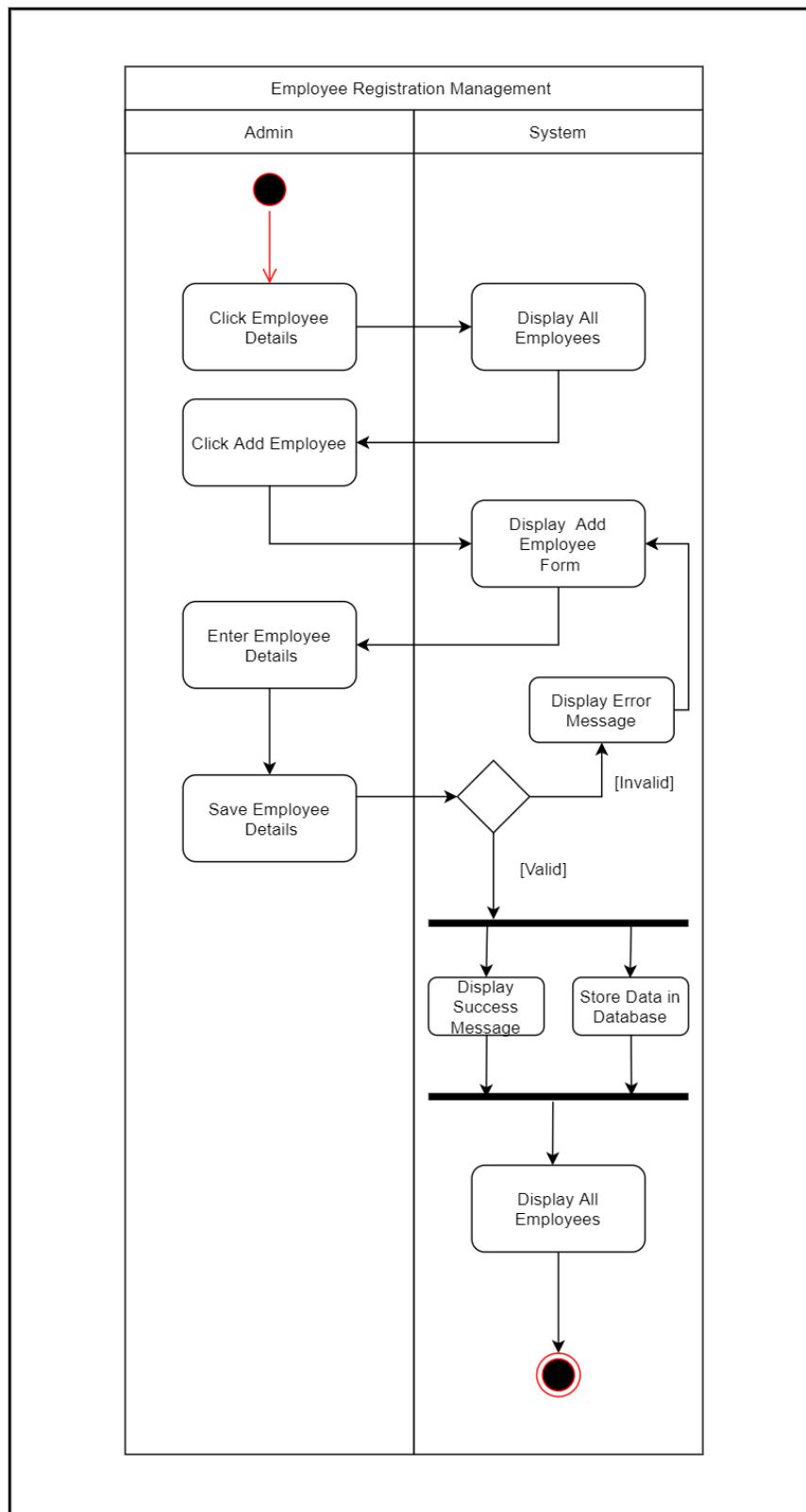


Figure 23: Activity diagram_add employee

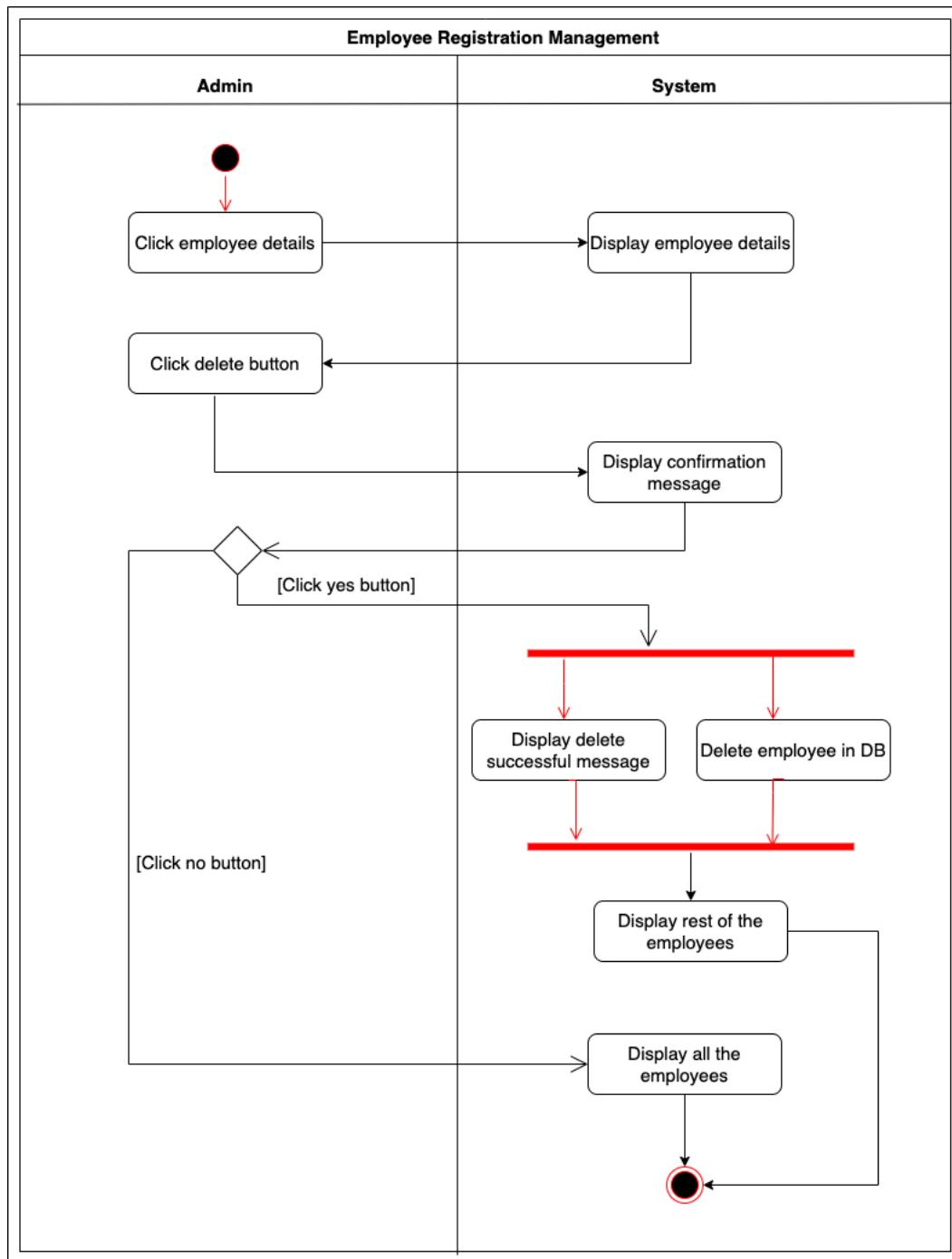


Figure 24: Activity diagram_delete employee

Supplier Registration Management – IT19994406

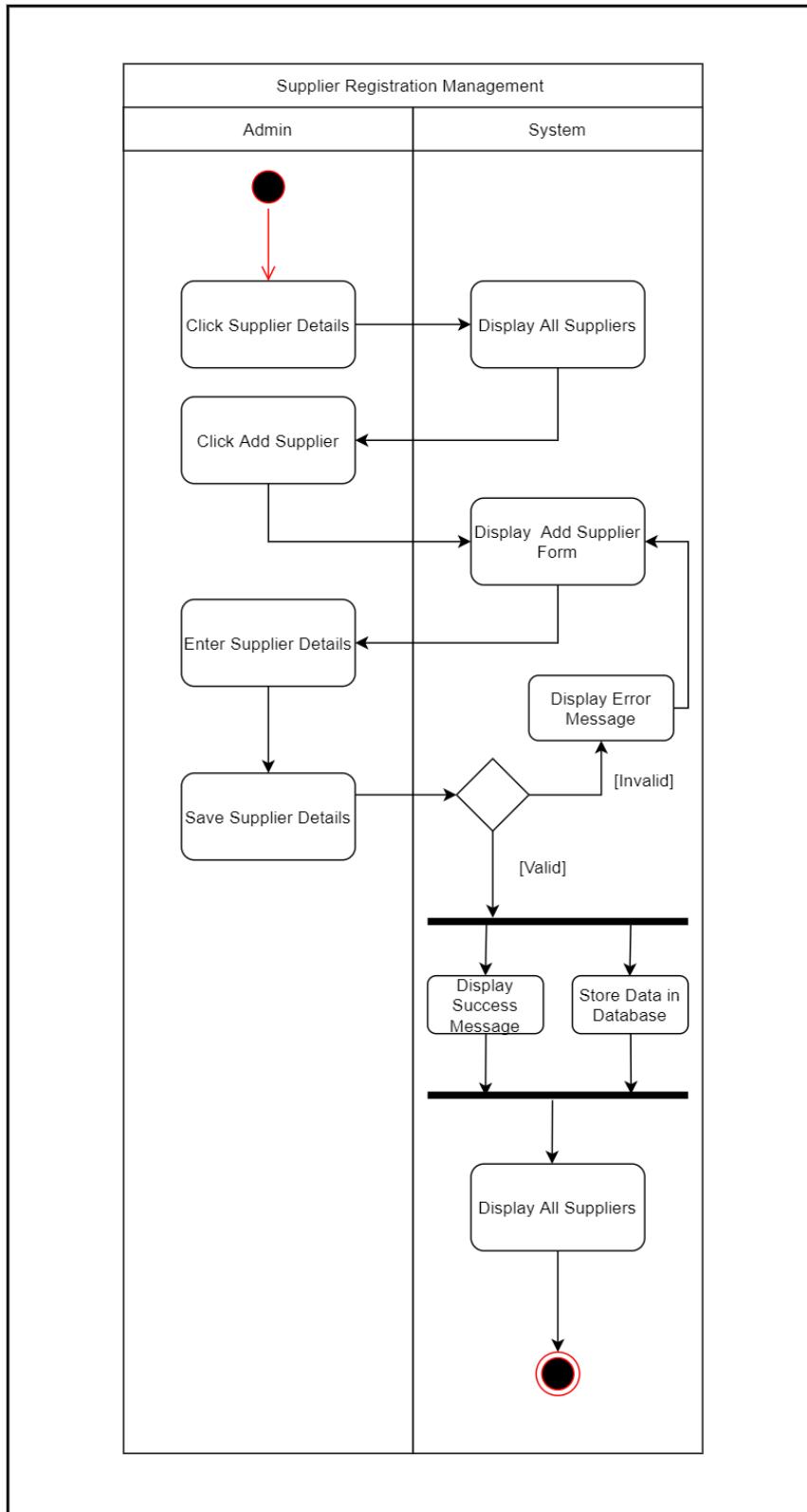


Figure 25: Activity diagram_add supplier

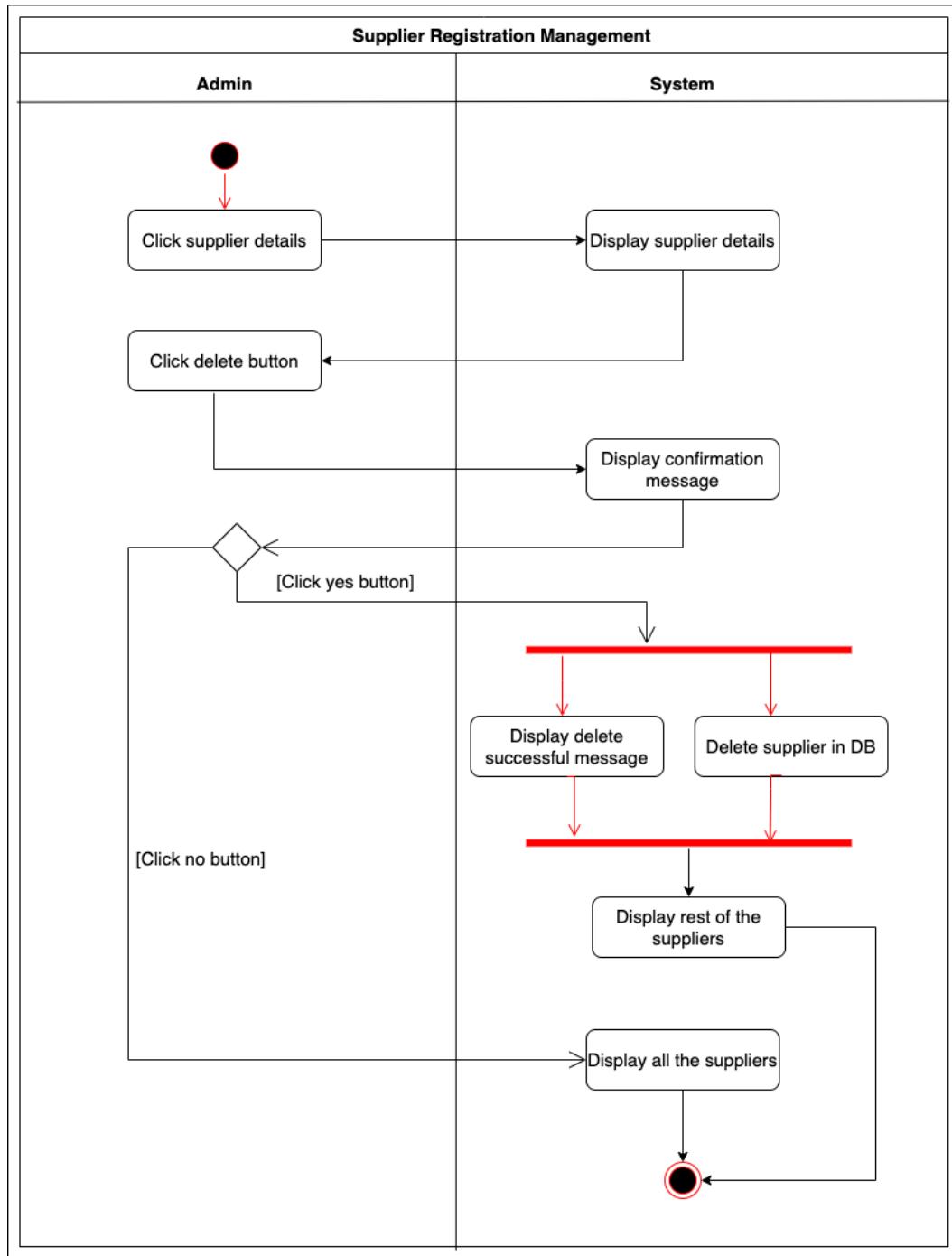


Figure 26: Activity diagram_delete supplier

2.1.2 Non-functional requirements

Performance

A significant number of employees are working in the workstation and the daily workload is also high. All the automated tasks should be fast and accurate. So, the performance of the system can be considered as a major nonfunctional requirement.

Security

The important details of workstation should be stored in a safe manner. With the automated system, it assures that all the data entered to the system will be protected against any unauthorized access. And also, the data should be safe against malware threats.

Usability

Users will be able to navigate between different pages and components easily and the interfaces will be pleasant to use. All the functions have different components, and it will be easier to handle all data entry operations. Users will be able to complete their actions fast and smoothly with the application.

Availability

Many of the tasks happening in the workstation have to be done on time and it is a must to have an available system. Registrations, invoice calculations, filling job sheets, ordering and adding items to stock can be done at any time with the system. Availability is one of the main nonfunctional requirements which has to be fulfilled within the application.

