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AN ISO 9001:2015, 14001:2015, 21001:2018, 45001:2018 CERTIFIED TRAINING INSTITUTION

NETTUR TECHNICAL EDUCATION CENTER

SYNOPSIS

ON

VEHICLE SERVICING SYSTEM

PROJECT DONE BY

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DIPLOMA IN COMPUTER ENGINEERING AND IT INFRASTRUCTURE

NTTF AT R D TATA TECHNICAL EDUCATION CENTRE

GOLMURI, AGRICO POST, JAMSHEDPUR

2022 – 2025



AN ISO 9001:2015, 14001:2015, 21001:2018, 45001:2018 CERTIFIED TRAINING INSTITUTION

NETTUR TECHNICAL TRAINING FOUNDATION

CERTIFICATE

This is to certify that the project titled

VEHICLE SERVICING SYSTEM

Is a bona fide record of the project work done by

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In partial fulfilment of the requirement for the award of Diploma in Computer Engineering and IT Infrastructure under the institution Nettur Technical Training Foundation, Jamshedpur Training Centre, during the Academic year 2022 – 2025.

PROJECT GUIDE

EXTERNAL EXAMINER

PRINCIPAL

ACKNOWLEDGEMENT

We hereby declare that we the members of the team “TECH OF TURTLE”, would like to accomplish our Web based project under the guidance of Mr. Mrinmoy Kumar Mahato. We are very thankful to Bibek Sir, Smruti Mam & Shilpa Mam all the Supporting Staff Members who helped and motivated us whenever required. We are very grateful to our Principal Madam, Mrs. Preeta John for giving us this golden chance to explore ourselves. Last but not the least, we would like to thank our Classmates who were ready to help us whenever required.

THANK YOU.

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INTRODUCTION

A Vehicle Service System is a comprehensive framework or software solution designed to manage and streamline the maintenance, repair, and management of vehicles. It serves as a tool for vehicle owners, fleet managers, or auto service centers to ensure vehicles are properly serviced, maintained, and repaired in a timely and efficient manner. The primary purpose of a vehicle service system is to track the performance and condition of vehicles, schedule maintenance, manage repairs, and ensure the overall safety, reliability, and longevity of the vehicles.

Feasibility Study

- ✓ Market Feasibility
- ✓ Technical Feasibility
- ✓ Operational Feasibility
- ✓ Financial Feasibility
- ✓ Schedule Feasibility

OBJECTIVE

The primary objective of a ***Vehicle Servicing System*** is to streamline the process of scheduling, managing, and tracking appointments efficiently and effectively through an online platform. This system aims to benefit both service providers and clients by offering automation, convenience, and flexibility in appointment management.

Here are some key objectives:

- ✓ Simplifying Appointment Scheduling
- ✓ Enhancing Customer Convenience
- ✓ Improving Time Management and Resource Utilization
- ✓ Providing Real-Time Availability and Flexibility

TARGET AUDIENCE

- ✓ **Vehicle Owners:** Individual seeking reliable and convenient vehicle servicing and maintenance.
- ✓ **Independence Service Centers:** Small to medium-sized garages offering general vehicle repair and maintenance.
- ✓ **Authorized Dealerships and Workshops:** Service centers of automotive brands offering specialized services and repairs.
- ✓ **Technicians:** Personnel responsible responsible for carrying out maintenance and repair, who will use the system to receive service assignments and track job status.

ADVANTAGES

A vehicle service system, which typically involves the maintenance, repair, and management of vehicle, offers several advantages.

- Improved Vehicle Performance
- Increased Vehicle Lifespan
- Reduce Risk of Breakdown
- Enhanced Safety
- Cost Saving
- Better Fuel Efficiency
- Higher Resale Value
- Better Driving Experience

