Project of

Software Engineering

(CS3074)

April 18, 2023

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Section: S1

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Software Requirement Specification For

Motor Part Shop Software (MPSS)

Version 1.0 approved

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8. Software Design Diagrams

1.Introduction

1.1 Purpose

The purpose of the document is to serve as a guide to designers, developers and testers who are responsible for the engineering of the Motor Part Shop Software (MPSS) Project. It should give the engineers all of the information necessary to design, develop and test the software.

1.2 Project Scope

A small automobile spare parts shop sells the spare parts for a vehicles of several makes and models. Also, each spare part is typically manufactured by several small industries. To stream line the sales and supply ordering, the shop owner has asked us to develop the following motor part shop software. Motor Part Shop Software (MPSS). The motor parts shop deals with large number of motor parts of various manufacturers and various vehicle types. Some of the motor parts are very small and some are of reasonably large size. The shop owner maintains different parts in wall mounted and numbered racks. The shop owner maintains as few inventory for each item as reasonable, to reduce inventory overheads after being inspired by the just-in-time (JIT) philosophy. Thus, one important problem the shop owner faces is to be able to order items as soon as the number of items in the inventory reduces below a threshold value. The shop owner wants to maintain parts to be able to sustain selling for about one week. To calculate the threshold value for each item, the software must be able to calculate the average number of parts sales for one week for each part. At the end of each day, the shop owner would request the computer to generate the items to be ordered. The computer should print out the part number, the amount required and the address of the vendor supplying the part. The computer should also generate the revenue for each day and at the end of the month, the computer should generate a graph showing the sales for each day of the month, we are required to develop the required software.

1.3 Environment Characteristics

The software is compatible with Windows version 11 and above for greater flexibility across all the systems. The hardware requirements involve RAM greater than 512 MB and above. The hard disc capacity needs to exceed 10 GB for this software to function smoothly.

1.4 References

en.wikipedia.org for relevant definition.

2 Description

2.1 Product Perspective

The Motor Part Shop Software is a new system that replaces the current manual processes of billing and inventory management in Parts Shops. The system is expected to evolve over several releases. MPSS will be help in restocking of motor parts for the in owner's shop as well as it will show required sales statistics to the Shop owner. The Software can be modified in further versions to add complex functionalities.

2.2 Design Concerns

In our Project we have assumed that for a Shop a single owner exists. The owner is allotted a predefined username and password required to access his page. This data is stored in the database. However he canchange his password in his login page.

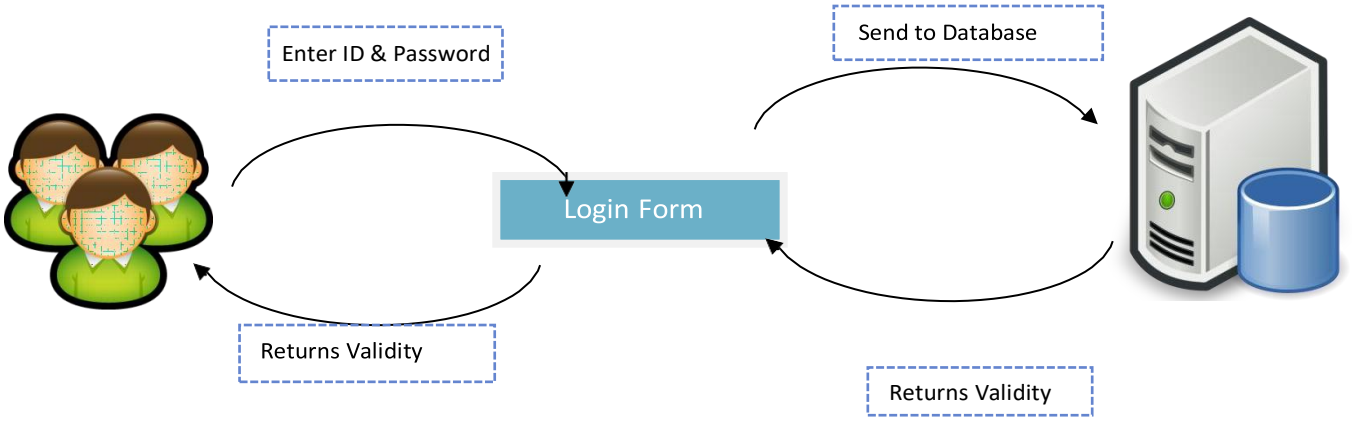
2.3 User Classes

The various user classes that are expected to use this software as follows,

- Owner can use the software to look into the sales statistics and the current stock of the motor parts.
- Shop Keeper can use the software for billing purpose.
- The Sales guy can update the current stock of the motor parts after getting the list from the software.

3 Functional Requirements

3 . 1 Login Authentication



This is the first functionality that the user encounters when it uses the software. There are three classes of users, which include owner, shop keepers and the sales executive. Users are required to enter their username and password to login into the software.

- ***Input*** **-** Username and Password
- ***Process*** **-** The username and password is matched with the existing data of owner, shop keeper and the sales executive.
- ***Output*** **-** Successful login if correct details are entered, else an unsuccessful login attempt is displayed.

3.2 Search for a Motor Part

This feature can be used to search for a motor part that is present in the inventory. This feature returns the location of the motor part and the number of parts left in the inventory. This feature can be accessed by the owner, the shop keeper and the sales executive.

- ***Input*** - Motor part ID
- ***Output*** - The rack location where the motor part is stored, and the number of parts stored there.

If no parts are present, a warning message is to be displayed.

3.3 Manage Stock

This feature is kept to check the current stock of any motor part within the store. A list of all the existing motor parts is displayed when the user wishes to check the stock showing the part's number, part's name and the number of items in the shop currently.

- ***Input*** **-** User asks for the current stock by clicking on the"Check current stock" button.
- ***Process*** **-** The current stock is fetched from the database in ascending order of the part ID.
- ***Output*** **-** The current stock is displayed in a list showing the part ID, part name and the number of parts in the inventory currently.

3.4 Setting the threshold for a motor part

This functionality is required to calculate the threshold of each motor part based on the number of parts sold previously so that the shop does not run out of the specified part. The average of number of parts previously sold is calculated to get the threshold.

• ***Input*** **-** The stock that is sold in recent weeks.
• ***Process*** **-** Average of the stocks is calculated for each part.
• ***Output*** **-** The threshold for each motor part, if the current stock falls below the threshold for a motor part, the motor part is restocked.

3.5 Billing a customer

This feature is used to bill a customer when it wishes to buy some required parts from the motor part shop. After the billing is done, the appropriate change is done in the database, which is reflected over the sales statistics.

• ***Input*** **-** The parts a user buys
• ***Output*** **-** The stock is reduced in the database.

3.6 Checking Sales statistics

This functionality has got two parts, as follows,

• The owner can check the sale of motor parts from the shop in the current day. This includes the parts that were sold beginning from the day itself. The user can also check the revenue of the day with the help of this feature.

Input **-** Owner asks for sale of motor parts of the current day.
Output **-** Revenue for the day is calculated and displayed along with the sold parts details.

• The owner can check the sales graph which shows the daily sales of the shop over a period of a month. This includes all the parts in the shop. The graph would also show the revenue generated every day in the current month.

Input **-** Owner asks for sale of motor parts of the current month.
Output **-** A graph is displayed which shows the sale of motor parts for each day of the month.

3.7 Adding a new motor part to the inventory

This functionality enables the sales executive to add a new motor part into the inventory. To add a new part, the sales executive needs to enter the part ID, part name, the address of the vendor who currently sells the motor part. The initial count for a new part is set to 0, which can be incremented accordingly by the sales executive.

• ***Input*** - Sales Executive adds the id of the new part, name of the part, address of the vendor from which the part is bought along with the number of the parts.

• ***Output*** - New part is added in the database which can be checked by the current stock

4 External Interface Requirements

4.1 User Interfaces

When the Shop Owner will open the software, a welcome page asking the user id and password will be displayed. Upon logging in, the software will display four buttons along with a billing button and an exit button. The four functionalities include, Stocks, Sales, Requires Parts, Add parts. The stocks button will show the list of current stock of motor parts. The sales button will display the sales statistics of the shop. Upon the clicking the exit button, the current user will be logged out and the login page will be displayed again. The billing button will direct the user to the billing page. The requires parts button will display the motor parts that need to be restocked by the end of the day.The add parts page will help in adding the recent number of restocked motor parts. The UI is kept simple and understandable for the user, so that it can work with it without hassle.

4.2 Hardware Interfaces

Since the software is supposed to be run on a single system, we do not require cloud based hosting solution here. If more than one system needs to be connected, cloud based solution is required to store the database.

4.3 Software Interfaces

4.3.1 Inventory Query

The Shop Owner queries the parts whose details he/she wishes to view. Programmatically determines the details of the product. Displays information about the product. The Shop Owner selects the option to change the price of the product which updates the corresponding price in the database.

4.3.2 Add to inventory

The Shop Owner requests for the addition of the product and subsequently enters the details of the product. Updates the product in its database and gives a confirmation message.

4.3.3 New transaction

The Shop Owner provides the details of the product ready to be purchased. On pressing the print button, the details of the inventory are updated and a bill is produced and printed along with a confirmation message.

4.4 Communications Interfaces

Any changes made to the inventory is automatically updated in the database which has been set up in a separate server. The software is to be kept connected to the internet for continuous use in multiple systems.

5 Other Non-Functional Requirements

5.1 Maintainability Requirements

The software must be require as lesser maintenance as possible. Given a glitch in the software, the administrators must be capable enough to sort out the bug quickly to prevent delay in the shop's functionality.

5.2 Portability Requirements

The software should be able to be deployed in any machine.

5.3 Performance Requirements

The software must be developed using an object oriented model. The performance of every existing module in this software must be robust. This software should be able to run on various operating systems steadily as it as been specified before. Overall the performance of the software must be reliable and the data kept must be safe in case ofa power failure.

5.4 Safety & Security Requirements

A firewall will be used with the server to prevent unauthorized access to the system. Passwords must be stored in hashed format to prevent any data leak A mail must be provided for emergency queries regarding the software, so that the software can be used without concerns. The mail must be replied by the admins of the software for quick responses. And finally the whole software is completely secured from outside accessing.

6. Performance Requirements

This application will be used by a single user. There will be no multiple user handling since the application runs on a single portable device. The amount of the input maybe huge since the input data of the application depends on the number of products. Interest objects may be more than one at the same time, that the software has to handle multiple object recognition. The major issue here is the application should answer in real-time, namely, the recognizing and labeling operations has to be handled in less than 1 second. Also the application should be able to recognize more than %80 of the interested objects.

7. Other Requirements

Each user of the SAS is required to log in his/her account to perform different activitieslike sales transactions, update inventory, view sales statistics and update process etc. MySQL is required for maintaining the databases of inventory, sales, and employees.

SOFTWARE DESIGN DIAGRAM

DATA FLOW DIAGRAMS

Level 0

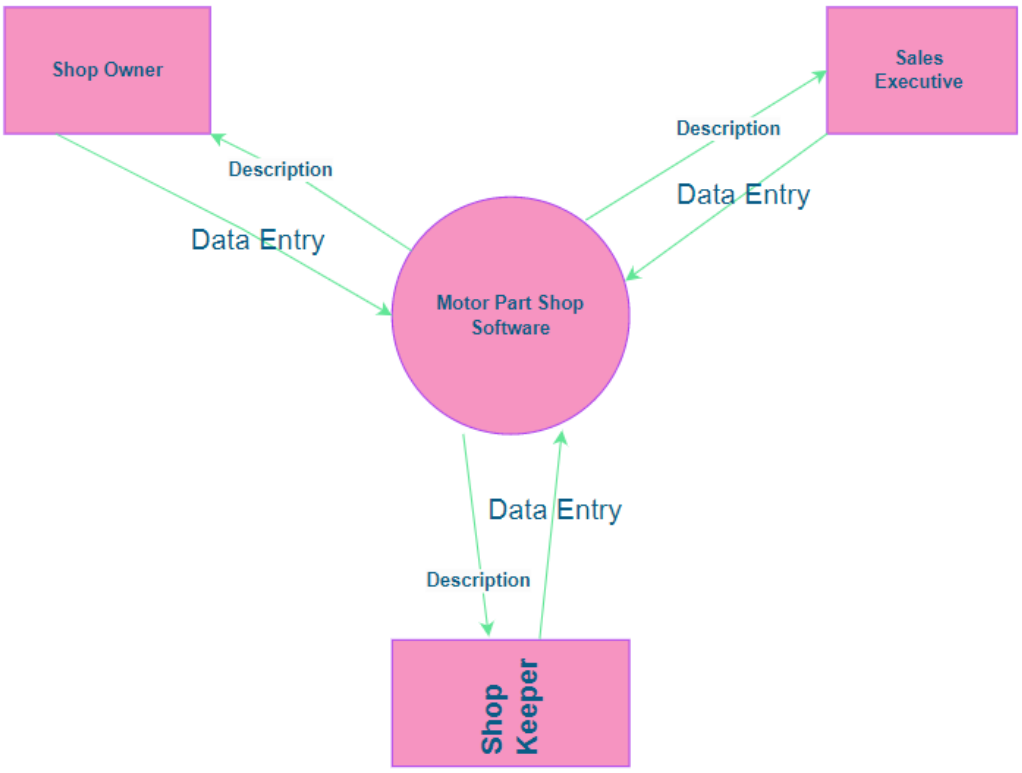


Fig: Level-0 DFD.

Level 1

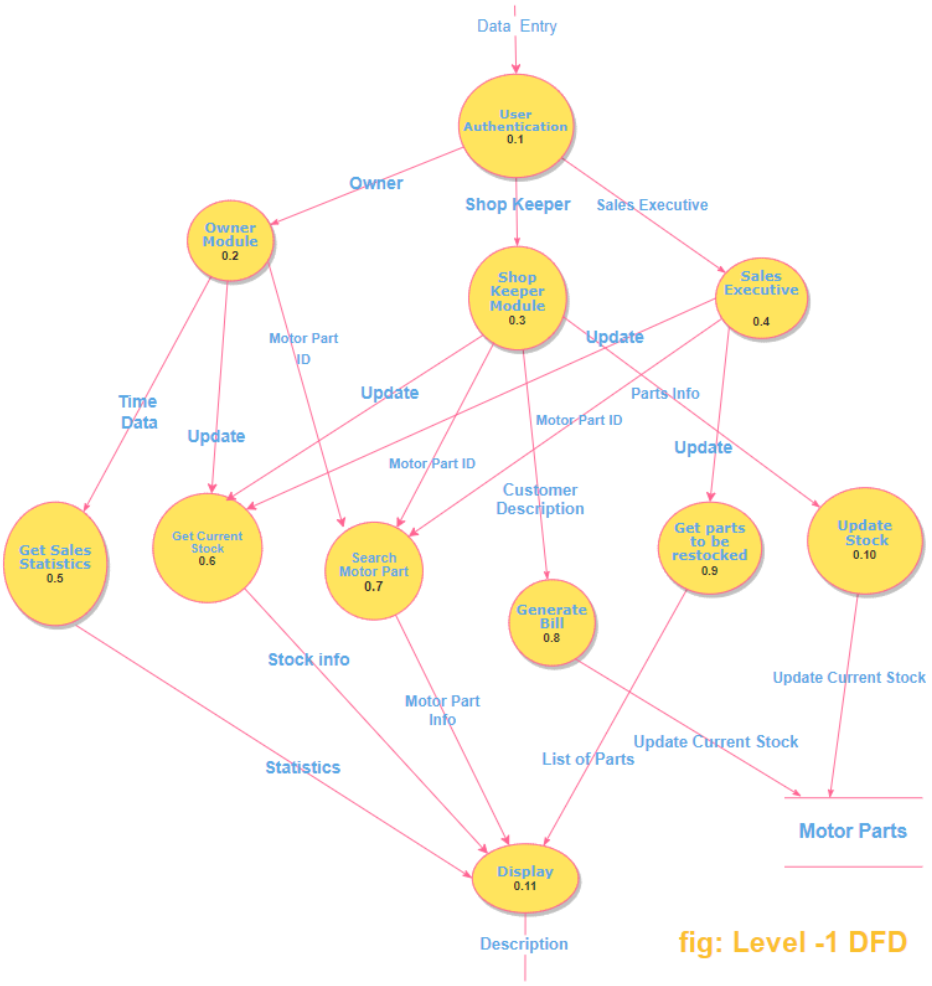


fig: Level -1 DFD

Level 2

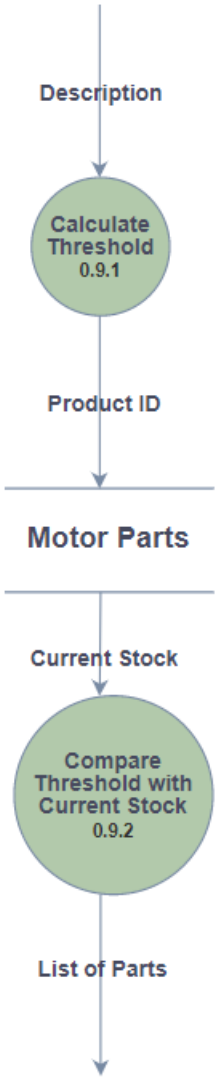


Fig: Level-2 DFD.