2.2 Design

2.2.1 High level architecture diagram

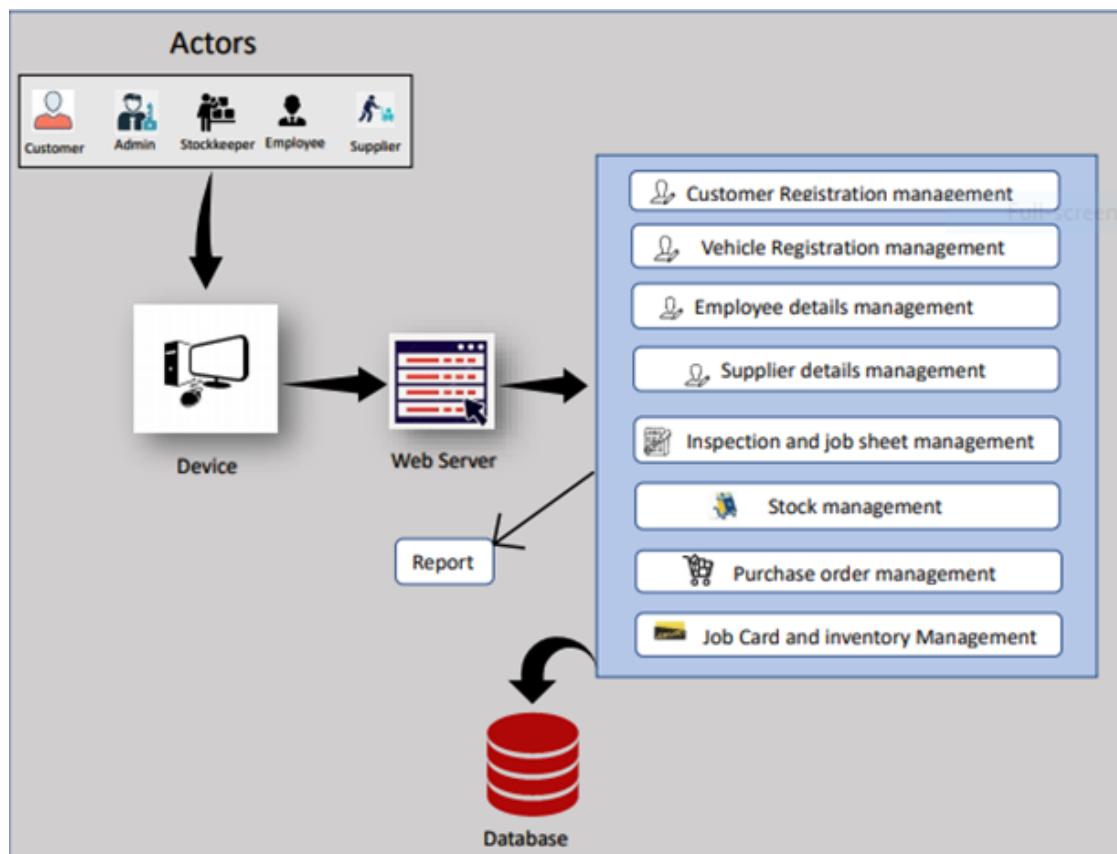


Figure 27: High level architecture diagram

2.2.2 Class diagram

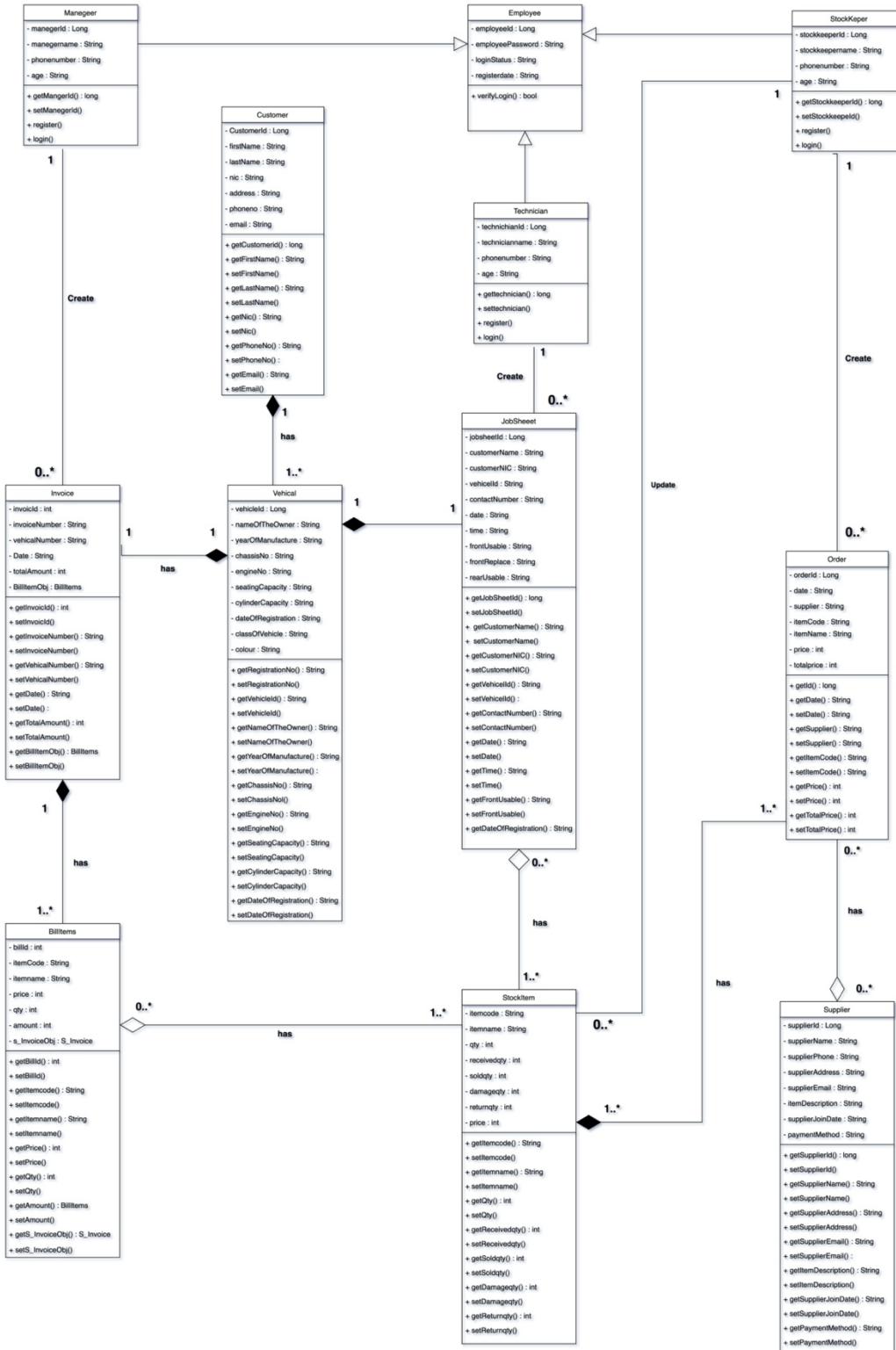


Figure 28: Class diagram

2.2.3 ER diagram

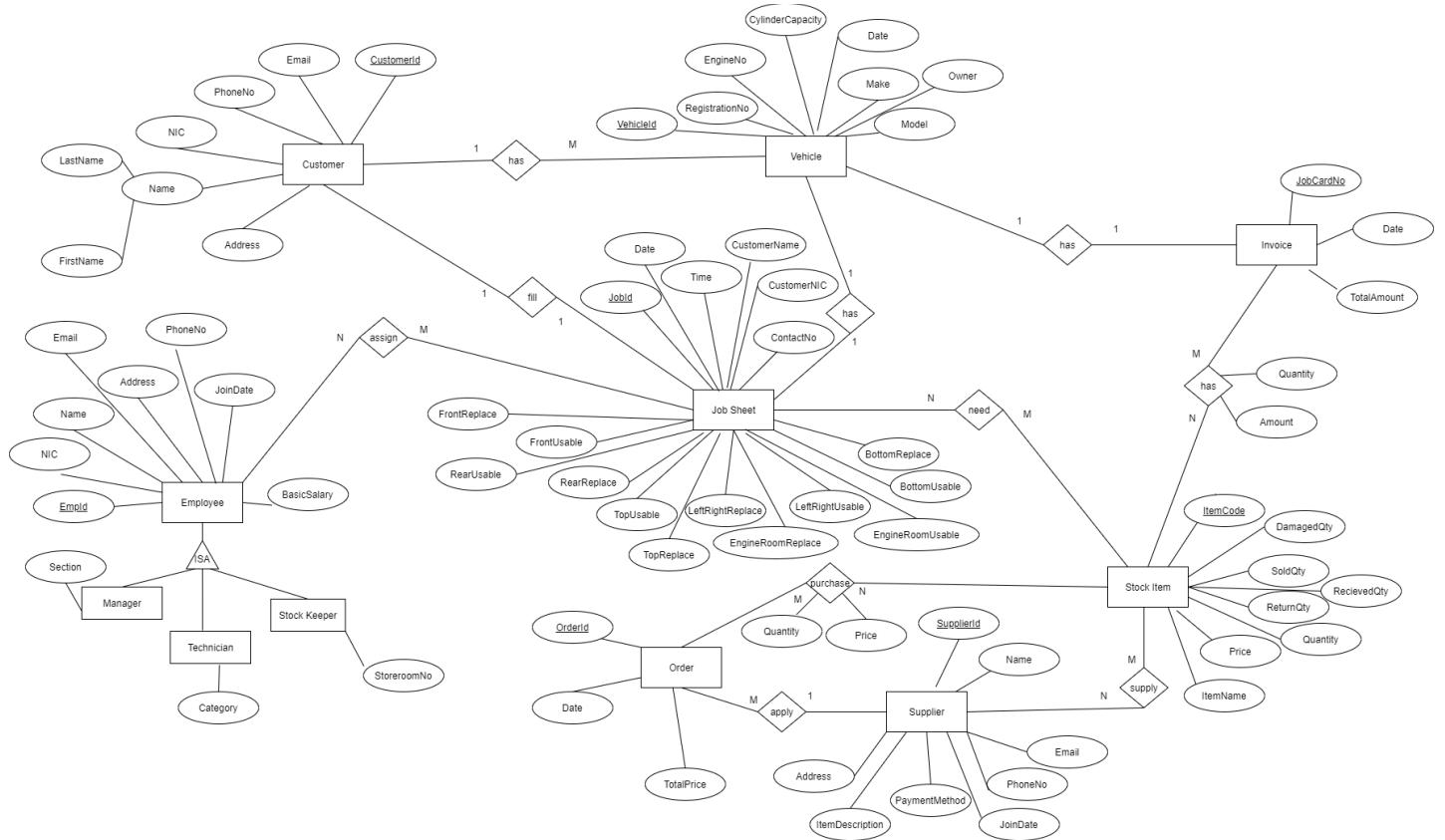


Figure 29: ER diagram

2.2.4 Sequence diagrams

Invoice Management – IT20045326

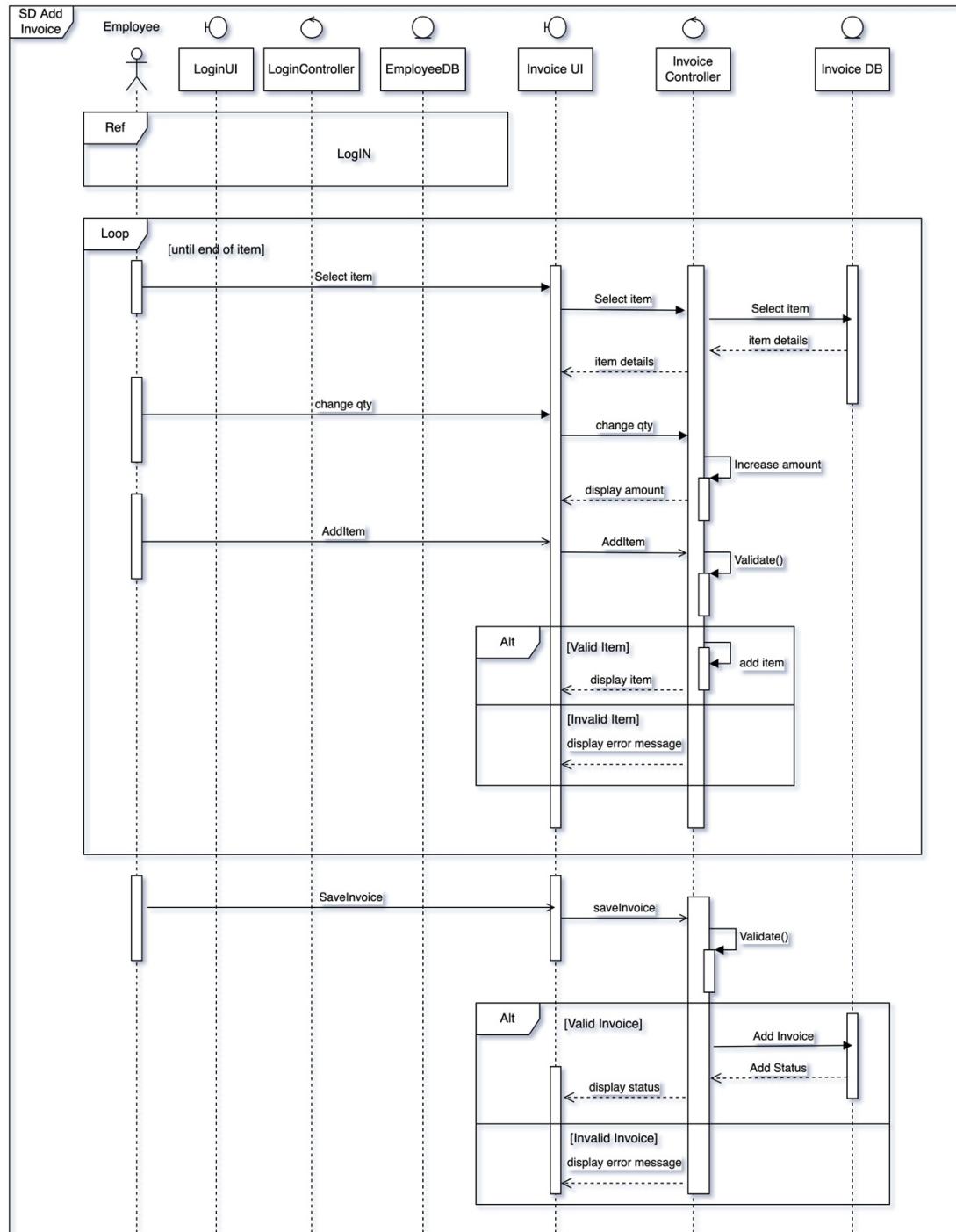


Figure 30: Sequence diagram_add invoice

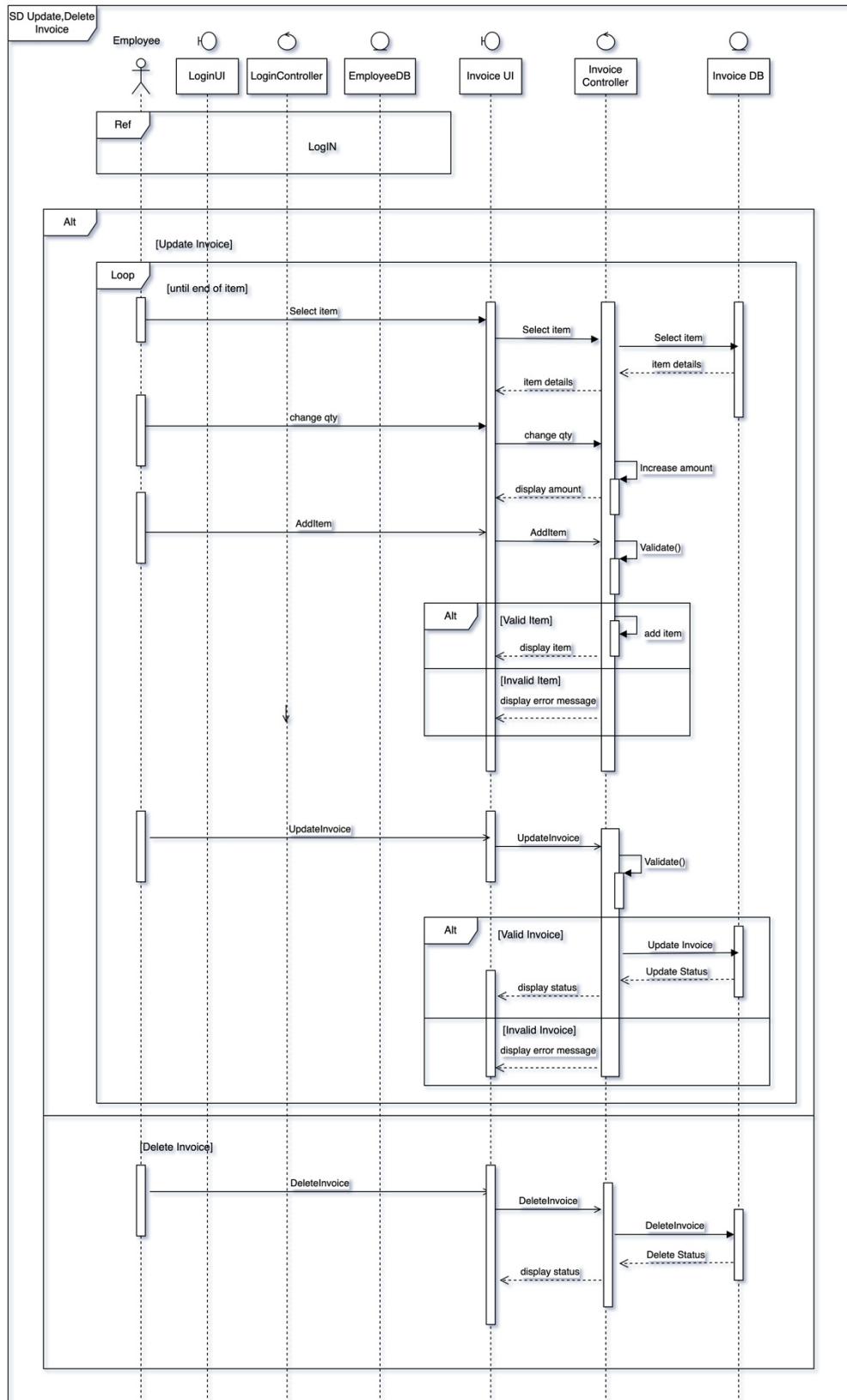


Figure 31: Sequence diagram _update and delete invoice

Job sheet Management – IT20005580

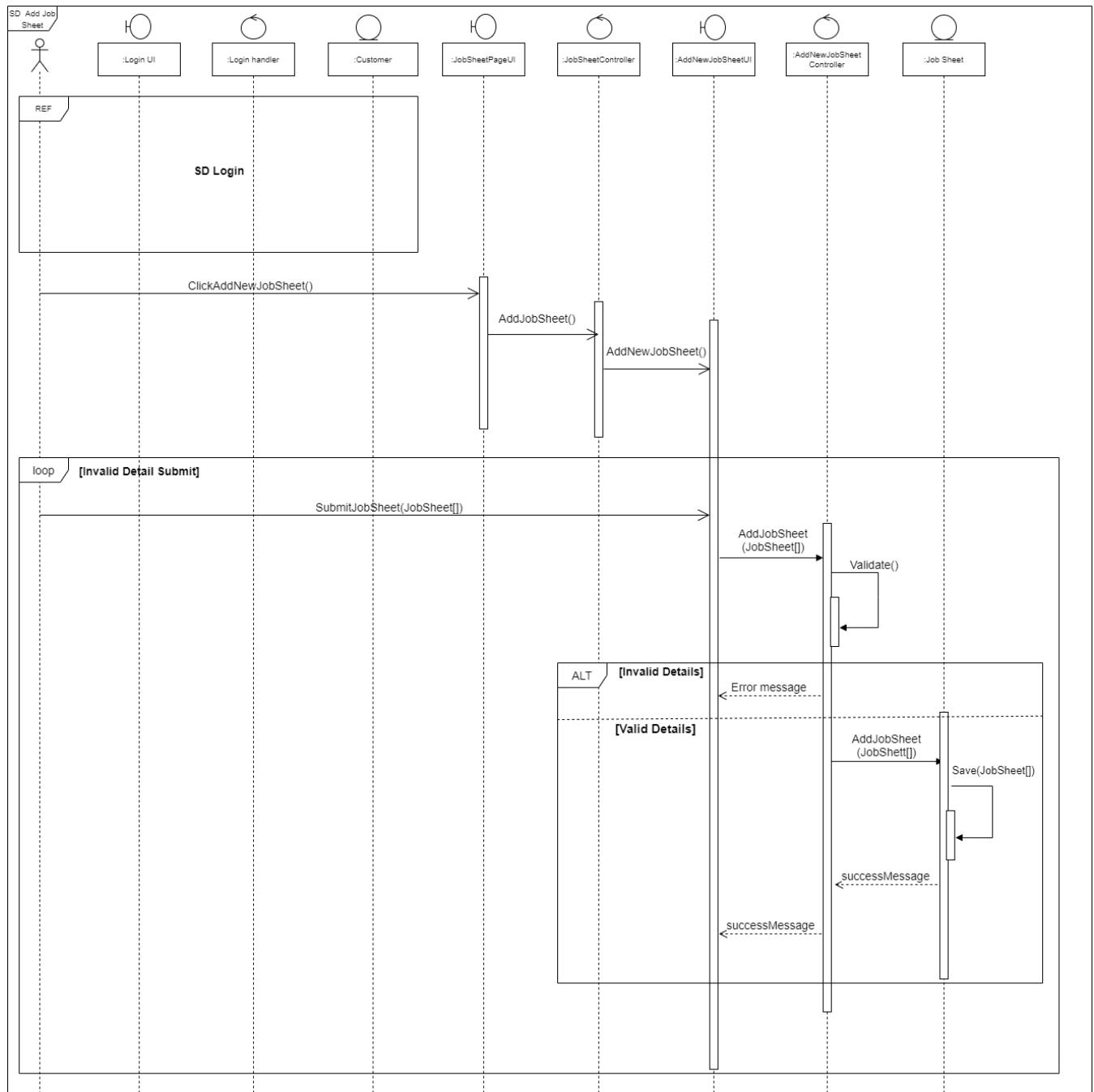


Figure 32: Sequence diagram _add joosheet

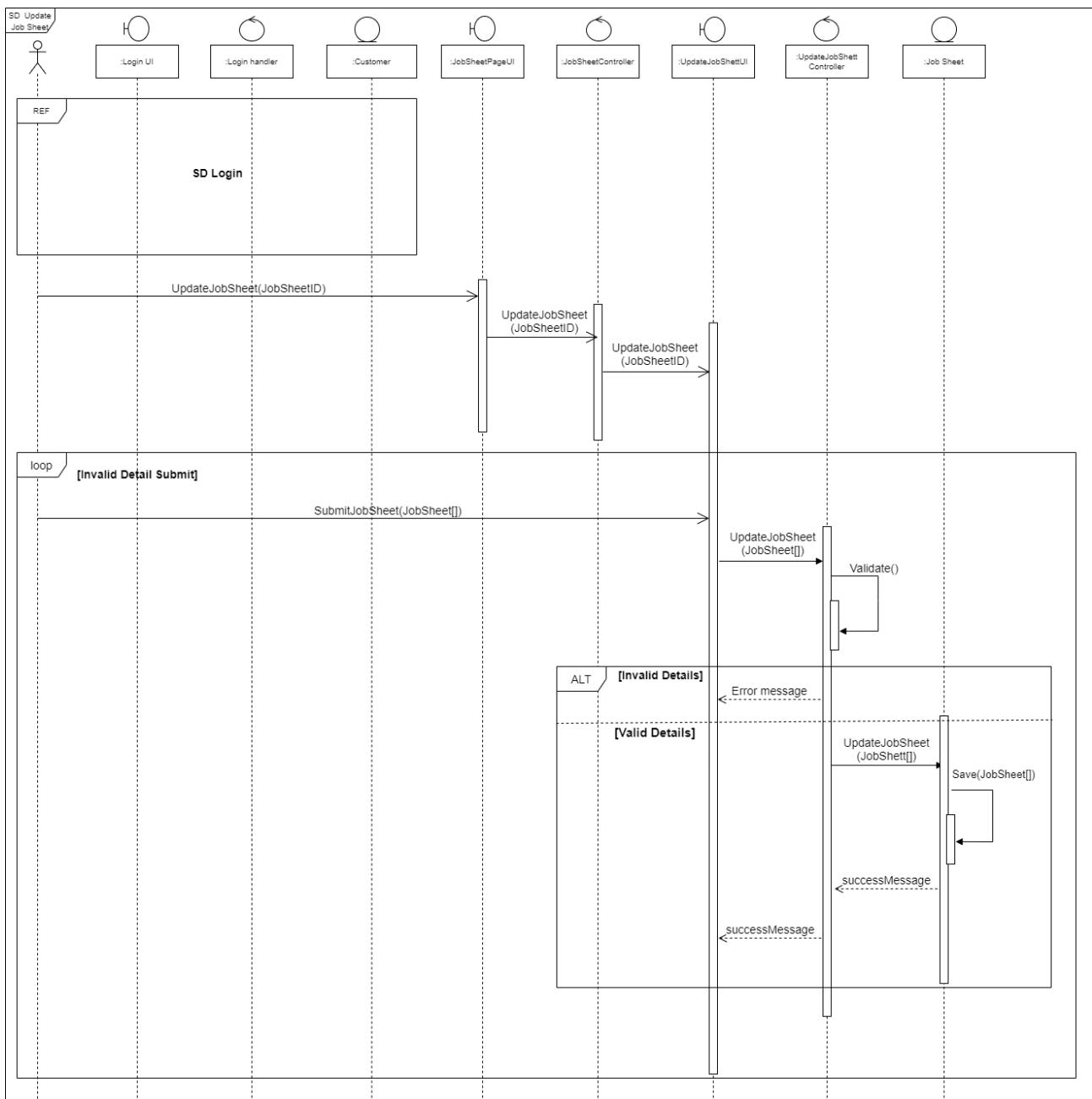


Figure 33: Sequence diagram _update jobsheet

Stock Management – IT20055530

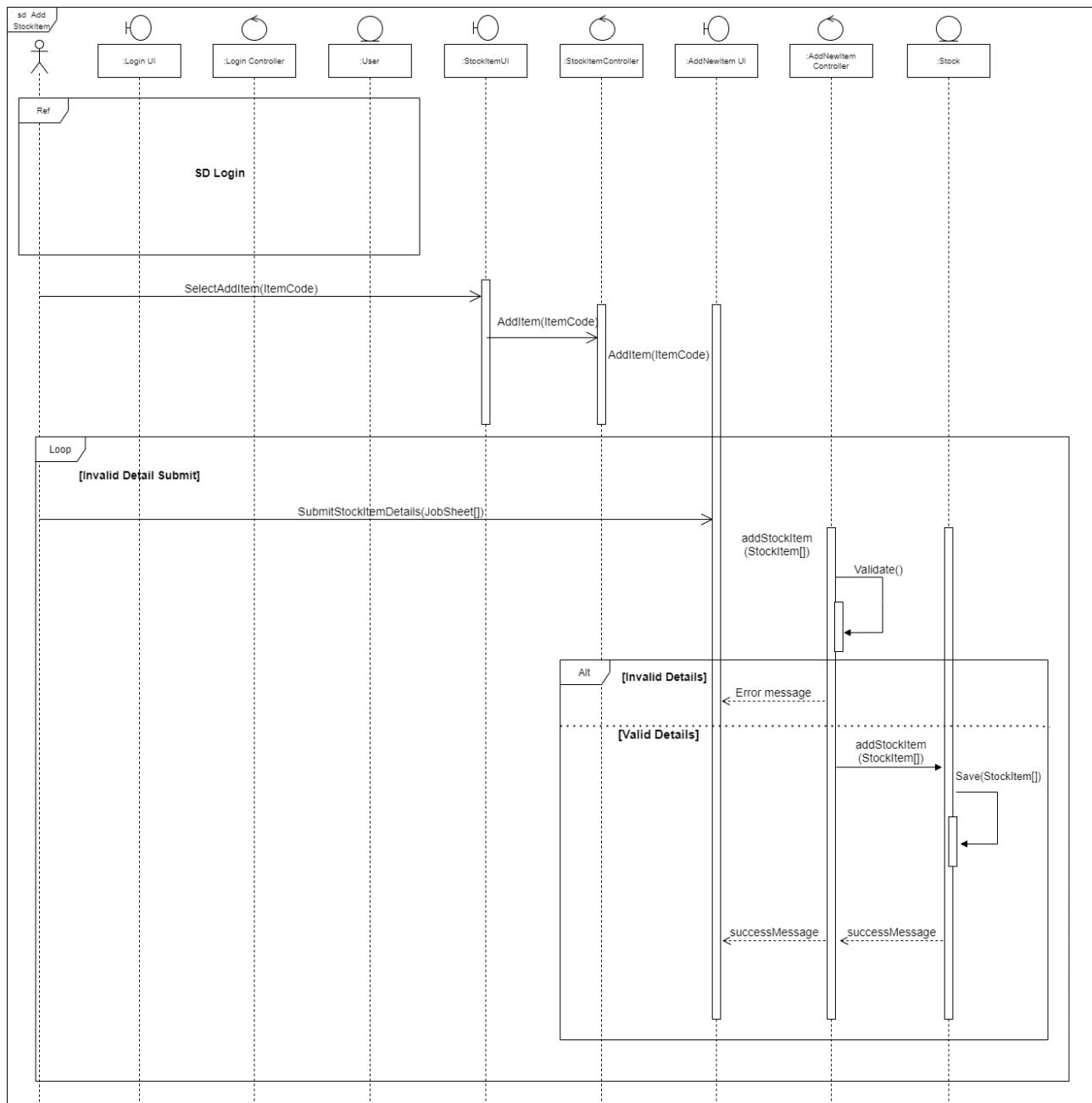


Figure 34: Sequence diagram _add stock

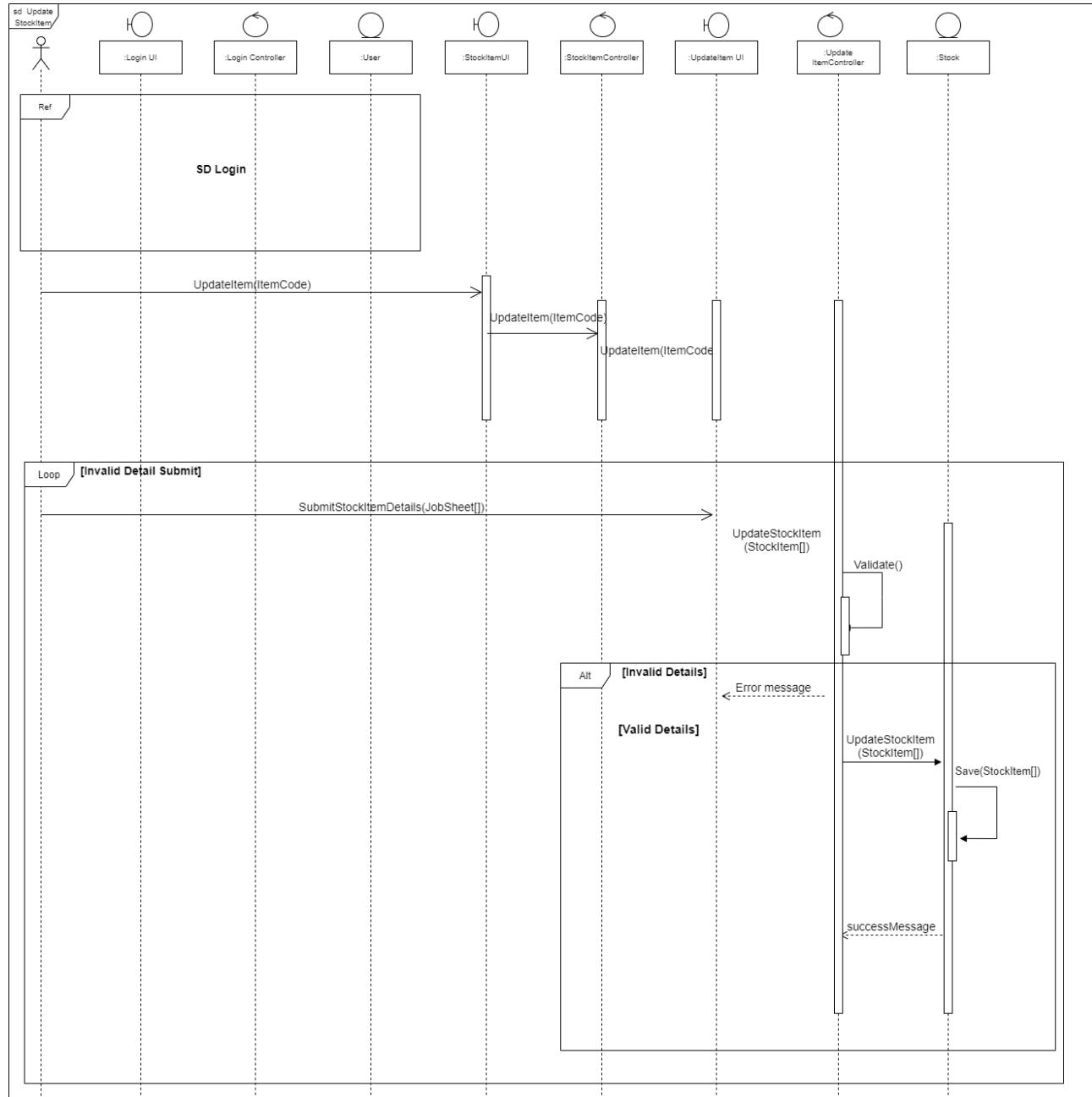


Figure 35: Sequence diagram _update stock

Purchasing Order Management – IT20121488

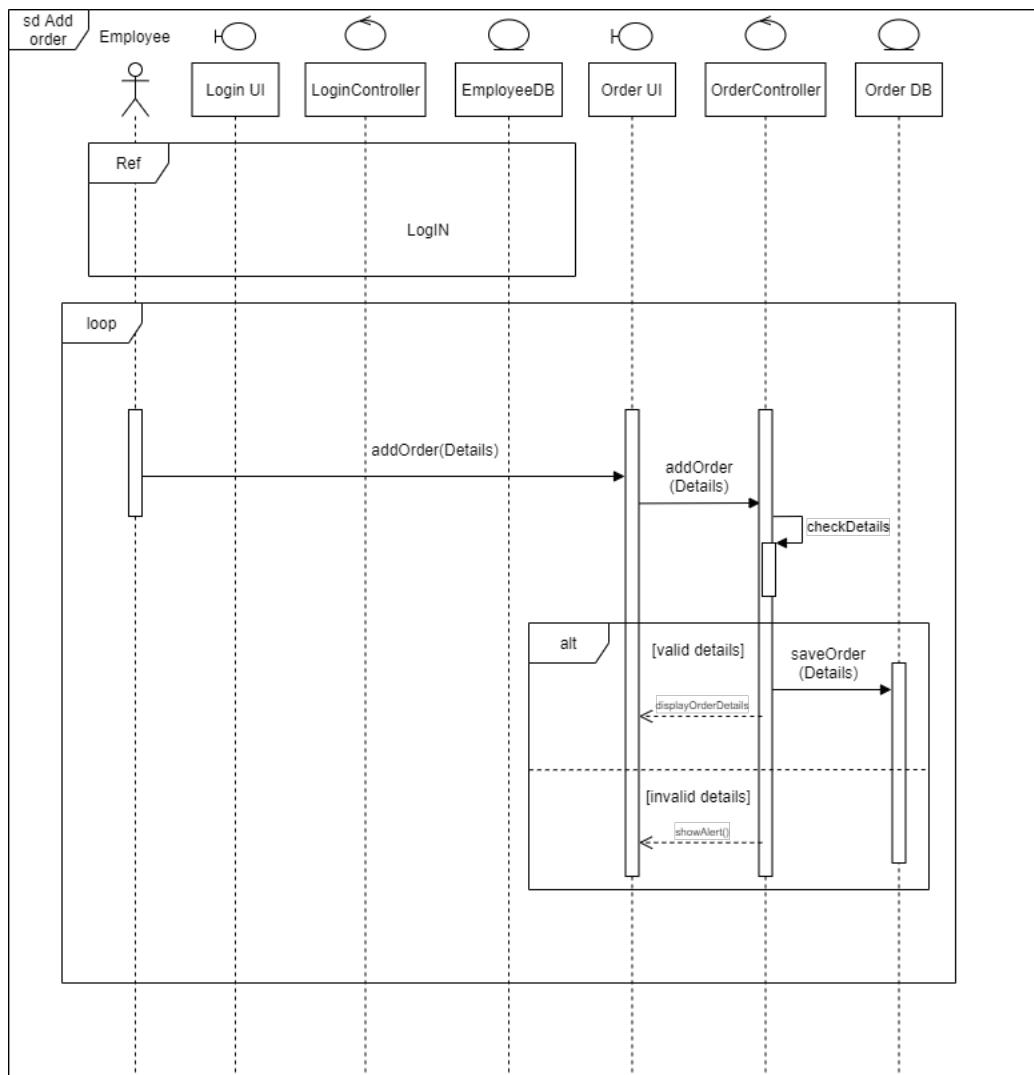


Figure 36: Sequence diagram _add order

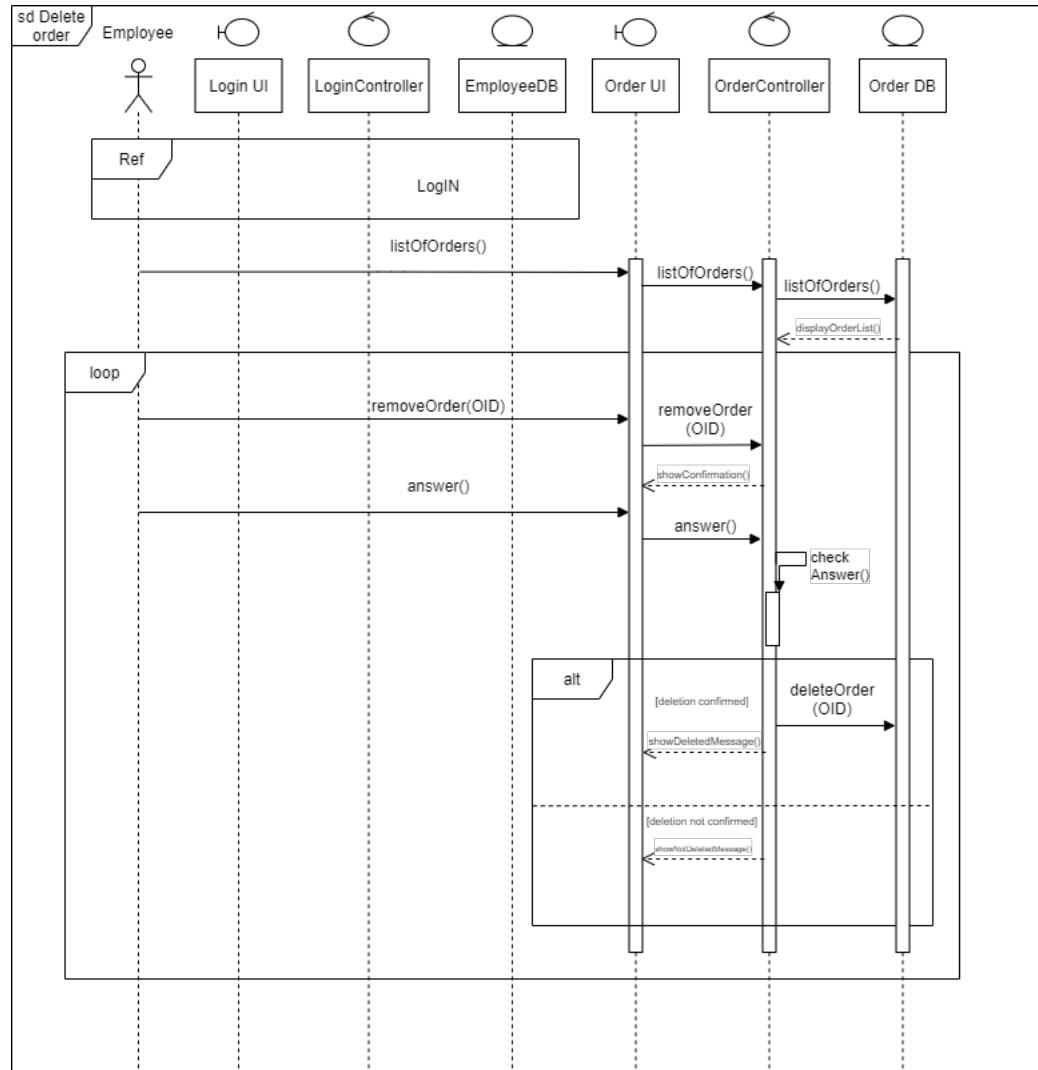


Figure 37: Sequence diagram_delete order

Customer Registration Management – IT20005962

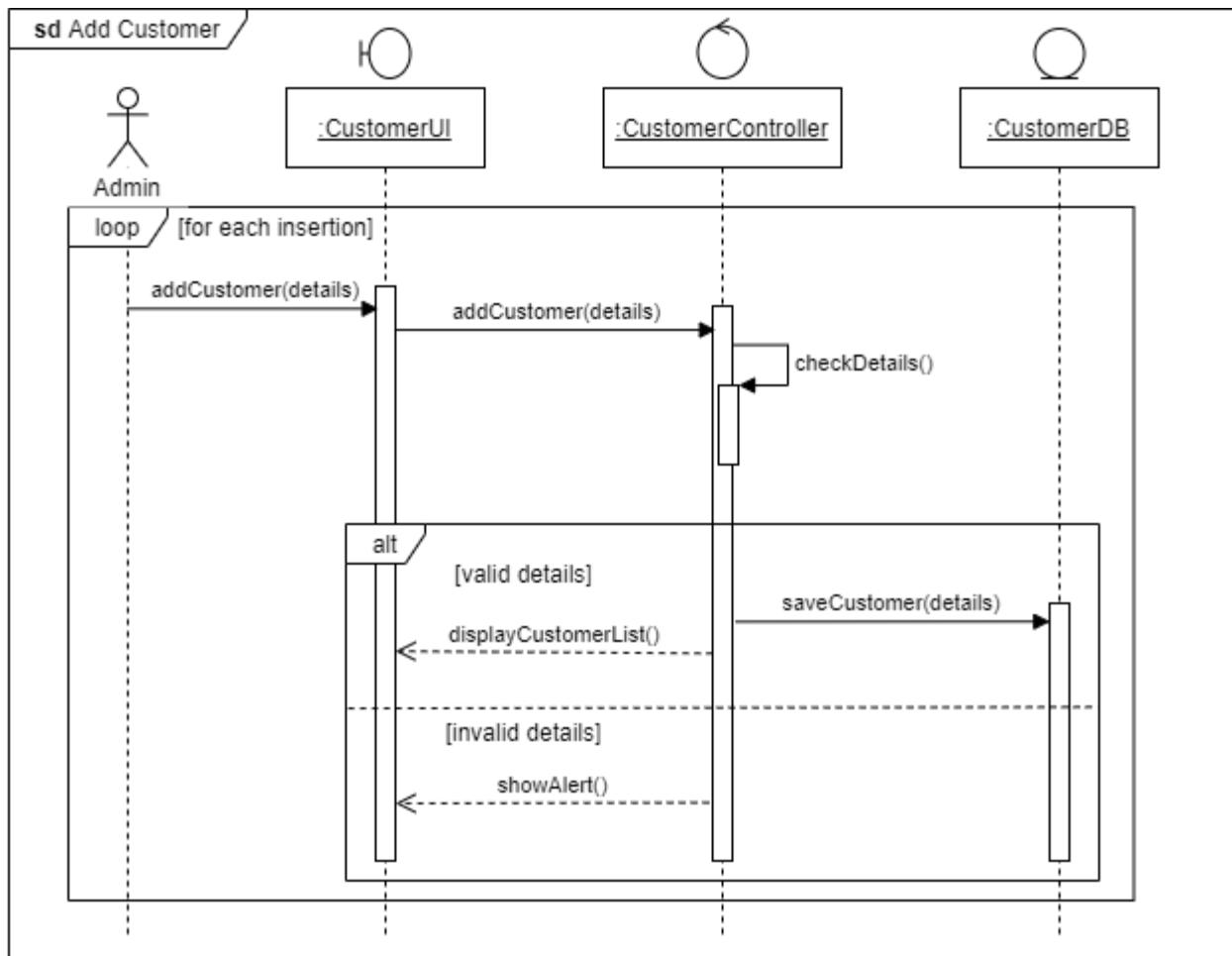


Figure 38: Sequence diagram_add cutomer

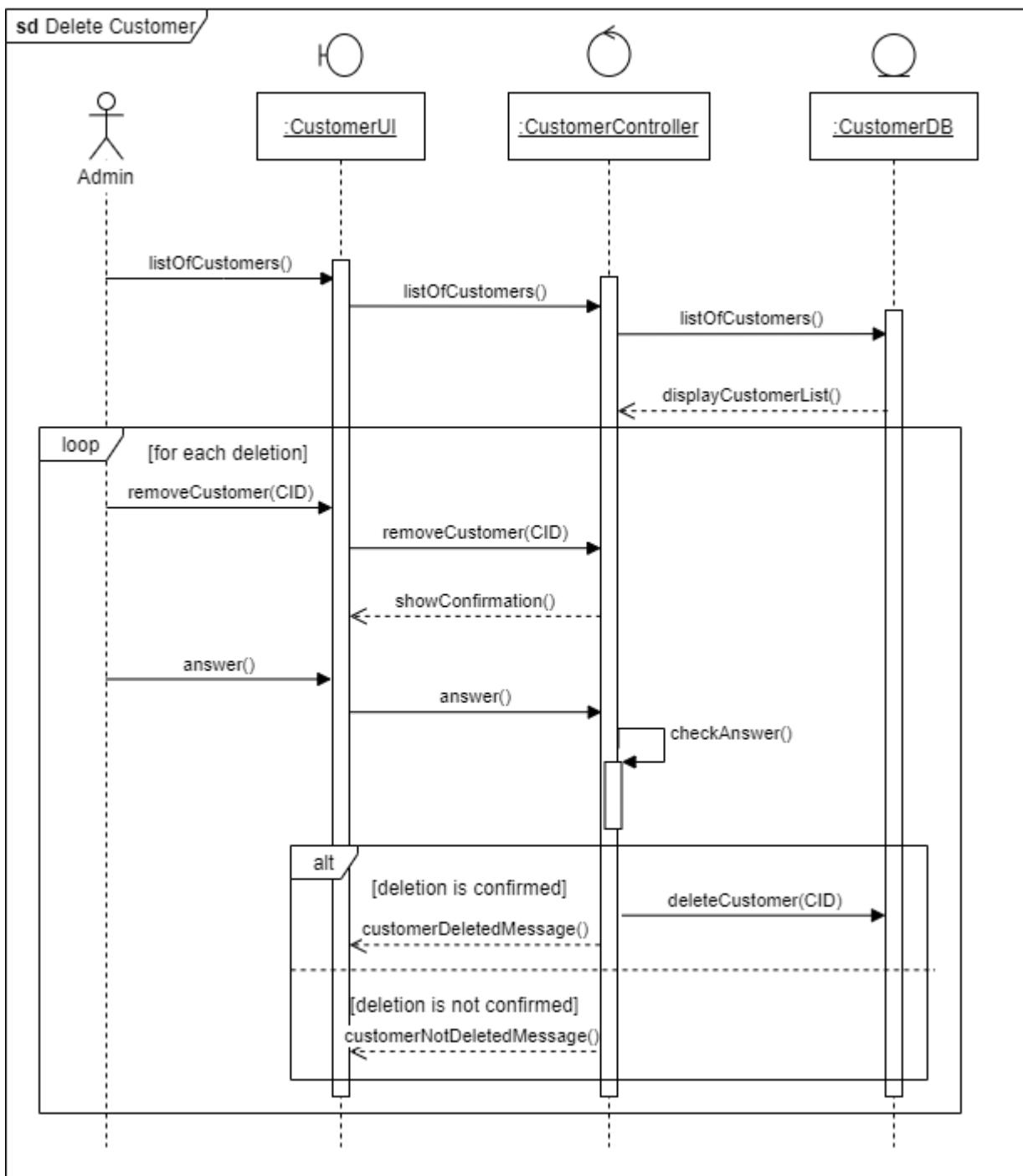


Figure 39: Sequence diagram_delete customer

Vehicle Registration Management – IT20017088

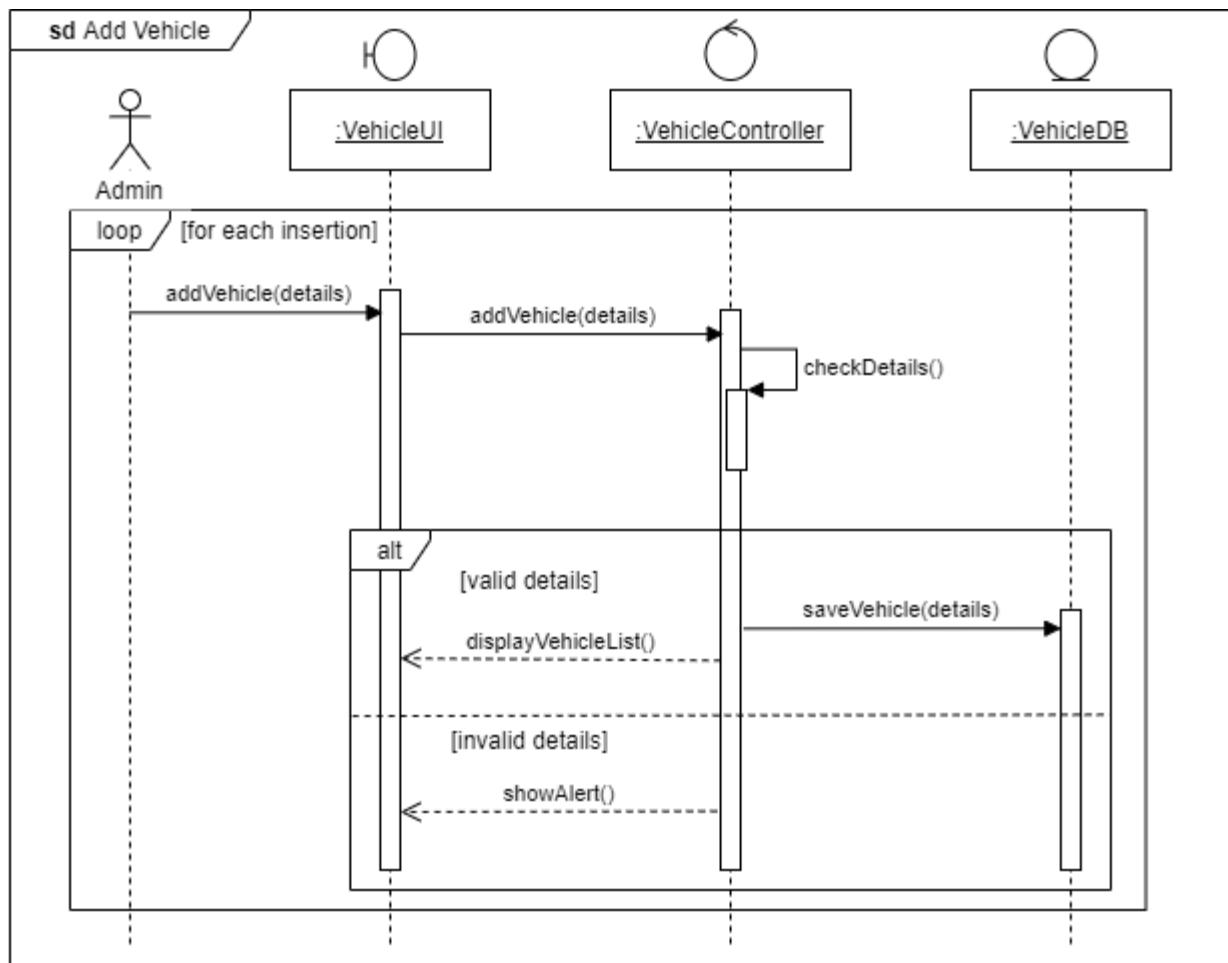


Figure 40: Sequence diagram_add vehicle

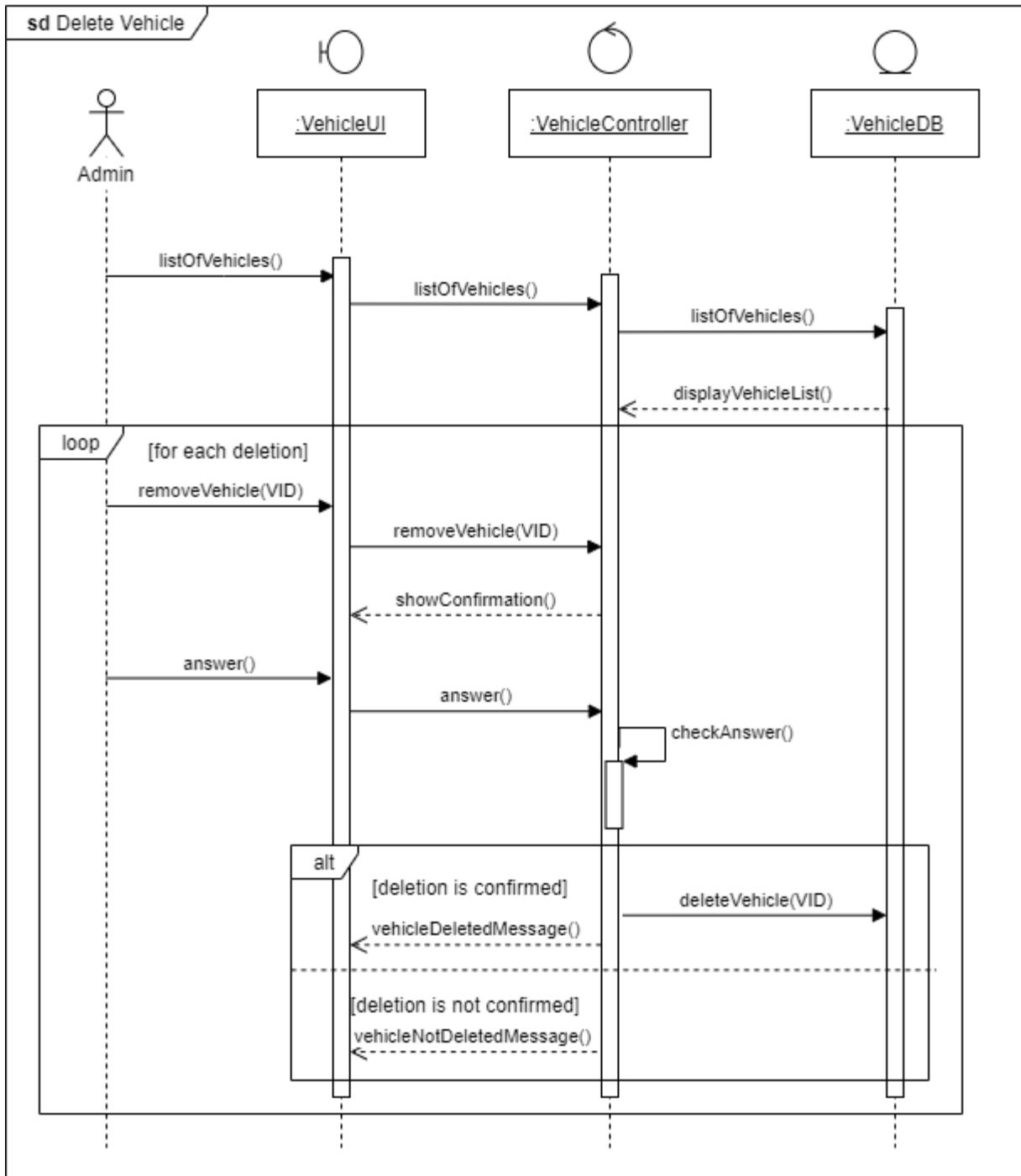


Figure 41: Sequence diagram_delete vehicle

Employee Registration Management – IT19169736

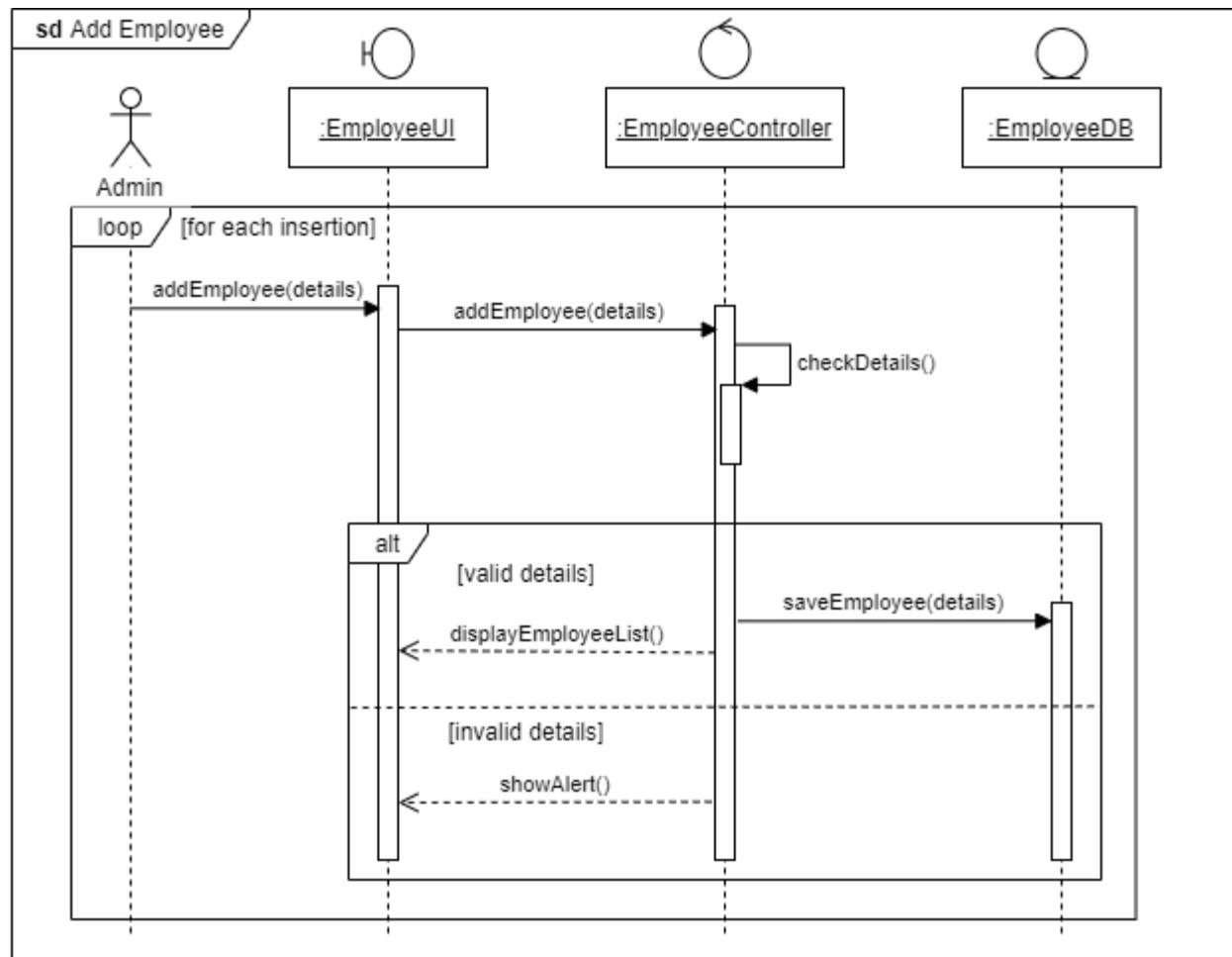


Figure 42: Sequence diagram_add employee

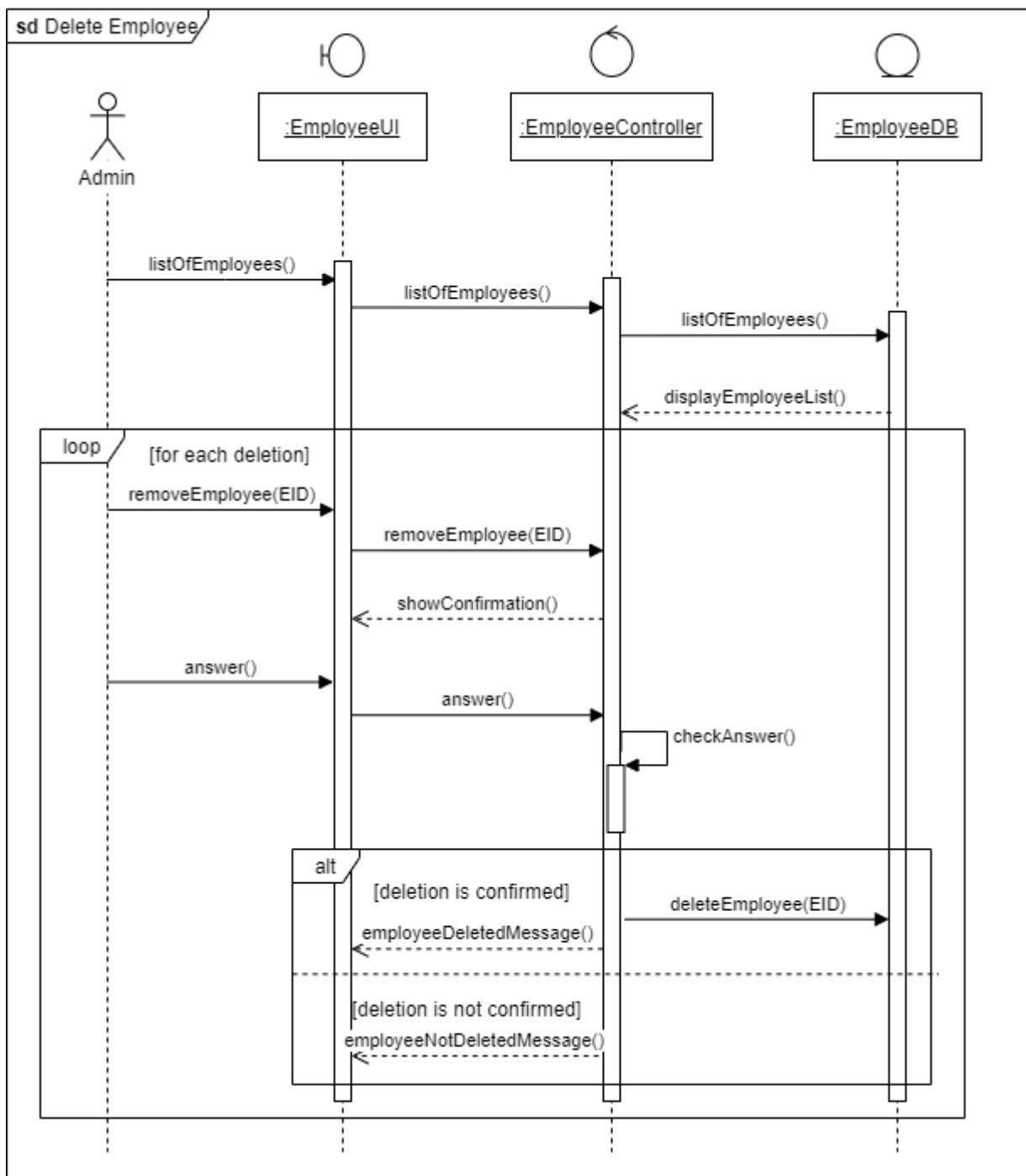


Figure 43: Sequence diagram_delete employee

Supplier Registration Management – IT19994406

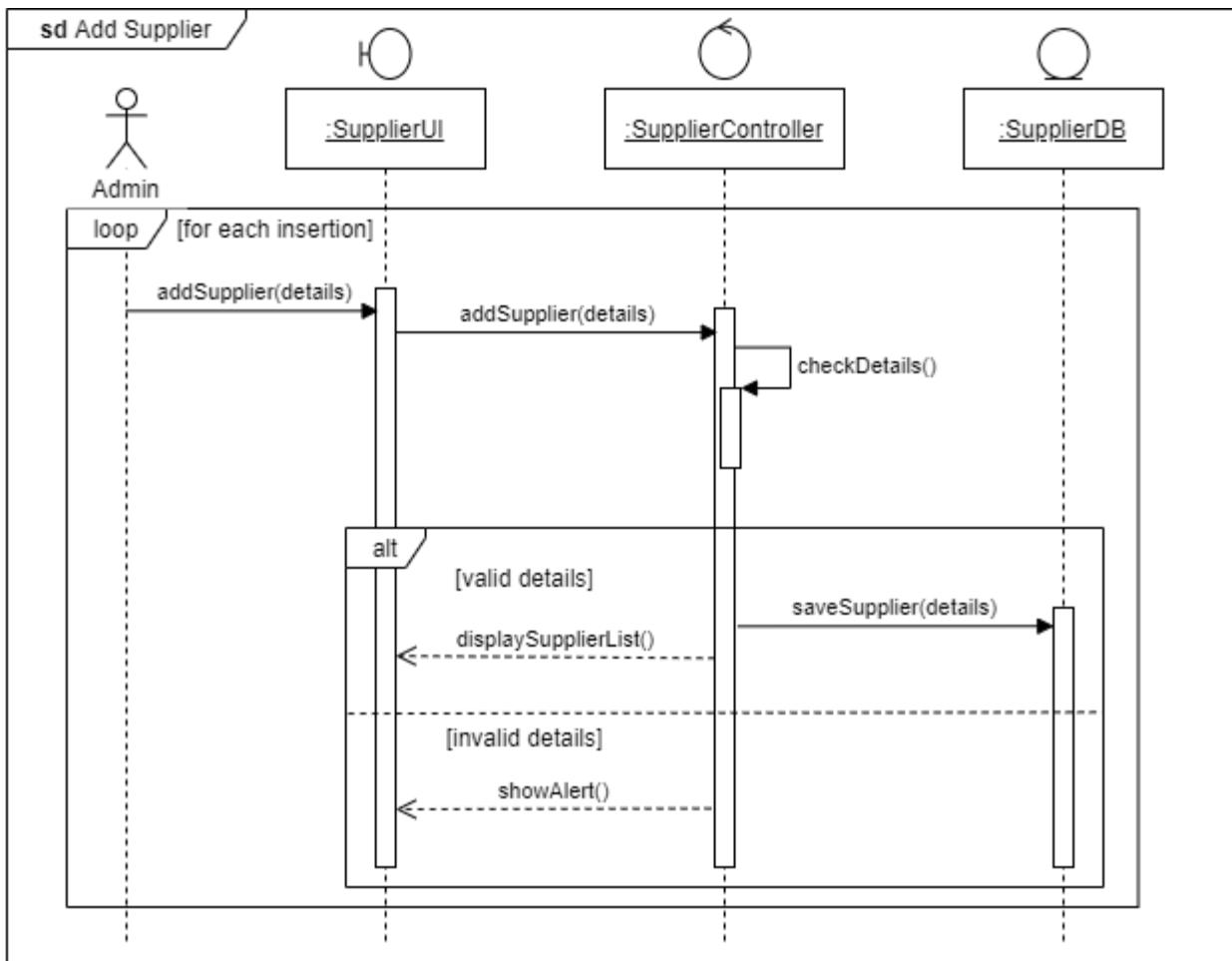


Figure 44: Sequence diagram_add supplier

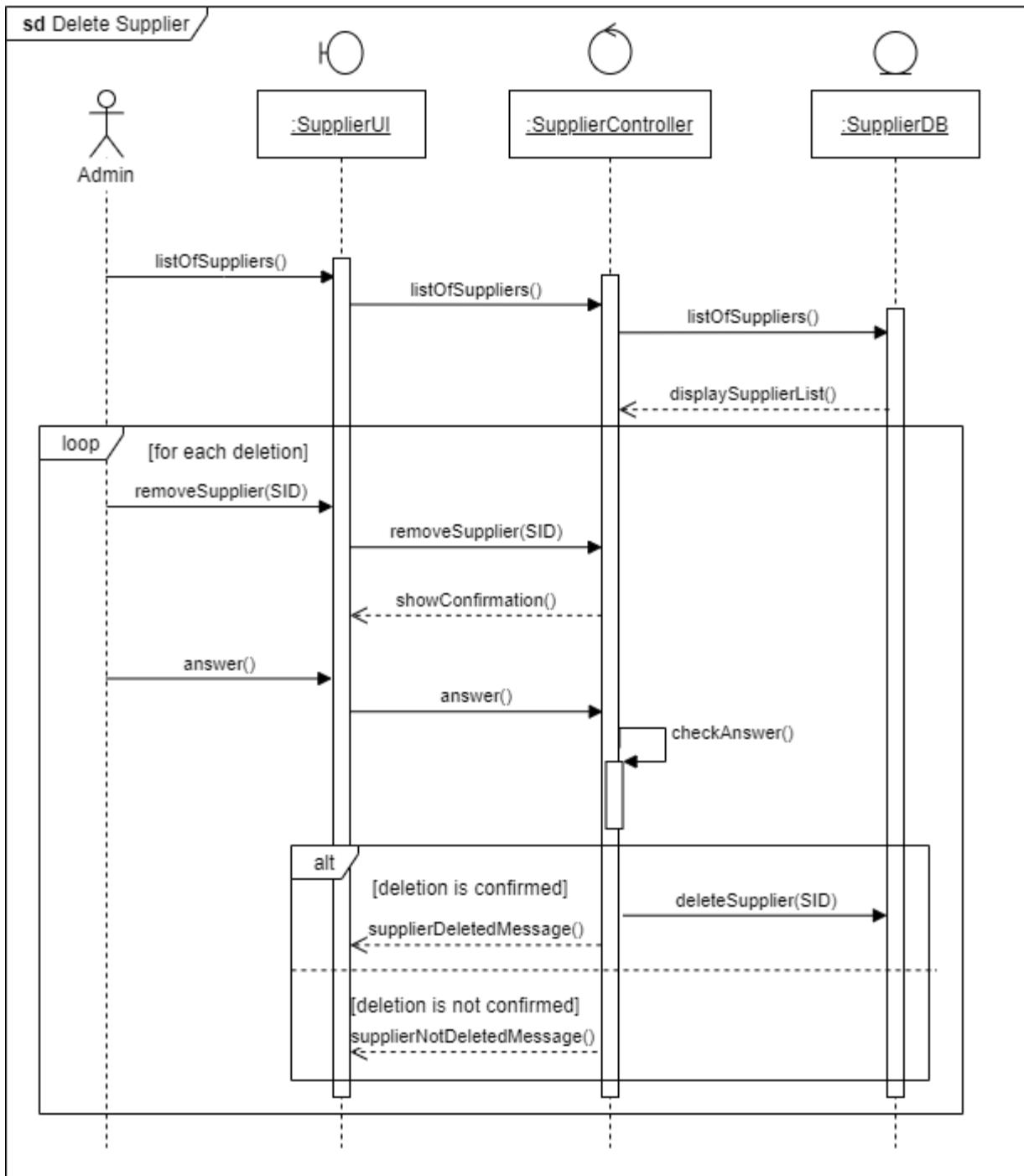


Figure 45: Sequence diagram_delete supplier

2.2.5 User Interfaces

Invoice Management – IT20045326

The screenshot shows the 'JOB CARD' creation screen. The top header includes the 'MOTOROX Automobiles' logo and a 'Logout' button. On the left is a sidebar with navigation links: Dashboard, Job Card, Item Master, Purchase Order, Job Sheet, Customer Details, Supplier Details, Employee Details, Vehicle Details, and Profile. The main area has tabs for 'View All', 'Search', 'PDF', and 'Job'. The 'Job' tab is active. The form fields include 'Invoice Number' (INV23), 'Vehical Number' (empty), 'Time' (3:03:53 AM), and 'date' (13/10/2021). A large 'Rs. 0.00' value is displayed prominently. Below the form is a table for adding items, with columns for Item Id, Item Name, Cost Price, QTY, Amount, and Options. A separate table on the right lists existing invoices with columns for InvoiceNo and VehicalNo, each with a 'View' button.

Figure 47: Create invoice without data

This screenshot shows the same 'JOB CARD' interface but with data entered. The 'Job' tab is active. The 'Invoice Number' is INV23, 'Vehical Number' is NC 9024, 'Time' is 3:05:58 AM, and 'date' is 13/10/2021. In the item table, there is one entry: 'TOYATAITM011' with 'Item Name: Iron Gear Lever, Vehicle Name: Ace Hydra Crane', 'Cost Price: 6700', and 'Amount: 6700'. The total amount 'Rs. 57900.00' is displayed. The right-hand table of existing invoices shows entries for INV1 through INV9, each with a 'View' button.

Figure 46: Create invoice with data

Job Sheet List

Invoice Number	Vehical Number	Total	Date	Item Code	itemname		
INV1	WE 7678	Rs.1241.00	01/10/2021	ITM003	1 Black Oil Chamber	<button>View</button>	<button>Delete</button>
INV2	HI 2000	Rs.11000.00	05/10/2021	ITM005	1 Iron Gear Lever Assembly Housing	<button>View</button>	<button>Delete</button>
INV3	GE 5001	Rs.21200.00	05/10/2021	ITM011 ITM012	1 60-I Pilot Lever Boot 2025450 2 Iron Gear Lever, Vehicle Name: Ace Hydra Crane	<button>View</button>	<button>Delete</button>
INV5	NC 9024	Rs.18000.00	06/10/2021	ITM002	1 RUBBER Car Parts, For Automotive, Vehicle Model: Bmw 5 Series	<button>View</button>	<button>Delete</button>
INV6	NO 4545	Rs.48000.00	06/10/2021	ITM006	1 B054/TAC Gear Lever Rubber Bracket	<button>View</button>	<button>Delete</button>
INV7	GU 2620	Rs.83400.00	06/10/2021	ITM011 ITM006	1 60-I Pilot Lever Boot 2025450 2 B054/TAC Gear Lever Rubber Bracket	<button>View</button>	<button>Delete</button>
INV8	NO 4545	Rs.2140.00	06/10/2021	ITM009	1 B157/tac Assembly Gear Lever	<button>View</button>	<button>Delete</button>
INV9	GE 5001	Rs.2700.00	06/10/2021	ITM010	1 Braiding Bevel Gear Parts	<button>View</button>	<button>Delete</button>
