بسم الله الرحمن الرحيـم

Kingdom of Saudi Arabia	**المملكة العربية السعودية**
Majmaah University	وزارة التعليــم العالي
Ministry of Higher Education	**جامعة المجمعة**
College of Science Al Zulfi	كـ لـ ية العلوم
	قسم علوم الحاسب والمعلومات

Online Shopping Spare Parts

Graduation Project

Submitted in partial fulfillment of the requirements for the award of
Bachelor degree of the Majmaah University
(Semester 1, 2018-19)

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Table of Contents

4. Chapter 4: Main Pages

4.1. Layouts

Chapter 5: Conclusion and Future Work

5.1. Future Goals

References:

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Introduction

The Automotive industry is the key driver of any growing economy. A sound transportation system plays a pivotal role in a country's rapid economic and industrial development. In nowadays making a decision while buying parts can be incredibly frustrating, because of the many possibilities. The market is often flooded with an incredible number of options and it can be hard to determine which part is the right one for the job. That´s why it is important to know the difference between used OEM parts and aftermarket parts later in report will talk about it. The gained knowledge will help to make best choice, without being frustrated afterwards. Components of an automobile or other manufactured goods, kept in reserve to replace parts that fail. In supply usage, any part, component, or subassembly kept in reserve for the maintenance and repair of major items of equipment. Knowing your car in and out is very important. When your car breaks down in the middle of nowhere, your knowledge on auto parts can help you get started again. Get to know your vehicle thoroughly and completely. It is always good to take some time to surf through several vendors' stores and note down what each seller offers for the particular auto part you are seeking. better than you spending time dealing with some of shopping stores and they increase the price usually we trying to be honest 100% and get the same barcode like a same part we want to sell. to guaranteed if its available and the original one.

Problem Definition

Buying spare parts for car anytime & anywhere using webpage and mobile application , user can search or browse the part it shows some of parts with information with it if its original or first class or second class parts.

The idea I found it out because some of distributor in some areas in my country don't have all the spare parts and if they have it, they take a lot of time or maybe days. Some of people paying for taking their cars to another cities, spend a lot of money and losing time, some of spare shopping they play with prices so it safe idea for stable prices on parts. Besides that , the idea is broker between distributor or even scrap used original parts and try to help customers 24/7 as possible satisfy and saving time, effort & money.

Problems:

- Areas it doesn't have most parts for cars "distances"

- It takes time to receive the parts to spare shops and sometimes they tell you to come after a while.

- Most of them Don't Recover the parts if it's not working.

- Non-immediate payment.

- You cannot trust the supplier just because of his talking skills.

- Some salesperson might act pushy which can be very disturbing.

Some problems questions and its answer:

Playing & charging at the price ?

- We put stable prices by choosing which part level the customer wants & flexible to choose the price the customer want.

Complicated navigation site?

- While shoppers are attracted to complex-looking sites, they are increasingly frustrated by complicated site navigations, overwhelming options and irrelevant details

We'll make site structure simple and we use heat map tools & we remove all the allow them to get a good feel for your ، clutter that can distract our visitor company and the products we're selling.

Missing product information ?

They refuse to buy a product online, if they cannot capture it mentally or cannot imagine how it will look like once unpacked.

help them assess your product properly and give them all the information they need to feel comfortable purchasing your product. Use the same structure and spec labels for similar products to help your customers compare and decide. Remember: Consistency is key.

Goals

- Stable prices by choosing which part level the customer wants & flexible to choose the price the customer want.

-Using heat map tools & we remove all the clutter that can distract our visitor allow them to get a good feel for your company and the products we're selling.

-Competition of large shops at the lowest cost, where your website will open 24 hours a day, 7 days a week.

-Your competitors in the same field, starting to sell through the Internet, will remain away from technology and less than them.

## *Objectives:*

-Time Saving.

-Money Saving.

-The online market works for 24x7x365 days a year. This means you don't have to worry about the time and can shop anytime from anywhere. All you need is working internet connection.

