

# PROJECT REPORT

IN

#### COMPUTER SCIENCE AND ENGINEERING

**ON** 

#### **SPOTLIGHT**

## SUBMITTED IN PARTIAL FULFILLMENT OF THE DEGREE

**OF** 

## BE(CSE)

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# **DECLARATION**

We hereby declare that the project work titled, "Online Car Dealership Website" submitted as part of Bachelor's degree in CSE, at Chitkara University, Himachal Pradesh, is an authentic record of our own work carried out under the supervision of Dr. Alok Misra.

**Signature(s):** 

#### **ACKNOWLEDGEMENT**

We have taken efforts in this project. However, it would not have been possible without the kind support and help of many individuals and organizations. We would like to extend our sincere thanks to all of them.

We are highly indebted to Dr. Alok Misra for their guidance and constant supervision as well as for providing necessary information regarding the project & also for their support in completing the project.

We would like to express our gratitude towards our parents & member of CSE Department for their kind co-operation and encouragement which help us in completion of this project.

We would like to express our special gratitude and thanks to industry persons for giving us such

attention and time.

Our thanks and appreciations also go to our colleague in developing the project and people who have willingly helped us out with their abilities.

# **Project Title: Online Car Dealership Website**

#### **Introduction:**

In today's world, people have no time as they want their work to be done as soon as possible. The aim of this project is to design and develop a user-friendly website for a car dealership to showcase their inventory and make it easy for customers to browse and book test drives online. The website will provide a convenient platform for customers to explore various cars, compare prices and features, and ultimately take their car of choice for a spin from the comfort of their homes.

#### **Project Category:**

This website would fall under the category of automotive e-commerce websites, as it provides a platform for car dealerships to showcase their inventory and allow customers to browse through their selection, search for specific cars, filter results based on their preferences and customize in real-time. The website also offers additional features, such as booking test drives, accessing vehicle information, and communicating with dealerships.

**Abstract:** The online car dealership website project aims to design and develop a user-friendly platform that showcases inventory and facilitates the purchase of vehicles online. The website will offer advanced search options, detailed car information as well as dealership contact details, and a responsive design optimized for search engines. The goal is to create an ideal browsing experience for customers and provide a convenient platform for buying and selling cars.

## **Work Done:**

**Overview:** This online car dealership website is a platform that enables customers to browse and book test drives online. The website showcases inventory, provides advanced search options, detailed car information, and the contact details of nearby dealerships. The website's goal is to make it easy for customers to look for cars online.

## **Purpose:**

- 1. To provide a platform to display the dealership's inventory as well as contact details.
- 2. Enables customers to book test drives online conveniently.
- 3. Helps customer make an informed decision by providing details about each car.
- 4. Allows customers to filter their search by relevant criteria.
- 5. It is designed to be responsive, meaning it can be accessed from various devices.
- 6. Optimized for search engines for improved visibility.

# **Overall Description:**

#### 1. Product Perspective:

This software system is user friendly. It showcases the vehicles available for sale along with their features and prices. Visitors can browse the inventory. The website also provides information about the dealership, such as its location and contact details.

#### 2. Product Function:

The website provides customers with information on the cars available for purchase including their features, specifications, and prices. It allows customers to browse inventory and filter search results based on their preferences, such as make, model, year, price range, and location. Additionally, the customer can search on the basis of countries and cities and get the contact of the nearby dealerships.

## 3. Operating Environment:

This project works on the following:

- 1. Operating System Windows 7, 8, 10, Mac, Linux.
- 2. Text- Editor: VS Code.
- 3. Technologies used: HTML, CSS, JavaScript.

## 4. User Perspective:

This website primarily focuses on seamless browsing experience of German electric cars. It has an intuitive user interface that facilitates the selection and customization of vehicle. The user can also search on the basis of countries and cities and get the contact number of the corresponding dealerships. It is accessible across multiple devices and platforms, including desktops, laptops, tablets, and smartphones.

# **EXTERNAL INTERFACE REQUIREMENTS:**

#### 1. User Interface:

It is easy to use and user friendly.

High-quality images and videos that showcase the vehicles from multiple angles as well as a search function that enables users to filter results by relevant criteria.

#### 2. Software Interface:

This whole project works on browsers like Chrome, Firefox etc. and is based on technologies like HTML, CSS, JavaScript.