DIS-ADVANTAGES

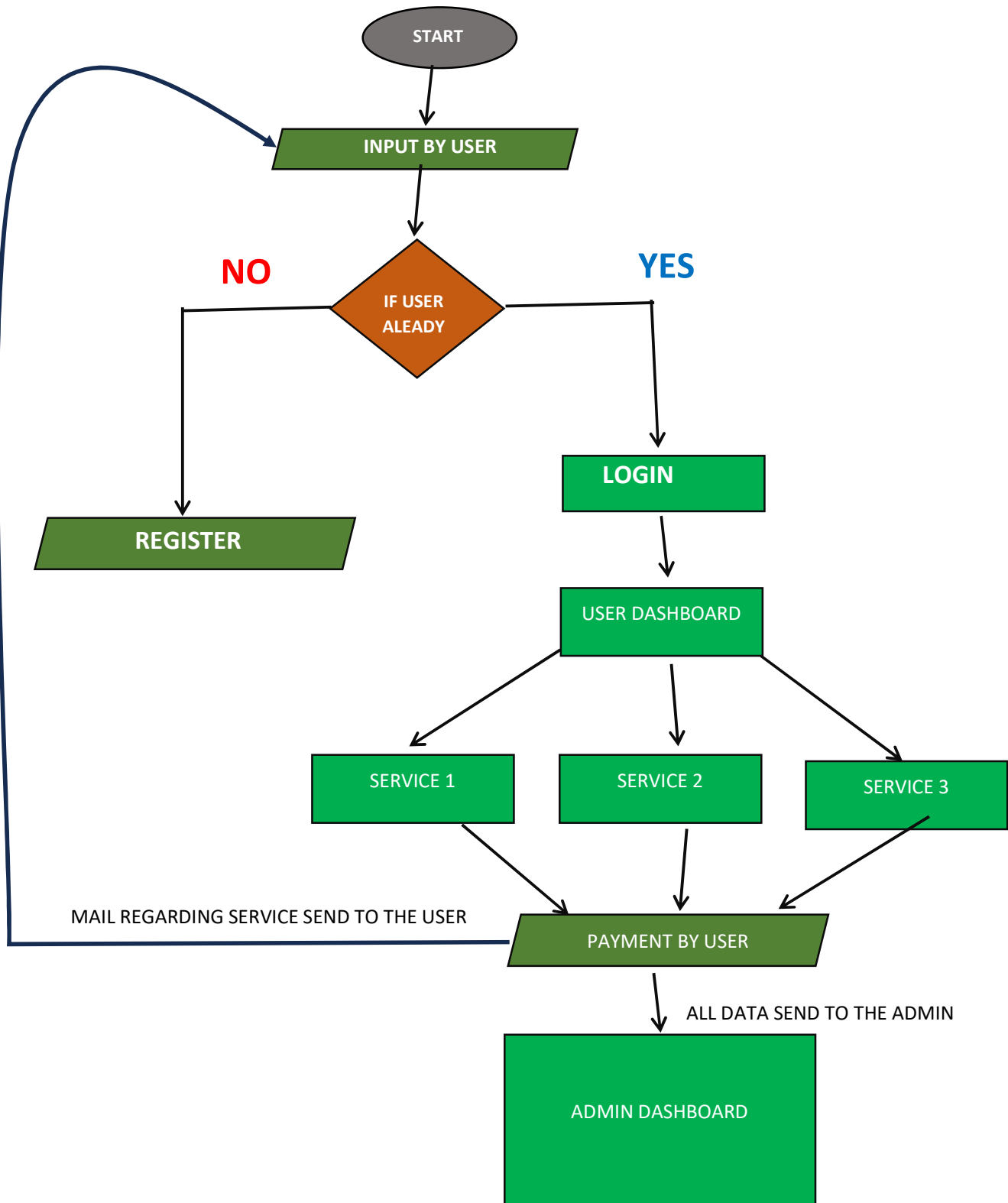
While vehicle service system offers many advantages, there are also some potential disadvantages to consider.

- Dependence on Service Providers
- Cost of Service
- Over-Scheduling and Delay
- Risk of Over-Maintenance
- Limited Service Quality
- Part Availability
- Lack of Transparency
- Time-Consuming