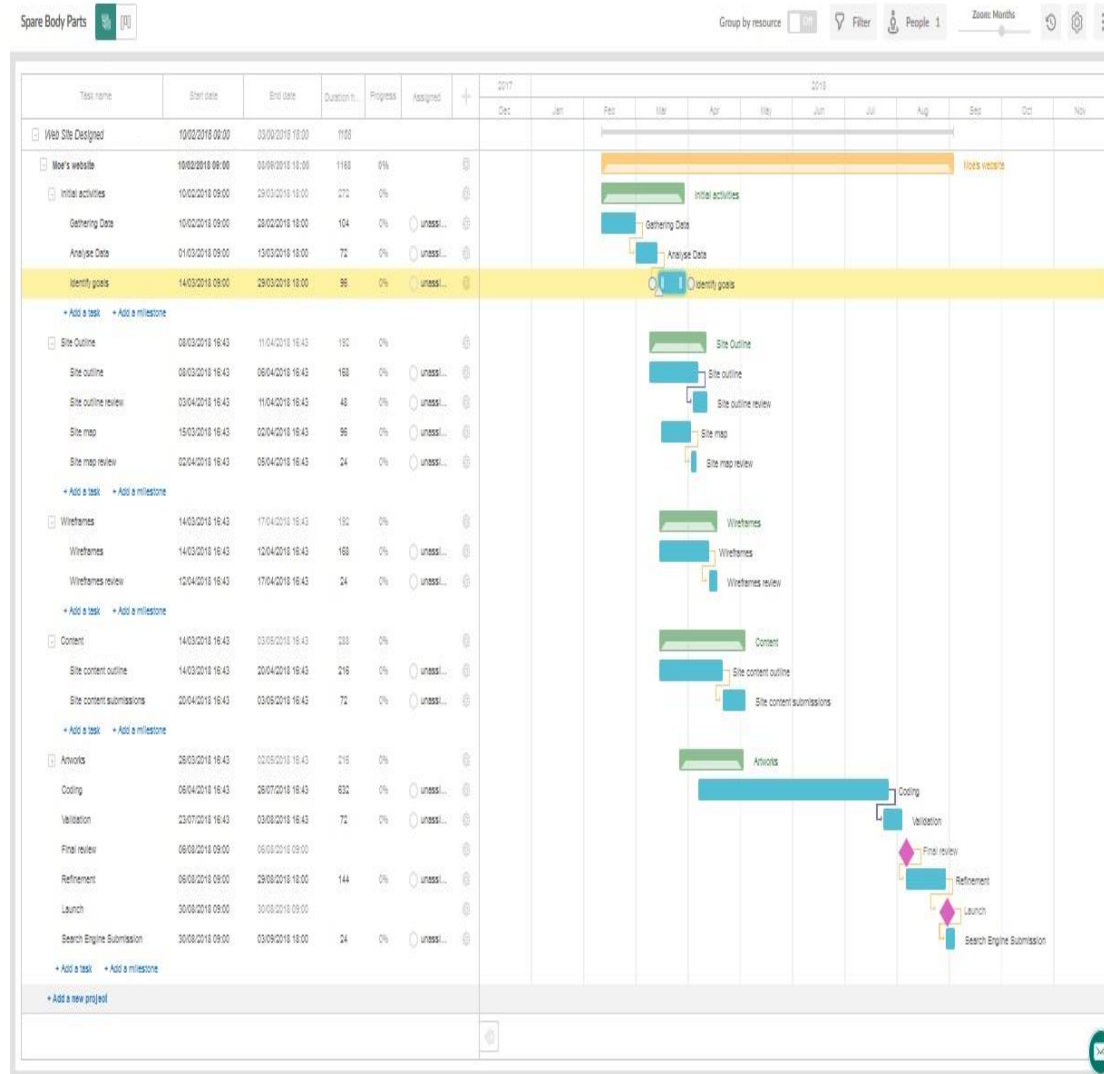*-Online buying of car parts gives bigger reach and without worrying about the distances.*

-In the online marketplace, you can find suppliers offering thousands of products from braking components to engine to other accessories along with the price list

-Compare items & prices easily.