#### 3. Communication Interface:

Users can reach us on our social media pages whose links are present on the bottom of the website.

# **SYSTEM FEATURES:**

#	Title of System features	Description	Functional Requirements
1.	Customize	A user can customize cars on based on their choice.	For customization, each user must specify their choices.
2.	API	A user can search for specific cars.	For searching, the user must provide the manufacturer name.

# **REQUIREMENT ANALYSIS**

## **Software:**

- ➤ Operating System: Window 10/11
- ➤ GUI internet browser (Like Google)
- ➤ Visual studio 2023

# **Hardware:**

- Minimum Hardware Requirement that can support GUI Internet browser and Window 10 Operating System.
- 233 MHz Processor
- 3 GB RAM

# **SYSTEM STUDY AND PROBLEM DEFINITION**

## 1) SYSTEM ANALYSIS.

It consists of the following steps:

- i. Feasibility study.
- ii. Information gathering.
- iii. Making algorithms and flowcharts.
- 2) SYSTEM DESIGN AND PROGRAMMING.
- 3) IMPLEMENTATION AND DOCUMENTATION.

## **FEASIBILITY STUDY**

A feasibility study is a test of system proposal according to its work ability impact on the organization, ability to meet the users need and effective user or resources.

It focuses on three major questions: -

- 1) What are the user's demonstrable needs and how does the candidate system meet them?
- 2) What resources are available for a given candidate system and is the problem worth solving?
- 3) What is the likely impact of the candidate system on the organization? How well does it fit within the organization master MIS plans?

The result of the feasibility study is a formal proposal. This is simply a report - a formal document detailing the nature and scope of proposed solution. The proposal summarizes what is known and what is going to be done.

#### Types of Feasibility study:

The different types of feasibility studies are as follows:

- > Technical feasibility study: It is used to determine the requirements of technologies for the current system.
- > Schedule feasibility study: It is used to determine the time factor related to the current system.
- ➤ Cultural feasibility study: It is used to determine the impact of the current system on a culture.
- Legal feasibility study: It is used to determine the legal scrutiny of the current system.
- > Marketing feasibility study: It is used to determine the single and multi-dimensional market forces that affect the current system. There are four types of marketing feasibility study, which are as follows:
  - 1. Economic feasibility
  - 2. Operational feasibility
  - 3. Schedule feasibility

# **SYSTEM DESIGN**

System design is the solution i.e., how to approach the creation of a new system. This important phase consists of several steps. Here the stress is on translating performance requirements into design specifications.

A schematic step has to be followed so as to achieve beneficial results at the end. It involves starting with a vague idea and ultimately starting with the new system. The design phase is transition from user oriented to a programmer's database personal.

Various steps involved in system designing areas follow:

- 1. Problem definition
- 2. Input/output specifications
- 3. Database design
- 4. Modular program design
- 5. Preparation of source code
- 6. Testing and debugging

## **Other Non-Functional Requirements:**

#### 1. Performance Requirements

It is fast and user-friendly and thus, saves time.

#### 2. Portability Requirements

User can use it from anywhere.

#### 3. Availability Requirements

This system is up and running whenever needed.

#### 4. Scalability Requirements

It meets the needs for which it was build.

#### 5. Security Requirements

This system provides basic security authentication.

#### 6. Safety Requirements

It is safe from various attacks.

#### 7. Usability Requirements

The user will be able to view cars easily and book test drives online.

#### 8. Accessibility Requirements

It makes 3D model of a car easily accessible and the user can customize their car of choice.

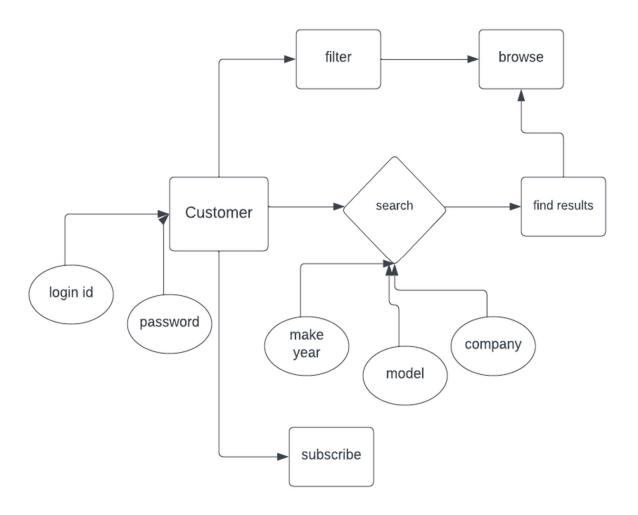
#### 9. Supportability Requirements

It is supported by all the browsers like Chrome, Firefox etc.