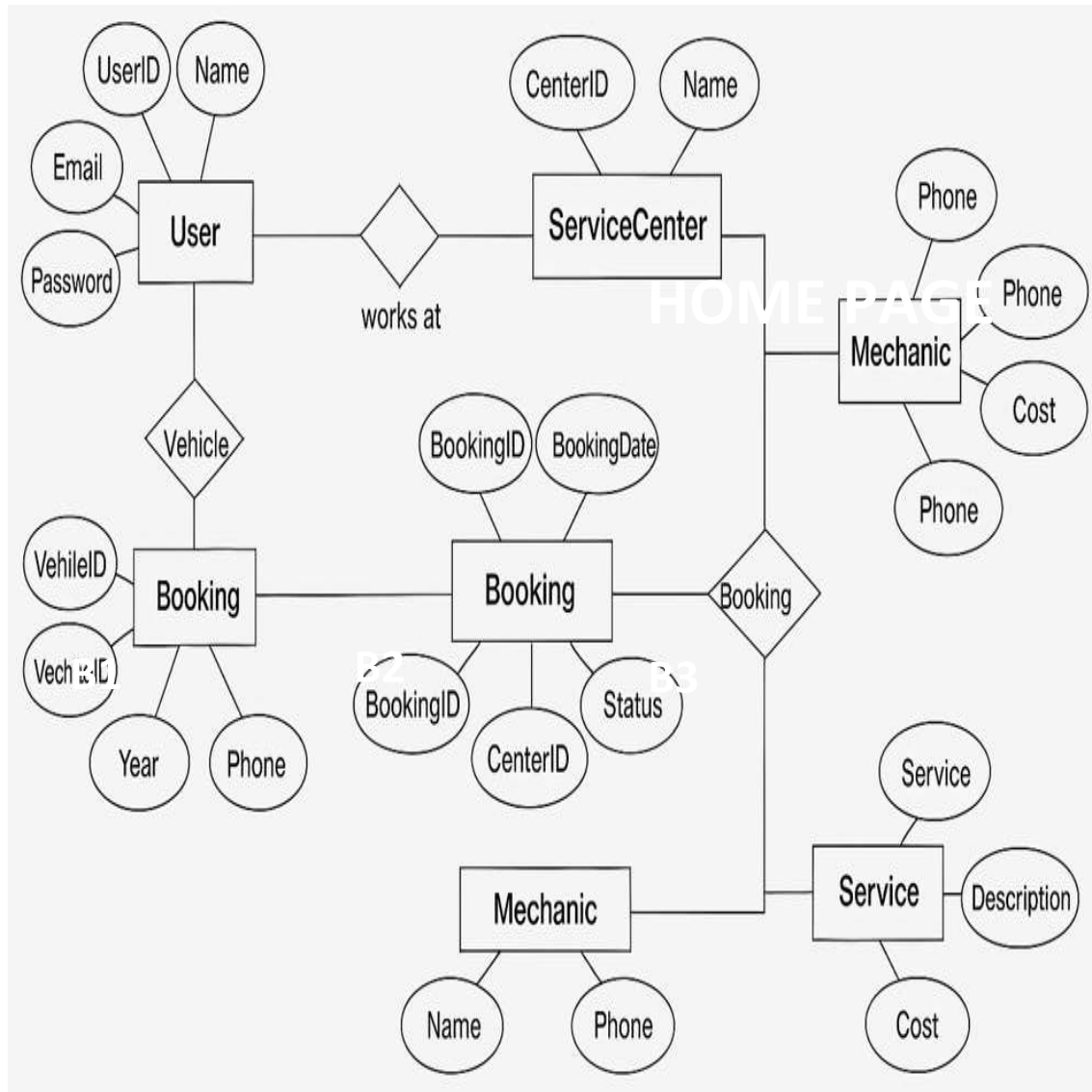
FUNCTIONALITIES

- Vehicle Maintenance Scheduling
- Parts Management and Inventory
- Customer Management and Communication
- Vehicle Inspection and Monitoring
- Cost Estimation and Billing
- Repair Management
- Reporting and Analytics
- Mobile and Remote Access
- Maintenance History and Warranty Tracking

