

**CAPSTONE PROJECT REPORT**

**Report 1 – Project Introduction**

– Da Nang, June 2022 –

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# I. Record of Changes

| **Date** | **A\* M, D** | **In charge** | **Change Description** |
| --- | --- | --- | --- |
| 6/3/2022 | A | Cuong | Product background |
| 6/3.2022 | A | Nhan | Business Opportunity |
| 7/7/2022 | AA | Toumtam | Project Scope & Limitations |
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\*A - Added M - Modified D - Deleted

# II. Project Introduction

## 1. Overview

### 1.1 Project Information

* Project name: FPT Car Showroom
* Group name: NCT
* Software type: Java Web

### 1.2 Project Team

| **Full Name** | **Role** | **Email** | **Mobile** |
| --- | --- | --- | --- |
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## 2. Product Background

Each of us, when we want to buy a car, will need to go to each store of different car manufacturers or read reviews of websites to choose and compare to choose the one we like best. That way we will spend a lot of time going to each store to see the car models, and also read incorrect reviews about the car you are referring to. It is also possible that when we have already chosen the car we want, but the car is out of stock, so we take more time to order the car we want.

## 3. Existing Systems

### 3.1 Waterfall Model

The Waterfall Model was the first Process Model to be introduced. It is also referred to as a linear-sequential life cycle model. It is very simple to understand and use. In a waterfall model, each phase must be completed before the next phase can begin and there is no overlapping in the phases.

The Waterfall model is the earliest SDLC approach that was used for software development.

The waterfall Model illustrates the software development process in a linear sequential flow. This means that any phase in the development process begins only if the previous phase is complete. In this waterfall model, the phases do not overlap.

* Requirement Gathering and analysis − All possible requirements of the system to be developed are captured in this phase and documented in a requirement specification document.
* System Design − The requirement specifications from the first phase are studied in this phase and the system design is prepared. This system design helps in specifying hardware and system requirements and helps in defining the overall system architecture.
* Implementation − With inputs from the system design, the system is first developed in small programs called units, which are integrated in the next phase. Each unit is developed and tested for its functionality, which is referred to as Unit Testing.
* Integration and Testing − All the units developed in the implementation phase are integrated into a system after testing of each unit. Post integration the entire system is tested for any faults and failures.
* Deployment of system − Once the functional and non-functional testing is done; the product is deployed in the customer environment or released into the market.
* Maintenance − There are some issues which come up in the client environment. To fix those issues, patches are released. Also to enhance the product some better versions are released. Maintenance is done to deliver these changes in the customer environment.

### 3.2 SQL Server

SQL Server is a database management service provided by Microsoft. As a database server, it is a software product with the primary function of storing and retrieving data as requested by other software applications—which may run either on the same computer or on another computer across a network.

We use SQL Server as the main database to store car information, and also add some methods like create, update, delete, add,... in order to manage the database.

## 4. Business Opportunity

Many customers have confused which car is good, stabilised, or they just want to know more details about the car. We will give customers an overview about cars, the outstanding parts of a car when combined with other cars and finally the technical specifications which make customers make a decision whether to buy or not . Besides showing information about the car, the system would bring the newest models of car brands from the world. In order to go to the car store, customers could pick up a phone and view these car models everywhere. This product might reduce waste time when choosing a car for new customers who have never bought it or know it before. It also increases proficiency of a store when having a web system to assist in selling and make the store more professional in customer view.

## 5. Software Product Vision

For customers who are new in the car industry, we have a list of cars of the year depending on price. We also have a list of properties for customers to choose like model, price, fuel, engine size, power,...This is our first product, so we also have a contact us that customers can give any idea to improve the product, or give a model of car which they want to advise. And also a blog zone for car collectors to read information about car models.

## 6. Project Scope & Limitations

This product is made for the customer to have a closer look on cars that they want to buy. This product doesn’t support buying a car directly. In fact, we only provide information for customers to make their choice, so customers who expect to buy a car from an online store might be disappointed. Because not only the parameters of a car, customers need to double check it in a real store to make sure the car matches customers requirement. Nevertheless, the developer team only has three members so there might be some functions that aren't available yet. The product would give customers make things in there mind, give satisfied with many car model for whom addicted to car world. You also can register for the testing car to get more experince the car that you are about to buy.

### 6.1 Major Features

FE-01: Search car by name, model, price.

FE-02: A feedback system to receive customer’s feedback

FE-03: Create, view, modify, delete, and archive car list.

FE-04: View technical specifications of a car.

FE-05: A blog that contains car newsletter, magazines.

FE-06: The function of storing registration information (data)

FE-07: The diverse company of car

### 6.2 Limitations & Exclusions

LI-1: The store doesn’t support e-commerce system, so customers won’t be able to buy a car directly from the online store.

LI-2: This car store may not contain all the systems that customers needed

LI-3: This store doesn’t have online support or online chat

LI-4: The store may not have all the kinds of car that you are looking for.