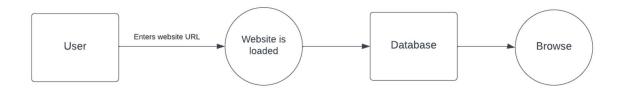
#### **10. Efficiency Requirements**

It works with good efficiency.

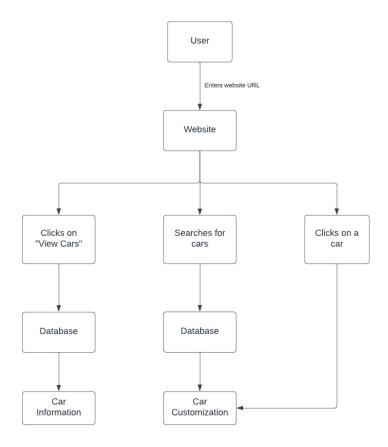
# **E-R DIAGRAM**



# **DATA FLOW DIAGRAM**

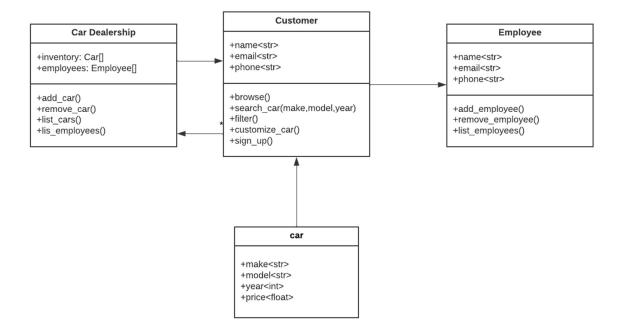


#### DFD LEVEL 0

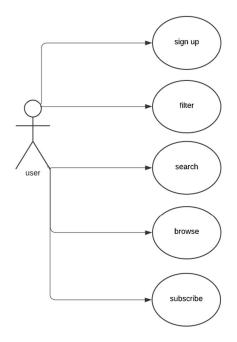


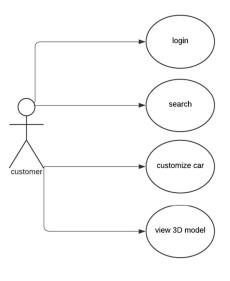
**DFD LEVEL 1** 

# **CLASS DIAGRAM**

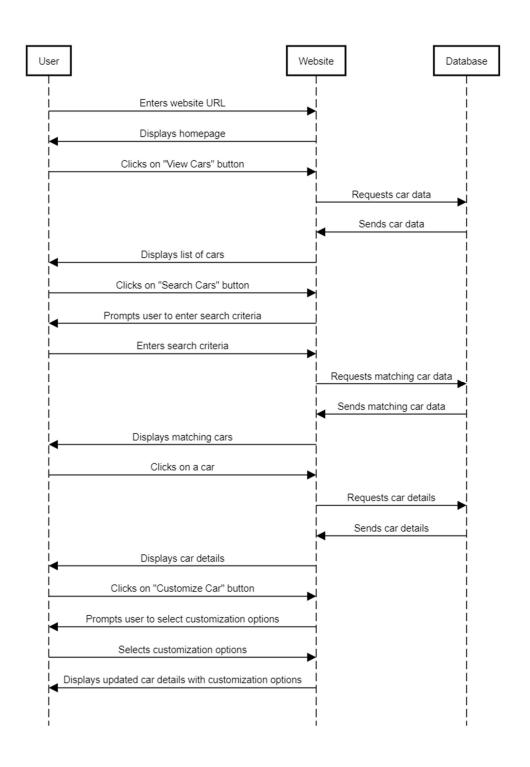


# **USE CASE DIAGRAM**





# **SEQUENCE DIAGRAM**



## **CODING**

```
<!DOCTYPE html>
<html lang="en">
   <meta charset="UTF-8">
   <meta name="viewport" content="width=device-width, initial-scale=1.0">
   <link rel="shortcut icon" href="assets/img/favicon.png" type="image/x-icon">
   <!--======== REMIX ICONS =========->
   <link href="https://cdn.jsdelivr.net/npm/remixicon@2.5.0/fonts/remixicon.css" rel="styl</pre>
   <link rel="stylesheet" href="assets/css/swiper-bundle.min.css">
   <link rel="stylesheet" href="assets/css/styles.css">
   <title>SpotLight</title>
   <div id="preloader">
      <video src="assets/videos/batman.mp4" autoplay loop muted></video>
    </div> -->
   <header class="header" id="header">
      <nav class="nav container">
```

```
<a href="https://www.facebook.com/" target = "_blank" class="footer__social-link"</pre>
               <i class="ri-facebook-fill"></i></i>
           <a href="https://www.instagram.com/" target = " blank" class="footer social-link"</pre>
               <i class="ri-instagram-line"></i></i>
           <a href="https://twitter.com/" target = "_blank" class="footer__social-link">
               <i class="ri-twitter-line"></i></i>
<a href="#" class="scrollup" id="scroll-up">
   <i class="ri-arrow-up-line"></i></i>
<a href="#footerid" class="scrolldown" id="scroll-down">
   <i class="ri-arrow-down-line"></i></i>
<script src="assets/js/scrollreveal.min.js"></script>
<script src="assets/js/swiper-bundle.min.js"></script>
<script src="assets/js/mixitup.min.js"></script>
<!--======== MAIN JS ========->>
<script src="assets/js/main.js"></script>
```

```
function showmsg() {
    document.getElementById("submitmsg").style.display = "none";
    setTimeout(function() {
        document.getElementById("submitmsg").style.display = "block";
        }, 2000);
    setTimeout(function() {
        document.getElementById("submitmsg").style.display = "none";
        document.
```

Languages used are

HTML, CSS, JAVASCRIPT