INV10	SS 3456	Rs.1600.00	06/10/2021	ITM008	1 B014/tac Shifter Finger	<button>View</button>	<button>Delete</button>
INV11	QL 5555	Rs.214800.00	06/10/2021	ITM003 ITM008 ITM001 ITM009 ITM010 ITM002 ITM011	1 Black Oil Chamber 2 B014/tac Shifter Finger 3 SS Volvo Regulator, For Automotive 4 B157/tac Assembly Gear Lever 5 Braiding Bevel Gear Parts 6 RUBBER Car Parts, For Automotive, Vehicle Model: 7 Bmw 5 Series 8 60-I Pilot Lever Boot 2025450	<button>View</button>	<button>Delete</button>
INV12	NO 4545	Rs.6580.00	06/10/2021	ITM007	1 B045/tac Gear Lever Pin	<button>View</button>	<button>Delete</button>

Figure 49: Full invoice list

Job Sheet List

Invoice Number	Vehical Number	Total	Date	Item Code	itemname		
INV22	NC 9024	Rs.24600.00	13/10/2021	BMWITEM001 TOYATAITM005	1 60-I Pilot Lever Boot 2025450 2 RUBBER Car Parts, For Automotive, Vehicle Model: Bmw 5 Series	<button>View</button>	<button>Delete</button>
INV23	GE 2001	Rs.14140.00	13/10/2021	BMWITEM004 BENZITM005	1 B054/TAC Gear Lever Rubber Bracket 2 B157/tac Assembly Gear Lever	<button>View</button>	<button>Delete</button>

Figure 48: Search jobsheet list by date

The screenshot shows the 'Job Sheet List' page of the MOTOROX application. On the left is a sidebar with navigation links: Dashboard, Job Card, Item Master, Purchase Order, Job Sheet, Customer Details, Supplier Details, Employee Details, Vehicle Details, and Profile. The main content area has a title 'Job Sheet List' and a 'Create' button. Below it are search fields for 'Date From' (mm/dd/yyyy), 'Date To' (mm/dd/yyyy), 'Total From' (Enter First total), 'Total To' (Enter Second total), 'Search by ItemNumber:' (INV18), and 'Search by vehicalNumber:' (HI-2090). A 'Search' button is present next to each search field. The results table has columns: Invoice Number, Vehical Number, Total, Date, Item Code, and itemname. One row is shown for INV18:

Invoice Number	Vehical Number	Total	Date	Item Code	itemname
INV18	NO 4545	Rs.33400.00	06/10/2021	BENZITM006 BMWITM003 TOYATAITM005 BMWITM002	1 Black Oil Chamber 2 B045/tac Gear Lever Pin 3 RUBBER Car Parts, For Automotive, Vehicle Model: 4 Bmw 5 Series B014/tac Shifter Finger

Figure 50: Search job sheet by invoice number

The screenshot shows the 'Job Sheet List' page of the MOTOROX application. The sidebar and search interface are identical to Figure 50. The search results table shows three rows of data:

Invoice Number	Vehical Number	Total	Date	Item Code	itemname
INV1	WE 7878	Rs.1241.00	01/10/2021	ITM003	1 Black Oil Chamber
INV8	NO 4545	Rs.2140.00	06/10/2021	ITM009	1 B157/tac Assembly Gear Lever
INV10	SS 3456	Rs.1600.00	06/10/2021	ITM008	1 B014/tac Shifter Finger

Figure 51: Search by total price

The screenshot shows the 'Job Sheet List' page of the MOTOROX application. On the left is a sidebar with navigation links: Dashboard, Job Card, Item Master, Purchase Order, Job Sheet (selected), Customer Details, Supplier Details, Employee Details, Vehicle Details, and Profile. The main content area has a title 'Job Sheet List' and a 'Create' button. Below it are four search input fields: 'Date From:' (mm/dd/yyyy), 'Date To:' (mm/dd/yyyy), 'Total From:' (Enter First total), 'Total To:' (Enter Second total), 'Search by ItemNumber:' (INV10098), and 'Search by vehicalNumber:' (ge 2001). A 'Search' button is located to the right of each pair of fields. Below the search area is a table with columns: Invoice Number, Vehical Number, Total, Date, Item Code, and itemname. The table contains three rows of data:

Invoice Number	Vehical Number	Total	Date	Item Code	itemname
INV14	GE 2001	Rs.2940.00	06/10/2021	BENZITM002 BENZITM005	1 B014/tac Shifter Finger 2 B157/tac Assembly Gear Lever
INV20	GE 2001	Rs.59950.00	06/10/2021	BENZITM005 BMWITEM001	1 B157/tac Assembly Gear Lever 2 60-i Pilot Lever Boot 2025450
INV23	GE 2001	Rs.14140.00	13/10/2021	BMWITEM004 BENZITM005	1 B054/TAc Gear Lever Rubber Bracket 2 B157/tac Assembly Gear Lever

Figure 52: Search by vehicle number

The screenshot shows the 'Update INV18' page. The top section displays the total amount 'Rs. 50910.00'. Below it is a form with fields: 'Invoice Number:' (INV18 / NO 4545), 'Vehical Number:' (input field), 'Time' (dropdown: 3:21:13 AM), 'date:' (dropdown: 06/10/2021), and buttons for 'PDF', 'Delete', and 'Update'. The main area contains two tables. The first table lists items with columns: Item Id, Item Name, Cost Price, qty, and Amount. The second table lists items with columns: Item Code, Item Name, Cost Price, QTY, Amount, Options, and Delete. To the right of these tables is a sidebar with a table titled 'InvoiceNo' and 'VehicalNo' containing a list of invoices.

Item Id	Item Name:	Cost Price:	qty:	Amount:
BMWITEM003	B045/tac Gear Lever Pin	890	1	890

Item Code	Item Name:	Cost Price:	QTY:	Amount:	Options	Delete
