

# IT 2080 – IT Project

## Activity 1



**Group Number - ITP25\_B04\_01\_74**

**Topic – Vehicle Service Center Management System**

**Team Members**

IT Number	Student Name	Student Email Address	Contact Number
IT23668836	W. Mihiranga Kokila Welgama	it23668836@my.sliit.lk	0703678823
IT23584068	S.M.M.T.S. Mayadunna	it23584068@my.sliit.lk	0775529064
IT23775442	T.G.C. Theekshana	it23775442@my.sliit.lk	0716984376
IT23594340	Shashanka A.S	it23594340@my.sliit.lk	0775148612
IT23717190	Salitha A.H.S	it23717190@my.sliit.lk	0717670882

## Table of Contents

<b>01. Problem Statement .....</b>	<b>3</b>
<b>02. Benefits that users will get from the System .....</b>	<b>4</b>
1. Customer .....	4
2. Service Adviser .....	4
3. Technician .....	4
4. Inventory Manager .....	5
5. Manager.....	5
<b>03. Mind Map.....</b>	<b>6</b>
<b>04. Features and user Requirements .....</b>	<b>7</b>
1. Customer Requirements .....	7
2. Service Adviser Requirements.....	7
3. Technician Requirements.....	8
4. Inventory Manager Requirements .....	8
5. Manager Requirements .....	9
<b>05. Name of the Project .....</b>	<b>9</b>

# Vehicle Service Center Management System

## 01. Problem Statement

Numerous auto service centers continue to rely on paper or simple tools for handling appointments, repairs, and inventory. This leads to issues such as lost reservations, delayed updates, and misunderstandings between clients and employees. Customers frequently lack awareness of their vehicle's status, or the payment amount required. Employees might lack precise details regarding components or the status of tasks. These problems save time and diminish customer satisfaction. With an increasing number of individuals using vehicles, service centers require improved systems to manage operations efficiently.

We propose developing an Automotive Service Management System (ASMS) — an intelligent web platform to oversee all service tasks centrally. Clients can schedule appointments, view updates, and confirm quotes online. Technicians can view job specifics and modify work advancement. Service advisors and inventory managers will receive notifications and resources to enhance their work efficiency. Supervisors can access reports and enhance their decision-making. This system will save time, minimize errors, and provide customers with significantly improved experience.

## **02. Benefits that users will get from the System**

### **1. Customer**

- Book and manage appointments online.
- Get real-time job status updates and reminders.
- Track vehicle service progress.
- Make secure online or offline payments.
- View and approve quotes before service.
- Receive annual/vehicle inspection reports digitally.

### **2. Service Adviser**

- Create and manage service orders.
- Generate and send quotes to customers.
- Assign jobs to available technicians.
- Send regular service updates to customers.

### **3. Technician**

- Link parts used with billing.
- Receive digital service requests.
- Update job stages and usage of inventory.
- Upload service updates and inspection reports.