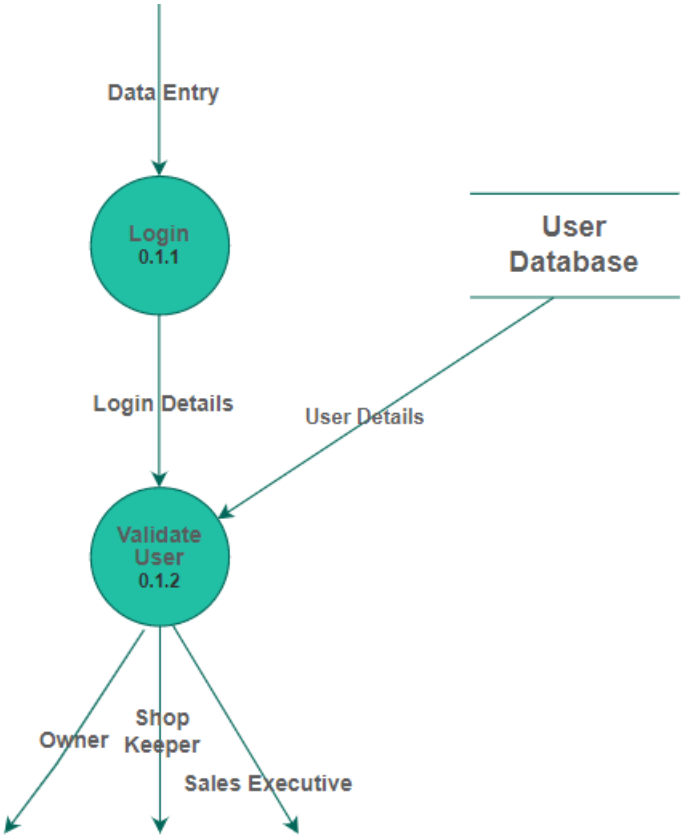


Fig: Level-2 DFD.

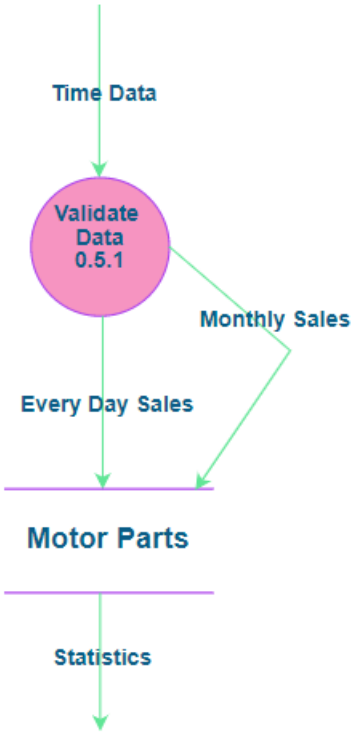
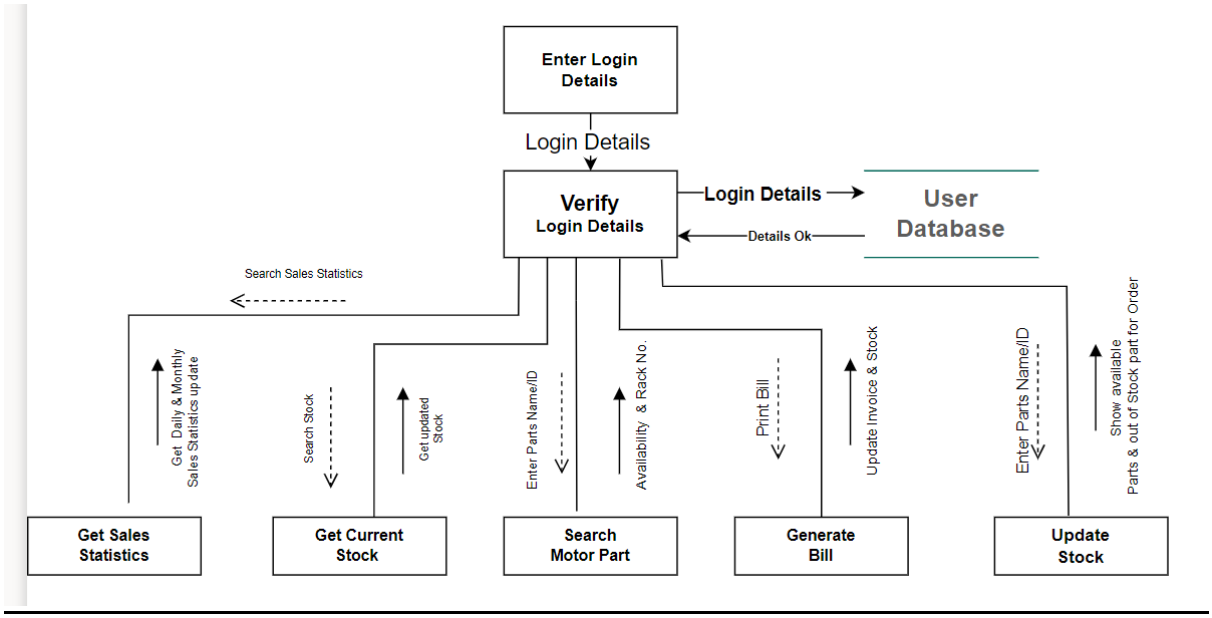
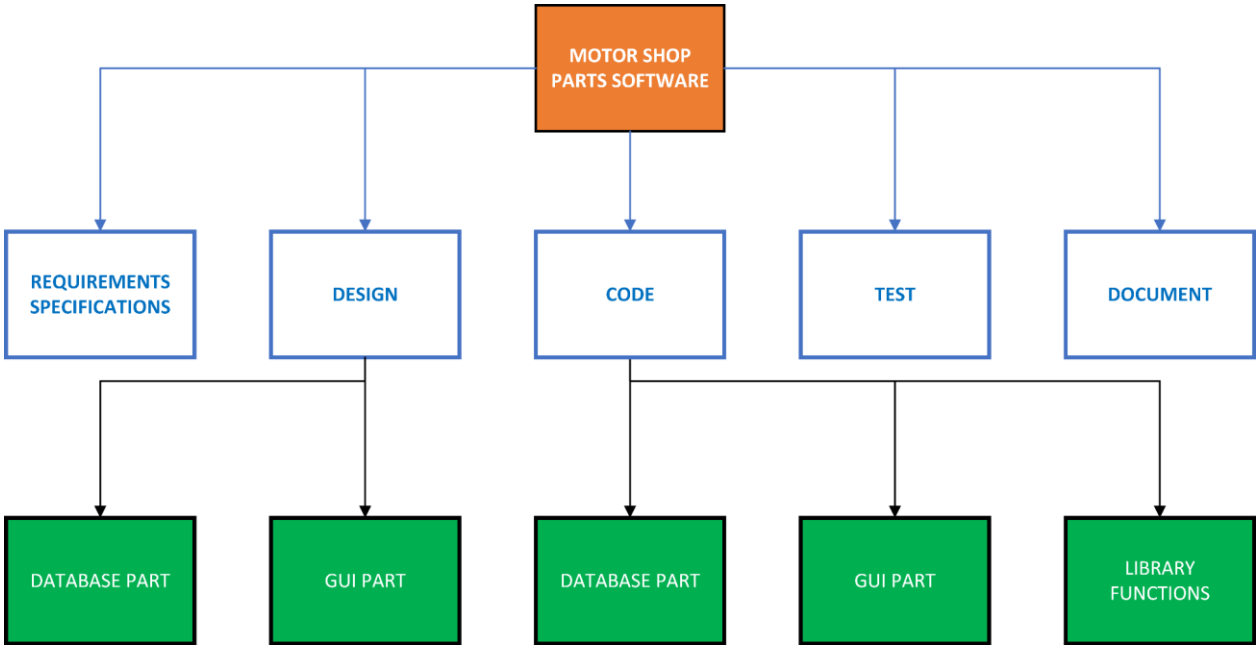


Fig: Level-2 DFD.