1 BENZITM006	Black Oil Chamber	620	2	1240	<input type="button" value="+"/> <input type="button" value="-"/>	<input type="button" value="Delete"/>
2 BMWITEM003	B045/tac Gear Lever Pin	890	4	3560	<input type="button" value="+"/> <input type="button" value="-"/>	<input type="button" value="Delete"/>
3 TOYATAITM005	RUBBER Car Parts, For Automotive, Vehicle Model: Bmw 5 Series	9000	3	27000	<input type="button" value="+"/> <input type="button" value="-"/>	<input type="button" value="Delete"/>
4 BMWITEM002	B014/tac Shifter Finger	800	2	1600	<input type="button" value="+"/> <input type="button" value="-"/>	<input type="button" value="Delete"/>
5 BENZITM006	Black Oil Chamber	620	1	620	<input type="button" value="+"/> <input type="button" value="-"/>	<input type="button" value="Delete"/>
6 BENZITM007	BMW New Stabilizer Link Rod, For Industrial	8000	2	16000	<input type="button" value="+"/> <input type="button" value="-"/>	<input type="button" value="Delete"/>
7 BMWITEM003	B045/tac Gear Lever Pin	890	1	890	<input type="button" value="+"/> <input type="button" value="-"/>	<input type="button" value="Delete"/>
			4	Rs.50910.00		

InvoiceNo	VehicalNo
INV1	WE 7878
INV2	HI 2000
INV3	GE 5001
INV5	NC 9024
INV6	NO 4545
INV7	GU 2620
INV8	NO 4545
INV9	GE 5001

Figure 53: Update invoice

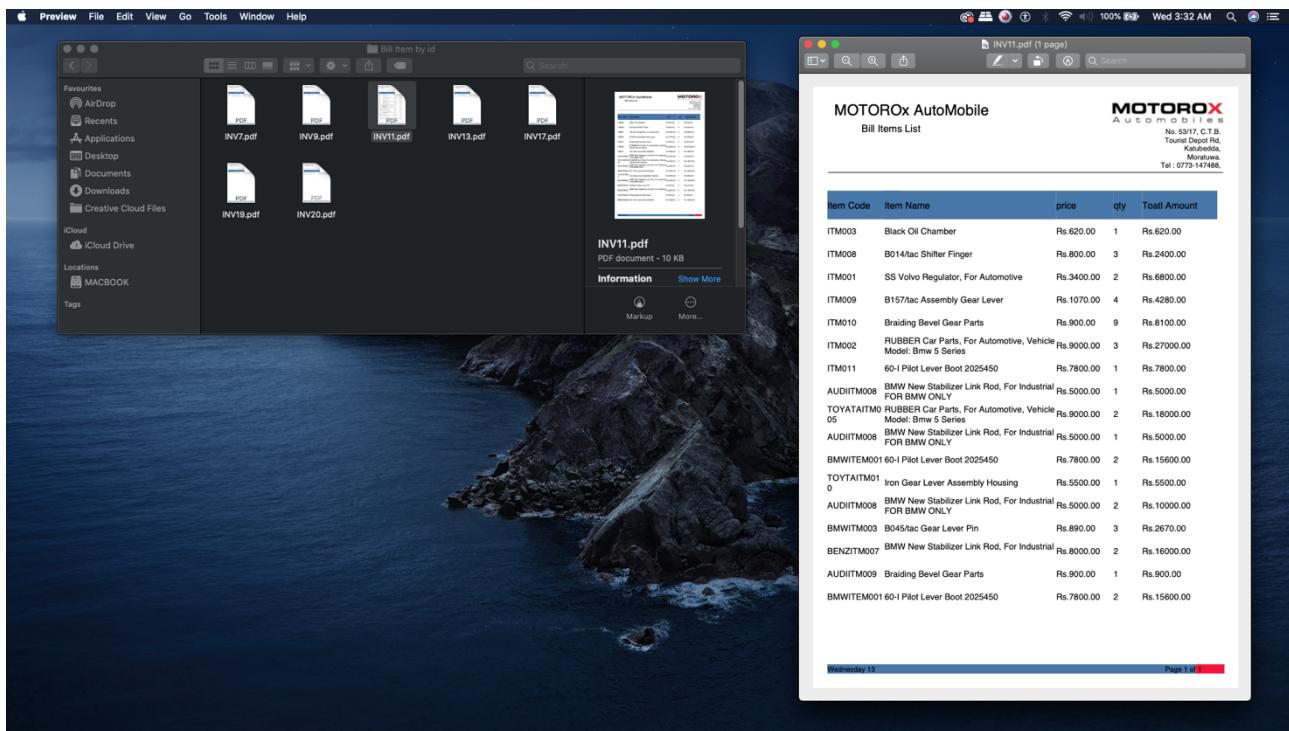


Figure 54: Demonstration of name with invoice

Report generated with specific name related to invoice number

MOTOROX AutoMobile

Bill Items List

MOTOROX
A u t o m o b i l e s

No. 53/17, C.T.B.
Tourist Depot Rd,
Katubedda,
Moratuwa.
Tel : 0773-147488,

Item Code	Item Name	price	qty	Total Amount
BENZITM006	Black Oil Chamber	Rs.620.00	2	Rs.1240.00
BMWITM003	B045/tac Gear Lever Pin	Rs.890.00	4	Rs.3560.00
TOYATAITM0 05	RUBBER Car Parts, For Automotive, Vehicle Model: Bmw 5 Series	Rs.9000.00	3	Rs.27000.00
BMWITM002	B014/tac Shifter Finger	Rs.800.00	2	Rs.1600.00
BENZITM006	Black Oil Chamber	Rs.620.00	1	Rs.620.00
BENZITM007	BMW New Stabilizer Link Rod, For Industrial	Rs.8000.00	2	Rs.16000.00
BMWITM003	B045/tac Gear Lever Pin	Rs.890.00	1	Rs.890.00
AUDIITM009	Braiding Bevel Gear Parts	Rs.900.00	1	Rs.900.00
BENZITM005	B157/tac Assembly Gear Lever	Rs.1070.00	2	Rs.2140.00
BENZITM006	Black Oil Chamber	Rs.620.00	3	Rs.1860.00
AUDIITM009	Braiding Bevel Gear Parts	Rs.900.00	1	Rs.900.00
BENZITM005	B157/tac Assembly Gear Lever	Rs.1070.00	1	Rs.900.00
BMWITM002	B014/tac Shifter Finger	Rs.800.00	1	Rs.800.00
BMWITM004	B054/TAc Gear Lever Rubber Bracket	Rs.12000.00	2	Rs.24000.00

MOTOROX AutoMobile

Invoice Details Report



No. 53/17, C.T.B.
Tourist Depot Rd,
Katubedda,
Moratuwa.
Tel : 0773-147488,

Invoice Id	Invoice Number	Vehi Number	Date	Total
1	INV1	WE 7878	01/10/2021	Rs.1241.00
2	INV2	HI 2000	05/10/2021	Rs.11000.00
3	INV3	GE 5001	05/10/2021	Rs.21200.00
5	INV5	NC 9024	06/10/2021	Rs.18000.00
6	INV6	NO 4545	06/10/2021	Rs.48000.00
7	INV7	GU 2620	06/10/2021	Rs.83400.00
8	INV8	NO 4545	06/10/2021	Rs.2140.00
9	INV9	GE 5001	06/10/2021	Rs.2700.00
10	INV10	SS 3456	06/10/2021	Rs.1600.00
11	INV11	QL 5555	06/10/2021	Rs.214800.00
12	INV12	NO 4545	06/10/2021	Rs.6580.00
13	INV13	HI 2000	06/10/2021	Rs.45340.00
17	INV14	GE 2001	06/10/2021	Rs.2940.00
18	INV18	NO 4545	06/10/2021	Rs.33400.00
19	INV19	HI 2000	06/10/2021	Rs.11000.00
20	INV20	GE 2001	06/10/2021	Rs.59950.00
21	INV21	CS 3356	06/10/2021	Rs.81360.00
22	INV22	NC 9024	13/10/2021	Rs.24600.00

Job sheet Management – IT20005580

The screenshot shows a web application interface for 'MOTOROX Automobiles'. The left sidebar contains navigation links for Dashboard, Job Card, Item Master, Purchase Order, Job Sheet, Customer Details, Supplier Details, Employee Details, Vehicle Details, and Profile. The main content area is titled 'Job Sheet List' and displays a table with two rows of data. The columns are labeled '#', 'Customer Name', 'Customer NIC', 'Contact Number', 'Date', 'Time', and 'Action'. Row 1: Hasitha, 967867456v, 0786544321, 2021-10-06, 5.00pm, Update, View, Delete. Row 2: Saranga, 876545150v, 0723455621, 2021-10-07, 2.00pm, Update, View, Delete. A blue 'Add Job Sheet' button is located at the top left of the table. A search bar with a magnifying glass icon is at the top right.

Figure 57: Jobsheet list

The screenshot shows a 'Job Sheet' form page. The left sidebar is identical to Figure 57. The main form has a blue header bar with the text 'CLICK HERE TO GET THE ITEM CODE'. Below this are several input fields: 'Customer Name*' and 'Customer NIC*', 'Vehicle Id*' and 'Contact Number*', and a date/time selector ('Date*' mm/dd/yyyy and 'Time*'). The form is divided into sections: **FRONT SIDE**, **REAR SIDE**, **LEFT/RIGHT SIDE**, and **TOP SIDE**. Each section contains two input fields for Usable and Replace values, both preceded by 'Eg: #----/#----' examples.