FLOWCHART

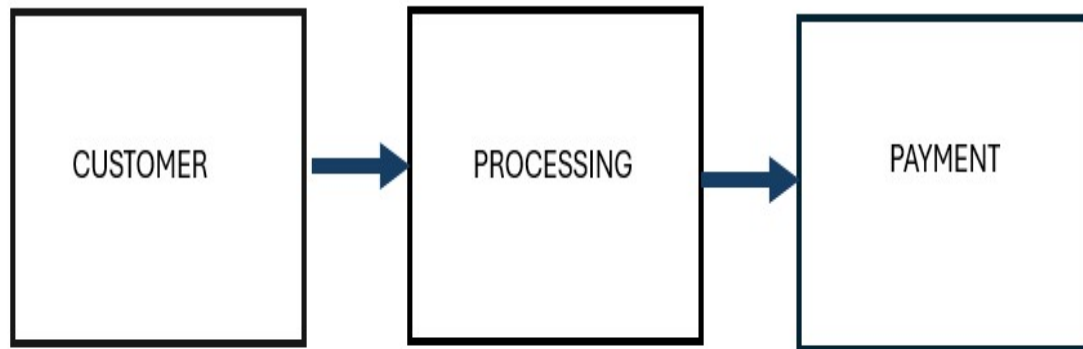


ER DIAGRAM

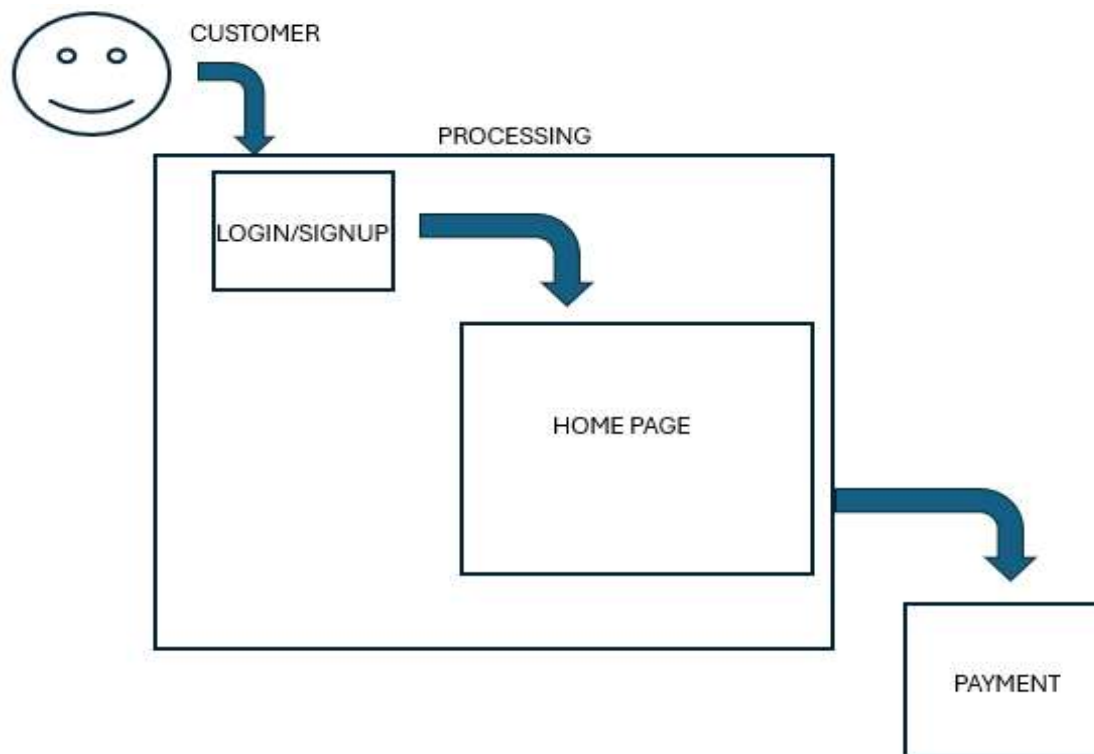


DFD

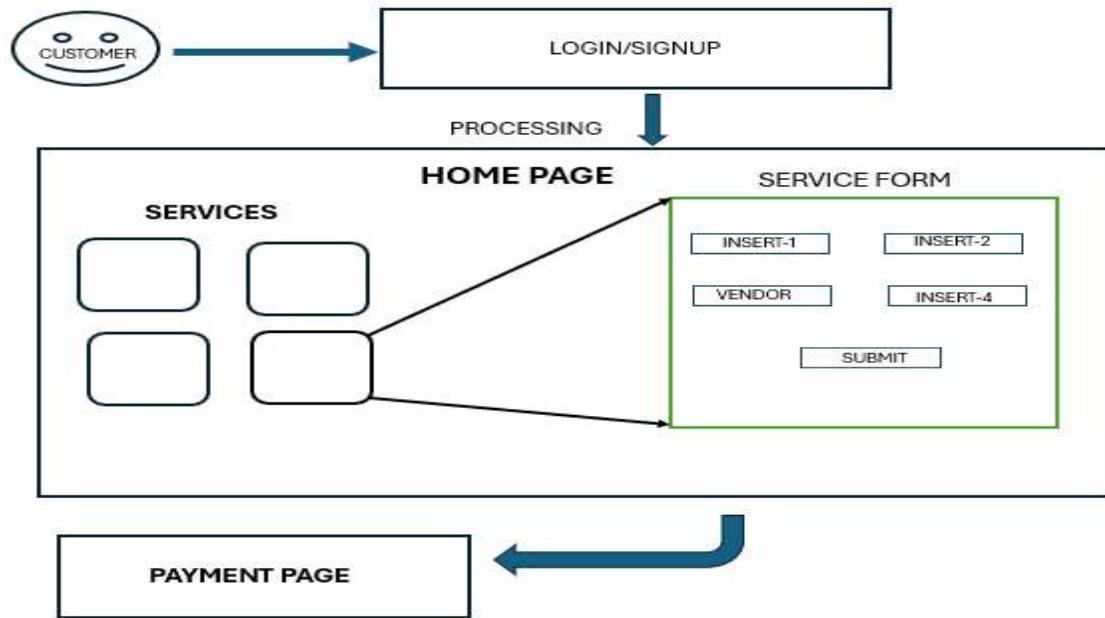
DFD-0



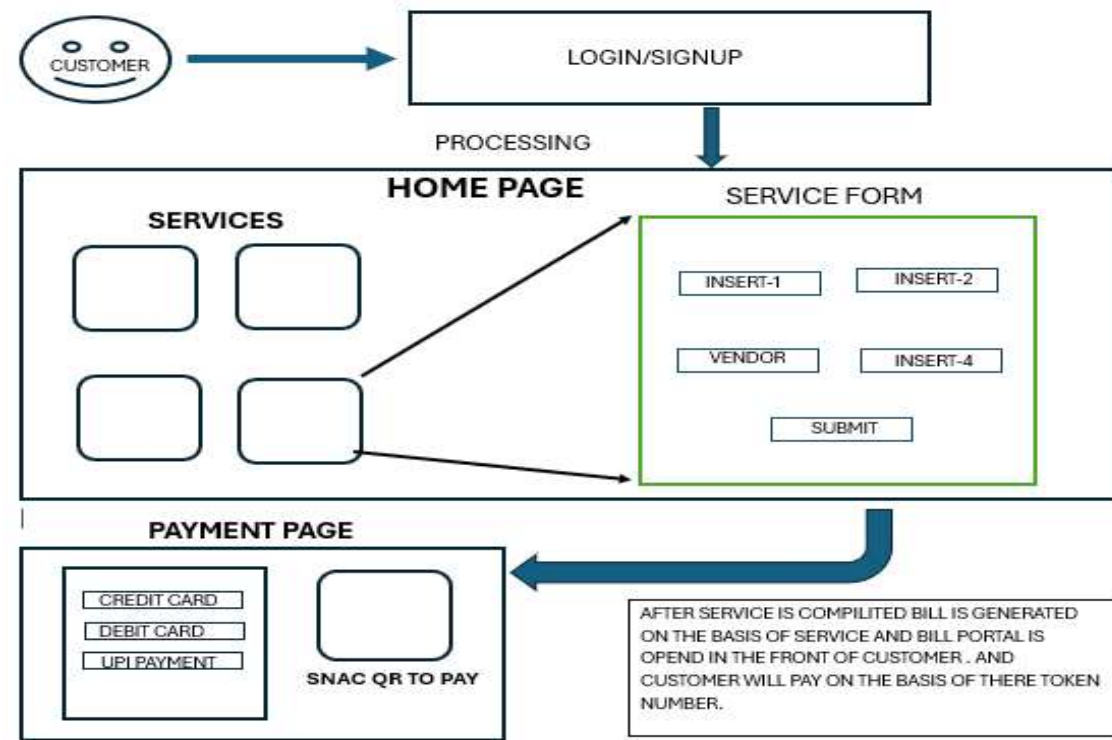
DFD-1



DFD-2



DFD-3



REQUIREMENTS

Software Requirements:-

SPECIFICATION

Operating System	Windows
Software	Visual Studio Code
Language	HTML,CSS,JAVASCRIPT,PHP
DataBase	MYSQLI
Server	XAMPP SERVER
Browser	Any browser
Testing Tool	Selenium

Hardware Requirements:-

Specification:

Accessories	Laptop
Hard Disk	50GB or More Storage Space
RAM	4Gb Ram or More
Processor	Intel core i5 10500U @ 2.5GHz
Printer	A network printing report and bills

HTML



HTML (Hyper Text Markup Language) – A Comprehensive Definition

HTML (HyperText Markup Language) is the foundational language used to create and structure web pages on the internet. It provides a standardized way to organize content, ensuring that web browsers like Google Chrome, Mozilla Firefox, and Microsoft Edge can interpret and display it correctly. HTML is not a programming language but a markup language that structures web content through a system of elements and tags.