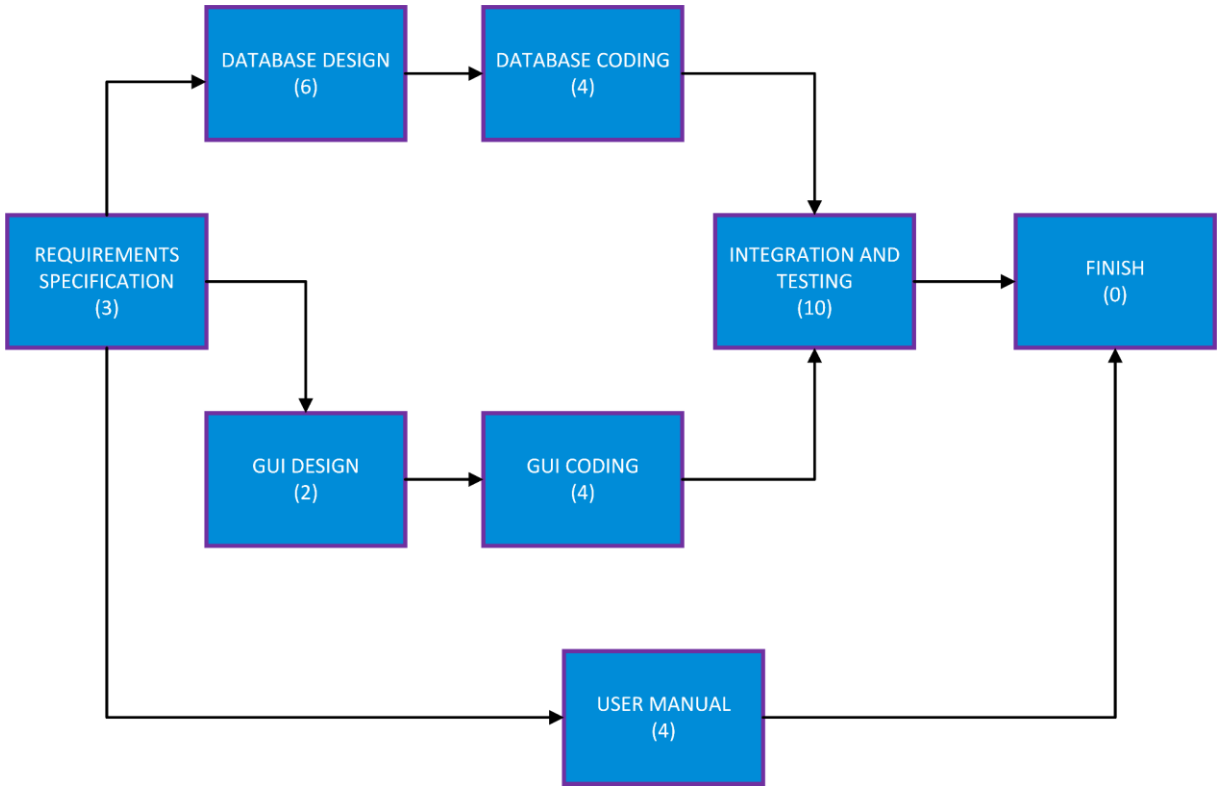
STRUCTURE CHART



WORK BREAKDOWN STRUCTURE

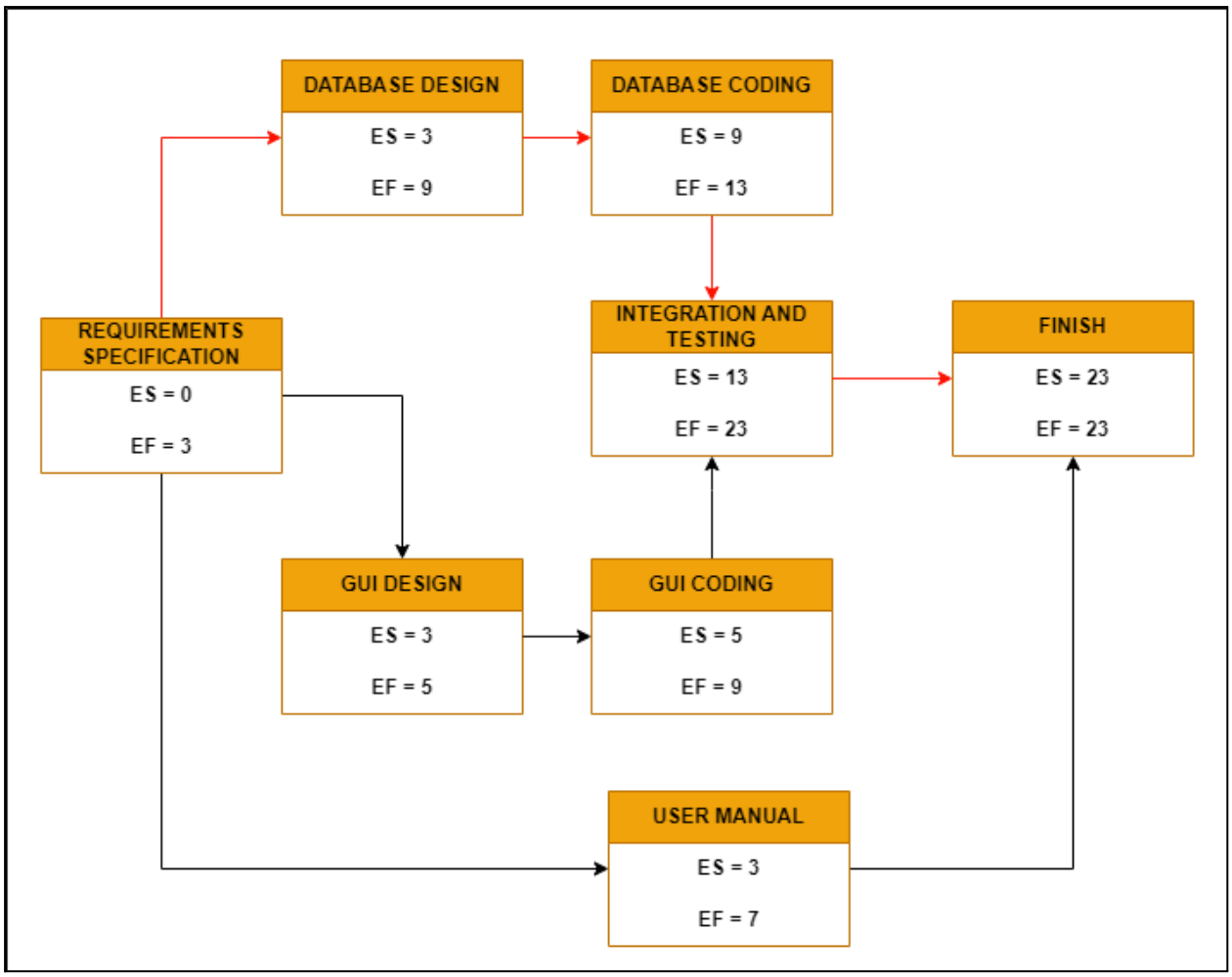


ACTIVITY NETWORK

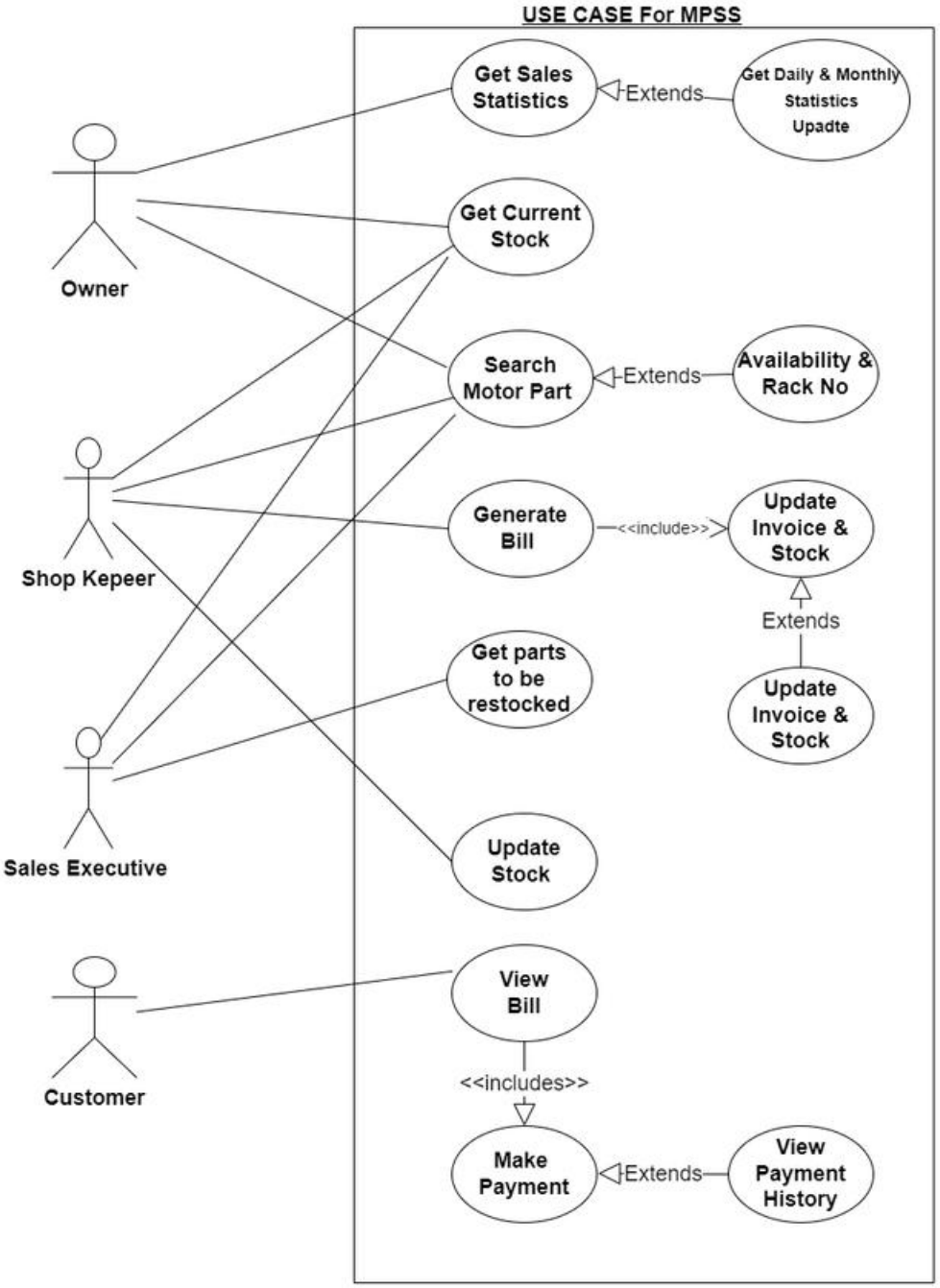


CRITICAL PATH

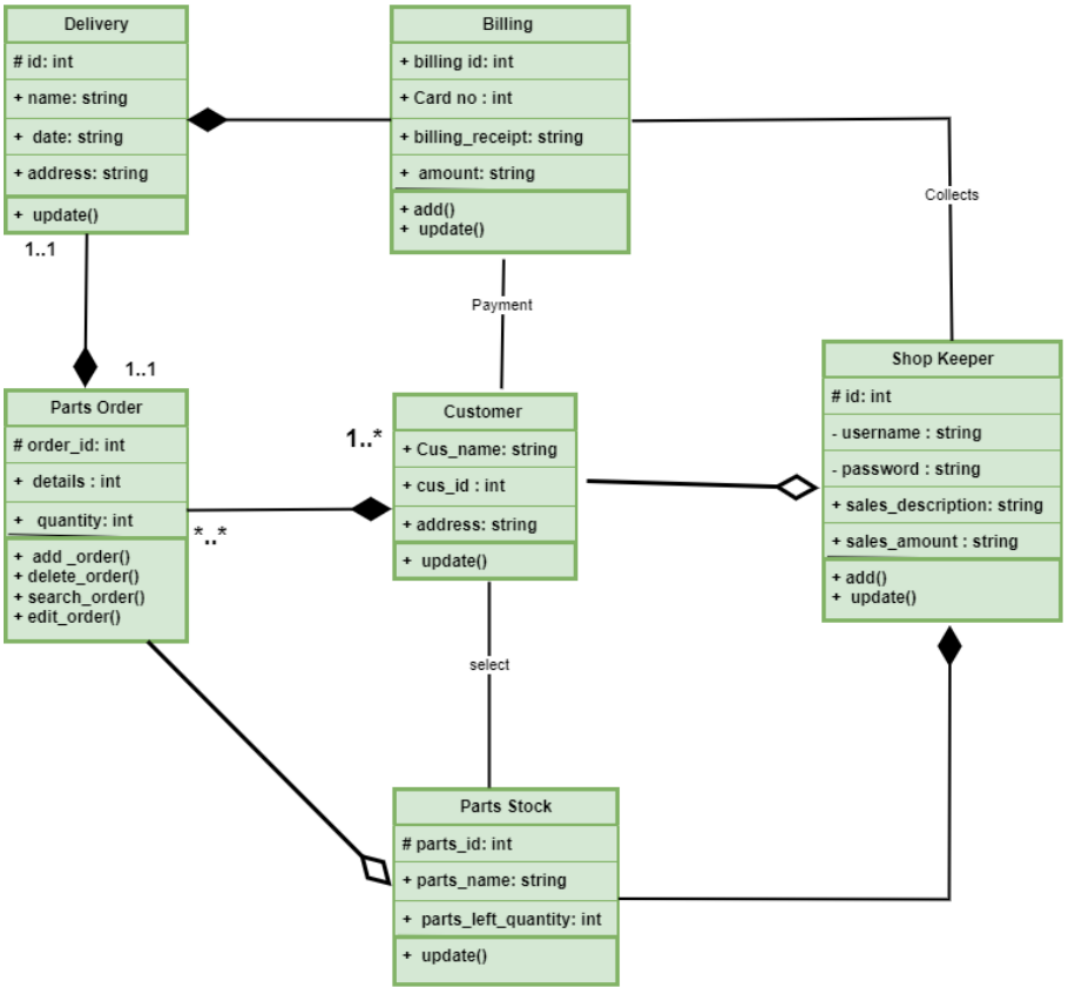
- Calculated by determining the Earliest Start (ES) and Earliest Finish (EF) time of each activity illustrated in the activity network(in the form of Activity-On-Node).
- Critical path is shown in red in the following diagram:



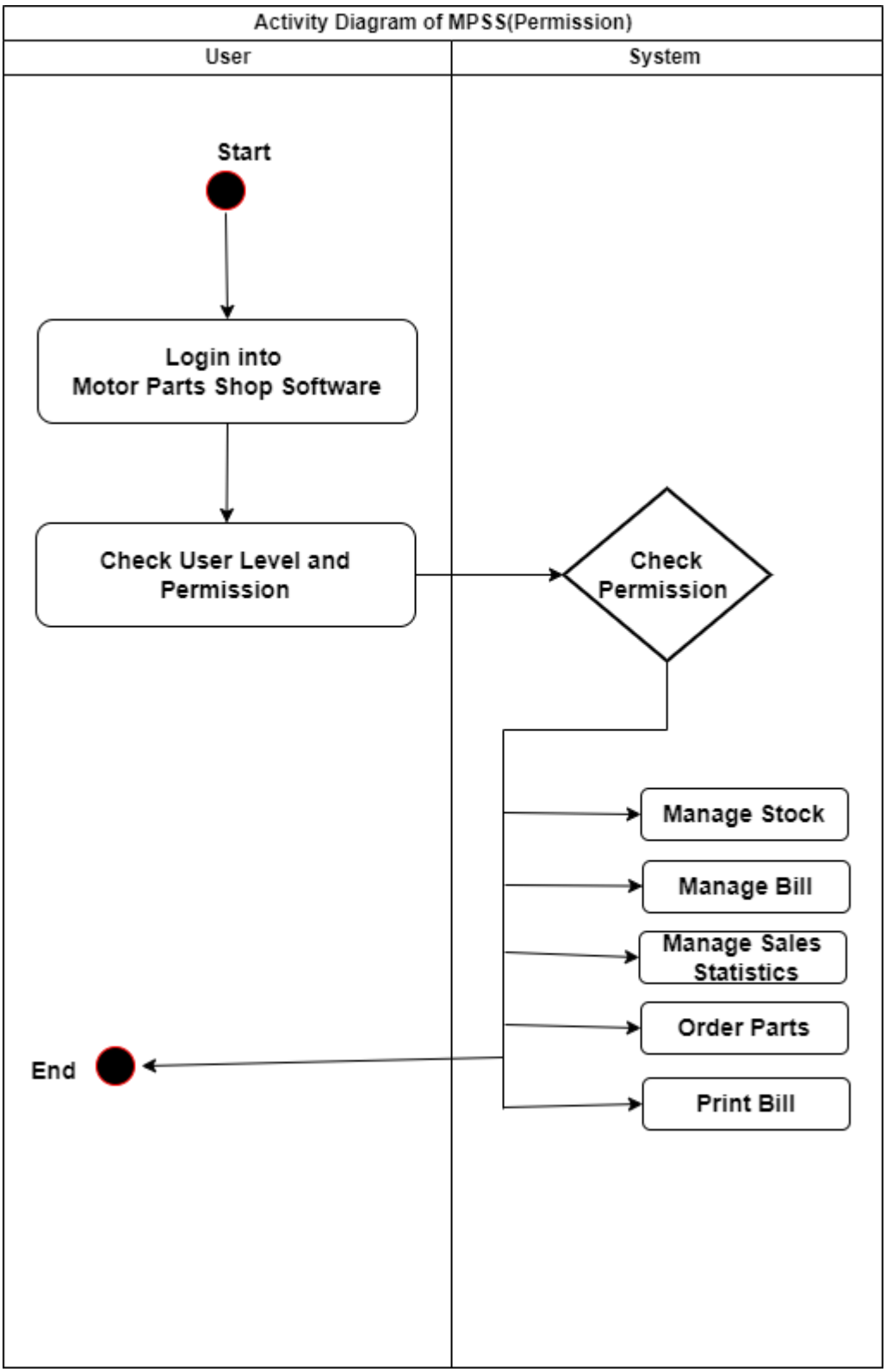
USE CASE

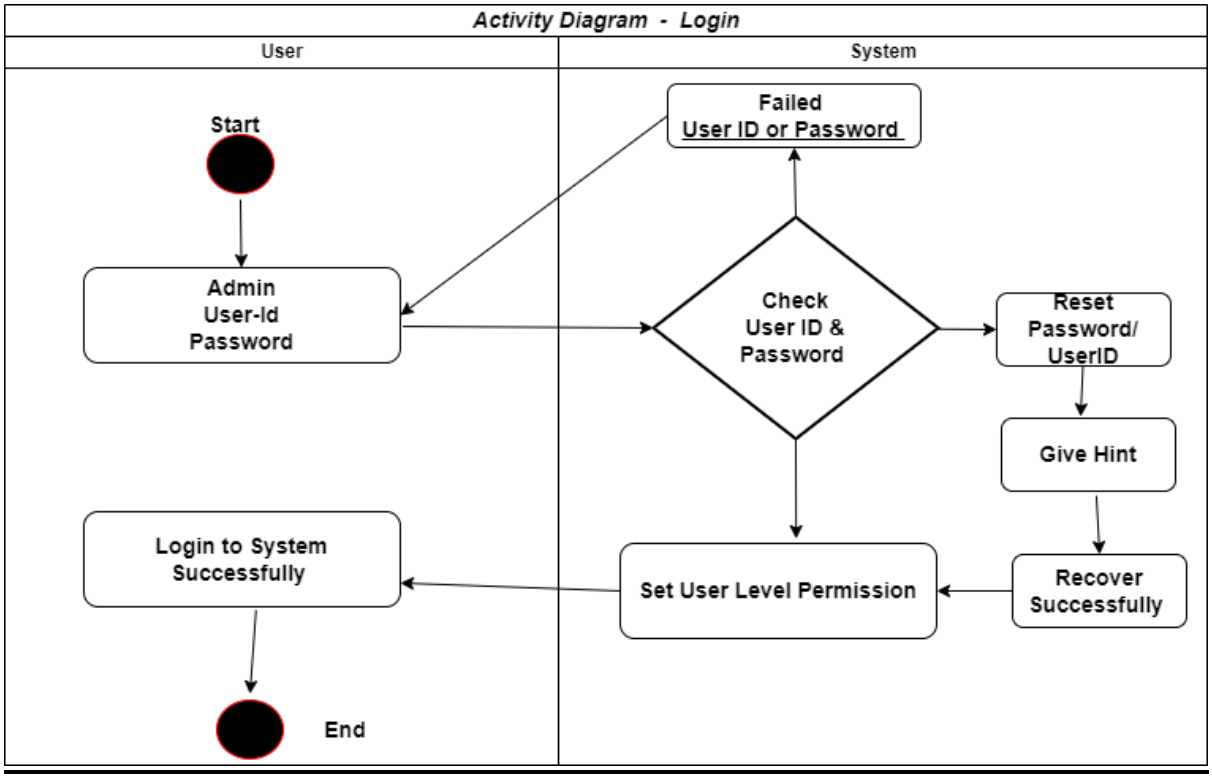

USE CASE For MPSS
Get Sales Statistics
Extends
Get Daily & Monthly Statistics Upadte
Get Current Stock
Search Motor Part
Extends
Availability & Rack No
Generate Bill
<<include>>
Update Invoice & Stock
Extends
Get parts to be restocked
Update Invoice & Stock
Update Stock
View Bill
<<includes>>
Make Payment
Extends
View Payment History
Owner
Shop Kepeer
Sales Executive
Customer