-Easy to use and navigate
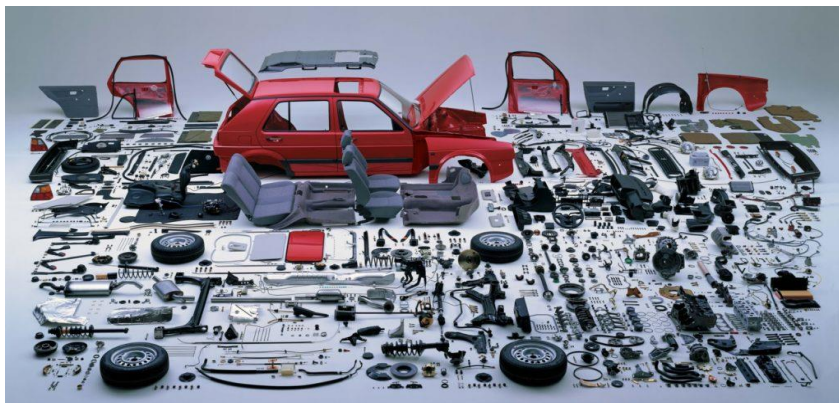
Work Plan:

Chapter2: System Analysis and Specification

Site Design and Conversion Point Essentials:

As we know, having a business website in the digital era is essential. But while it's theoretically very easy to create a website, building one that is superbly optimized for user experience and high conversions is rather more challenging. The average landing page has a 10% conversion rate, which means 90% of opportunities to gain customers are being lost. So how can you design a high-converting website that makes the most of these opportunities? Here are five website design and conversion point essentials you need to know

It needs to be fast:

According to this research report, a simple one-second delay in page load time leads to a 16% decrease in customer satisfaction, 11% fewer page views, and a 7% loss in conversions. Having a fast website is essential not just for user experience, but also for ranking well with Google. Slow websites kill conversions – in fact, 40% of users will abandon a page that takes three or more seconds to load. For this reason, Google recommends aiming for a three-second load time as best practice.

So what factors influence how long your pages take to load? Here are some of them?

- **Image size:** maybe you have lots of beautiful stock images on your website? You may want to check the file sizes. It's always worth resizing images offline before you upload them – large files are unnecessary and could significantly hinder your page speeds.

- **Rich content:** too many images, GIFs and videos on a single web page is a recipe for slow load times. While visual content does improve the user experience, exercise moderation and keep it to what's necessary.

- **Broken code:** broken HTML code? Get it sorted out to improve page load time.

- **Broken links:** likewise, errors such as broken links can also slow your pages down. Resolve these errors, and you will likely see some improvements.

- **Caching:** Caching is a method of saving information in your browser so that you don't need to load every element on the page each time you refresh the page. Using the latest caching technology (such as BigPipe caching) can make a big difference.

It needs to be responsive:

These days, responsive web design is very much the standard for building websites. With new gadgets arriving all the time, it's simply impractical to create a different version of your website for each new device and screen resolution. Responsive design ensures that your website responds to the user's behavior and environment, so as they switch from laptop to tablet, for example, it should automatically adapt to accommodate the device's resolution, screen size and scripting abilities.