Figure 58: Jobsheet form

Job Sheet

CLICK HERE TO GET THE ITEM CODE

Customer Name:	Hasitha	Customer NIC:	967867456v
Vehicle Id:	3	Contact Number:	0786544321
Date:	10/06/2021	Time:	5.00pm

FRONT SIDE

Front(Usable):	#HL001/#SLC002
Front(Replace):	#SLC002

REAR SIDE

Rear(Usable):	#RM004
Rear(Replace):	#RM004

LEFT/RIGHT SIDE

Left/Right(Usable):	#SM-R001
Left/Right(Replace):	#FD-R008

TOP SIDE

Top(Usable):	#BLC001
Top(Replace):	#BLC001

Figure 59: Jobsheet update form

Details

Customer Name: Hasitha
Contact Number: 0786544321

Front(Usable) Parts: #HL001/#SLC002	Rear(Usable) Parts: #RM004
Front(Replace) Parts: #SLC002	Rear(Replace) Parts: #RM004
Left/Right(Usable) Parts: #SM-R001	Engine Room(Usable) Parts: #RM004
Left/Right(Replace) Parts: #FD-R008	Engine Room(Replace) Parts: #RM004
Front(Usable) Parts: #HL001/#SLC002	Rear(Usable) Parts: #RM004
Front(Replace) Parts: #SLC002	Rear(Replace) Parts: #RM004

Report

Figure 60: View details of the jobsheet

The screenshot shows a web application interface for 'MOTOROX Automobiles'. On the left is a dark sidebar with navigation links: Dashboard, Job Card, Item Master, Purchase Order, Job Sheet (selected), Customer Details, Supplier Details, Employee Details, Vehicle Details, and Profile. The main content area has a title 'Job Sheet List' and a blue button 'Add Job Sheet'. A search bar contains the letters 'sa', with suggestions 'sa', 'sar', and 'sar' below it. A table lists one job sheet entry:

#	Customer Name	Customer NIC	Contact Number	Date	Time	
1	Saranga	876545150v	0723455621	2021-10-07	2.00pm	<button>Update</button> <button>View</button> <button>Delete</button>

Figure 61: jobsheet_search by customer name

The screenshot shows a PDF document titled 'post (2).pdf'. The left side of the PDF shows a small thumbnail of the document. The right side is a single page with the following content:

Details

Customer Name: Haditha
Contact Number: 0786544321

Front(Usable) Parts: #HL001#SLC002 Rear(Usable) Parts: #RM004
Front(Replace) Parts: #SLC002 Rear(Replace) Parts: #RM004
Left/Right(Usable) Parts: #SM-R001 Engine Room(Usable) Parts: #RM004
Left/Right(Usable) Parts: #FD-R008 Engine Room(Replace) Parts: #RM004
Front(Usable) Parts: #HL001#SLC002 Rear(Usable) Parts: #RM004
Front(Replace) Parts: #SLC002 Rear(Replace) Parts: #RM004

Figure 62: Generated report for a particular customer

Stock Management - IT20055530

The screenshot shows a web application interface for 'MOTOROX Automobiles'. The left sidebar contains navigation links for Dashboard, Job Card, Item Master, Purchase Order, Job Sheet, Customer Details, Supplier Details, Employee Details, Vehicle Details, and Profile. The main content area is titled 'Stock Item List' and features a table with the following data:

Item Code	Item Name	Quantity	Price	Action
B003	Bonnet	1	22000	<button>Update</button> <button>Delete</button> <button>View</button>
BLC001	Brake Light cup	4	3200	<button>Update</button> <button>Delete</button> <button>View</button>
BULBS011	Bulbs	3	6000	<button>Update</button> <button>Delete</button> <button>View</button>
DD002	Dicky Door	6	3000	<button>Update</button> <button>Delete</button> <button>View</button>

Figure 63: Stock list

The screenshot shows a 'ADD ITEM' form within the 'MOTOROX Automobiles' application. The left sidebar includes the same navigation links as Figure 63. The form contains the following input fields:

- Item Code:
- Item Name:
- Quantity:
- Received Qty:
- Sold Qty:
- Damaged Qty:
- Return Qty:
- Price:

At the bottom are two buttons: 'Save' and 'Cancel'.

Figure 64: Add stock form

The screenshot shows a web-based application interface for 'MOTOROX Automobiles'. The left sidebar contains a navigation menu with icons and labels for Dashboard, Job Card, Item Master, Purchase Order, Job Sheet, Customer Details, Supplier Details, Employee Details, Vehicle Details, and Profile. The main content area is titled 'UPDATE ITEM'. It contains several input fields: 'Item Code:' with value 'B003', 'Item Name:' with value 'Bonnet', 'Quantity:' with value '1', 'Received Qty:' with value '2', 'Sold Qty:' with value '1', 'Damaged Qty:' with value '0', 'Return Qty:' with value '0', and 'Price:' with value '22000'. At the bottom are two buttons: 'Save' and 'Cancel'.

Figure 65: Update stock item form

The screenshot shows a 'View Item Details' page. The left sidebar is identical to Figure 65. The main content area displays the following details: Item Code :B003, Item Name :Bonnet, Quantity :1, Received Quantity :2, Sold Quantity :1, Damaged Quantity :0, Return Quantity :0, and price :22000. A blue 'Report' button is located at the bottom of the details box.

Figure 66: View stock items

The screenshot shows a web application interface for 'MOTOROX Automobiles'. On the left, a sidebar lists various menu items: Dashboard, Job Card, Item Master, Purchase Order, Job Sheet, Customer Details, Supplier Details, Employee Details, Vehicle Details, and Profile. The main content area is titled 'Stock Item List' and contains a table with one row. The table has columns for Item Code, Item Name, Quantity, Price, and Action. The row shows Item Code 'DD002', Item Name 'Dicky Door', Quantity '6', Price '3000', and Action buttons for 'Update', 'Delete', and 'View'. A search bar at the top right contains the value 'DD002'.

Figure 67: Search stock item for a given item code

The screenshot shows a PDF document titled 'post (10).pdf'. The document has a single page with the number '1' at the bottom left. The main content is a box titled 'View Item Details' containing the following information:
Item Code :DD002
Item Name :Dicky Door
Quantity :6
Received Quantity :10
Sold Quantity :4
Damaged Quantity :0
Return Quantity :0
price :3000

Figure 68: Generated report for a particular item

Purchasing Order Management – IT20121488

The screenshot shows the 'Order List' page of the Motorox application. The left sidebar contains navigation links for Dashboard, Job Card, Item Master, Purchase Order, Job Sheet, Customer Details, Supplier Details, Employee Details, Vehicle Details, and Profile. The main area has a title 'Order List' and a search bar with a 'Generate Pdf' button. Below is a table with columns: Order Id, Date, Supplier, Item Code, Item Name, Price, Total Price, and Action. The table contains four rows of data:

Order Id	Date	Supplier	Item Code	Item Name	Price	Total Price	Action
53	2021-10-01	Nikil	IT2020	A/C	20000	100000	<button>Update</button> <button>Delete</button> <button>View</button>
54	2021-10-09	Sukitha	IT2030	Side Mirror	5000	20000	<button>Update</button> <button>Delete</button> <button>View</button>
55	2021-10-08	Tharaka	IT2040	Signal Light	20000	140000	<button>Update</button> <button>Delete</button> <button>View</button>
56	2021-10-23	Sampika	IT2050	Engine Oil	10000	50000	<button>Update</button> <button>Delete</button> <button>View</button>

Figure 69: Order list

The screenshot shows the 'Create Order Form' page. The left sidebar is identical to Figure 69. The main area has a title 'Create Order Form' and a form with fields: Date (mm/dd/yyyy), Supplier (supplier), Item Code (item code), Item Name (item name), Price (price), Quantity (QTY), and Total Price (total price). At the bottom are 'Save' and 'Cancel' buttons.

Figure 70: Create order form

The screenshot shows a web browser window with the URL `localhost:3000/create-an-order/54`. The page title is "Order Page". On the left, there is a sidebar menu with the following items:

- Dashboard
- Job Card
- Item Master
- \$ Purchase Order
- Job Sheet
- Customer Details
- Supplier Details
- Employee Details
- Vehicle Details
- Profile

The main content area is titled "Update Order Form". It contains the following fields:

Date	10/09/2021	<input type="button" value=""/>
Supplier	Sukitha	
Item Code	IT2030	
Item Name	Side Mirror	
Price	5000	
Quantity	QTY	
Total Price	20000	

At the bottom are two buttons: a green "Save" button and a red "Cancel" button.

Figure 71: Update order form

The screenshot shows a web browser window with the URL `localhost:3000/view-order/53`. The page title is "MOTROX AUTOMOBILES". On the left, there is a sidebar menu with the following items:

- Dashboard
- Job Card
- Item Master
- \$ Purchase Order
- Job Sheet
- Customer Details
- Supplier Details
- Employee Details
- Vehicle Details
- Profile

The main content area is titled "Order Details" and displays the following information:

Order ID:	53
Date:	2021-10-01
Supplier:	Nikil
Item Code:	IT2020
Item Name:	A/C
Price:	20000
Quantity:	5
Total Price:	100000

Figure 72: View order details

The screenshot shows a web application interface for 'MOTOROX Automobiles'. On the left is a dark sidebar with navigation links: Dashboard, Job Card, Item Master, Purchase Order (selected), Job Sheet, Customer Details, Supplier Details, Employee Details, Vehicle Details, and Profile. The main content area has a title 'Order List' and a search bar containing 'nikil' with a magnifying glass icon. Below is a table titled 'Create An Order' with columns: Order Id, Date, Supplier, Item Code, Item Name, Price, Total Price, and Action. Two rows of data are shown:

Order Id	Date	Supplier	Item Code	Item Name	Price	Total Price	Action
59	2021-10-30	Nikil	IT2070	Wipers	7000	49000	<button>Update</button> <button>Delete</button> <button>View</button>
72	2021-10-30	Nikil	IT2050	Side Mirror	20000	120000	<button>Update</button> <button>Delete</button> <button>View</button>

Figure 73: Search orders for a given supplier name

The screenshot shows a PDF document titled 'MOTOROX AutoMobile Sri Lanka'. At the top is a header 'Order Details'. Below is a table with columns: Order ID, Item Name, Quantity, Price, and Total Price. The data is as follows:

Order ID	Item Name	Quantity	Price	Total Price
53	A/C	5	20000	100000
54	Side Mirror	4	5000	20000
55	Signal Light	7	20000	140000
56	Engine Oil	5	10000	50000
57	Head Light	4	15000	60000
58	Wipers	3	7000	21000
59	Wipers	7	7000	49000

At the bottom of the page are two small text elements: 'Monday 11 October' and 'Page 1 of 1'.

Figure 74: Generated report for all the orders

Customer Management – IT20005962

The screenshot shows the 'Customers List' page of the MOTOROX Automobiles application. The left sidebar contains navigation links for Dashboard, Job Card, Item Master, Purchase Order, Job Sheet, Customer Details, Supplier Details, Employee Details, Vehicle Details, and Profile. The main content area displays a table titled 'Customers List' with columns: First Name, Last Name, NIC, Phone No, Email Id, Vehicle Reg No, and Actions. The table contains five rows of customer data. A search bar and a 'Search' button are located above the table. A 'Logout' button is in the top right corner.

First Name	Last Name	NIC	Phone No	Email Id	Vehicle Reg No	Actions
Nadeesh	Mahela	987654215v	776543211	Kalani@gmail.com	DF2654	<button>Update</button> <button>View</button> <button>Delete</button>
Nadeesha	Sewmini	997252101v	786543221	Nadee@gmail.com	CD9987	<button>Update</button> <button>View</button> <button>Delete</button>
Hashan	Madusanka	997252102V	769752780	Heshan@my.sliit.lk	ML7865	<button>Update</button> <button>View</button> <button>Delete</button>
Nipun	Anurada	207257101v	76005271	nipu@gmail.com	AS1235	<button>Update</button> <button>View</button> <button>Delete</button>
Rashmi	Nadodi	990086541v	712398001	rash@gmail.com	WQ7787	<button>Update</button> <button>View</button> <button>Delete</button>

Figure 75: Customer list

The screenshot shows the 'Add Customer' form page of the MOTOROX Automobiles application. The left sidebar contains the same navigation links as Figure 75. The main content area is titled 'Add Customer' and contains a form with fields for First Name, Last Name, NIC, Address, Phone No, Email, and Vehicle Reg No. There are 'Save' and 'Cancel' buttons at the bottom of the form. A 'Logout' button is in the top right corner.

Figure 76: Add customer form

The screenshot shows a web browser window titled 'React App' with the URL 'localhost:3000/update-customer/8'. The page has a dark blue header with the 'MOTOROX Automobiles' logo and a 'Logout' button. On the left, there's a sidebar with various menu items: Dashboard, Job Card, Item Master, Purchase Order, Job Sheet, Customer Details, Supplier Details, Employee Details, Vehicle Details, and Profile. The main content area is titled 'Update Customer' and contains a form with fields for First Name (Rashmi), Last Name (Nadodi), NIC (990086541v), Address (kuliyapitiya), Phone No (712398001), Email (rash@gmail.com), and Vehicle Reg No (WQ7787). There are 'save' and 'Cancel' buttons at the bottom of the form.

Figure 77: Update customer form

The screenshot shows a web browser window titled 'React App' with the URL 'localhost:3000/view-customer/17'. The layout is identical to Figure 77, with the 'MOTOROX Automobiles' logo and 'Logout' button in the header and a sidebar with the same menu items. The main content area is titled 'View Customer Details' and displays a summary of customer details: First Name (hiruni), Last Name (shani), NIC (997252101v), Address (kurunegala), Phone No (769752721), Email (hirugm@l.com), and Vehicle Reg No (AS1234).

Figure 78: View customer

The screenshot shows a web application for Motorox Automobiles. On the left is a sidebar with various menu items: Dashboard, Job Card, Item Master, Purchase Order, Job Sheet, Customer Details, Supplier Details, Employee Details, Vehicle Details, and Profile. The main content area is titled "Customers List". It features a search bar with the input "nade" and a "Search" button. Below the search bar is a table with columns: First Name, Last Name, NIC, Phone No, Email Id, Vehicle Reg No, and Actions. Two rows of customer data are shown:

First Name	Last Name	NIC	Phone No	Email Id	Vehicle Reg No	Actions
Nadeesh	Mahela	987652415v	776543211	Kalani@gmail.com	DF2654	<button>Update</button> <button>View</button> <button>Delete</button>
Nadeesha	Sewmini	997252101v	786543221	Nadee@gmail.com	CD9987	<button>Update</button> <button>View</button> <button>Delete</button>

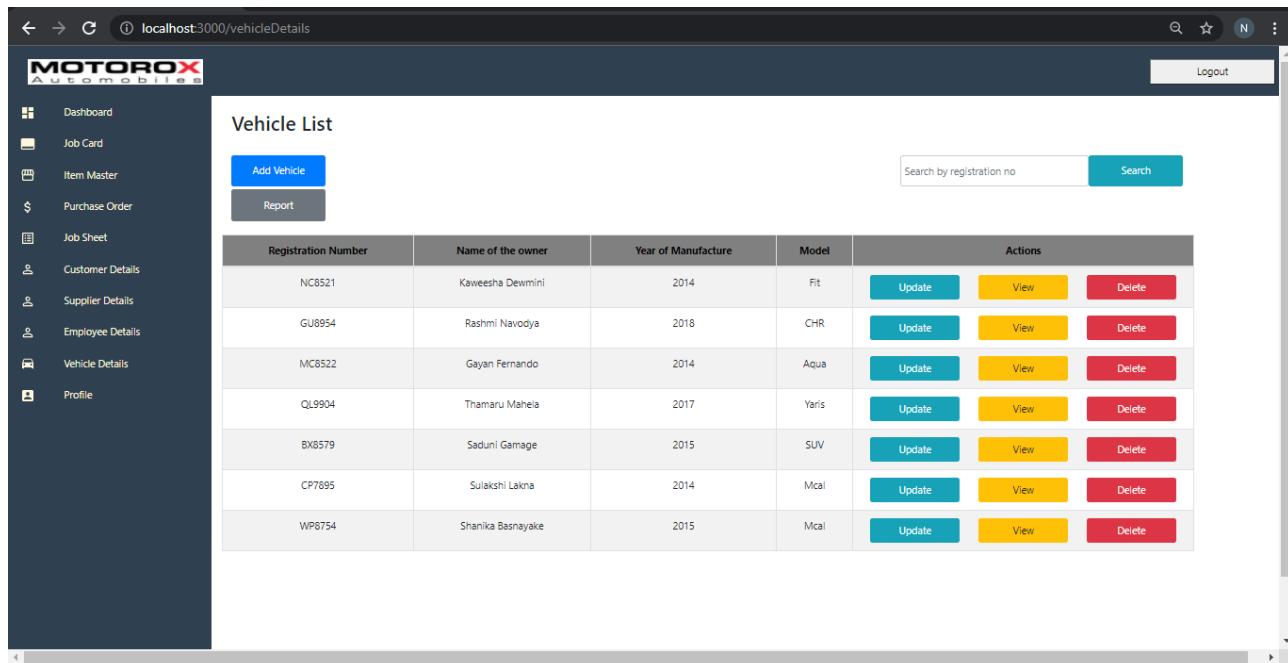
Figure 79: Customer search by first name

The screenshot shows a PDF document titled "Motorox Automobiles Customers' Report". The report contains a table with the following data:

CID	First Name	Last Name	NIC	Address	Phone Number	Email	Vehicle Reg No.
3	Nadeesh	Mahela	987652415v	23, Temple Rd, Matlabe	776543211	Kalani@gmail.com	DF2654
4	Nadeesha	Sewmini	997252101v	55, cross Rd, Galle	786543221	Nadee@gmail.com	CD9987
5	Hashan	Madusanka	997252102V	19, Kurunegala	769752780	Heeshan@my.sil.lk	ML7865
6	Nipun	Anurada	207257101v	80, Temple Rd, Colombo	76005271	nipu@gmail.com	AS1235
18	Dasuni	Nuwandara	980987642v	33, Temple Road, Mathara	798976543	dasuni@gmail.com	NN3876
19	Nethushi	Diwya	789876782v	Jaffna	712376982	nethu@gmail.com	LO0987

Figure 80: Generated report for customer details

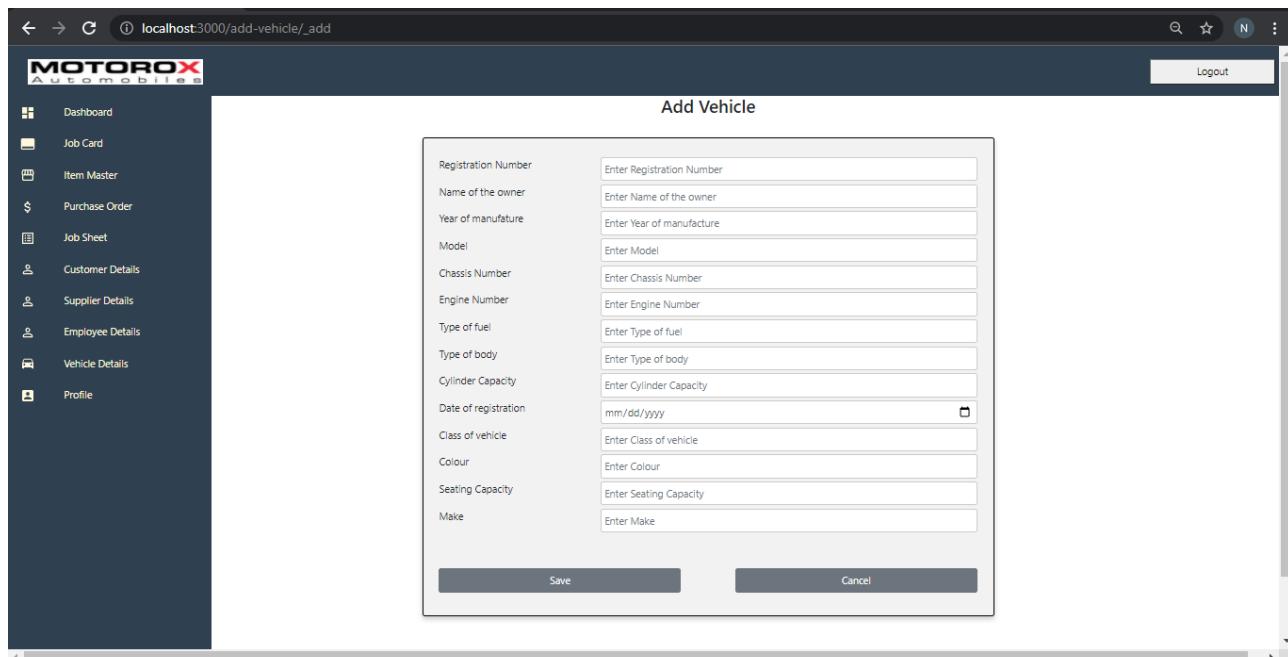
Vehicle Registration Management – IT20017088



The screenshot shows the 'Vehicle List' page of the Motorox Automobiles application. The left sidebar contains navigation links for Dashboard, Job Card, Item Master, Purchase Order, Job Sheet, Customer Details, Supplier Details, Employee Details, Vehicle Details, and Profile. The main content area has a 'Vehicle List' header with 'Add Vehicle' and 'Report' buttons. A search bar at the top right allows searching by registration number. Below is a table listing vehicles with columns for Registration Number, Name of the owner, Year of Manufacture, Model, and Actions (Update, View, Delete). The table lists seven vehicles:

Registration Number	Name of the owner	Year of Manufacture	Model	Actions		
NC8521	Kaweesha Dewmini	2014	Fit	Update	View	Delete
GU8954	Rashmi Navoda	2018	CHR	Update	View	Delete
MC8522	Gayan Fernando	2014	Aqua	Update	View	Delete
QL9904	Thamaru Mahela	2017	Yaris	Update	View	Delete
BX8579	Saduni Gamage	2015	SUV	Update	View	Delete
CP7895	Sulakshi Lakna	2014	Mcal	Update	View	Delete
WP8754	Shanika Basnayake	2015	Mcal	Update	View	Delete

Figure 81: Vehicle list



The screenshot shows the 'Add Vehicle' form page. The left sidebar is identical to Figure 81. The main content area has a 'Add Vehicle' header. A large form panel contains fields for Registration Number, Name of the owner, Year of manufacture, Model, Chassis Number, Engine Number, Type of fuel, Type of body, Cylinder Capacity, Date of registration (with a date picker icon), Class of vehicle, Colour, Seating Capacity, and Make. At the bottom are 'Save' and 'Cancel' buttons.

Figure 82: Add vehicle form

Update Vehicle

Registration Number	MC8522
Name of the owner	Gayan Fernando
Year of manufacture	2014
Model	Aqua
Chassis Number	89456512327665452
Engine Number	45789565198329523
Type of fuel	petrol
Type of body	Sedan
Cylinder Capacity	2500cc
Date of registration	10/05/2021
Class of vehicle	AA3
Colour	gray
Seating Capacity	4
Make	toyota

Save **Cancel**

Figure 83: Update vehicle form

View Vehicle Details

Registration Number :	WP8754
Name of the owner :	Shanika Basnayake
Year of manufacture :	2015
Model :	Mcal
Chassis Number :	78954632587965412
Engine Number :	78546255319311684
Type of fuel :	Octane95
Type Of Body :	Sedan
Cylinder Capacity :	2500CC
Date of registration :	2021-10-12
Class of vehicle :	A1
Colour :	Black
Seating Capacity :	5
Make :	Honda

Figure 84: View vehicle

Figure 85: Search vehicle for a given registration number

Motorox Automobiles							
Vehicles' Report							
VID	Reg No	Owner	Manufacture Year	Make	Model	Seats	Reg Date
13	GU8054	Rashmi Navinda	2018	Toyota	CHR	6	2021-10-05
14	MC8522	Gayan Fernando	2014	toyota	Aqua	4	2021-10-05
15	OL9904	Thamaru Mihela	2017	Kraeger	Yaris	5	2021-10-05
16	BX8579	Saduni Gamage	2015	Audi	SUV	5	2021-10-05
17	CP7895	Sulakshi Lakna	2014	Toyota	Mcal	5	2021-10-05
22	WP8754	Shanika Basnayake	2015	Honda	Mcal	5	2021-10-12

Tuesday 12 October

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Figure 86: Generated report for all the vehicles

Employee Registration Management – IT19169736

The screenshot shows the 'Employee List' page of the application. On the left is a sidebar with various menu items. In the center, there's a table titled 'Employee List' with columns: Name, Phone, Type, Category, and Actions. The table contains six rows of employee data. Each row has three buttons in the 'Actions' column: 'Update' (blue), 'View' (yellow), and 'Delete' (red).

Name	Phone	Type	Category	Actions
Devshan Gamage	0717787765	Tech	Painting	<button>Update</button> <button>View</button> <button>Delete</button>
Hiruni Perera	0717655436	Manager	Mechanic	<button>Update</button> <button>View</button> <button>Delete</button>
Sumali Ratnayake	0765528231	Tech	Mechanic	<button>Update</button> <button>View</button> <button>Delete</button>
Dewmini Herat	0773324130	Tech	Painting	<button>Update</button> <button>View</button> <button>Delete</button>
Shanika Basnayake	0779935391	Tech	Tinkering	<button>Update</button> <button>View</button> <button>Delete</button>
Thinudi Silva	0775544325	Tech	Tinkering	<button>Update</button> <button>View</button> <button>Delete</button>

Figure 87: Employee list

The screenshot shows the 'Add Employee' form. It features a sidebar with various menu items. The main area contains a form with fields for Name, NIC, Address, Phone, Email, JoinDate, BasicSalary, Type, and Category. Each field has a placeholder text and a corresponding input box. At the bottom of the form are two buttons: 'Save' and 'Cancel'.

Figure 88: Add employee form

The screenshot shows a web-based application interface for 'MOTOROX Automobiles'. On the left is a vertical sidebar with icons and labels for various modules: Dashboard, Job Card, Item Master, Purchase Order, Job Sheet, Customer Details, Supplier Details, Employee Details, Vehicle Details, and Profile. The main content area has a title 'Update Employee'. A form is displayed with the following fields and values:

Name	Dewmini Herat
NIC	876655423V
Address	No.03, Park Avenue, Pettah
Phone	0773324130
Email	dewmi@gmail.com
JoinDate	10/06/2021
BasicSalary	15000
Type	Tech
Category	Painting

At the bottom of the form are two buttons: 'Save' and 'Cancel'.