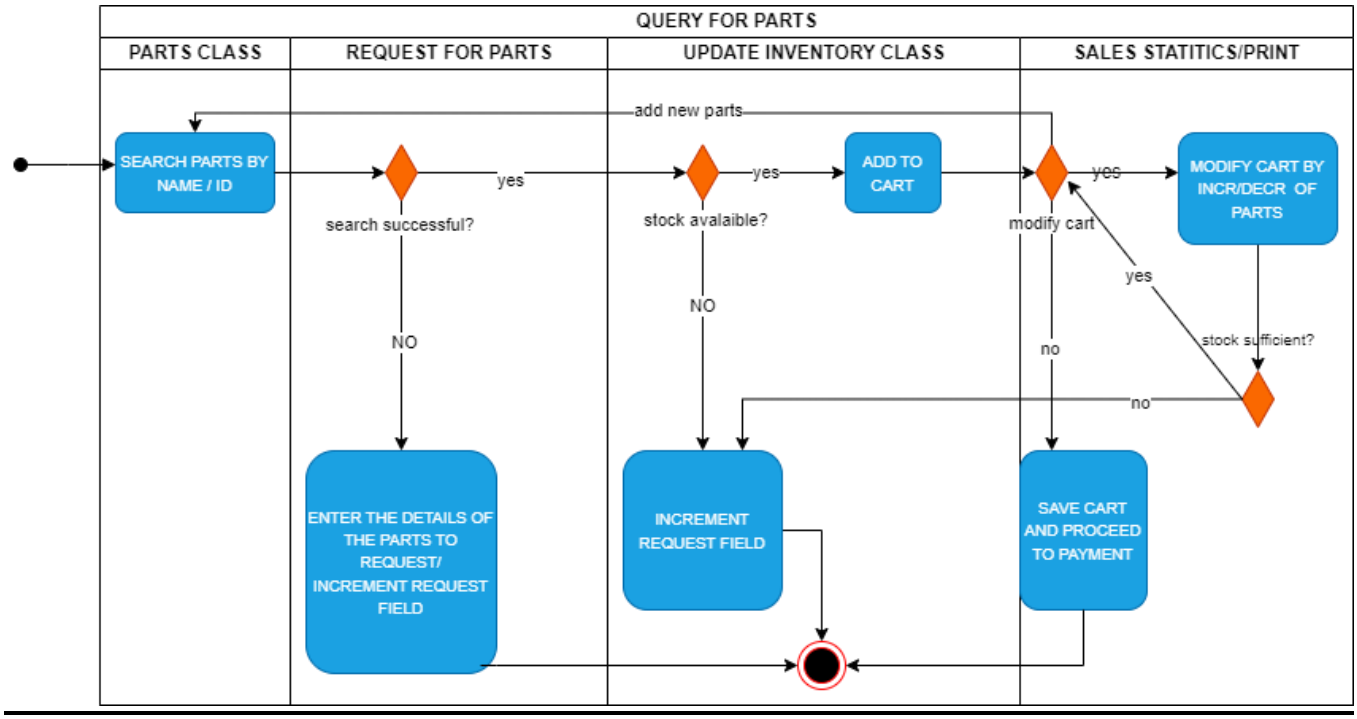
CLASS DIAGRAM

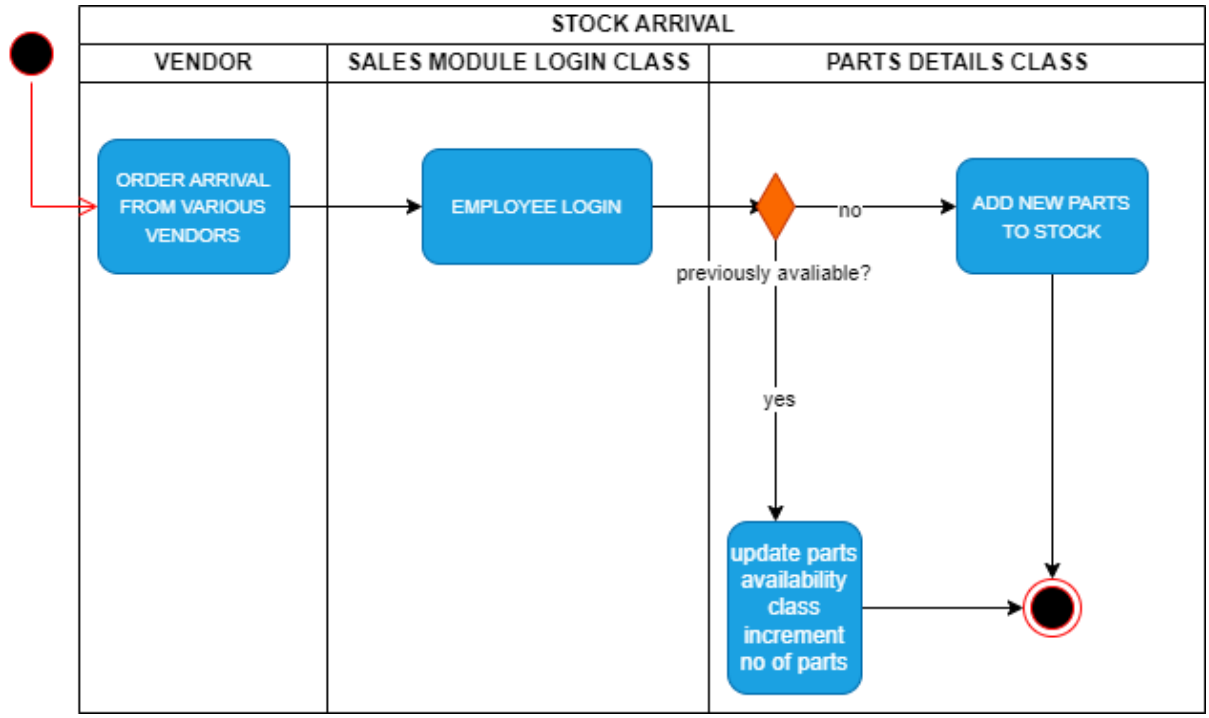


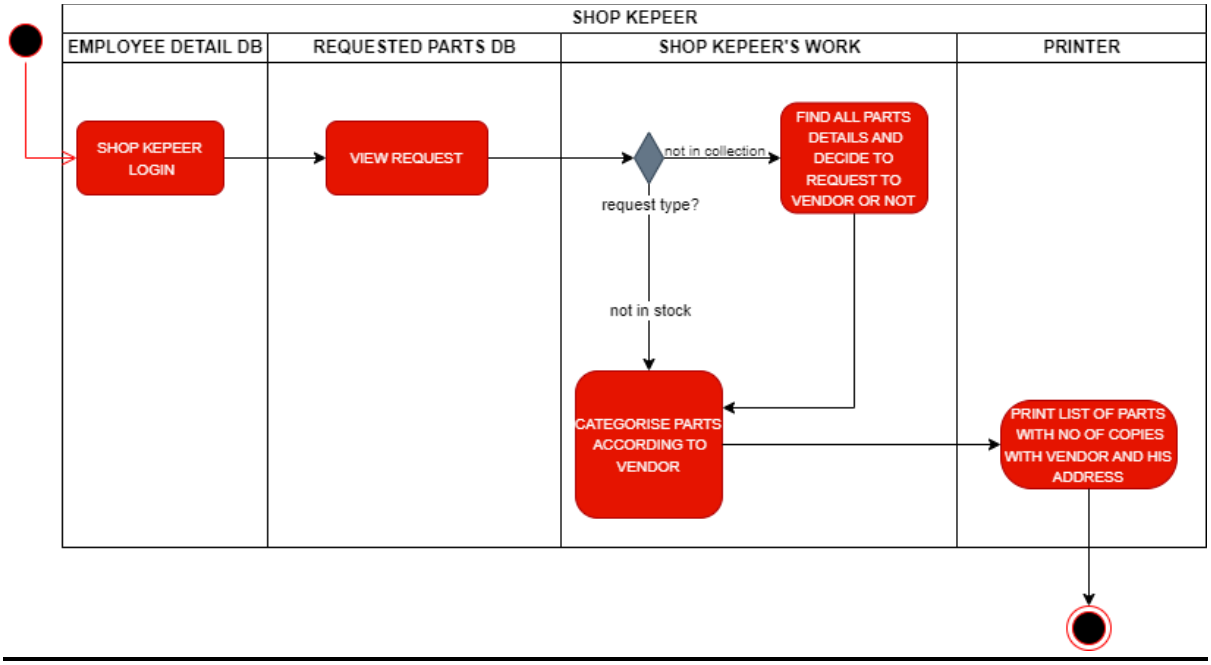
ACTIVITY DIAGRAM



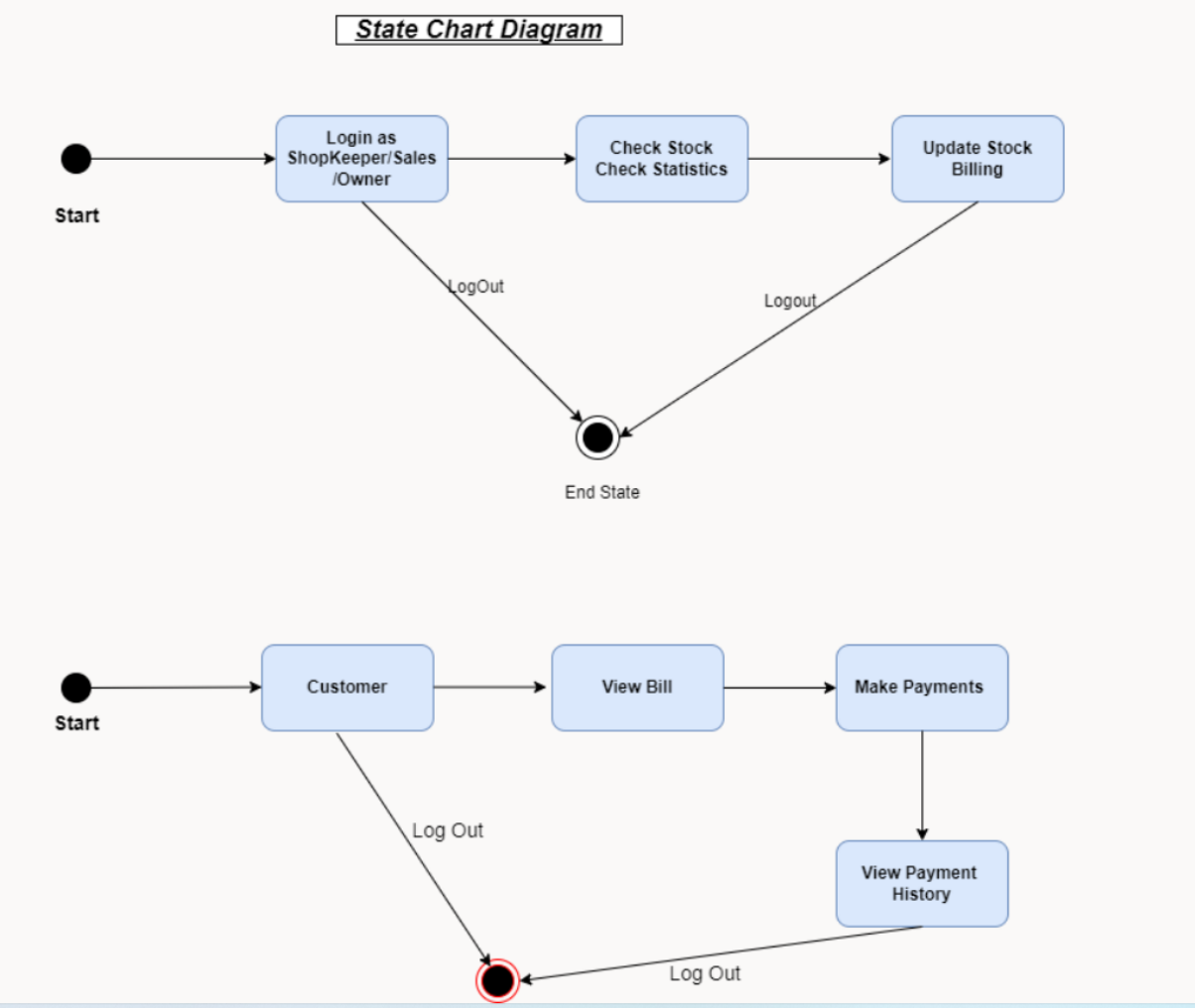

Activity Diagram - Login
User
System
Start
Admin
User-Id
Password
Failed
User ID or Password
Check
User ID &
Password
Reset
Password/
UserID
Give Hint
Recover
Successfully
Set User Level Permission
Login to System
Successfully
End


QUERY FOR PARTS
PARTS CLASS
REQUEST FOR PARTS
UPDATE INVENTORY CLASS
SALES STATITICS/PRINT
add new parts
SEARCH PARTS BY NAME / ID
yes
search successful?
NO
ENTER THE DETAILS OF THE PARTS TO REQUEST/ INCREMENT REQUEST FIELD
yes
stock avalaible?
NO
INCREMENT REQUEST FIELD
ADD TO CART
yes
modify cart
no
SAVE CART AND PROCEED TO PAYMENT
yes
MODIFY CART BY INCR/DECR OF PARTS
yes
stock sufficient?
no

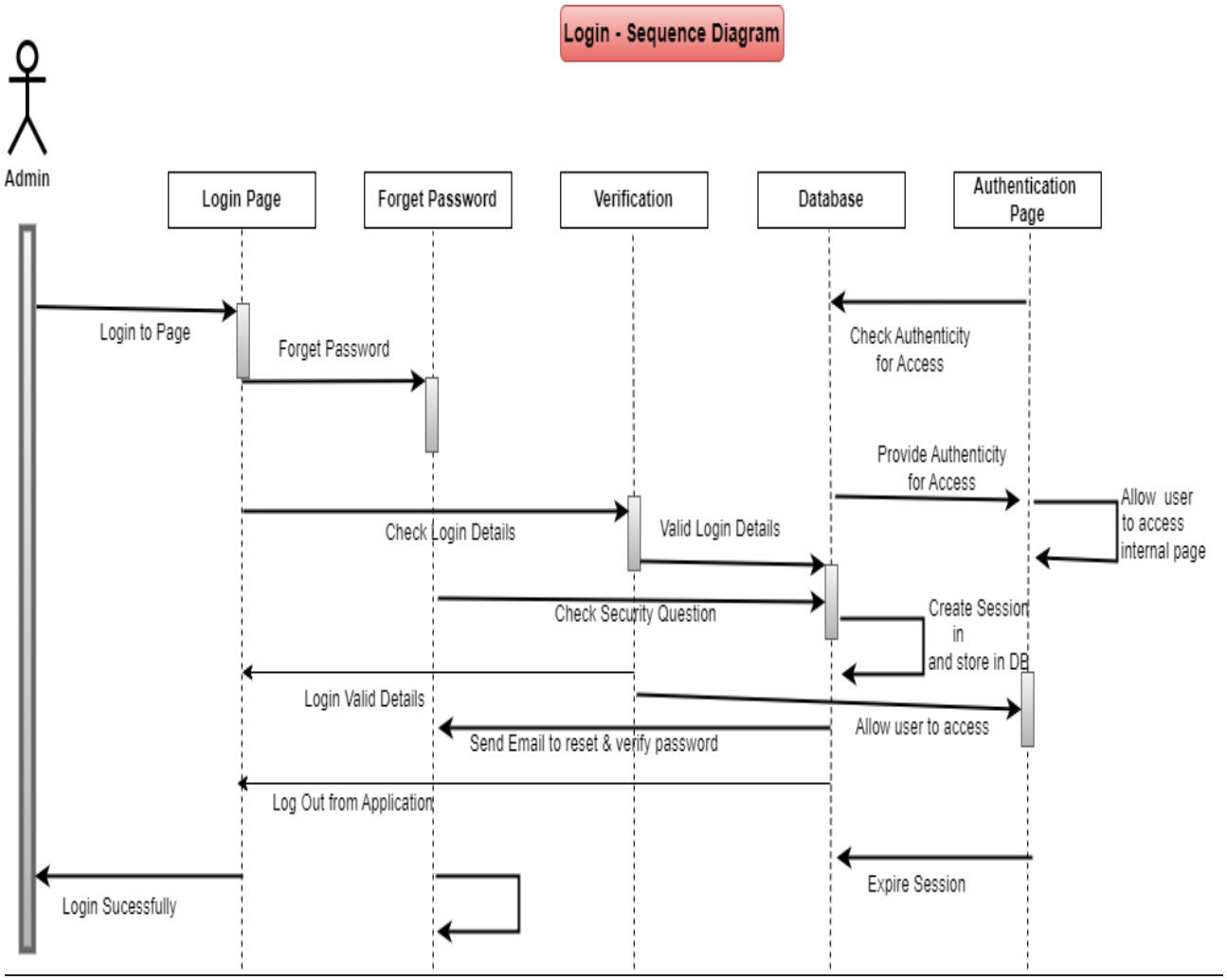

STOCK ARRIVAL
VENDOR
SALES MODULE LOGIN CLASS
PARTS DETAILS CLASS
ORDER ARRIVAL FROM VARIOUS VENDORS
EMPLOYEE LOGIN
previously avaliable?
no
ADD NEW PARTS TO STOCK
yes
update parts availability class increment no of parts