Description of Data Flow Diagram

Project Description: The main aim of providing Online Shopping Project DFD Data Flow Diagrams is to explain how design phases important in SDLC process while developing any web application software project. The below Context Level (0th Level) Diagram for shopping cart system explains about Administrator and user's data input stages , data output stages, data storage, UI Screen, reports:
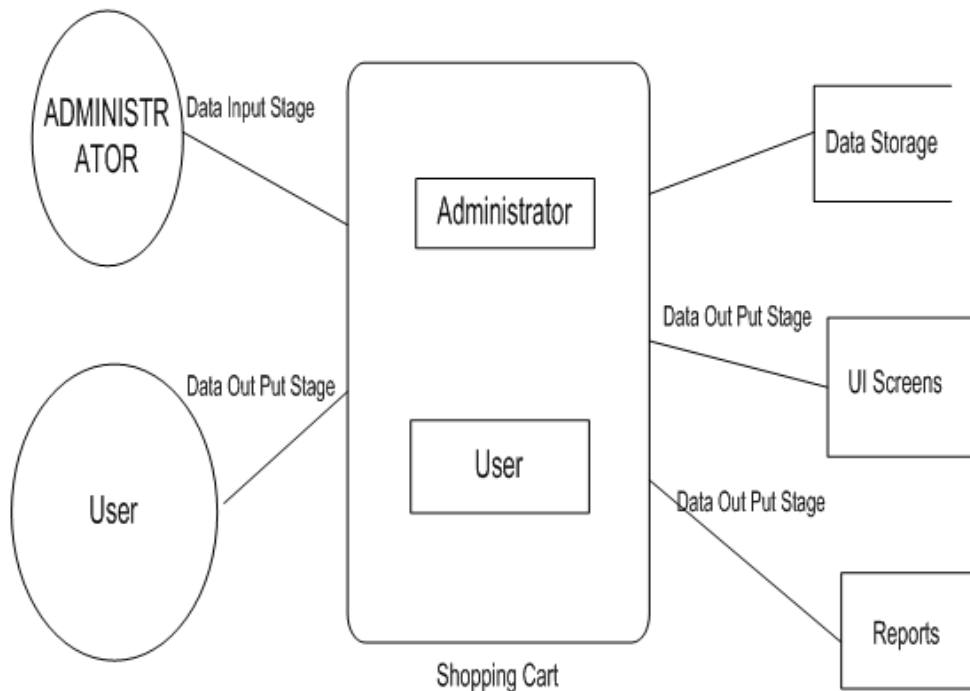
The below login dataflow diagram provides login form names, user and admin login details, verification details, check