## **CONCLUSION AND FUTURE SCOPE**

**CONCLUSION:** In conclusion, an online car dealership website offers a convenient and efficient way for customers to browse cars and take them for a spin. The website benefits both customers and dealerships by providing a seamless browsing experience and improving the visibility of the dealership.

#### **FUTURE SCOPE:**

The future scope of this project is promising. With the increasing popularity of e-commerce and online shopping, the demand for online car buying is likely to grow. The website can expand its scope by incorporating more advanced technologies such as virtual reality showrooms, AI-based chatbots, and machine learning algorithms to provide personalized recommendations to customers. Additionally, the website can explore partnerships with other industries such as insurance and financing to provide customers with a complete car-buying experience.

#### **REFERENCES:**

- [1] <a href="https://www.w3schools.com/">https://www.w3schools.com/</a>
- [2] <a href="https://stackoverflow.com/">https://stackoverflow.com/</a>
- [3] <a href="https://uiverse.io/">https://uiverse.io/</a>

## **SNAPSHOTS:**

The home page will look like this, with a video playing in the background:



To book a test drive you will have to fill this form:

Book a test drive		
France		
Name John	Surname Doe	
Email johndoe10@gmail.com		
Phone 1483369234		
City Paris	Pincode 75003	
Ferrari Roma		
Within next 6 months		
I HAVE READ AND ACCEPT THE GENERAL TERMS A	and conditions*	
	SUBMIT	

# Preview of Spotlight:



The FAQs section looks like this, We ought to answer your frequent queries as soon as possible:

# Frequently Asked Questions Q: What types of cars do you showcase? A: We showcase a wide range of cars, from sports cars to luxury sedans and SUVs. You can browse our inventory online to see our latest offerings. Q: Can I test drive a car before purchasing? Q: Do you offer financing options? Q: Can I customize a car to my liking? Q: How can I find a specific car model?

Customers can search for cars based on relevant criteria as:



The website is responsive, that is, it can be easily accessed from a mobile phone as well.





Customers can customize their car of choice as well.







Users can book a test drive from nearby dealerships as well.



Choose your favorite car for a door-step test drive or an online demo from an authorized dealer.



Select Location & Date

Select test drive or online demo option and confirm the date, time-slot and test drive location.



Request a Test Drive

Get connected with an authorized dealer or a verified car owner. Sit back & experience the car via a test drive.