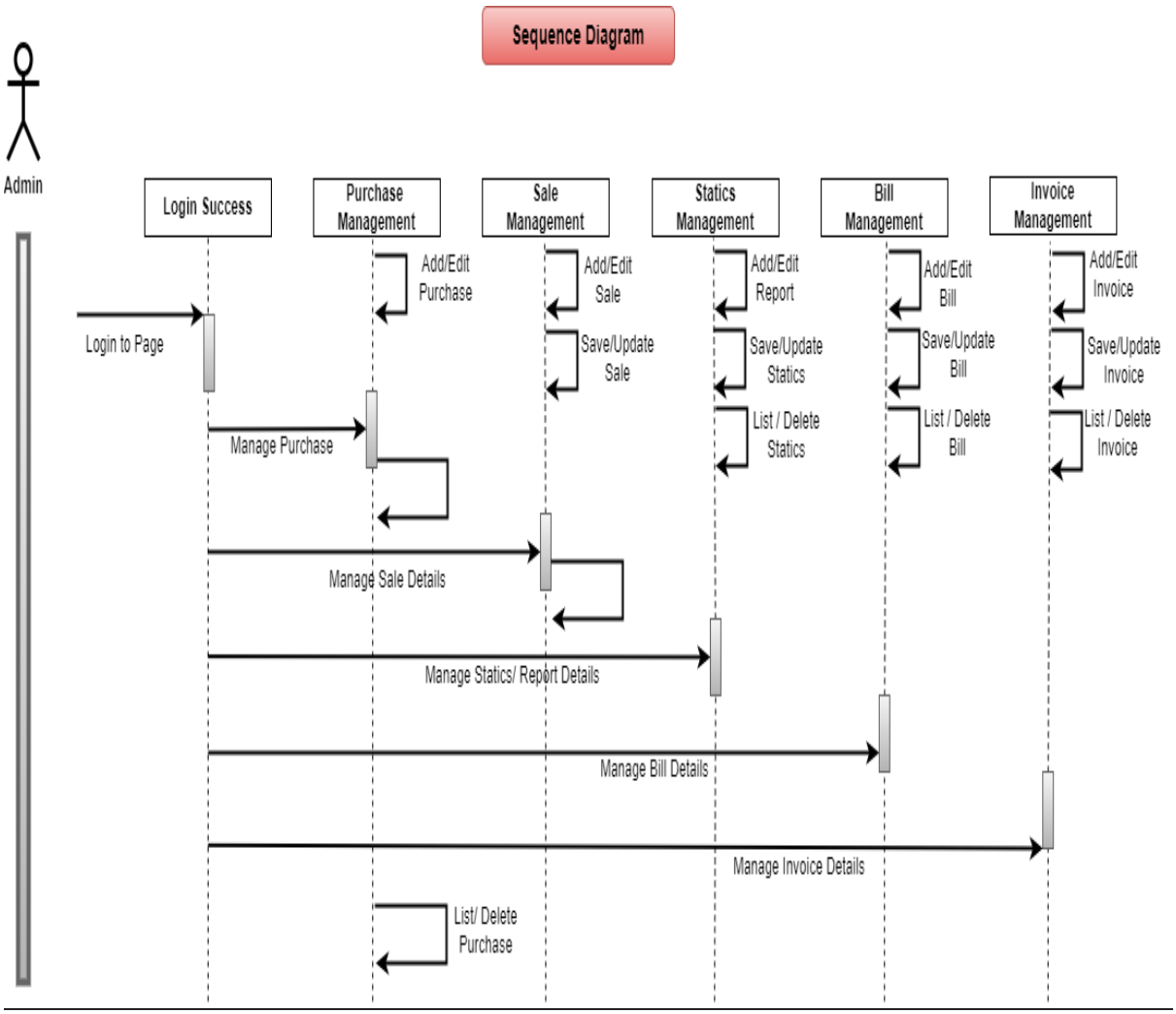

SHOP KEPEER
EMPLOYEE DETAIL DB
REQUESTED PARTS DB
SHOP KEPEER'S WORK
PRINTER
SHOP KEPEER LOGIN
VIEW REQUEST
request type?
not in collection
FIND ALL PARTS DETAILS AND DECIDE TO REQUEST TO VENDOR OR NOT
not in stock
CATEGORISE PARTS ACCORDING TO VENDOR
PRINT LIST OF PARTS WITH NO OF COPIES WITH VENDOR AND HIS ADDRESS

STATE CHART DIAGRAM

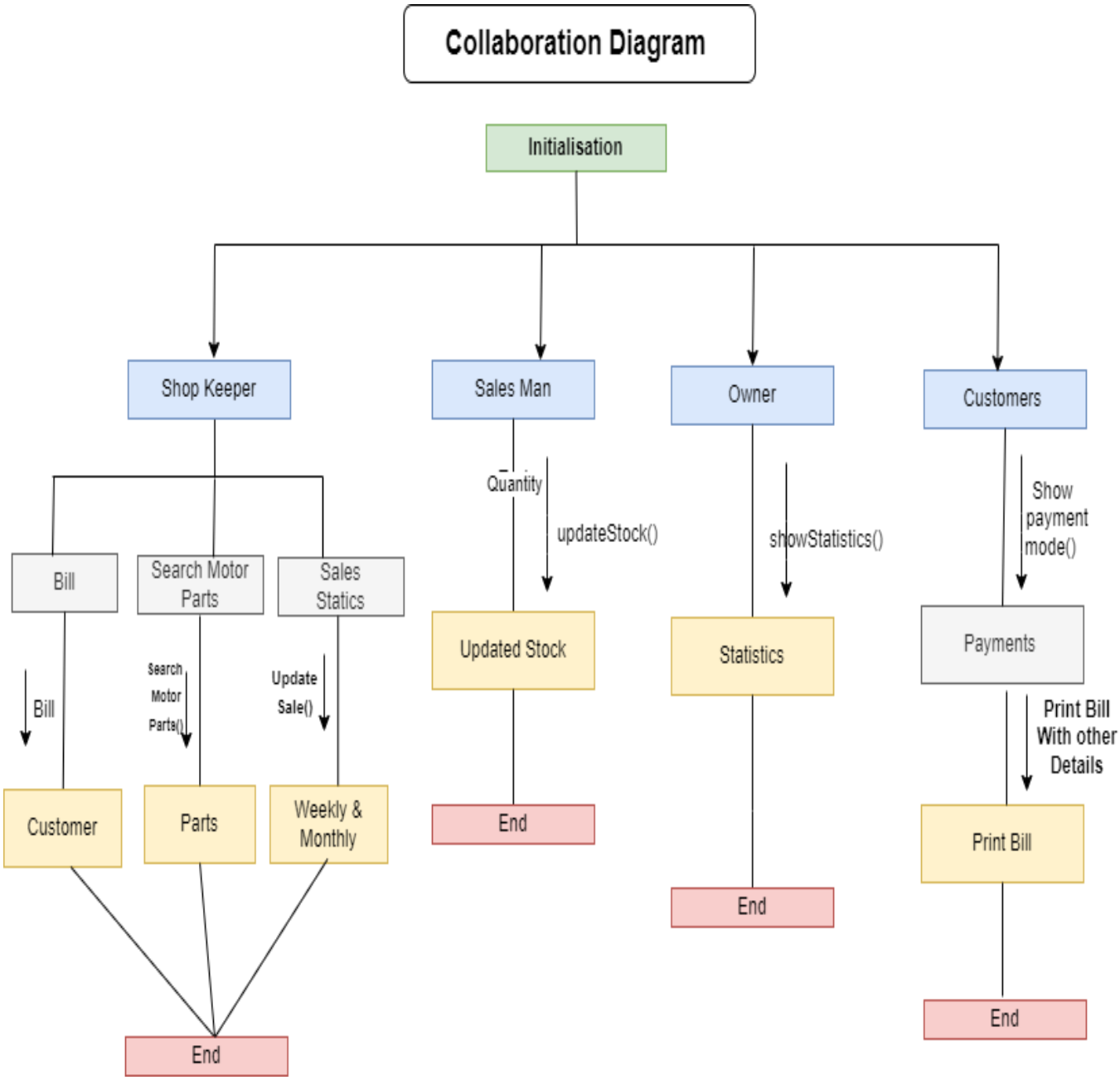


SEQUENCE DIAGRAM



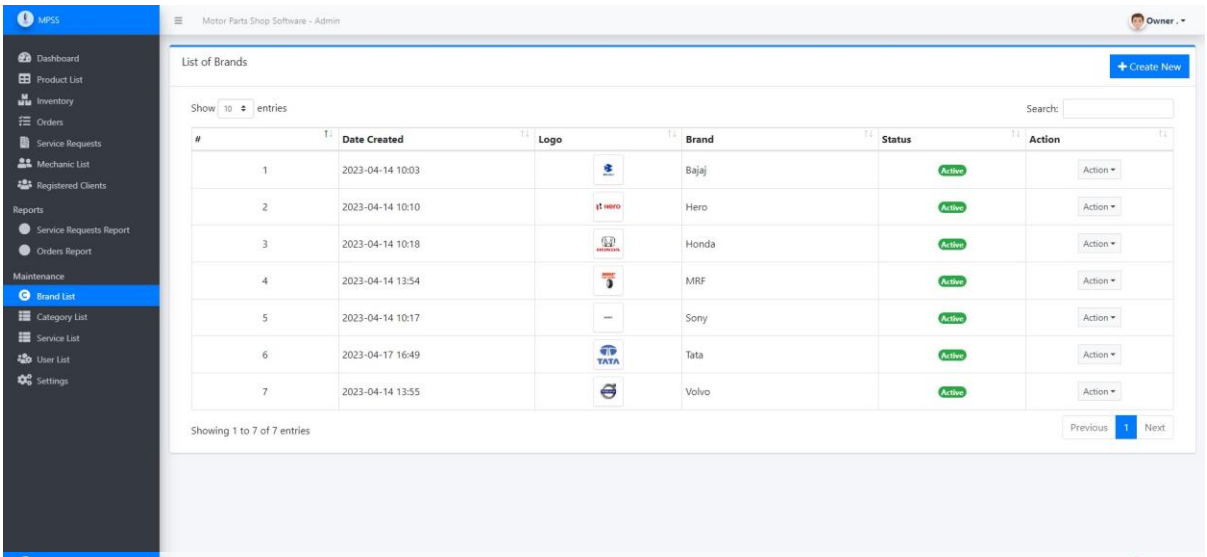

Sequence Diagram
Admin
Login Success
Purchase Management
Sale Management
Statics Management
Bill Management
Invoice Management
Add/Edit Purchase
Add/Edit Sale
Add/Edit Report
Add/Edit Bill
Add/Edit Invoice
Save/Update Sale
Save/Update Statics
Save/Update Bill
Save/Update Invoice
List / Delete Statics
List / Delete Bill
List / Delete Invoice
Login to Page
Manage Purchase
Manage Sale Details
Manage Statics/ Report Details
Manage Bill Details
Manage Invoice Details
List/ Delete Purchase