user and login master information and finally User home page redirection details.
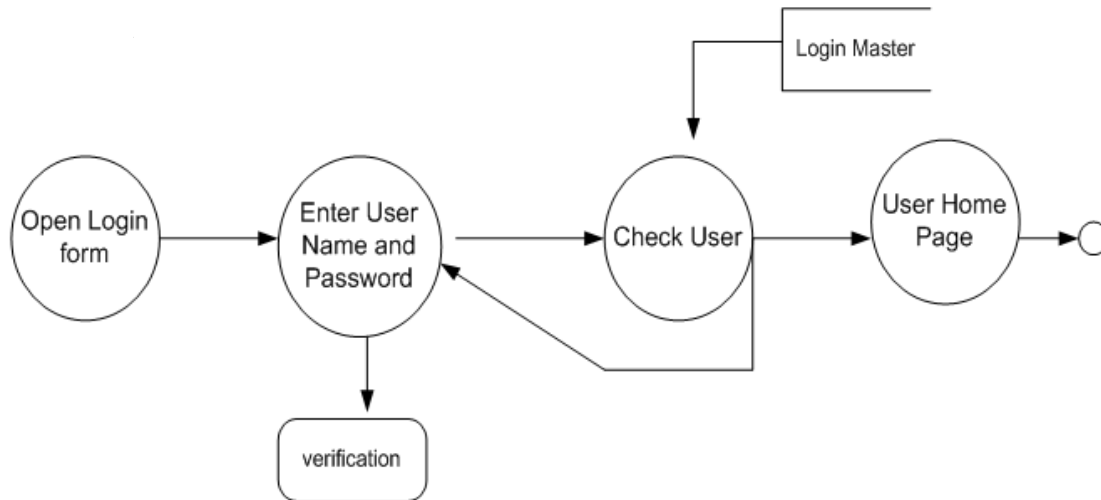
Shopping cart admin features and data flow diagrams with first Level of DFD Diagram below
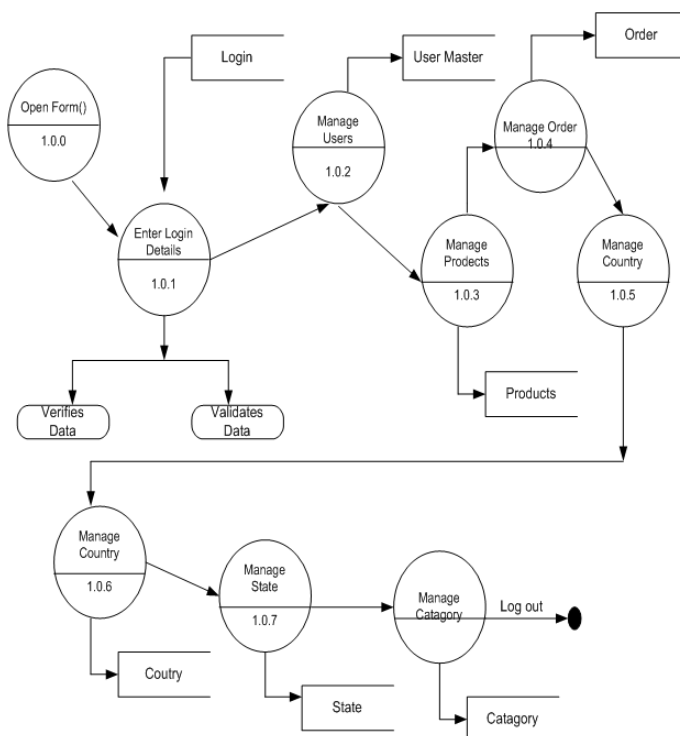
Administrator Data flow diagrams for the second level of managing orders from users selected products below:
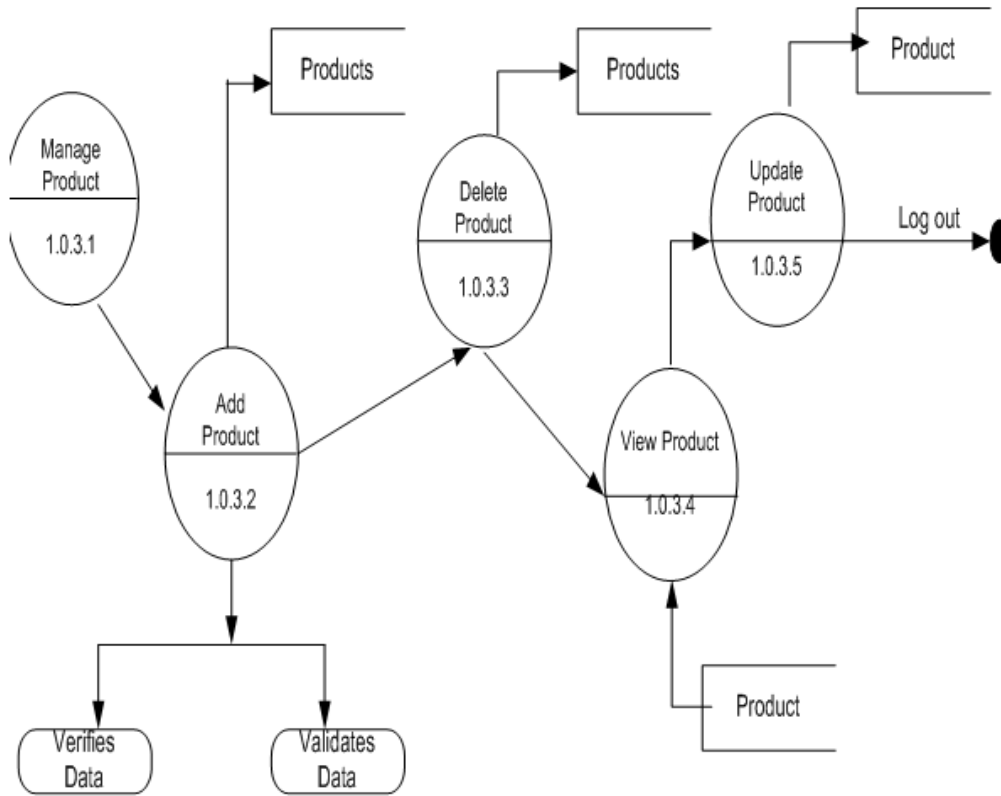
The below attached DFD diagram for the second level of processing for managing orders over admin functionality:
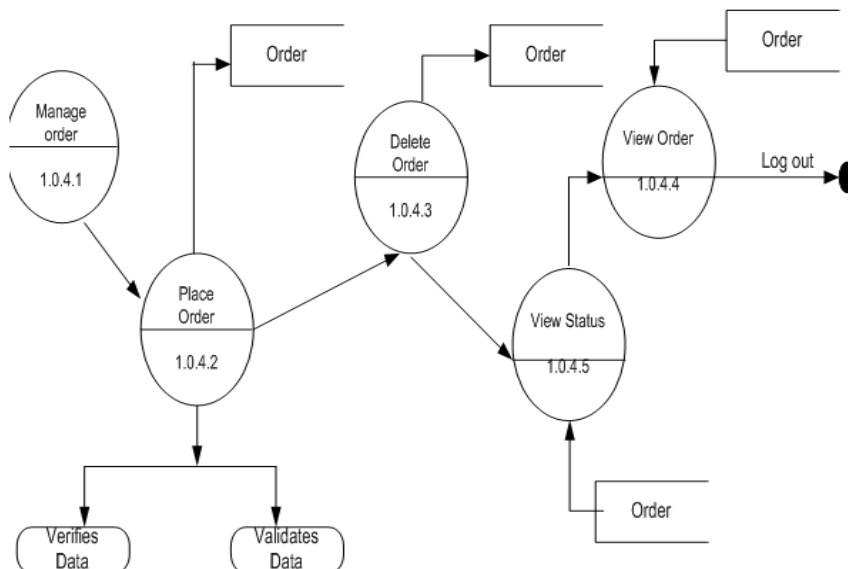
Data Modeling