CSS (Cascading Style Sheets) – A Comprehensive Definition

CSS (Cascading Style Sheets) is a stylesheet language used to describe the presentation and layout of web pages. It controls how HTML elements appear on the screen, including aspects like colors, fonts, spacing, positioning, and animations. By separating content (HTML) from design (CSS), it enhances web development efficiency, making websites visually appealing and user-friendly.



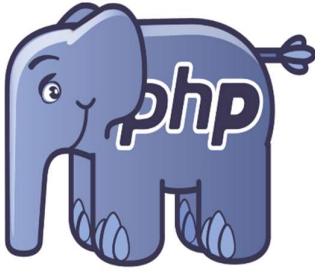
JS



JavaScript (JS) – A Comprehensive Definition

JavaScript (JS) is a high-level, interpreted programming language that enables dynamic and interactive web content. It is one of the core technologies of web development, alongside **HTML (HyperText Markup Language)** and **CSS (Cascading Style Sheets)**. While HTML structures a webpage and CSS styles it, JavaScript adds interactivity, making it more engaging for users.

Initially designed for web browsers, JavaScript has evolved into a versatile language that powers web applications, mobile apps, server-side applications (via **Node.js**), and even game development.



PHP (Hypertext Preprocessor) – A Comprehensive Definition

PHP (Hypertext Preprocessor) is a widely used, open-source server-side scripting language designed primarily for web development. It enables dynamic content creation, database interactions, and server-side functionalities, making it a key component in web applications. PHP scripts are executed on the server, and the resulting HTML is sent to the client's browser.

PHP was originally created by Rasmus Lerdorf in 1994 and has since evolved into a powerful language with extensive support for databases, security, and scalability. It is commonly used in combination with **HTML, CSS, JavaScript, and MySQL** to develop full-fledged web applications.

MySQLi (MySQL Improved) – A Comprehensive Definition

MySQLi (MySQL Improved) is an extension of PHP that provides an enhanced interface for interacting with MySQL databases. It was introduced in **PHP 5.0** as an improvement over the older **MySQL extension**, offering better performance, security, and support for **prepared statements, transactions, and object-oriented programming (OOP)**.

Developers use MySQLi to **connect, query, and manipulate** databases efficiently. It is one of the two main options for database interaction in PHP, with the other being **PDO (PHP Data Objects)**. MySQLi is **MySQL-specific**, whereas PDO supports multiple database types.



Visual Studio Code

Visual Studio Code (VS Code) is a **free, open-source, and lightweight** code editor developed by **Microsoft**. It works on **Windows, macOS, and Linux**, and it's popular among developers for writing and editing code in a variety of programming languages.

Git is a **distributed version control system** used to track changes in source code during software development. It helps multiple developers collaborate on a project by keeping a history of every change, allowing them to work on the same codebase without interfering with each other.



SCHEDULE FOR PROJECT

ACTIVITIES	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12
PREPARATION												
FLOWCHAT												
PROGRAMMING												
FINAL MAKEOVER												
PROJECT TESTING												

DATA FROM GANTT CHART:-

1. WEEK 1-2→PREPARATION
2. WEEK 2→FLOW CHART
3. WEEK 4-8→PROGRAMMING
4. WEEK 9-11→FINAL MAKEOVER
5. WEEK 5-8,12→PROJECT TESTING

START DATE→ 2nd January

FINISH DATE→ 31th March

BIBLIOGRAPHY

For the successful completion of the project we have taken references from:-

- 1.W3school.com
- 2.Fontawesome.com
- 3.Wikipedia.com
- 4.Geeksforgeeks.com
- 5.Github.com

CONCLUSION

The ***Vehicle Servicing System*** is to improve the appointment scheduling process for both service providers and clients by offering automation, flexibility, and efficiency. By achieving these objectives, the system enhances the overall customer experience, improves operational efficiency, reduces administrative overhead, and fosters business growth. Ultimately, it provides a more seamless and professional way to manage appointments in various industries, ranging from healthcare to beauty services and beyond.