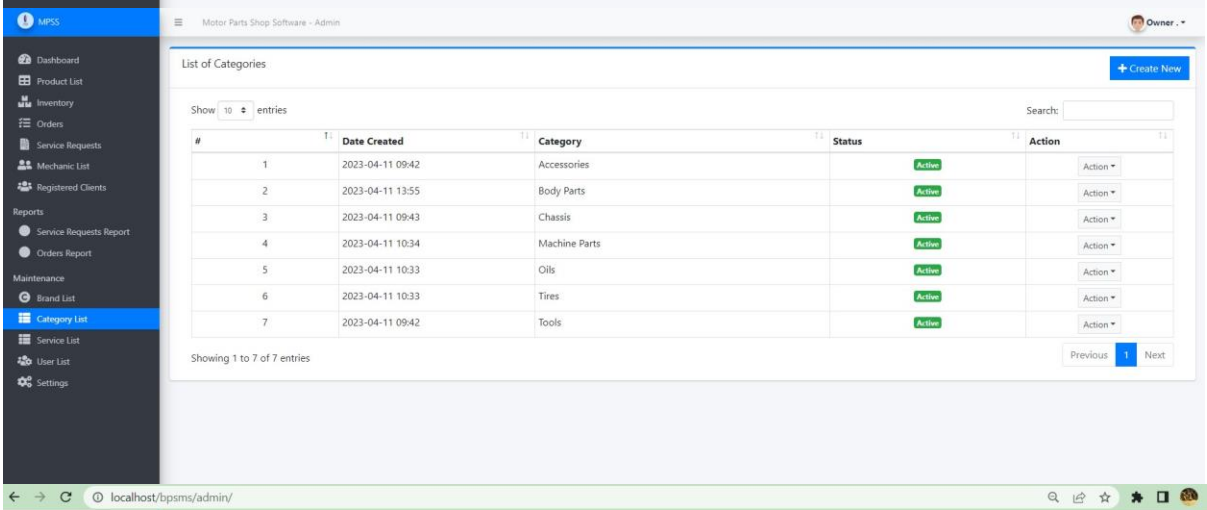
COLLABORATION DIAGRAM

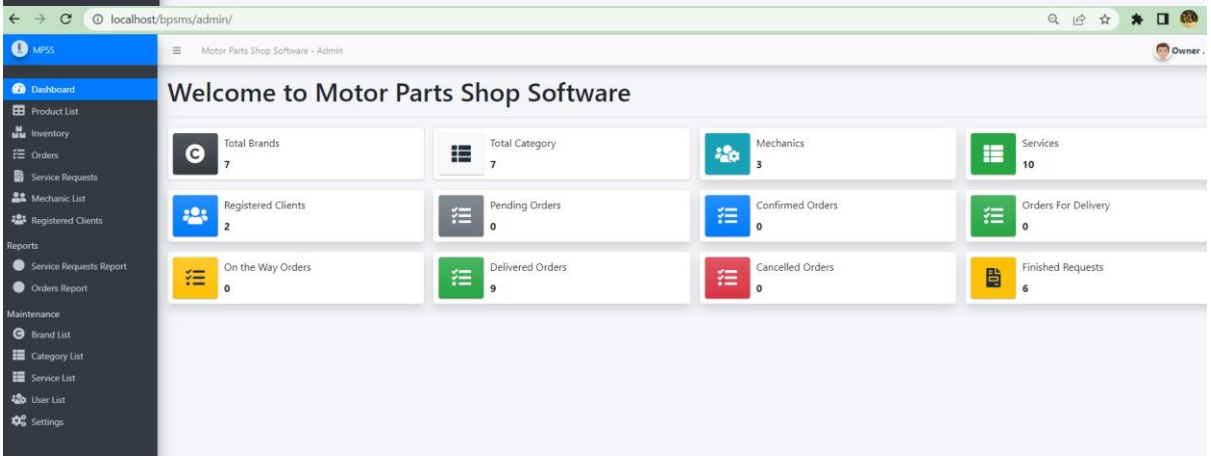


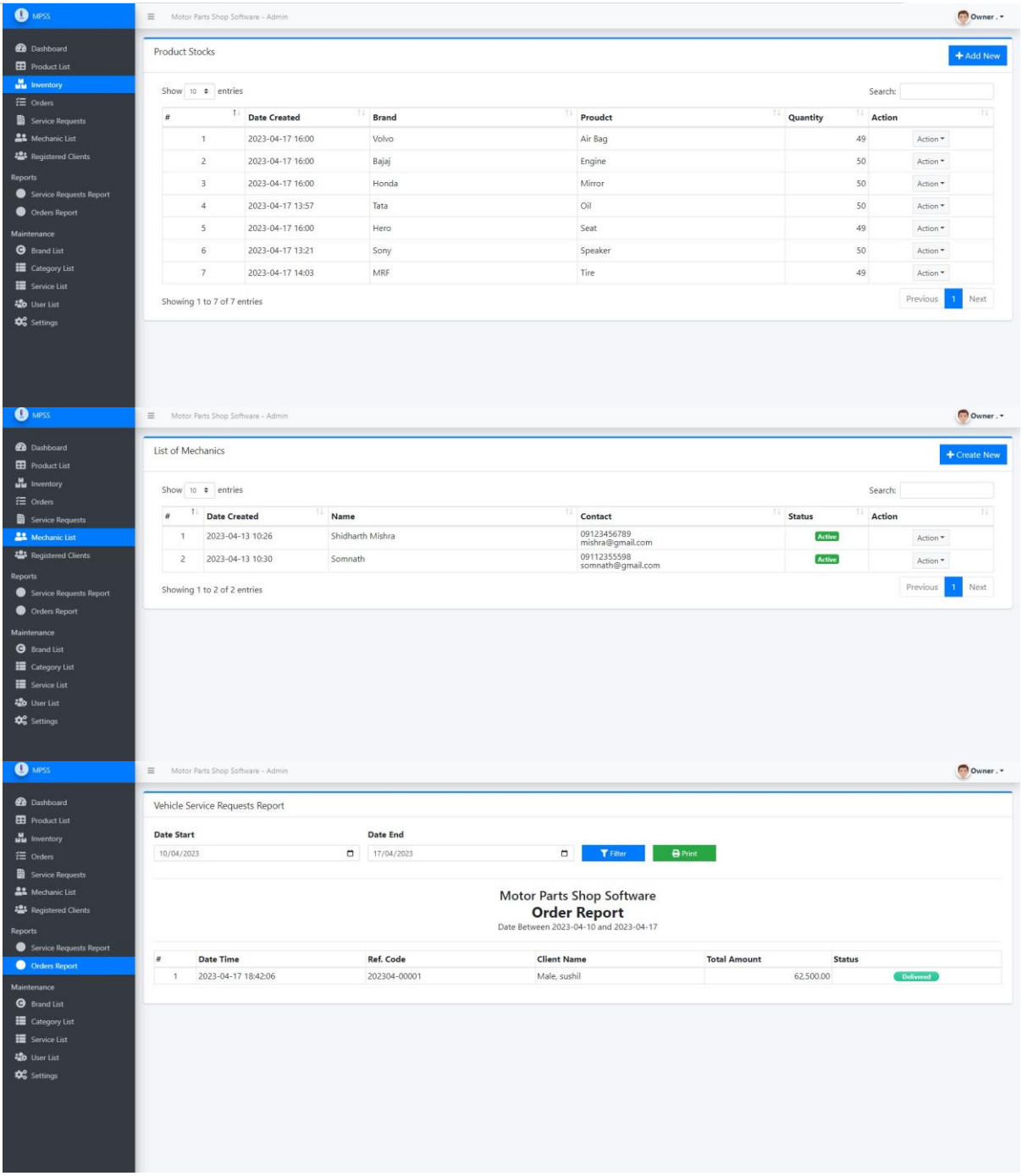
8. User Interface

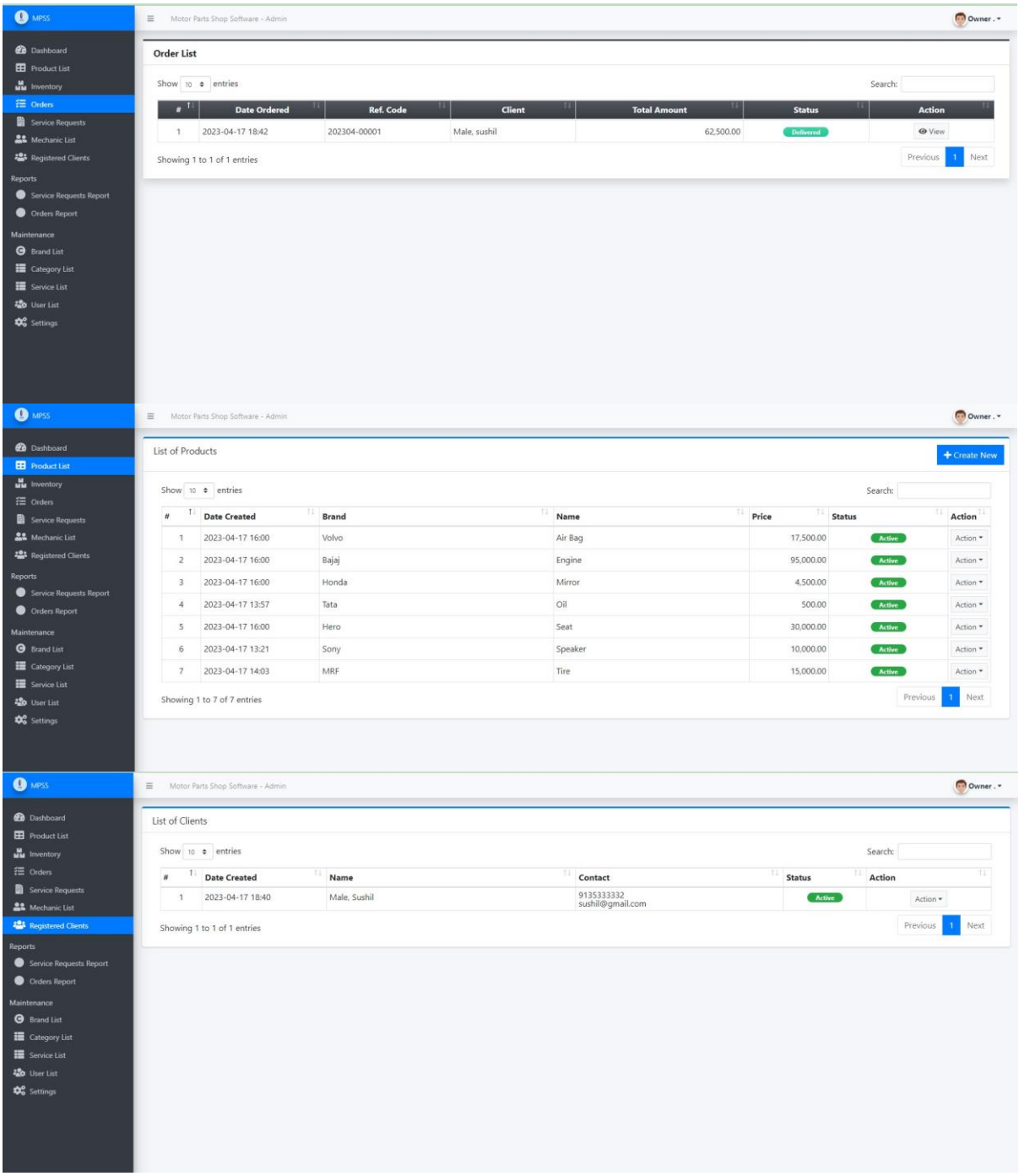
8.1 Owner

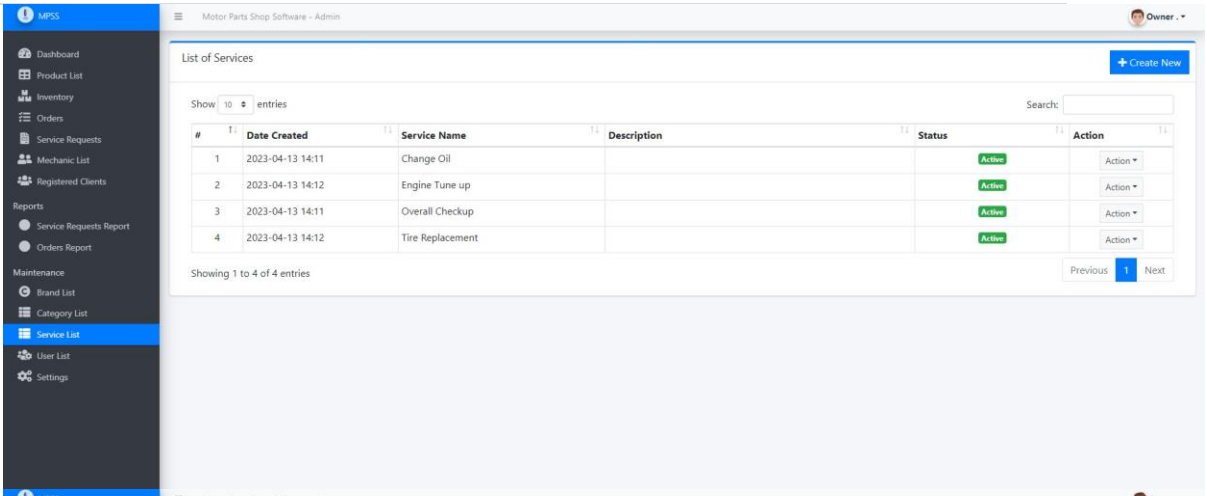


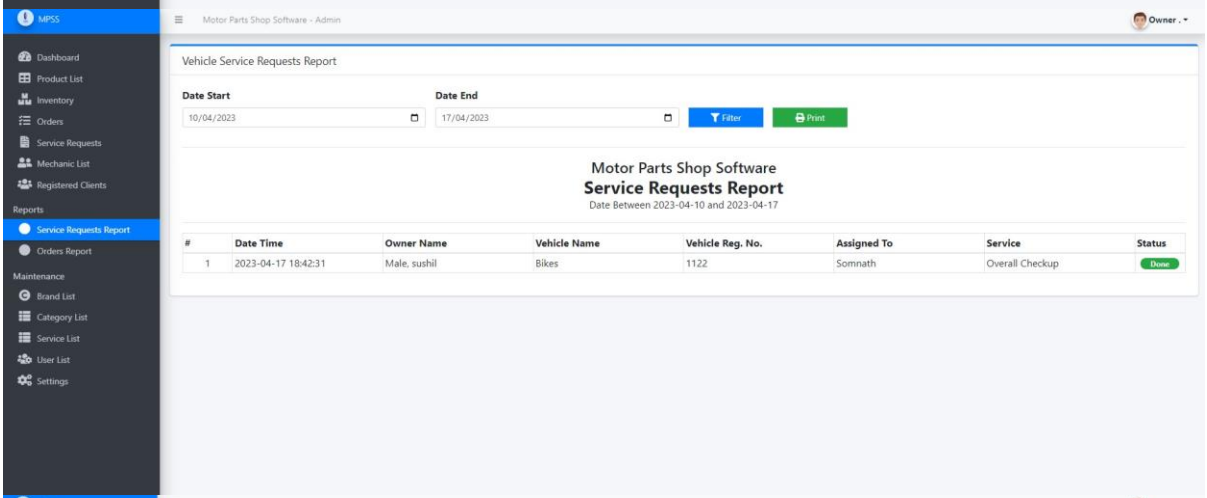


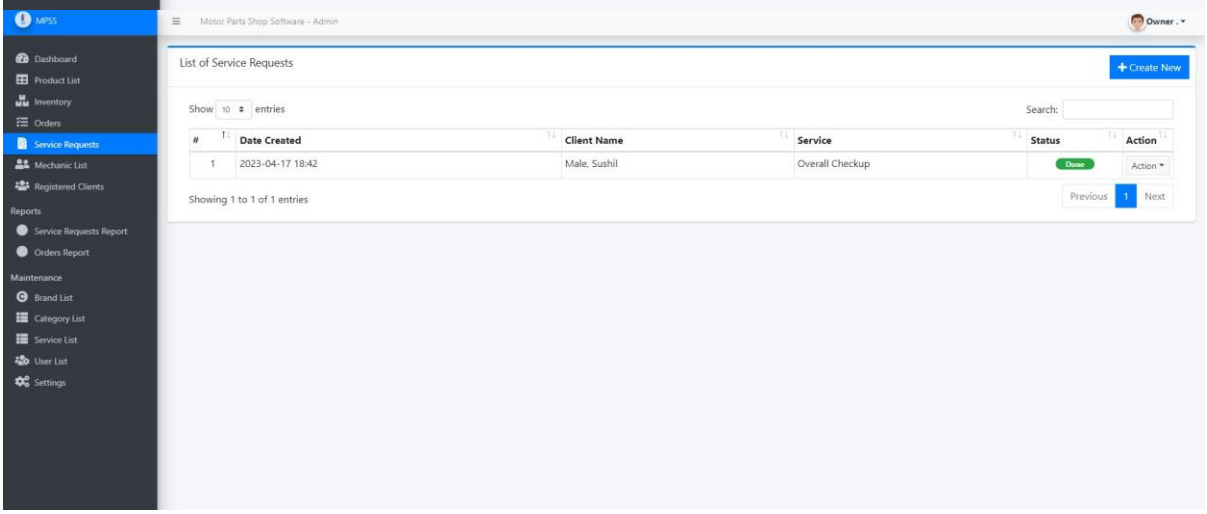


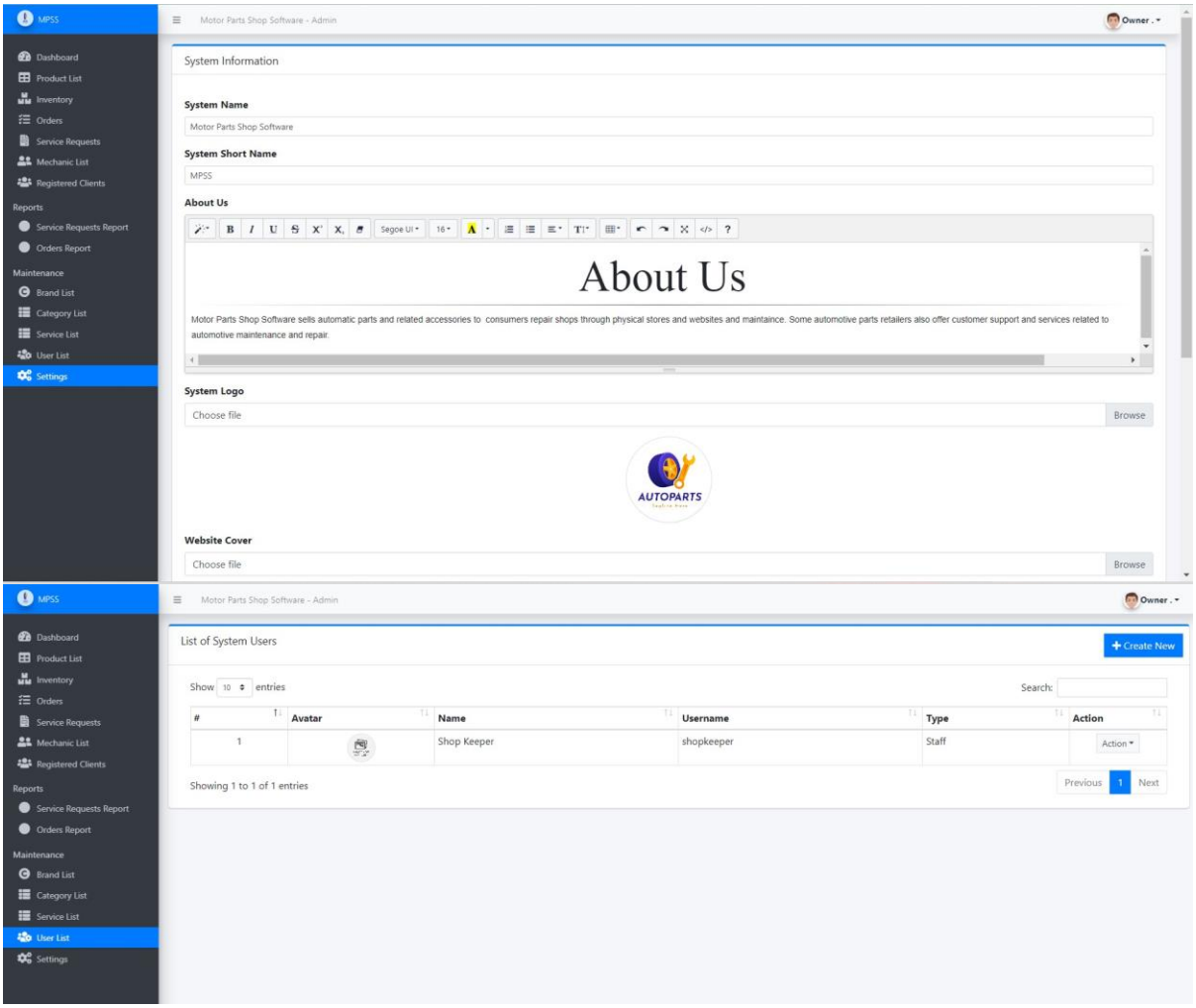

MPSS
Motor Parts Shop Software - Admin
Owner
Dashboard
Product List
Inventory
Orders
Service Requests
Mechanic List
Registered Clients
Reports
Service Requests Report
Orders Report
Maintenance
Brand List
Category List
Service List
User List
Settings
Product Stocks
+ Add New
Show 10 entries
Search:
Date Created Brand Proudct Quantity Action
1 2023-04-17 16:00 Volvo Air Bag 49 Action
2 2023-04-17 16:00 Bajaj Engine 50 Action
3 2023-04-17 16:00 Honda Mirror 50 Action
4 2023-04-17 13:57 Tata Oil 50 Action
5 2023-04-17 16:00 Hero Seat 49 Action
6 2023-04-17 13:21 Sony Speaker 50 Action
7 2023-04-17 14:03 MRF Tire 49 Action
Showing 1 to 7 of 7 entries
Previous 1 Next
List of Mechanics
+ Create New
# Date Created Name Contact Status Action
1 2023-04-13 10:26 Shidharth Mishra 09123456789 mishra@gmail.com Active Action
2 2023-04-13 10:30 Somnath 09112355598 somnath@gmail.com Active Action
Showing 1 to 2 of 2 entries
Previous 1 Next
Vehicle Service Requests Report
Date Start
10/04/2023
Date End
17/04/2023
Filter
Print
Motor Parts Shop Software
Order Report
Date Between 2023-04-10 and 2023-04-17
Date Time Ref. Code Client Name Total Amount Status
1 2023-04-17 18:42:06 202304-00001 Male, sushil 62,500.00 Delivered