Class Diagram:
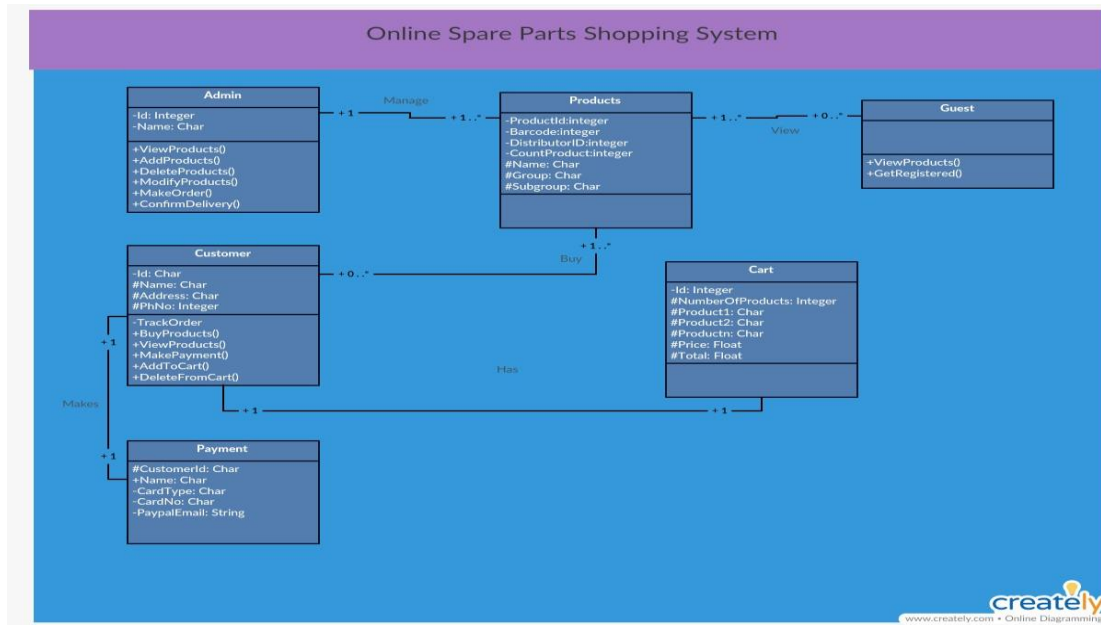
Use Case Diagram:
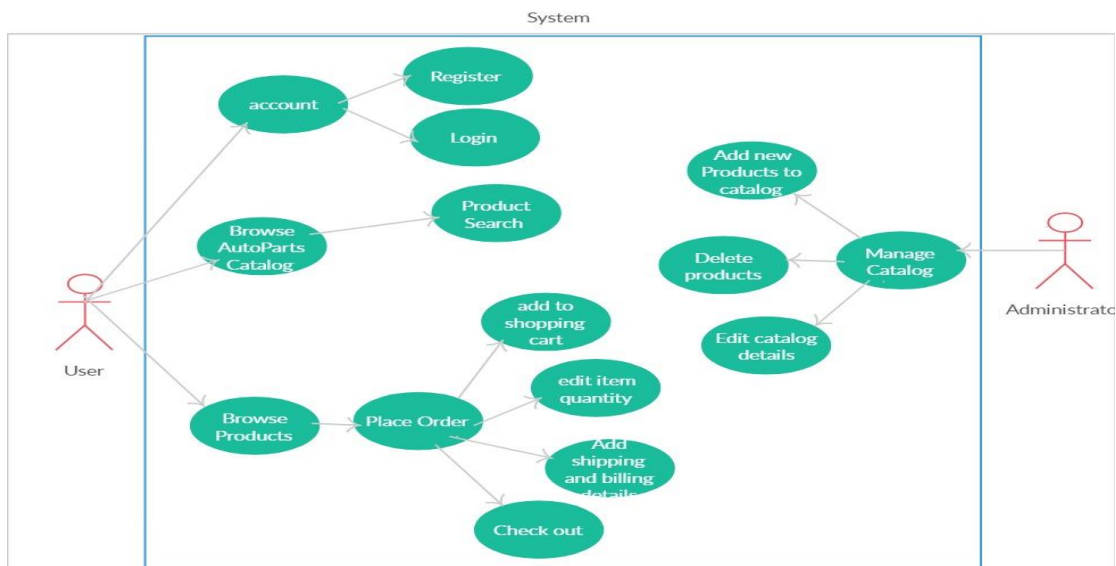