Figure 89: Update employee form

The screenshot shows a web-based application interface for 'MOTOROX Automobiles'. On the left is a vertical sidebar with icons and labels for various modules: Dashboard, Job Card, Item Master, Purchase Order, Job Sheet, Customer Details, Supplier Details, Employee Details, Vehicle Details, and Profile. The main content area has a title 'View employee details'. Inside a box, the following employee information is listed:

Name:	Dewmini Herat
NIC:	876655423V
Address :	No.03, Park Avenue, Pettah
Phone :	0773324131
Email :	dewmi@gmail.com
Join Date :	2021-10-12
Basic Salary :	34000
Type :	Tech
Category :	Tinkering

Figure 90: View employee details

The screenshot shows the 'Employee List' page of the Motorox Automobiles application. On the left is a sidebar with various menu items: Dashboard, Job Card, Item Master, Purchase Order, Job Sheet, Customer Details, Supplier Details, Employee Details, Vehicle Details, and Profile. The main content area has a title 'Employee List' and two buttons: 'Add employee' (blue) and 'Report' (grey). A search bar contains the name 'Devangi', and a 'Search' button is to its right. Below the search bar is a table with columns: Name, Phone, Type, Category, and Actions. One row is visible, showing Devangi Gamage, 0776552321, Tech, Mechanic, and three buttons: Update (blue), View (yellow), and Delete (red).

Figure 91: Search employee for a given name

The screenshot shows a PDF document titled 'Motorox Automobiles Employees' Report'. The table contains the following data:

EID	Name	NIC	Email	Joined Date	Basic Salary	Type	Category
1	Devshan Gamage	998877665V	dev@gmail.com	2021-10-06	25000	Tech	Painting
3	Hiruni Perera	897766541V	hiru@gmail.com	2021-10-04	50000	Manager	Mechanic
5	Sumali Ratnayake	998877662V	sumali@gmail.com	2021-10-06	23000	Tech	Mechanic
6	Dewmini Herat	876655423V	dewmi@gmail.com	2021-10-12	34000	Tech	Tinkering
10	Thinudi Silva	889977665V	thinudi@gmail.com	2021-09-22	40000	Tech	Tinkering
11	Devangi Gamage	998876556V	devangi@gmail.com	2021-10-06	30000	Tech	Mechanic
15	Sanduni Gamage	995970244V	sanduni@gmail.com	2021-10-11	25000	Tech	Painting

Figure 92: Generated report for all the employee details

Supplier Registration Management – IT19994406

The screenshot shows the 'Suppliers List' page. On the left is a sidebar with navigation links: Dashboard, Job Card, Item Master, Purchase Order, Job Sheet, Customer Details, Supplier Details, Employee Details, Vehicle Details, and Profile. At the top right are 'Logout' and 'Reading List' buttons. The main area has a search bar and a 'Search' button. Below is a table with the following data:

Supplier Name	Contact Number	Address	Item Description	Actions
Hiran Gamage	0713467876	56, Temple road, Malabe	Tyres	<button>Update</button> <button>View</button> <button>Delete</button>
Maneesha Perera	0712453637	No 54, III stage, Galle	Brake pad	<button>Update</button> <button>View</button> <button>Delete</button>
Bhagya Basnayake	0714563562	67, II cross road, Kandy	Brake oil	<button>Update</button> <button>View</button> <button>Delete</button>
Hiruni Amanga	0712345367	No 89, Temple Road, Kurunagala	Engine oil	<button>Update</button> <button>View</button> <button>Delete</button>
Miyuru Sathshara	0713425267	No 712, II cross road, Jaffna	Light vehicle spare parts	<button>Update</button> <button>View</button> <button>Delete</button>
Udari Fernando	0713455261	No 67, Flower road, Kegalle	Engine oil	<button>Update</button> <button>View</button> <button>Delete</button>

Figure 93: Supplier list

The screenshot shows the 'Add Supplier' form. On the left is a sidebar with the same navigation links as Figure 93. The main area has a title 'Add Supplier' and a form with the following fields:

- Company/Supplier Name: eg: John Smith
- Contact Number: Phone Number
- Address: Address
- Email ID: Email
- Item Description: Item Description
- Join Date: yyyy-mm-dd
- Payment Method: Payment Method

At the bottom are 'Save' and 'Cancel' buttons.

Figure 94: Add supplier form

Update Supplier

Company/Supplier Name	Miyuru Sathsara
Contact Number	0713425267
Address	No 712, il cross road, Jaffna
Email ID:	milyuru@gmail.com
Item Description	Light vehicle spare parts
Join Date	2021-06-01
Payment Method	Credit

Screenshot

Figure 95: Update supplier form

View Supplier Details

Company/Supplier Name:	Hiran Gamage
Contact Number:	0713467876
Address:	56, Temple road, Malabe
Email ID:	hiran@gmail.com
Item Description:	Tyres
Join Date:	2012-09-08
Payment Method:	cash

Screenshot

Figure 96: View supplier details

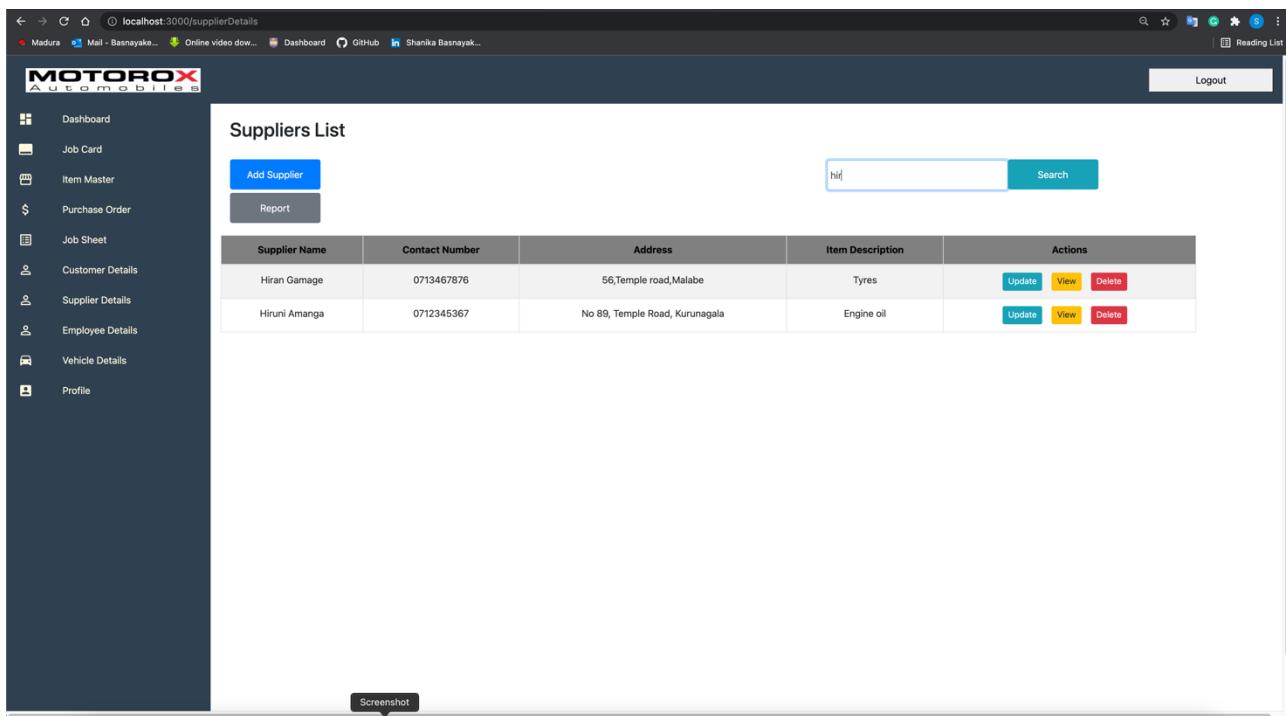


Figure 97: Search supplier for a given supplier name

Motorox Automobiles							
Suppliers' Report							
SID	Name	Phone No	Address	Email	Item Description	Join Date	Payment Method
1	Hiran Gamage	0713467876	56, Temple road, Malabé	hiran@gmail.com	Tyres	2012-09-08	cash
2	Mihindu Perera	0712453637	No 54, III stage, Galle manora	mihindu.perera@gamil.com	Brake pad	2012-12-01	credit
4	Bhagya Basnayake	0714563562	67, II cross road, Kandy	bhag@gmail.com	Brake oil	2021-09-27	cash
5	Hiruni Amanga	0712345367	No 89, Temple Road, Kurunagala	hiru07@gmail.com	Engine oil	2021-10-06	Credit
8	Miyuru Sathsara	0713425267	No 712, II cross road, Jaffna	miyuru@gmail.com	Light vehicle spare parts	2021-06-01	Credit
11	Udari Fernando	0713455261	No 67, Flower road, Kegalle	udari@gmail.com	Engine oil	2021-10-06	Cash

Wednesday 06

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Figure 98: Generated report for all the suppliers

2.3 Implementation



Figure 99: Tools and technologies

2.3.1 Tools

- Spring Tool Suite as backend development IDE
- Visual Studio Code as frontend development IDE
- MySQL workbench as database design tool
- Postman as API testing tool
- Jaspersoft Studio as report designing tool
- Trello as project management tool

2.3.2 Technologies

Spring boot

Spring boot is a java-based framework used to build spring applications. It is an opensource framework with minimum configurations. [1] Beginners can easily learn this framework with less time and effort. Spring boot is used to create REST API in order to do the functions of backend.

ReactJS

ReactJs is a widely used open-source Javascript library. It is a component-based library [2]and used to implement attractive user interfaces easily. ReactJS is used to develop the frontend of this application

Jasper reports

The JasperReports Library is an open-source reporting engine which is written in Java. [3]JasperReports is used to generate the reports of the web application which can be displayed or print in pdf format

GitHub

Git is an opensource version control system [4] used to handle larger projects. GitHub is a web-based interface, and it uses git. [5] GitHub is used to track all the changes of implementations done by group members.

2.3.3 Database

MySQL is an open-source relational database management system. [6] It is used as the Database to develop this web application.

2.4 Testing

2.4.1 Invoice Management – IT20045326

Table 1: Test cases for invoice management

Test ID	Test Inputs	Expected Output	Actual Output	Result (Pass/Fail)
1	Search without entering amount	Alert Message: "Amount not entered!"	Alert Message: "Amount not entered!"	Pass
2	Enter letters in Total From field	Alert Message: "Enter digits only!"	Alert Message: "Enter digits only!"	Pass
3	Search without selecting a date	Alert Message: "Date not selected!"	Alert Message: "Date not selected!"	Pass
4	Click Add without inserting amount	Alert Message: "Insert the amount!"	Alert Message: "Insert the amount!"	Pass

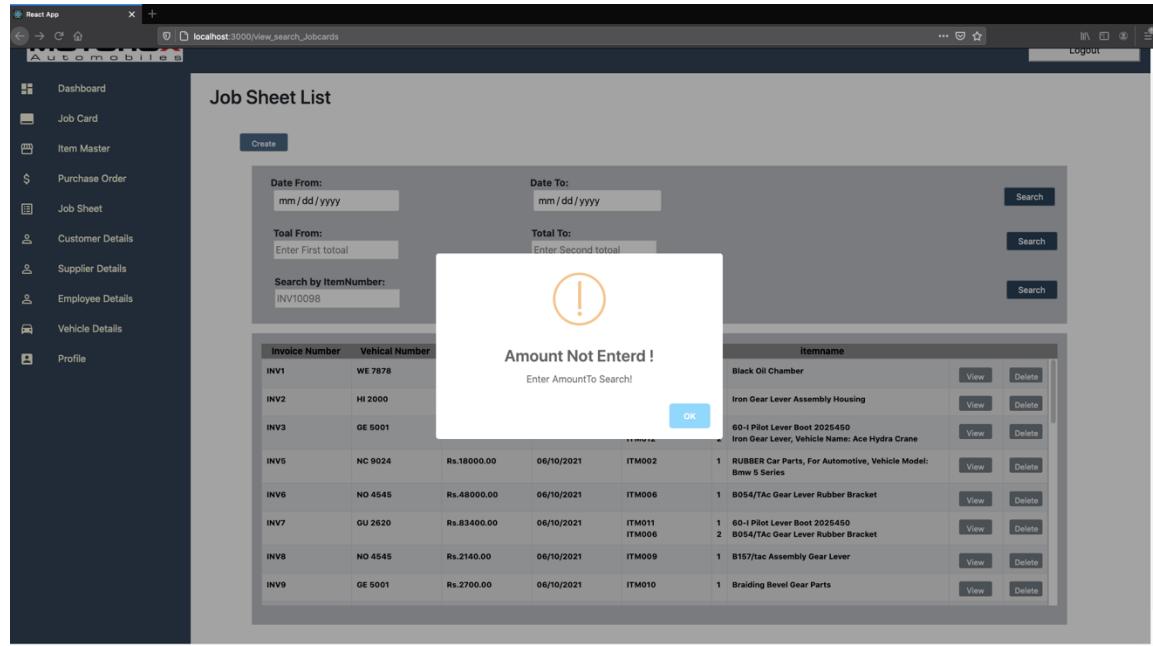


Figure 100: Test case 1

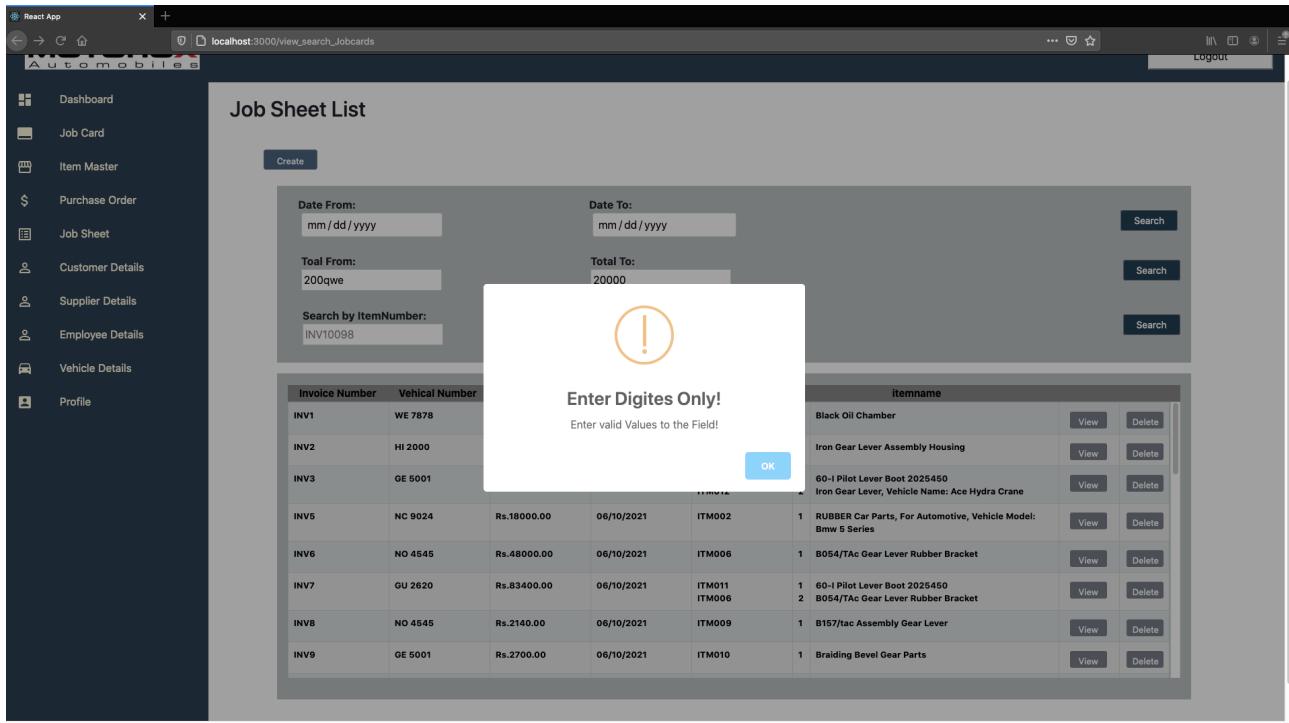


Figure 101: Test case 2

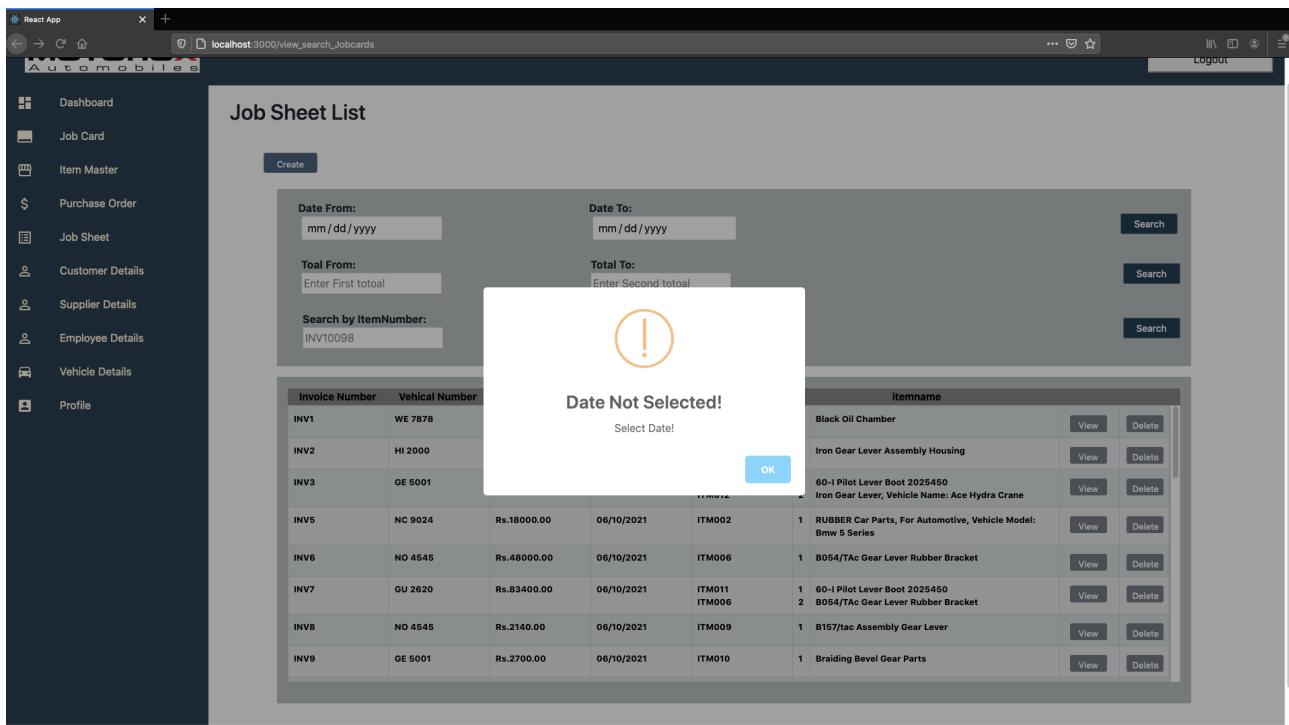


Figure 102: Test case 3

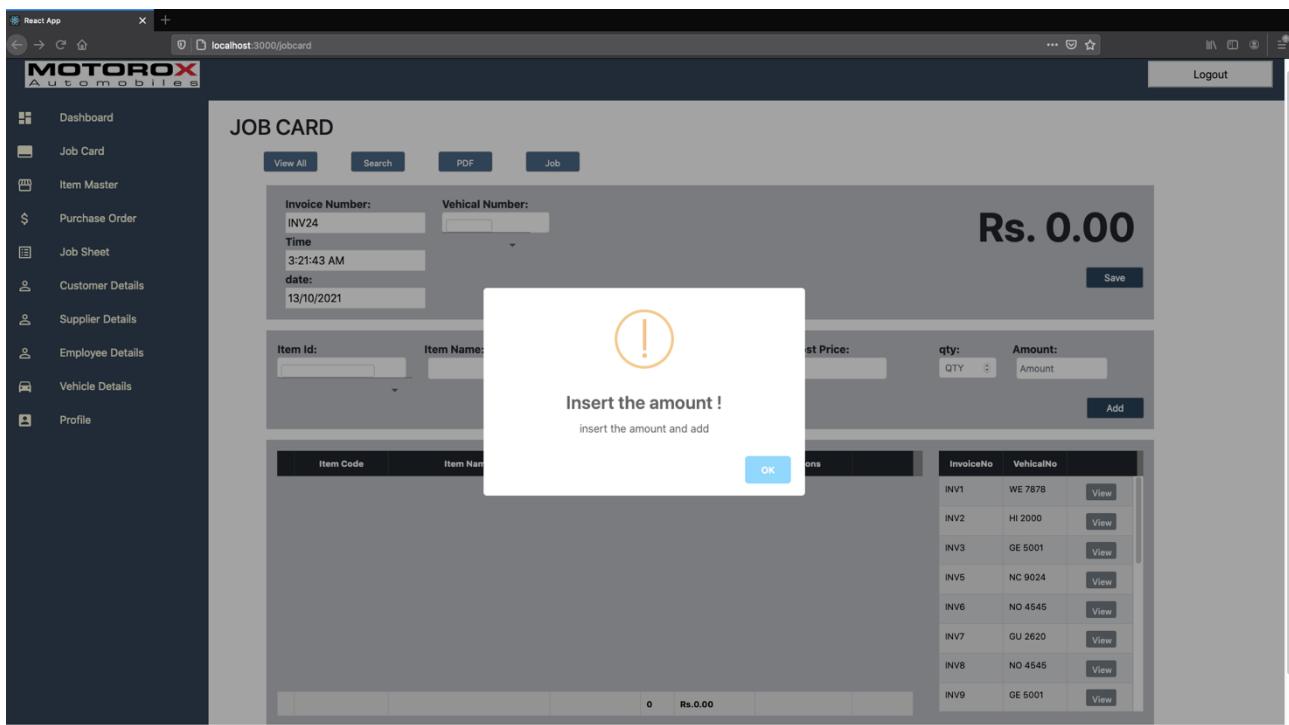


Figure 103: Test case 4

2.4.2 Jobsheet Management – IT20005580

Table 2: Test cases for jobsheet management

Test ID	Test Input	Expected Output	Actual Output	Result
5	Submit The Add Job Sheet Form Without Giving Customer NIC	Message: “Please Input The Customer NIC”	Message: “Please Input The Customer NIC”	Pass
6	Pop up confirmation Message to Confirm The Delete of a Job Sheet	Message: “Are you sure (Yes or No)”	Message: “Are you sure (Yes or No)”	Pass

The screenshot shows a web browser window for the MOTOROX Automobiles application at localhost:3000/jobSheetMain. The main page title is "Job Sheet". On the left, there is a sidebar with navigation links: Dashboard, Job Card, Item Master, Purchase Order, Job Sheet (which is currently selected), Customer Details, Supplier Details, Employee Details, Vehicle Details, and Profile. The main content area has a blue header bar with the text "CLICK HERE TO GET THE ITEM CODE". Below this, there are several input fields: Customer Name* (Nimal), Customer NIC* (empty), Vehicle Id* (8), Contact Number* (0769776322), Date* (10/13/2021), and Time* (4.00pm). A modal dialog box is displayed in the center, containing the message "Please input the customer NIC." with an exclamation mark icon. The application interface uses a dark theme with red and white accents.

Figure 104: Test case 5

The screenshot shows a web application interface for 'MOTOROX Automobiles'. The left sidebar contains navigation links for Dashboard, Job Card, Item Master, Purchase Order, Job Sheet, Customer Details, Supplier Details, Employee Details, Vehicle Details, and Profile. The main content area is titled 'Job Sheet List' and displays a table of three rows with columns for #, Customer Name, Customer NIC, Contact Number, Date, Time, and Action. A modal dialog box is overlaid on the page, asking 'Are you sure?' with 'Yes' and 'No' buttons. The URL in the browser bar is 'localhost:3000/jobsheet'.

#	Customer Name	Customer NIC	Contact Number	Date	Time	Action
1	Hasitha	967867456v	0786544321	2021-10-06	5.00pm	<button>Update</button> <button>View</button> <button>Delete</button>
2	Saranga	876545150v	0723455621	2021-10-07	2.00pm	<button>Update</button> <button>View</button> <button>Delete</button>
3	Amal	997612345v	0769776322	2021-10-07	5.00pm	<button>Update</button> <button>View</button> <button>Delete</button>

Figure 105: Test case 6

2.4.3 Stock Management – IT20055530

Table 3: Test cases for stock management

Test ID	Test Input	Expected Output	Actual Output	Result
7	Submit the Add item form without giving Item Code	Message: "Item Code is Required"	Message: "Item Code is Required"	Pass

The screenshot shows a web-based application for managing vehicle parts. The left sidebar contains navigation links for Dashboard, Job Card, Item Master, Purchase Order, Job Sheet, Customer Details, Supplier Details, Employee Details, Vehicle Details, and Profile. The main content area has a header 'MOTOROX Automobiles' and a sub-header 'localhost:3000/add-stock'. A modal window titled 'ADD ITEM' is open, showing fields for Item Code (empty), Item Name (Bulbs), Quantity (3), Received Qty (5), Sold Qty (2), Damaged Qty (0), Return Qty (0), and Price (5000). A red validation message 'Item Code Required' is displayed above the form. At the bottom of the modal are 'Save' and 'Cancel' buttons.