MPSS
Motor Parts Shop Software - Admin
Owner
Dashboard
Product List
Inventory
Orders
Service Requests
Mechanic List
Registered Clients
Reports
Service Requests Report
Orders Report
Maintenance
Brand List
Category List
Service List
User List
Settings
Order List
Show 10 entries
Search:
Date Ordered Ref. Code Client Total Amount Status Action
1 2023-04-17 18:42 202304-00001 Male, sushil 62,500.00 Delivered View
Showing 1 to 1 of 1 entries
Previous 1 Next
List of Products
Create New
Show 10 entries
Search:
Date Created Brand Name Price Status Action
1 2023-04-17 16:00 Volvo Air Bag 17,500.00 Active Action
2 2023-04-17 16:00 Bajaj Engine 95,000.00 Active Action
3 2023-04-17 16:00 Honda Mirror 4,500.00 Active Action
4 2023-04-17 13:57 Tata Oil 500.00 Active Action
5 2023-04-17 16:00 Hero Seat 30,000.00 Active Action
6 2023-04-17 13:21 Sony Speaker 10,000.00 Active Action
7 2023-04-17 14:03 MRF Tire 15,000.00 Active Action
Showing 1 to 7 of 7 entries
Previous 1 Next
List of Clients
Show 10 entries
Search:
Date Created Name Contact Status Action
1 2023-04-17 18:40 Male, Sushil 9135333332 sushil@gmail.com Active Action
Showing 1 to 1 of 1 entries
Previous 1 Next

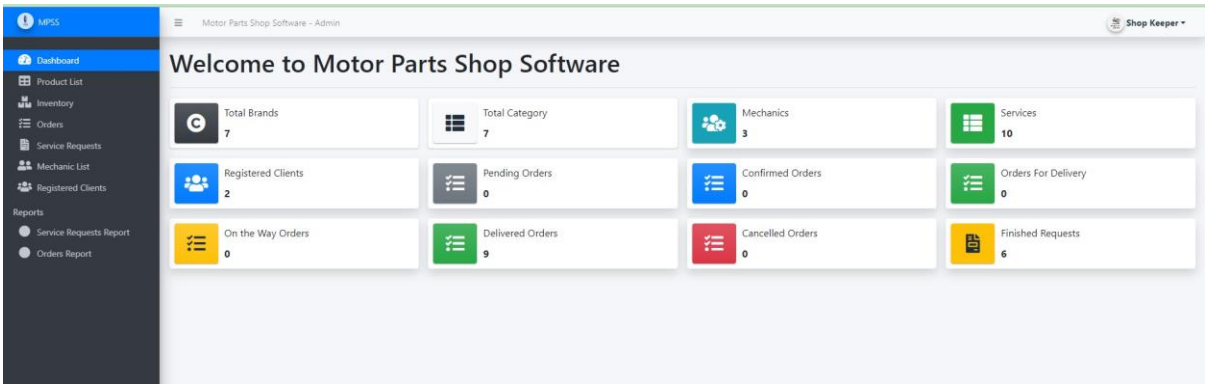

MPSS
Motor Parts Shop Software - Admin
Owner
Dashboard
Product List
Inventory
Orders
Service Requests
Mechanic List
Registered Clients
Reports
Service Requests Report
Orders Report
Maintenance
Brand List
Category List
Service List
User List
Settings
List of Services
Create New
Show 10 entries
Search:
Date Created Service Name Description Status Action
1 2023-04-13 14:11 Change Oil Active Action
2 2023-04-13 14:12 Engine Tune up Active Action
3 2023-04-13 14:11 Overall Checkup Active Action
4 2023-04-13 14:12 Tire Replacement Active Action
Showing 1 to 4 of 4 entries
Previous 1 Next

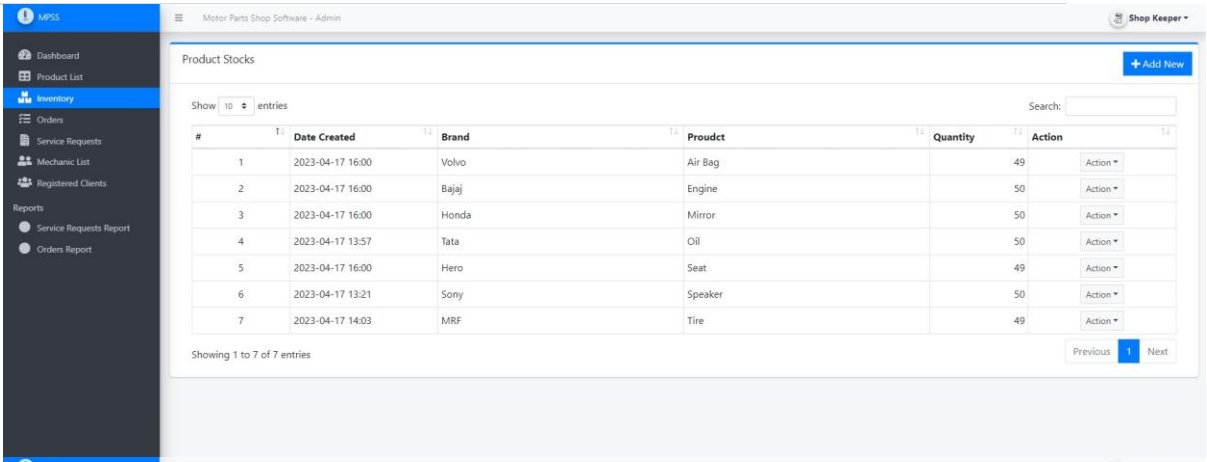

MPSS
Motor Parts Shop Software - Admin
Owner
Dashboard
Product List
Inventory
Orders
Service Requests
Mechanic List
Registered Clients
Reports
Service Requests Report
Orders Report
Maintenance
Brand List
Category List
Service List
User List
Settings
Vehicle Service Requests Report
Date Start
10/04/2023
Date End
17/04/2023
Filter
Print
Motor Parts Shop Software
Service Requests Report
Date Between 2023-04-10 and 2023-04-17
Date Time Owner Name Vehicle Name Vehicle Reg. No. Assigned To Service Status
1 2023-04-17 18:42:31 Male, sushil Bikes 1122 Somnath Overall Checkup Done

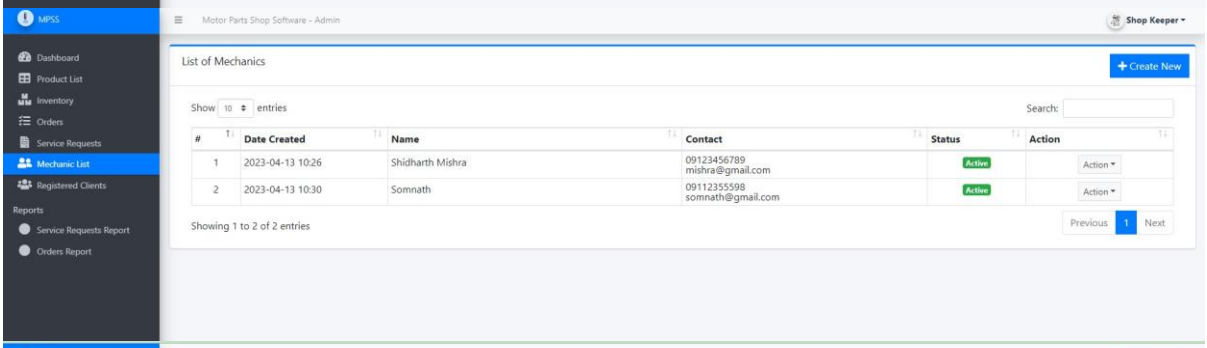

MPSS
Motor Parts Shop Software - Admin
Owner
Dashboard
Product List
Inventory
Orders
Service Requests
Mechanic List
Registered Clients
Reports
Service Requests Report
Orders Report
Maintenance
Brand List
Category List
Service List
User List
Settings
List of Service Requests
Create New
Show 10 entries
Search:
Date Created Client Name Service Status Action
1 2023-04-17 18:42 Male, Sushil Overall Checkup Done Action
Showing 1 to 1 of 1 entries
Previous 1 Next

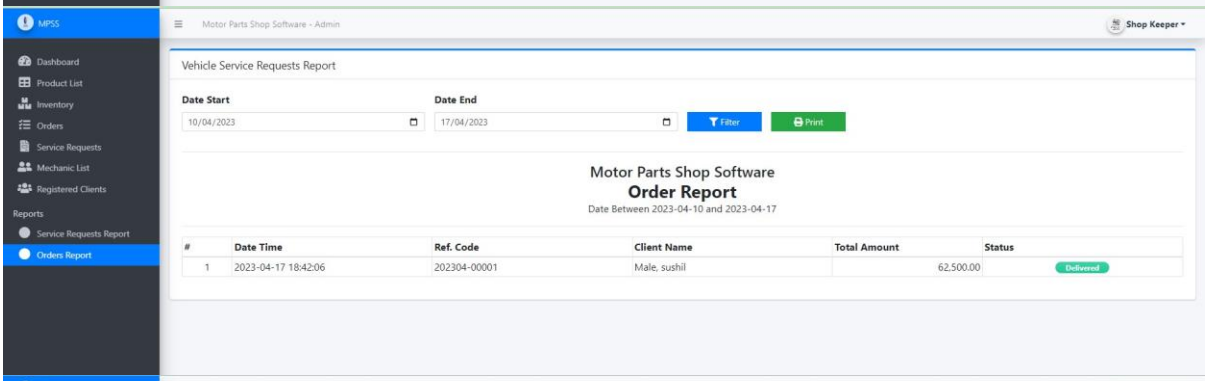


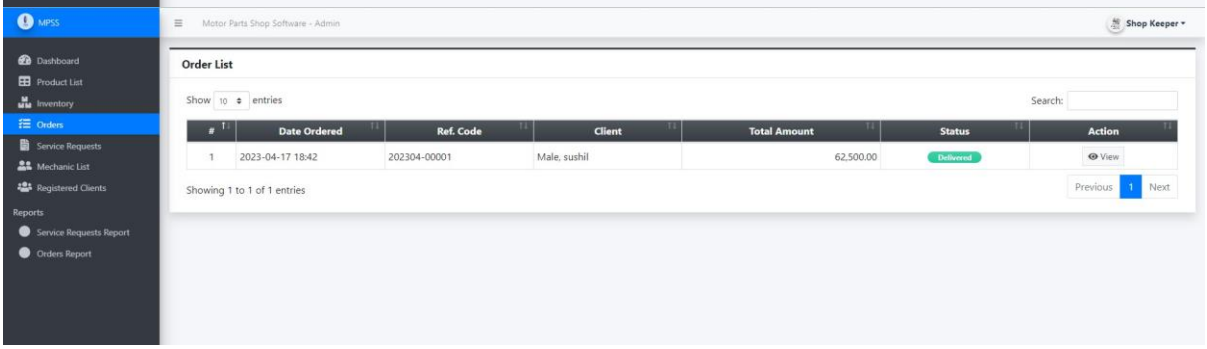
8.2 Shop Keeper

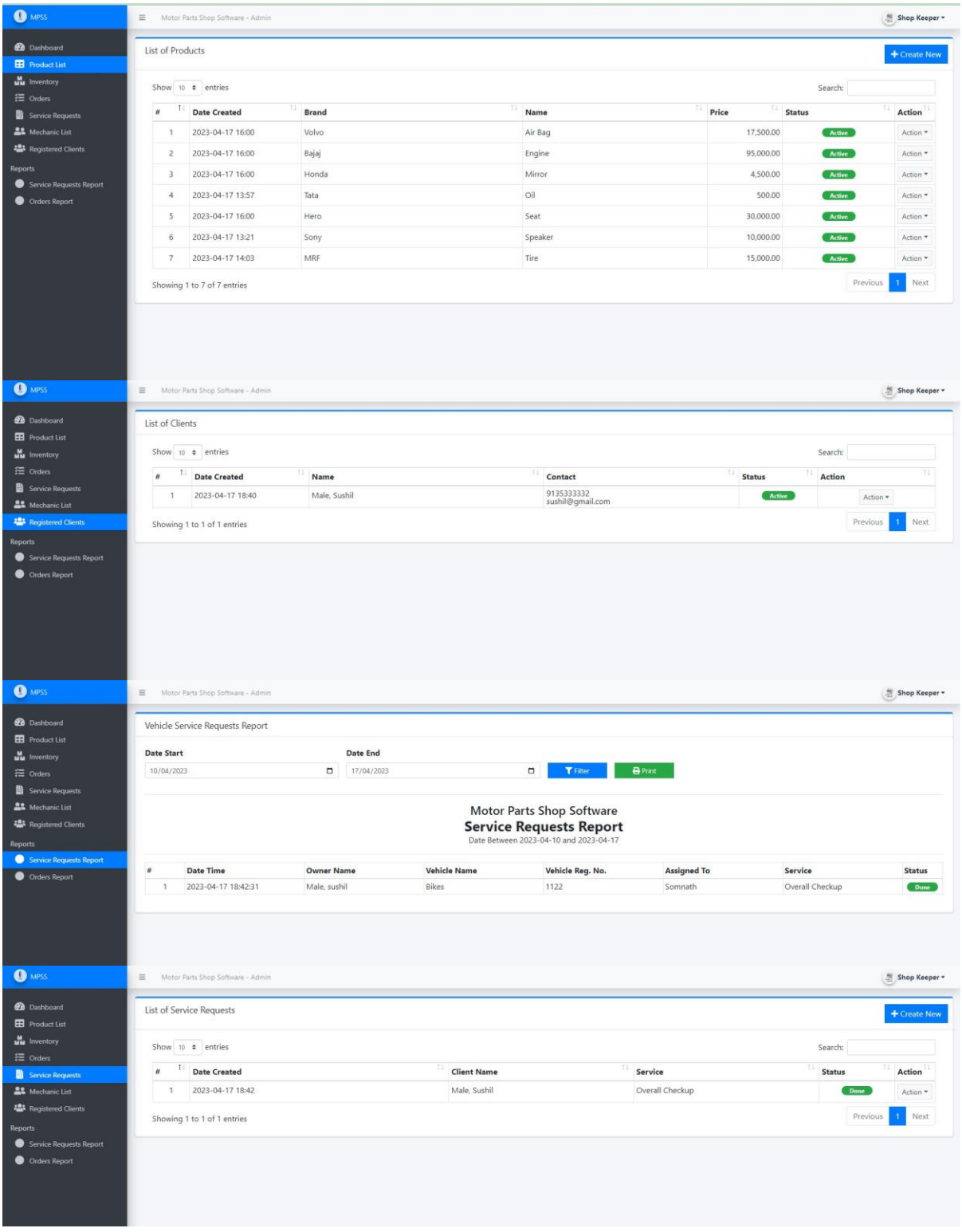



MPSS
Motor Parts Shop Software - Admin
Shop Keeper
Dashboard
Product List
Inventory
Orders
Service Requests
Mechanic List
Registered Clients
Reports
Service Requests Report
Orders Report
Product Stocks
+ Add New
Show 10 entries
Search:
Date Created Brand Proudct Quantity Action
1 2023-04-17 16:00 Volvo Air Bag 49 Action
2 2023-04-17 16:00 Bajaj Engine 50 Action
3 2023-04-17 16:00 Honda Mirror 50 Action
4 2023-04-17 13:57 Tata Oil 50 Action
5 2023-04-17 16:00 Hero Seat 49 Action
6 2023-04-17 13:21 Sony Speaker 50 Action
7 2023-04-17 14:03 MRF Tire 49 Action
Showing 1 to 7 of 7 entries
Previous 1 Next