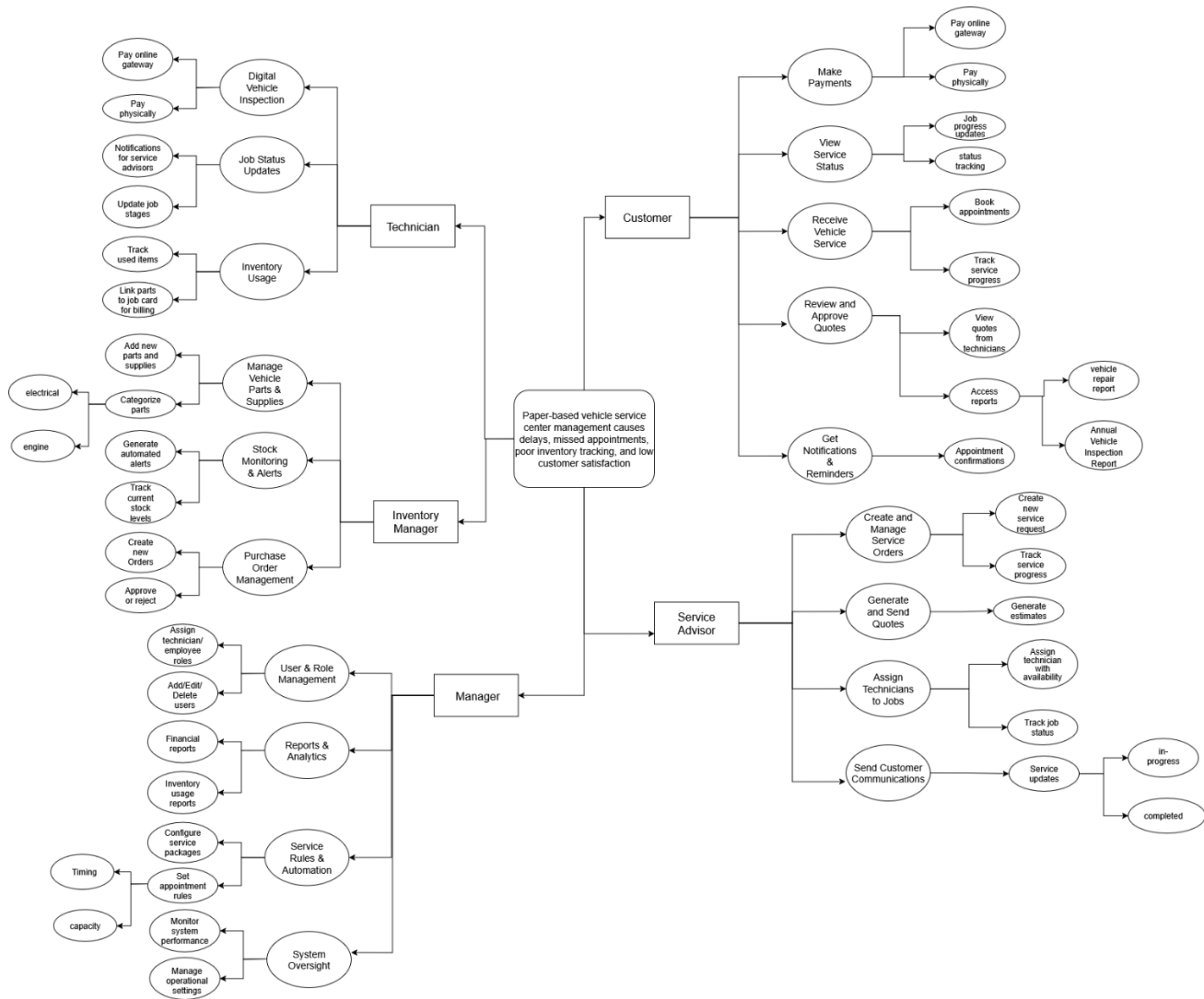
#### **4. Inventory Manager**

- Manage vehicle parts and supplies (add/edit/categorize).
- Track usage and generate alerts when stock is low.
- Manage purchase orders and approve/reject requests.
- Monitor inventory flow and supplier performance.

#### **5. Manager**

- View reports on financials, inventory, and employee performance.
- Set service rules, pricing packages, and configure system automation.
- Monitor capacity, technician assignment, and overall system performance.

### 03. Mind Map



## 04. Features and user Requirements

### 1. Customer Requirements

Feature	User Requirement
Make Payments	Customers can pay online or physically.
View Service Status	Customers can track job updates and stages.
Book Appointments	Customers can reserve service slots online.
Review and Approve Quotes	Customers can approve or reject technician estimates.
Receive Reports	Customers can view service and inspection reports.
Get Notifications	Customers will receive reminders and confirmations.

### 2. Service Adviser Requirements

Feature	User Requirement
Manage Service Orders	Create and update service records.
Generate Quotes	Prepare cost estimates for customers.
Assign Technicians	Allocate jobs based on availability.
Customer Communication	Send reminders, updates, and quotes.
Track Job Status	Monitor job progress (in-progress, completed)

### 3. Technician Requirements

Feature	User Requirement
Digital Vehicle Inspection	Technicians perform digital checkups and record issues.
Job Status Updates	Technicians can update the progress of each task.
Inventory Usage	Technicians can record parts used and link them to jobs.
Billing Integration	Parts used are automatically added to the invoice.

### 4. Inventory Manager Requirements

Features	User Requirements
Manage Parts & Supplies	Add, categorize, and update parts.
Stock Monitoring	Receive alerts when parts run low.
Purchase Order Management	Create orders and approve/reject requests.
Track Usage	Monitor stock levels and consumption trends.



## 5. Manager Requirements

Features	User Requirements
User & Role Management	Add/edit staff roles and responsibilities.
Reports & Analytics	View operational, financial, and inventory reports.
Service Rules & Packages	Set pricing, rules, and appointment criteria.
System Oversight	Monitor technician assignment and system usage.

## 05. Name of the Project

- “Auto Elite “– Vehicle Service Center Management System