Figure 106: Test case 7

2.4.4 Purchasing Order Management – IT20121488

Table 4: Test cases for purchase order management

Test ID	Test Inputs	Expected Output	Actual Output	Result (Pass/Fail)
8	Save form without filling all the fields	Alert Message: "Fill all fields!"	Alert Message: "Fill all fields!"	Pass
9	Enter price with letters	Alert Message: "Enter digits only!"	Alert Message: "Enter digits only!"	Pass
10	Search without entering supplier name	Alert Message: "Enter correct supplier name!"	Alert Message: "Enter correct supplier name!"	Pass

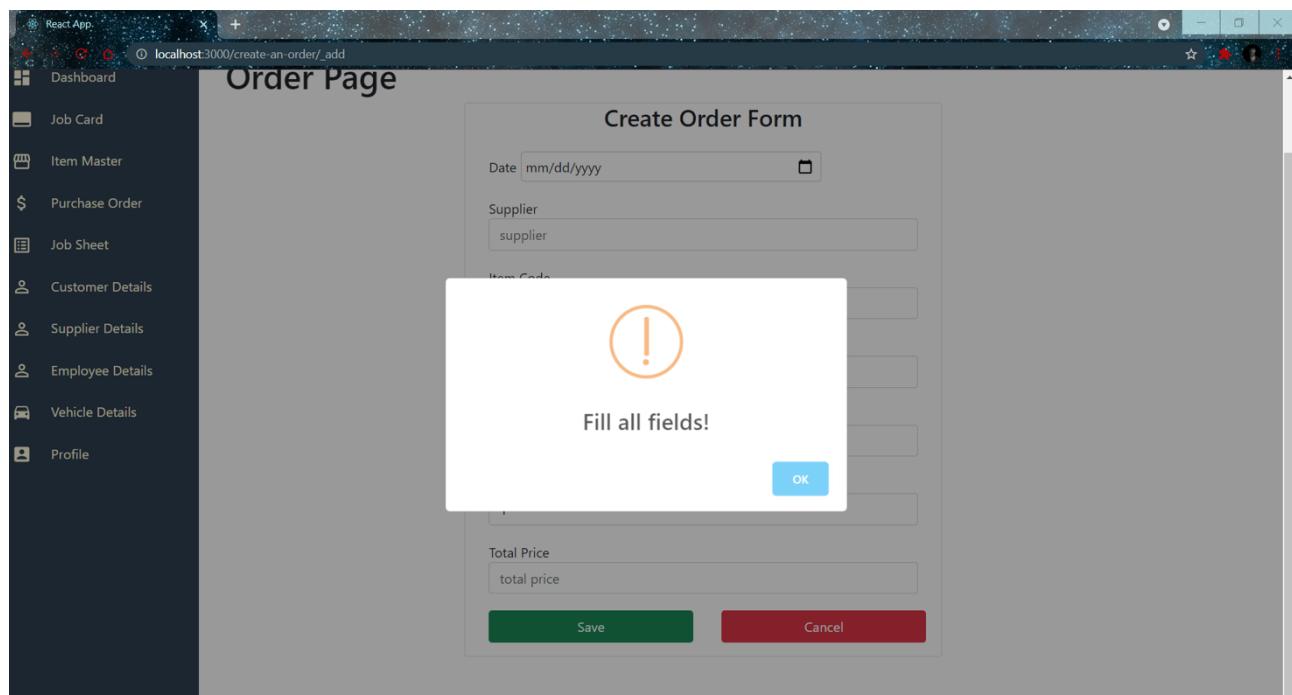


Figure 107: Test case 8

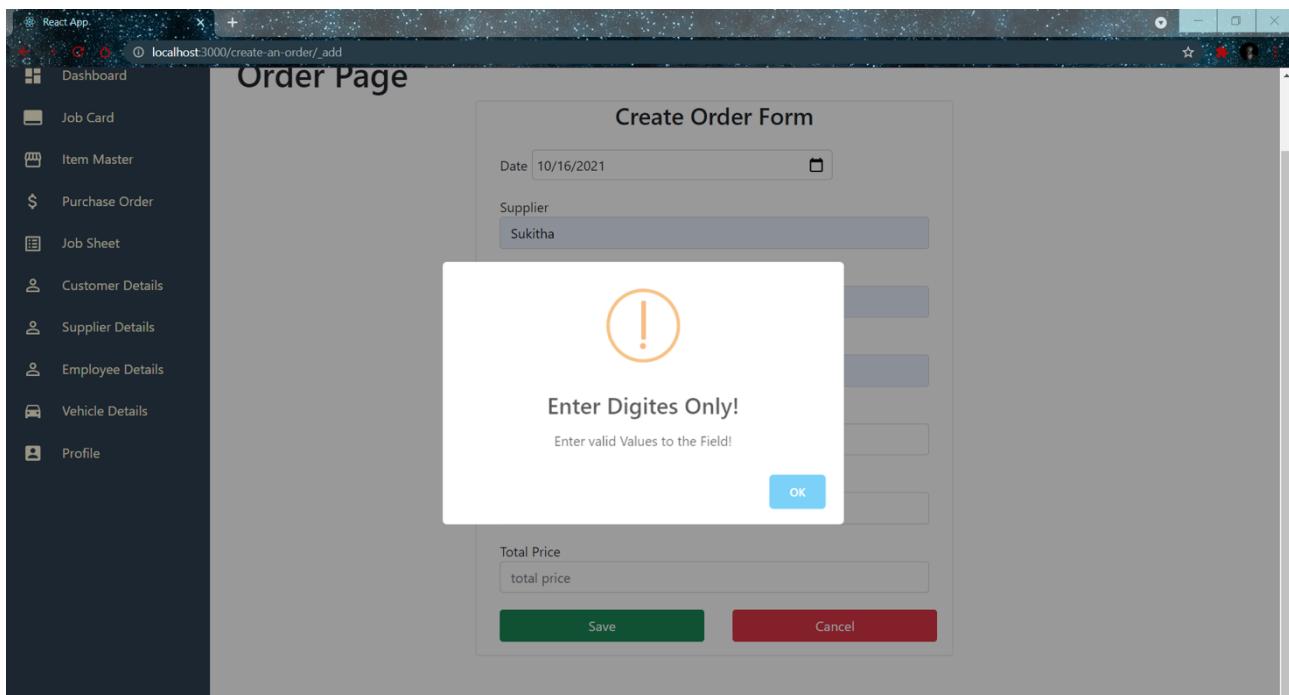


Figure 108: Test case 9

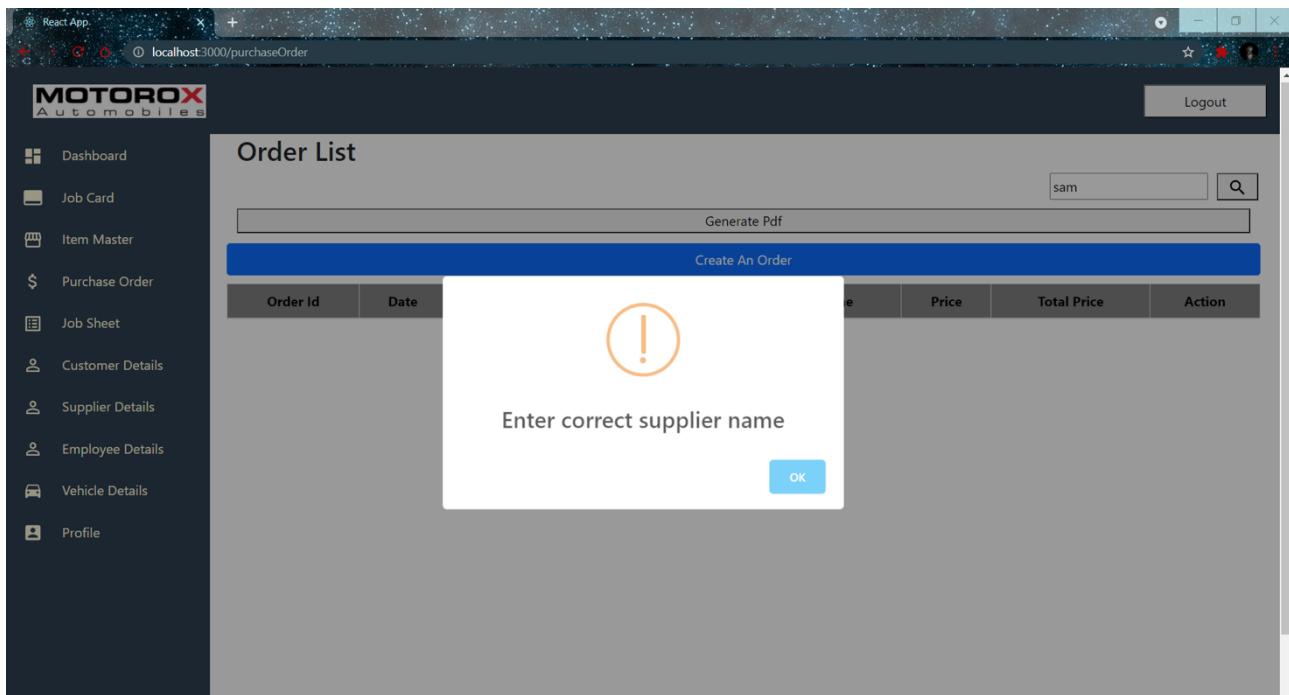


Figure 109: Test case 10

2.4.5 Customer Registration Management – IT20005962

Table 5: Test cases for customer registration

Test ID	Test Inputs	Expected Output	Actual Output	Result (Pass/Fail)
11	Enter vehicle registration number with one simple letter and 5 digits	Alert Message: “Enter valid Vehicle Reg No!”	Alert Message: “Enter valid Vehicle Reg No!”	Pass
12	Enter NIC without ‘V’ at the end and click Save	Alert Message: “Enter valid NIC!”	Alert Message: “Enter valid NIC!”	Pass
13	Enter email without ‘@’ and ‘.’ and click Save	Alert Message: “Enter valid Email!”	Alert Message: “Enter valid Email!”	Pass

The screenshot shows the 'Add Customer' interface. On the left is a sidebar with navigation links: Dashboard, Job Card, Item Master, Purchase Order, Job Sheet, Customer Details, Supplier Details, Employee Details, Vehicle Details, and Profile. The main area has a title 'Add Customer'. A modal dialog is open, displaying the error message 'Enter valid Vehicle Reg No.' with an 'OK' button. Below the modal, the main form contains fields for First Name ('hiruni'), Last Name ('shani'), and Vehicle Reg No. ('12334'). At the bottom of the form are 'Save' and 'Cancel' buttons.

Figure 110: Test case 11

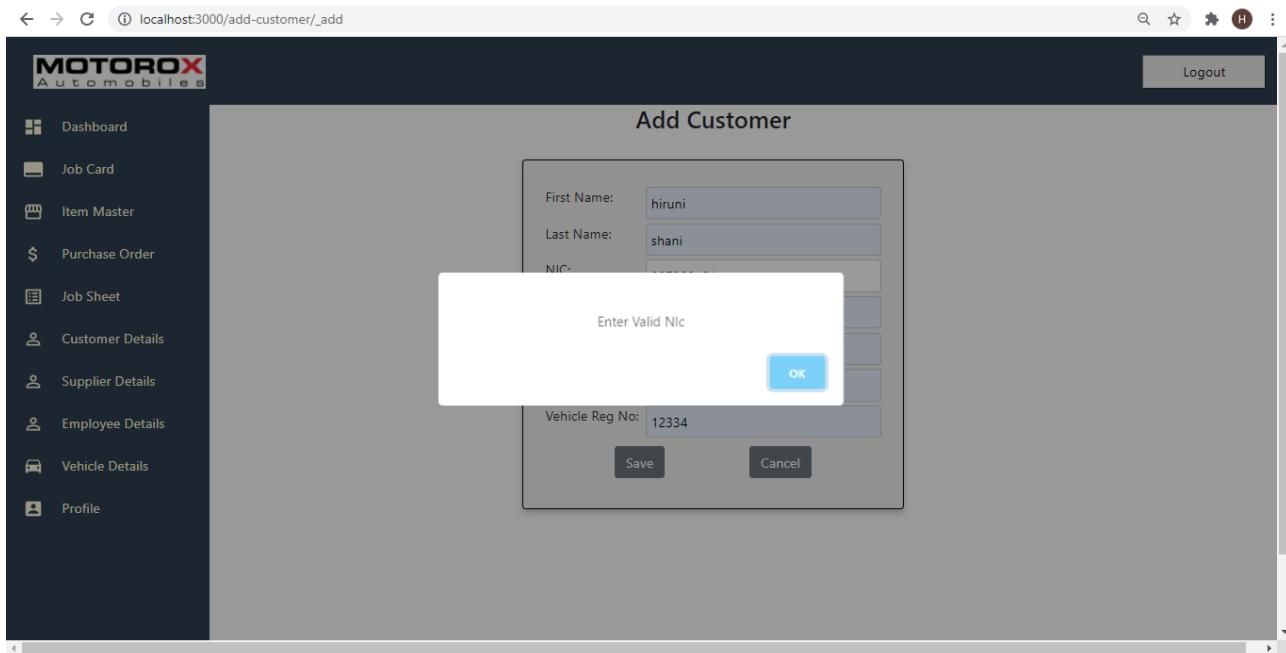


Figure 111: Test case 12

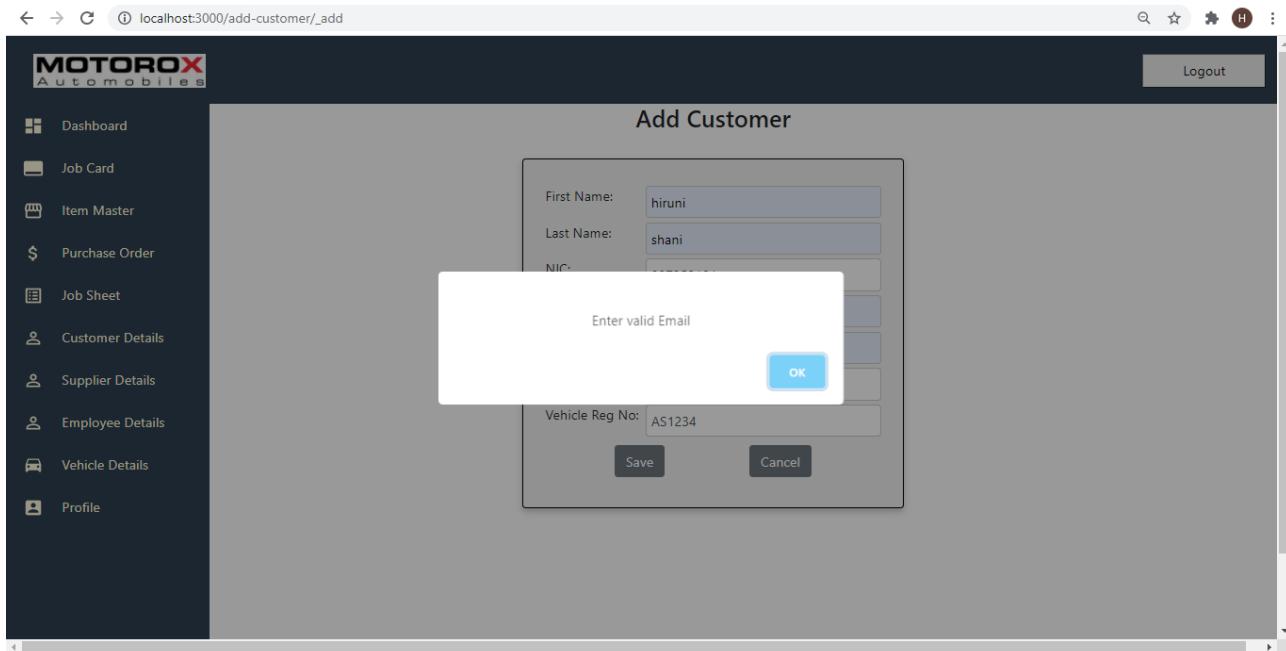


Figure 112: Test case 13

2.4.6 Vehicle Registration Management – IT20017088

Table 6: Test cases for vehicle registration management

Test ID	Test Inputs	Expected Output	Actual Output	Result (Pass/Fail)
14	Enter chassis number with 10 digits and click Save	Alert Message: "Chassis Number should be in 17 digits!"	Alert Message: "Chassis Number should be in 17 digits!"	Pass
15	Enter engine number with 5 digits and click Save	Alert Message: "Engine Number should be in 17 digits!"	Alert Message: "Engine Number should be in 17 digits!"	Pass
16	Enter seating capacity as 99 and click Save	Alert Message: "Enter the correct seating capacity!"	Alert Message: "Enter the correct seating capacity!"	Pass

The screenshot shows a web browser window for 'MOTOROX Automobiles' at the URL localhost:3000/add-vehicle/_add. The page title is 'Add Vehicle'. On the left is a sidebar with navigation links: Dashboard, Job Card, Item Master, Purchase Order, Job Sheet, Customer Details, Supplier Details, Employee Details, Vehicle Details, and Profile. The main content area contains a form with the following fields and their values:

Registration Number	WP8754
Name of the owner	Shanika Basnayake
Year of manufacture	2015
Model	Mcal
Chassis Number	789546325879654121
Engine Number	12345678901234567890
Type of fuel	Petrol
Type of body	Car
Cylinder Capacity	1500
Date of registration	10/20/2021
Class of vehicle	A1
Colour	Black
Seating Capacity	51
Make	Honda

A modal dialog box is displayed over the form, containing the message "Chassis no should be in 17 characters!" with an "OK" button.

Figure 113: Test case 14

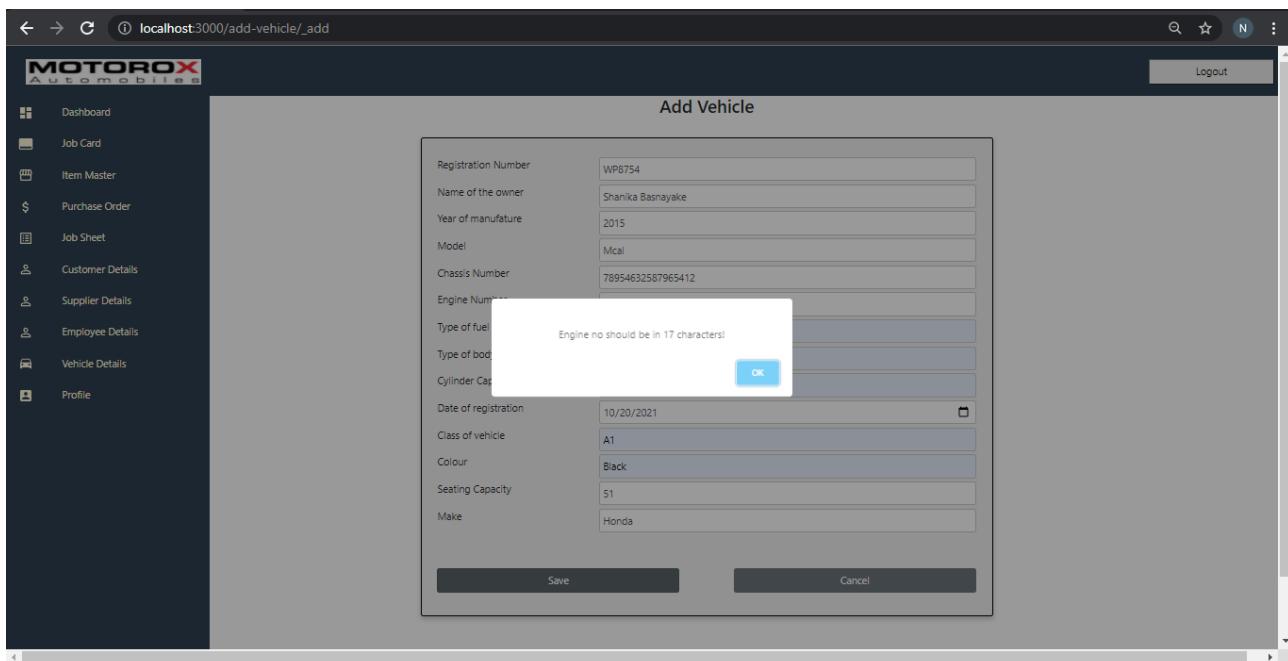


Figure 114: Test case 15

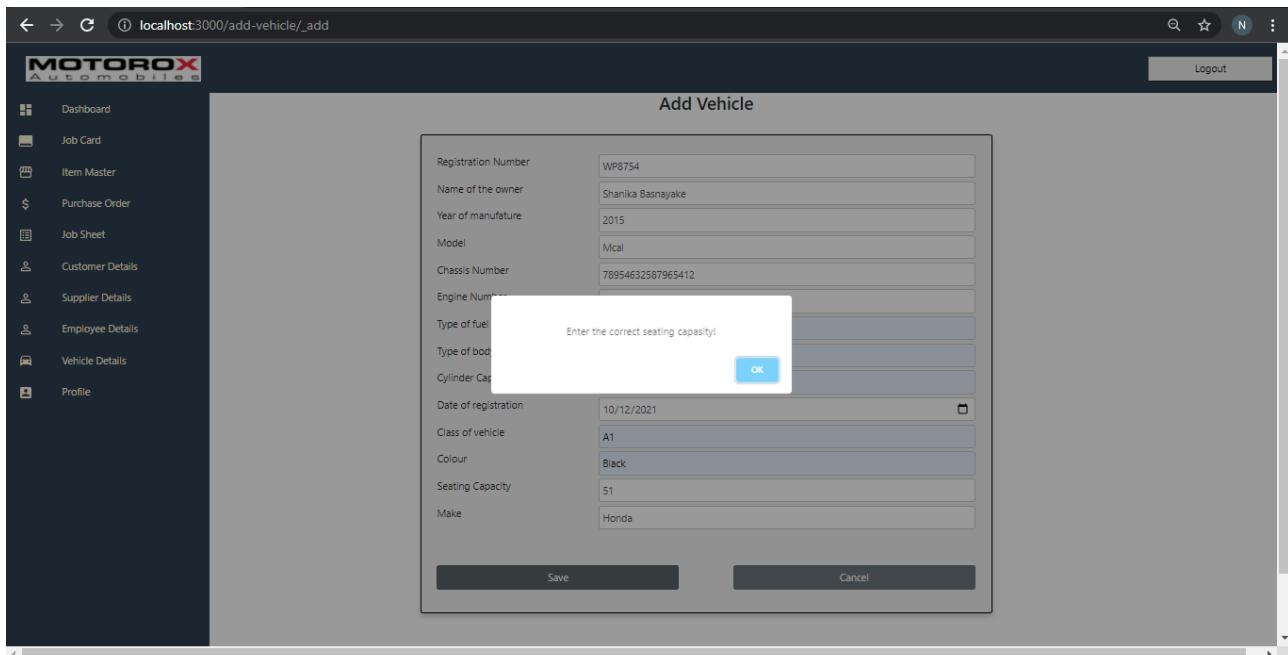


Figure 115: Test case 16

2.4.7 Employee Registration Management – IT19169736

Table 7: Test cases for employee registration management

Test ID	Test Inputs	Expected Output	Actual Output	Result (Pass/Fail)
17	Enter only 7 digits as phone number and click Save	Alert Message: "Invalid phone number format!"	Alert Message: "Invalid phone number format!"	Pass
18	Enter letters in Basic salary field and click Save	Alert Message: "Invalid salary!"	Alert Message: "Invalid salary!"	Pass
19	Enter digit in Category field and click Save	Alert Message: "Please enter valid category!"	Alert Message: "Please enter valid category!"	Pass