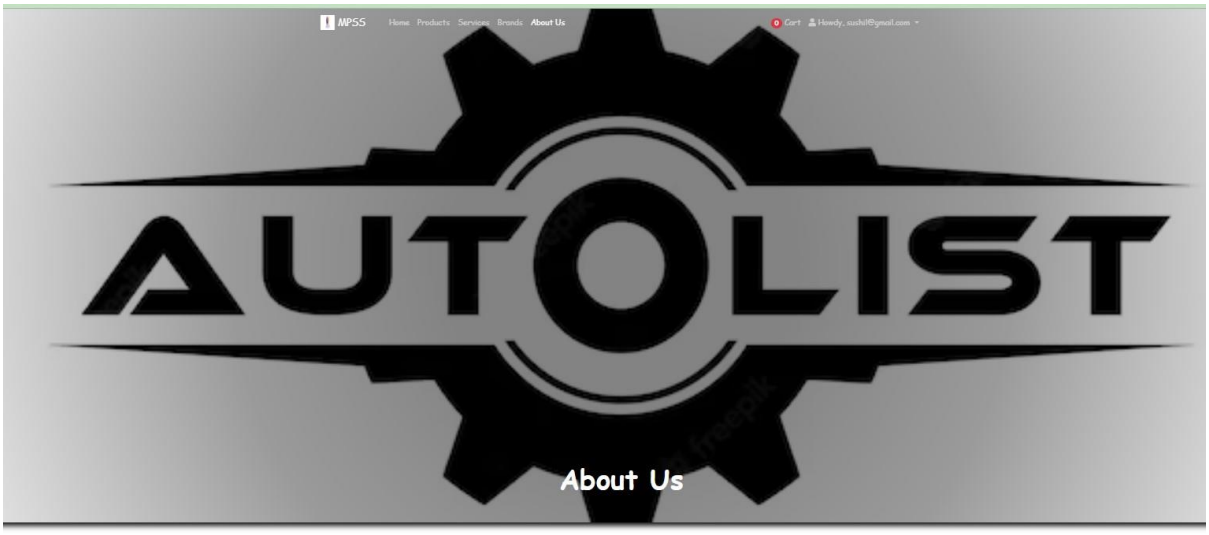

MPSS
Motor Parts Shop Software - Admin
Shop Keeper
Dashboard
Product List
Inventory
Orders
Service Requests
Mechanic List
Registered Clients
Reports
Service Requests Report
Orders Report
List of Mechanics
+ Create New
Show 10 entries
Search:
Date Created Name Contact Status Action
1 2023-04-13 10:26 Shidharth Mishra 09123456789 mishra@gmail.com Active Action
2 2023-04-13 10:30 Somnath 09112355598 somnath@gmail.com Active Action
Showing 1 to 2 of 2 entries
Previous 1 Next


MPSS
Motor Parts Shop Software - Admin
Shop Keeper
Dashboard
Product List
Inventory
Orders
Service Requests
Mechanic List
Registered Clients
Reports
Service Requests Report
Orders Report
Vehicle Service Requests Report
Date Start
10/04/2023
Date End
17/04/2023
Filter
Print
Motor Parts Shop Software
Order Report
Date Between 2023-04-10 and 2023-04-17
Date Time Ref. Code Client Name Total Amount Status
1 2023-04-17 18:42:06 202304-00001 Male, sushil 62,500.00 Delivered

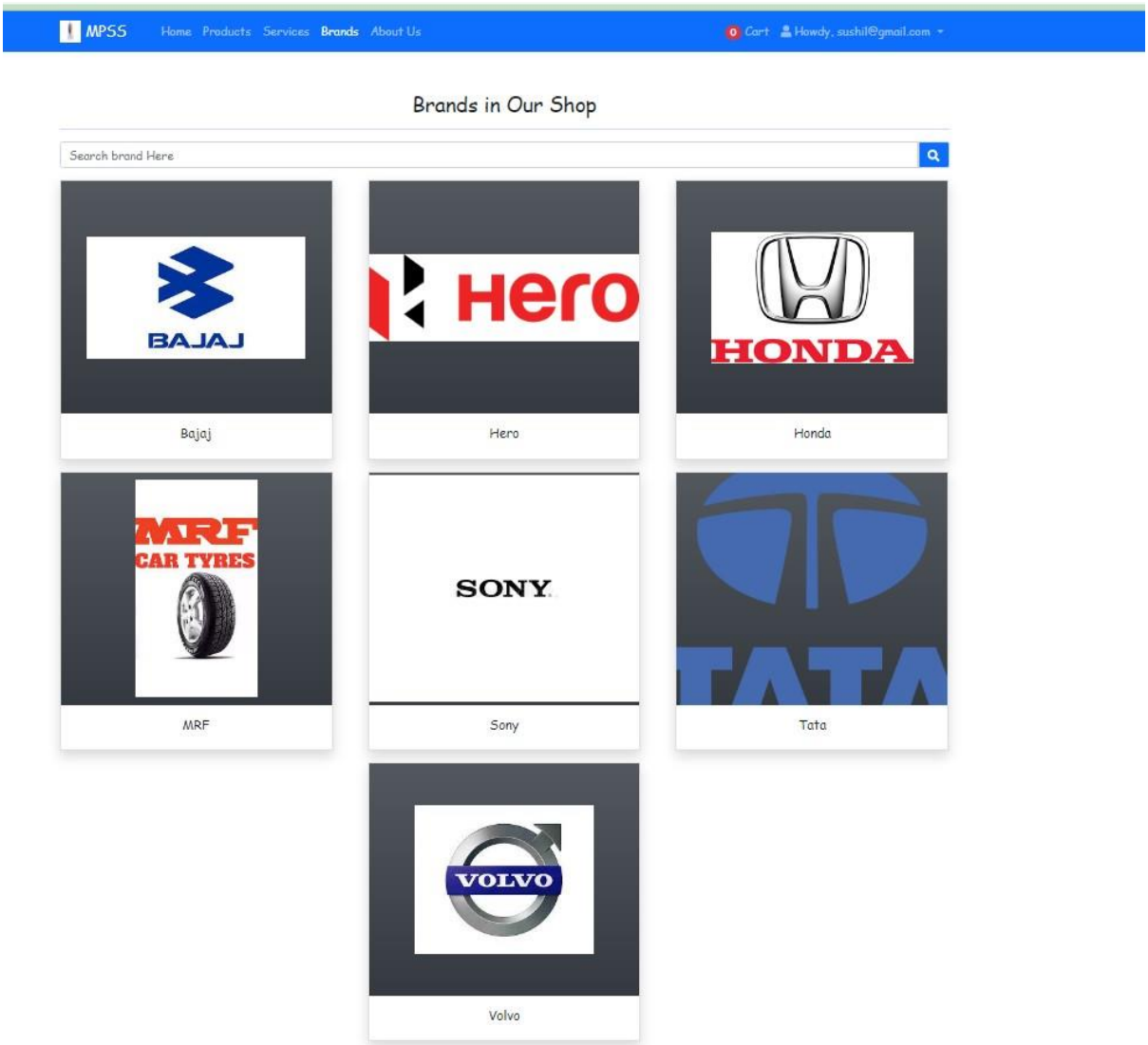

MPSS
Motor Parts Shop Software - Admin
Shop Keeper
Dashboard
Product List
Inventory
Orders
Service Requests
Mechanic List
Registered Clients
Reports
Service Requests Report
Orders Report
Order List
Show 10 entries
Search:
Date Ordered Ref. Code Client Total Amount Status Action
1 2023-04-17 18:42 202304-00001 Male, sushil 62,500.00 Delivered View
Showing 1 to 1 of 1 entries
Previous 1 Next


MPSS
Motor Parts Shop Software - Admin
Shop Keeper
Dashboard
Product List
Inventory
Orders
Service Requests
Mechanic List
Registered Clients
Reports
Service Requests Report
Orders Report
List of Products
Create New
Show 10 entries
Search:
Date Created Brand Name Price Status Action
1 2023-04-17 16:00 Volvo Air Bag 17,500.00 Active Action
2 2023-04-17 16:00 Bajaj Engine 95,000.00 Active Action
3 2023-04-17 16:00 Honda Mirror 4,500.00 Active Action
4 2023-04-17 13:57 Tata Oil 500.00 Active Action
5 2023-04-17 16:00 Hero Seat 30,000.00 Active Action
6 2023-04-17 13:21 Sony Speaker 10,000.00 Active Action
7 2023-04-17 14:03 MRF Tire 15,000.00 Active Action
Showing 1 to 7 of 7 entries
Previous 1 Next
List of Clients
Date Created Name Contact Status Action
1 2023-04-17 18:40 Male, Sushil 9135333332 sushil@gmail.com Active Action
Showing 1 to 1 of 1 entries
Vehicle Service Requests Report
Date Start
10/04/2023
Date End
17/04/2023
Filter
Print
Motor Parts Shop Software
Service Requests Report
Date Between 2023-04-10 and 2023-04-17
Date Time Owner Name Vehicle Name Vehicle Reg. No. Assigned To Service Status
1 2023-04-17 18:42:31 Male, sushil Bikes 1122 Somnath Overall Checkup Done
List of Service Requests
Date Created Client Name Service Status Action
1 2023-04-17 18:42 Male, Sushil Overall Checkup Done Action
Showing 1 to 1 of 1 entries

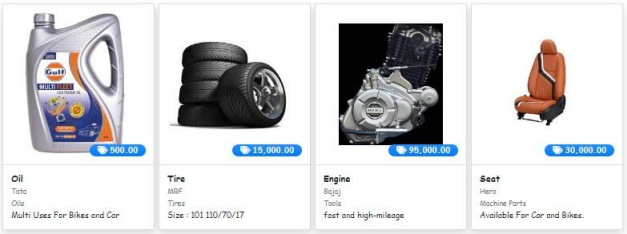
8.3 Customer

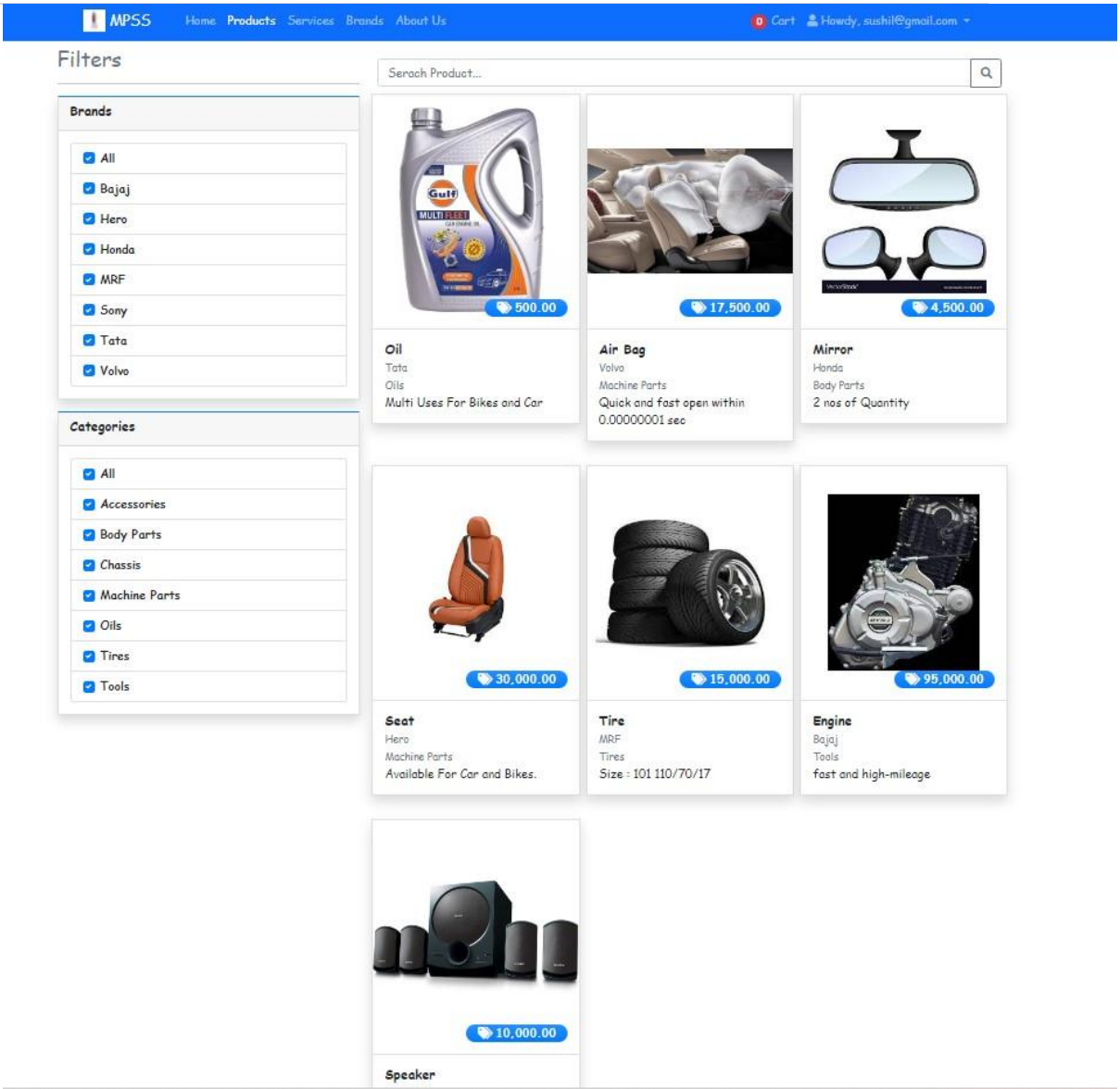

MPSS
Home
Products
Services
Brands
About Us
Cart
AUTOLIST
About Us


About Us
Motor Parts Shop Software sells automatic parts and related accessories to consumers repair shops through physical stores and websites and maintaince. Some automotive parts retailers also offer customer support and services related to automotive maintenance and repair.


MPSS
Home
Products
Services
Brands
About Us
Cart
Howdy, sushil@gmail.com
Brands in Our Shop
Search brand Here
Bajaj
Hero
Honda
MRF
Sony
Tata
Volvo


MPSS
Home
Products
Services
Brands
About Us
Cart
Howdy, sushil@gmail.com
AUTOLIST
Motor Parts Shop Software
Shop Now


500.00
15,000.00
95,000.00
30,000.00
Oil
Tata
Oils
Multi Uses For Bikes and Car
Tire
MRF
Tires
Size : 101 110/70/17
Engine
Bajaj
Tools
fast and high-mileage
Seat
Hero
Machine Parts
Available For Car and Bikes.


MPSS
Home
Products
Services
Brands
About Us
0 Cart
Howdy, sushil@gmail.com
Filters
Serach Product...
Brands
All
Bajaj
Hero
Honda
MRF
Sony
Tata
Volvo
Categories
All
Accessories
Body Parts
Chassis
Machine Parts
Oils
Tires
Tools
500.00
Oil
Tata
Oils
Multi Uses For Bikes and Car
17,500.00
Air Bag
Volvo
Machine Parts
Quick and fast open within 0.00000001 sec
4,500.00
Mirror
Honda
Body Parts
2 nos of Quantity
30,000.00
Seat
Hero
Machine Parts
Available For Car and Bikes.
15,000.00
Tire
MRF
Tires
Size : 101 110/70/17
95,000.00
Engine
Bajaj
Tools
fast and high-mileage
10,000.00
Speaker


MPSS
Home
Products
Services
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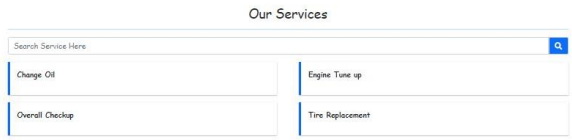
About Us
Cart
Howdy, sushil@gmail.com
AUTOLIST
Motor Parts Shop Software
We will take care of your vehicle
Send Service Request


Our Services
Search Service Here
Change Oil
Engine Tune up
Overall Checkup
Tire Replacement

10. Testing

Testing strategy: Unit testing

FUNCTION-ALITY	INPUT	EXPECTED OUTPUT	ACTUAL OUTPUT	STATUS
Login	ID, password	Login if details correct	User authenticated	Pass
Add parts	Vendor, size amount, price,	Add corresponding part	Corresponding part added.	Pass
Sell parts	Selected products	Purchase selected products	Selected products purchased with correct total price	Pass
Calculate revenue	Details of all orders	Correct revenue	Correctly calculated revenue generated	Pass
Generate items to order	Threshold, items left	Items to be ordered	Items with quantity falling below threshold generated	Pass