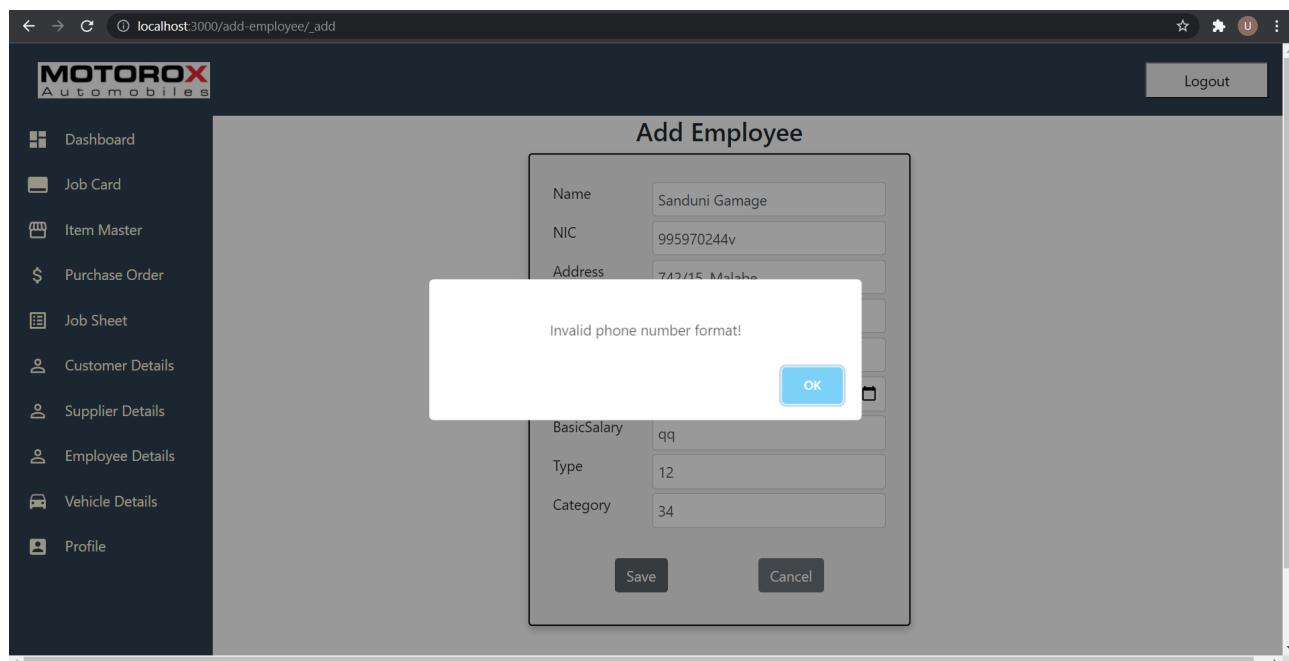


Figure 116: Test case 17

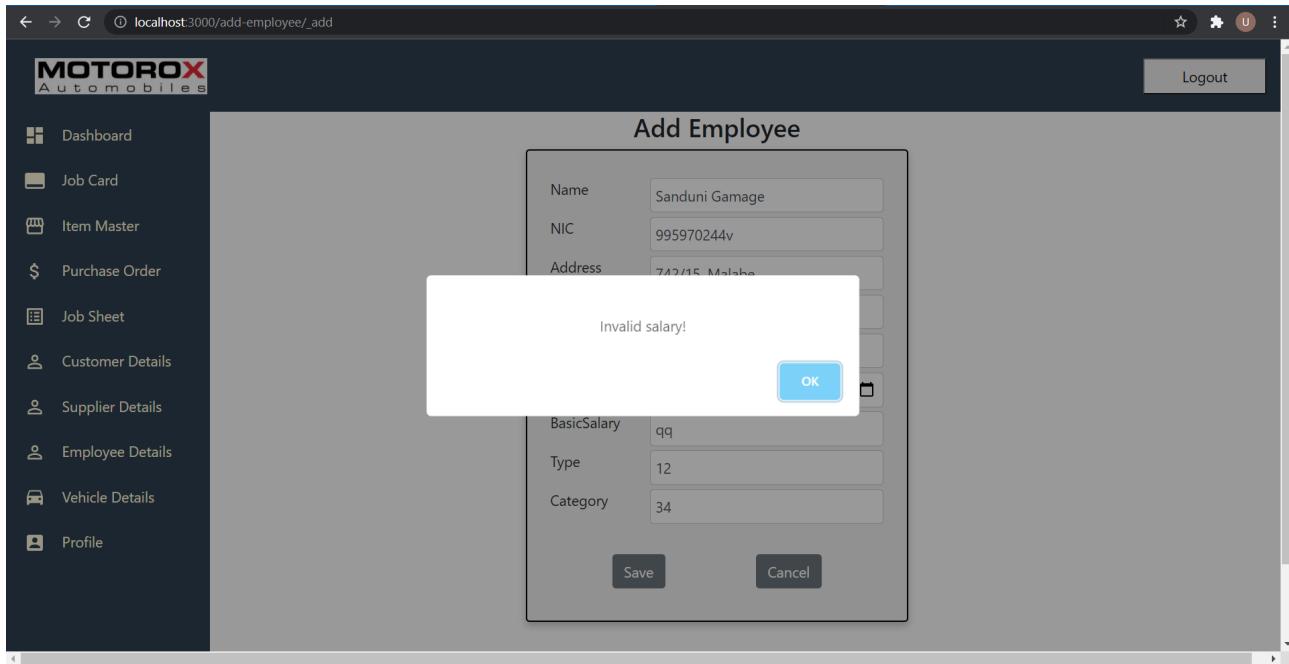


Figure 117: Test case 18

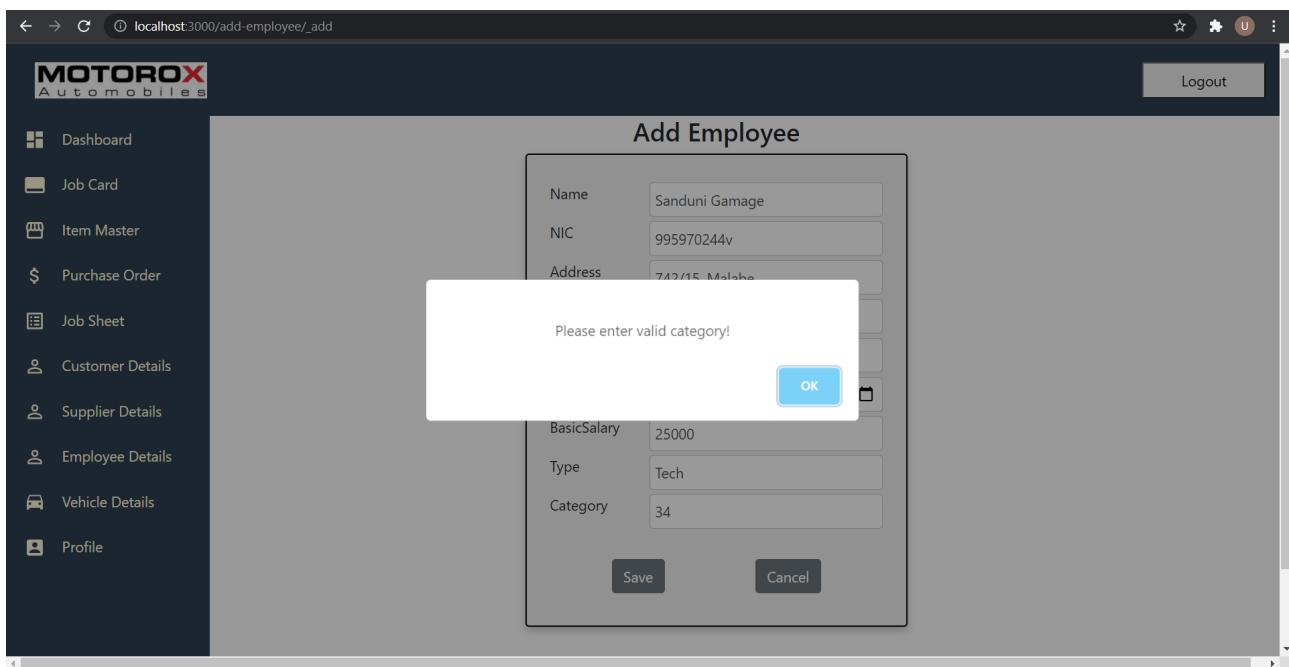


Figure 118: Test case 19

2.4.8 Supplier Registration Management – IT19994406

Table 8: Test cases for supplier registration management

Test ID	Test Inputs	Expected Output	Actual Output	Result (Pass/Fail)
20	Enter an upcoming date and click Save	Alert Message: "Please enter valid date!!!"	Alert Message: "Please enter valid date!!!"	Pass
21	Enter only the first name and click Save	Alert Message: "Enter first name and last name correctly!!!"	Alert Message: "Enter first name and last name correctly!!!"	Pass
22	Enter digit in payment method field and click Save	Alert Message: "Please enter valid payment method!!!"	Alert Message: "Please enter valid payment method!!!"	Pass

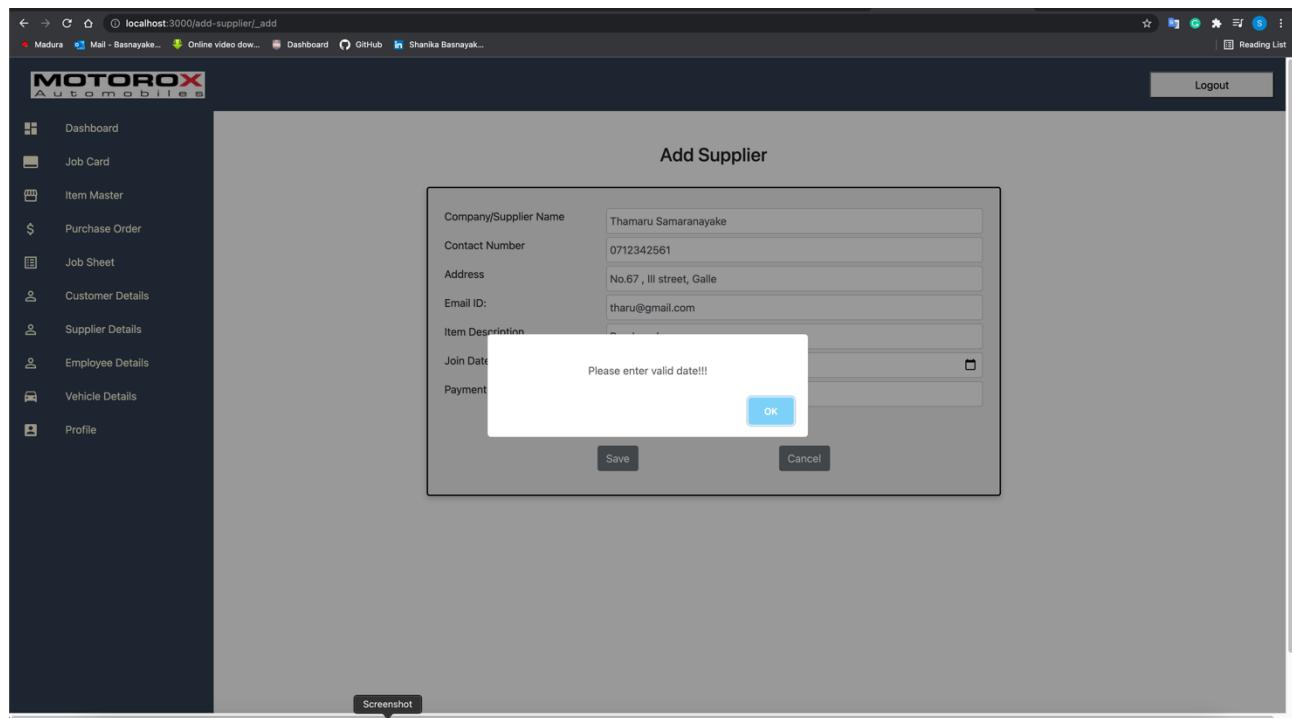


Figure 119: Test case 20

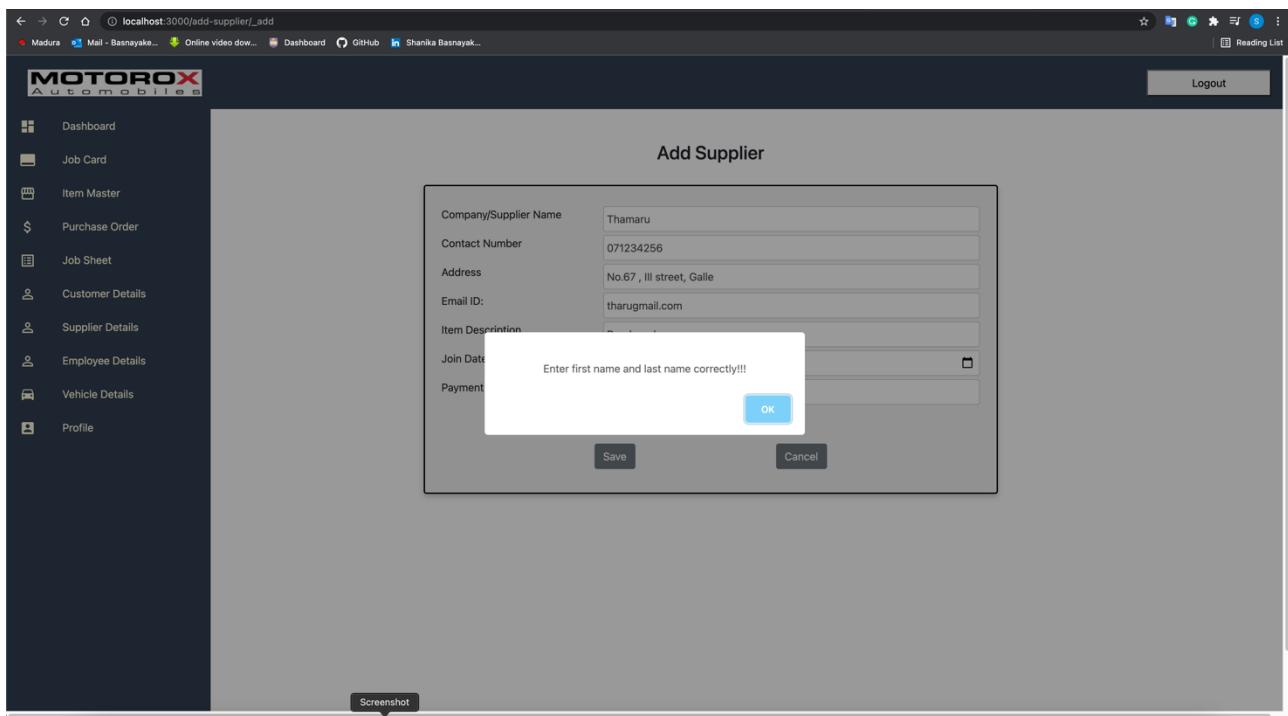


Figure 120: Test case 21

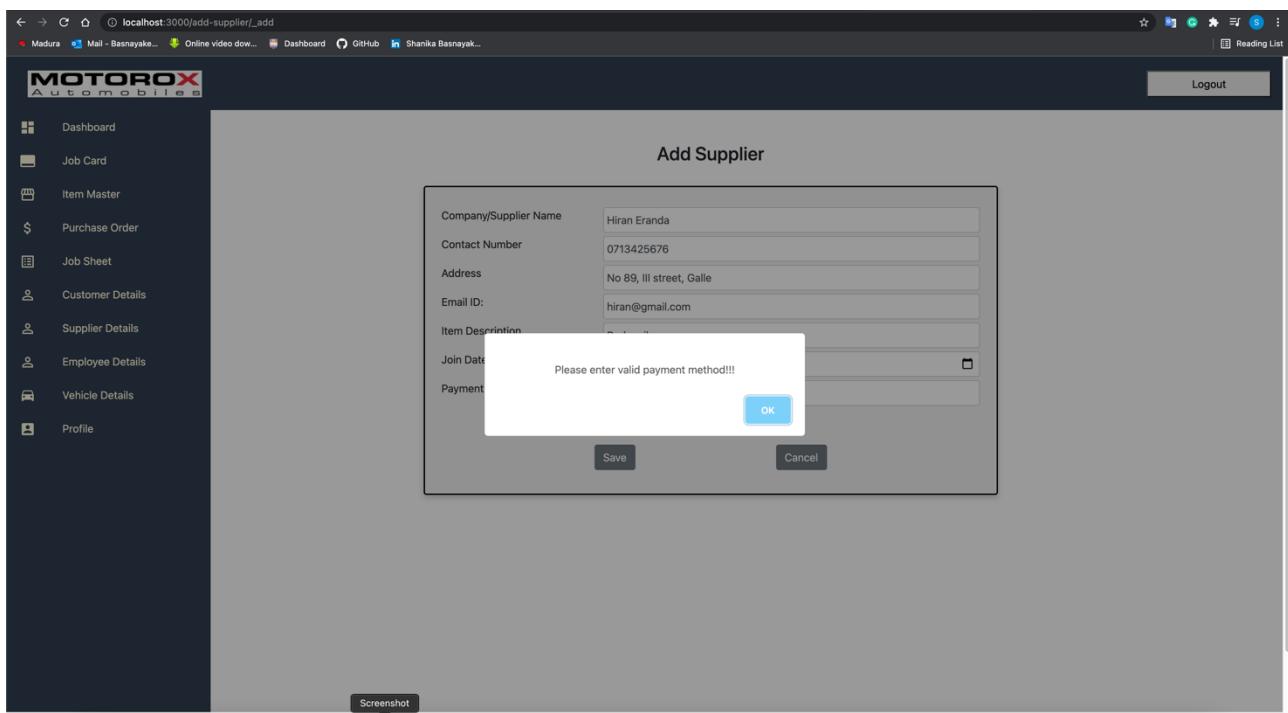


Figure 121: Test case 22

3. Conclusion

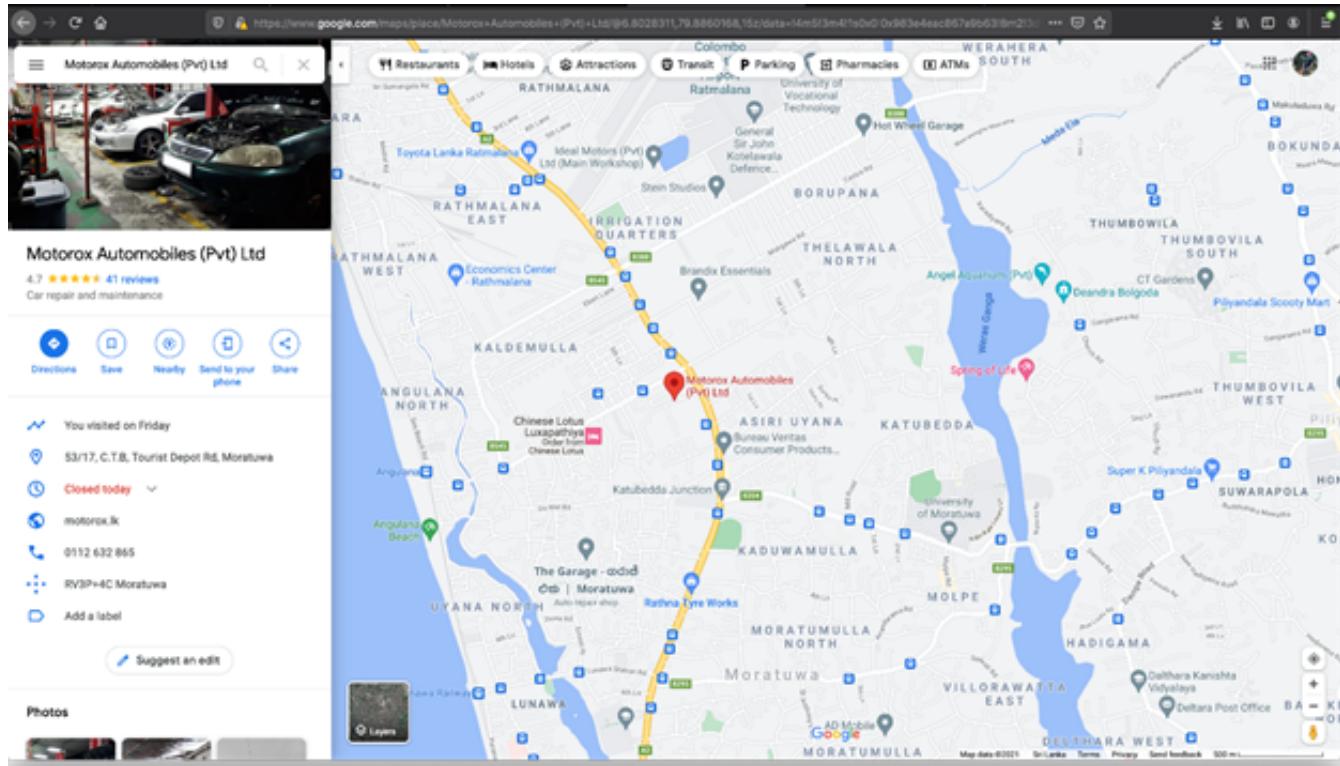
Motorox Automobiles was facing a lot of problems due to manual system. But with this developed system most of the problems have solved. All the registration can be done in much secured way and data can be easily retrieved with search. Keeping large number of data records also now can be done in much efficient way. Report of all the registered customers, vehicles, employees, and suppliers can take separately. All the important details of repairs will be stored in job sheet. From this system also can be generate a report of this job sheet. Calculations are also done in accurate way in invoice management and can take invoice of all the items that taken to repairing. Stock management of the system makes whole stock much feasible. And provide report of a particular stock item. And lastly purchasing order can be done in this system and all the details of those orders can take as a report. So that most of the services provided by Motorox automobiles manage with this web application. As for the limitations, like taking attendants of the employees can give possible solution like taking attendants with fingerprints or tap with a card.

4. References

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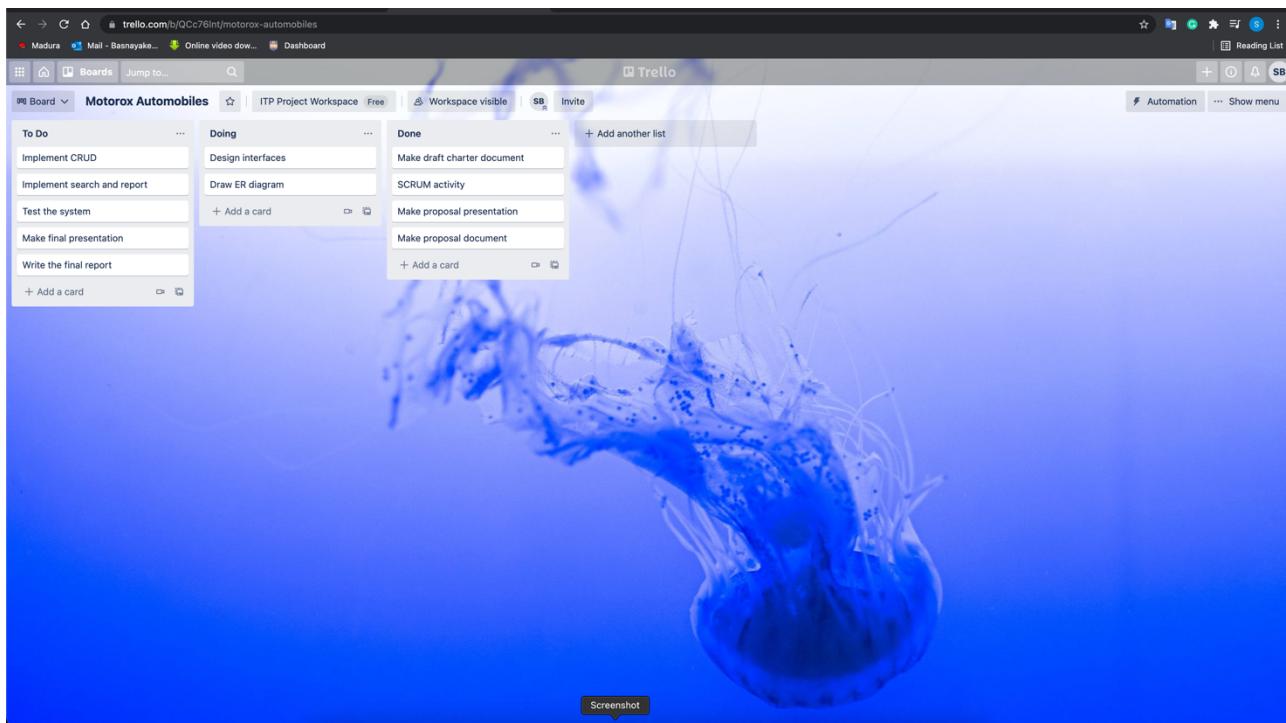
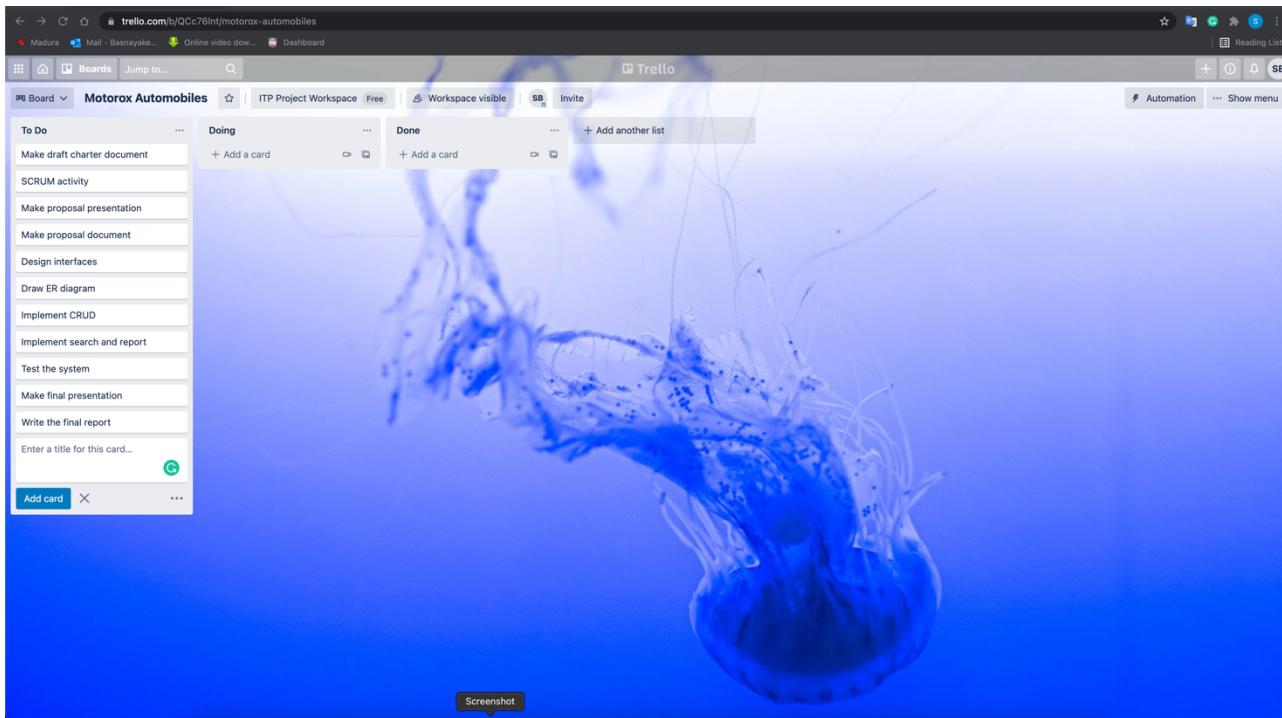
Appendix

Directions for Motorox Automobiles



[https://www.google.com/maps/place/Motorox+Automobiles+\(Pvt\)+Ltd/@6.8028311,79.8860168,15z/data=!4m5!3m4!1s0x0:0x983e4eac867a9b63!8m2!3d6.8028311!4d79.8860168](https://www.google.com/maps/place/Motorox+Automobiles+(Pvt)+Ltd/@6.8028311,79.8860168,15z/data=!4m5!3m4!1s0x0:0x983e4eac867a9b63!8m2!3d6.8028311!4d79.8860168)

Some of the snap shots of project planning



The screenshot shows a digital project timeline from July 17 to September 18. The timeline is divided into weekly segments. Key tasks include:

- 17 Jul:** project time (blue bar)
- 18 Jul - 24 Jul:** finalize project charter (purple bar)
- 25 Jul - 31 Jul:** mid exam (orange bar)
- 01 Aug - 07 Aug:** SCRUM activity (green bar)
- 08 Aug - 14 Aug:** proposal week (yellow bar)
- 15 Aug - 21 Aug:** interface design (pink bar)
- 22 Aug - 28 Aug:** ER Submission (light blue bar)
- 29 Aug - 04 Sep:** Informal progress evaluation (dark blue bar)
- 05 Sep - 11 Sep:** CRUD evaluation (light green bar)
- 12 Sep - 18 Sep:** team call (light orange bar)

Each task bar includes a small icon and a list of team members assigned to it.

The screenshot shows the ClickUp application interface. The left sidebar includes sections for Home, Notifications, Pulse, Goals, and Favorites (Everything, Space, ITP, List, upcoming work, Simple Project Ma...). The main area displays a 'List' view with a title 'List - Add details'. It features a search bar and navigation tabs for List, Board, Calendar, Gantt, Table, and View. A 'TO DO' section lists 14 tasks, each with a checkmark and a due date. The tasks are:

- ✓ mid exam (due Jul 19)
- ✓ finalize project charter (due Jul 19)
- ✓ SCRUM activity (due Jul 24)
- ✓ proposal week (due Aug 7)
- ✓ interface design (due Aug 14)
- ✓ ER Submission (due Aug 21)
- ✓ informal progress evalution (due Sep 18)
- ✓ CRUD evalution (due Sep 25)
- ✓ System testing activity, git report (due Oct 2)
- ✓ final reporting writing (due Jul 18, 7pm)
- ✓ scrum sumission (due Jul 25, 11:45pm)
- ✓ complete the full crud using the youtube video (due Jul 26, 11:45pm)
- ✓ complete jithub and proposal (due Jul 28, 8am)

A footer bar at the bottom contains icons for Google Classroom, Zoom, and Task.