Sequence Diagram for Admin:
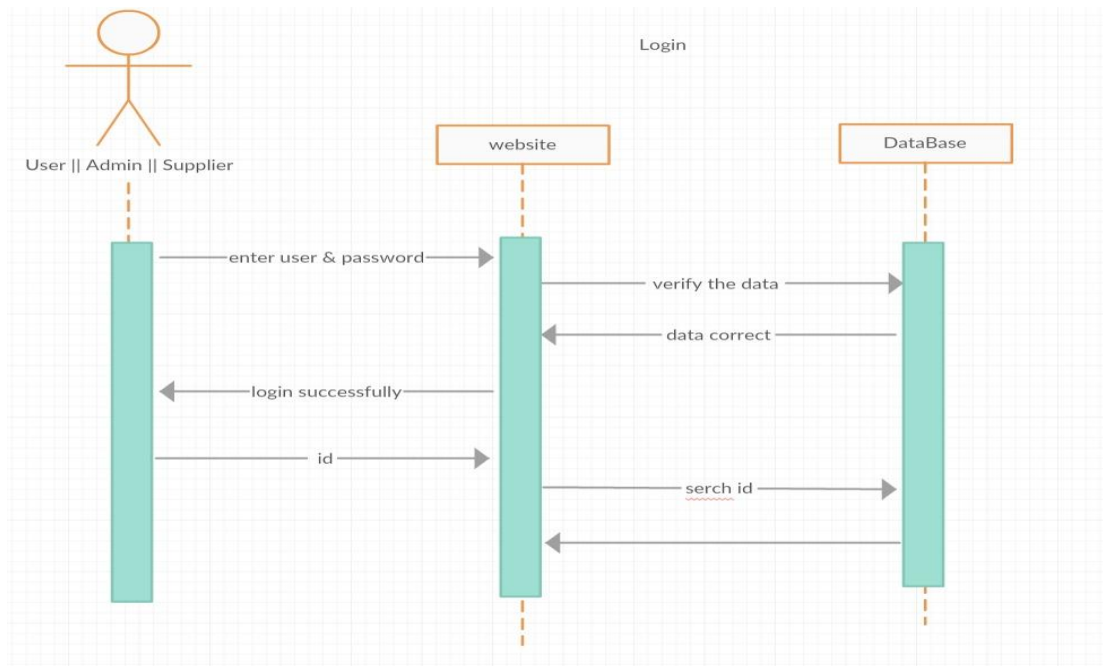
Sequence Diagram for user:
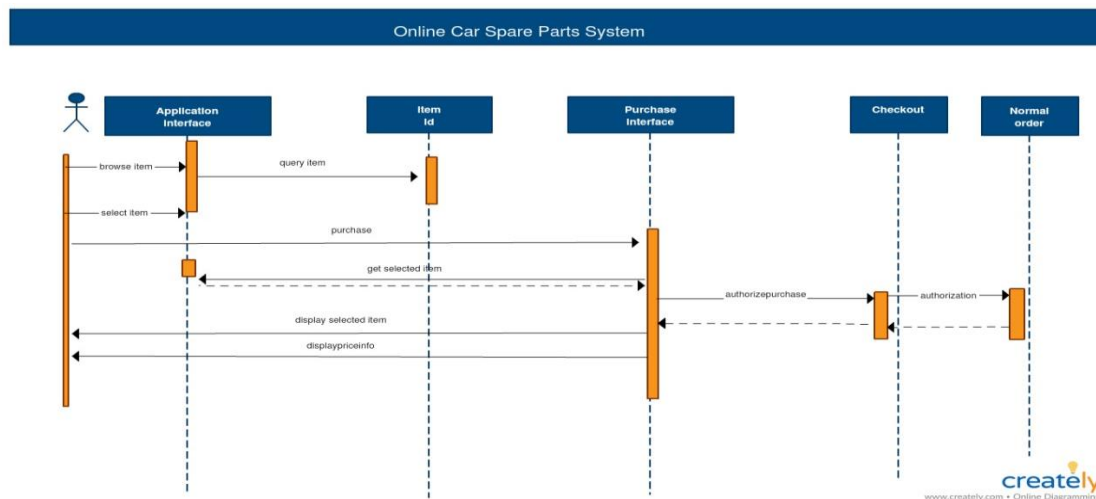
Activity Diagram:
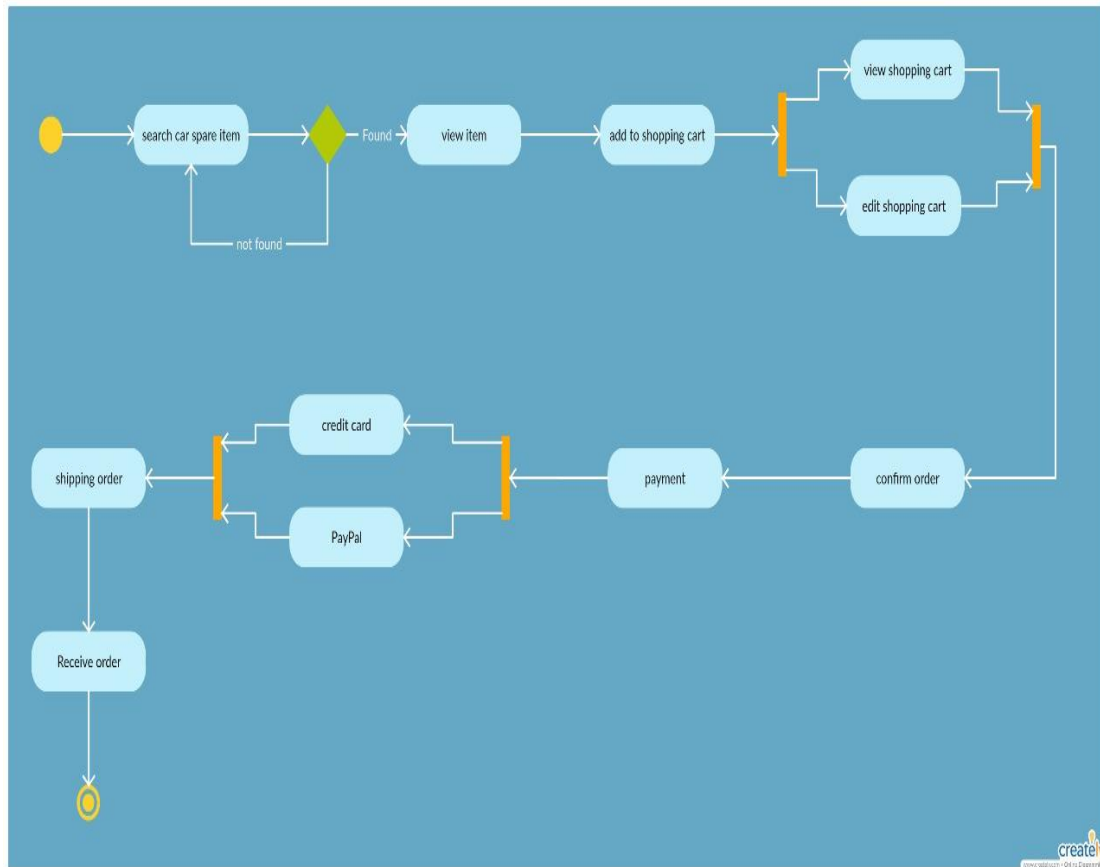
State Diagram:
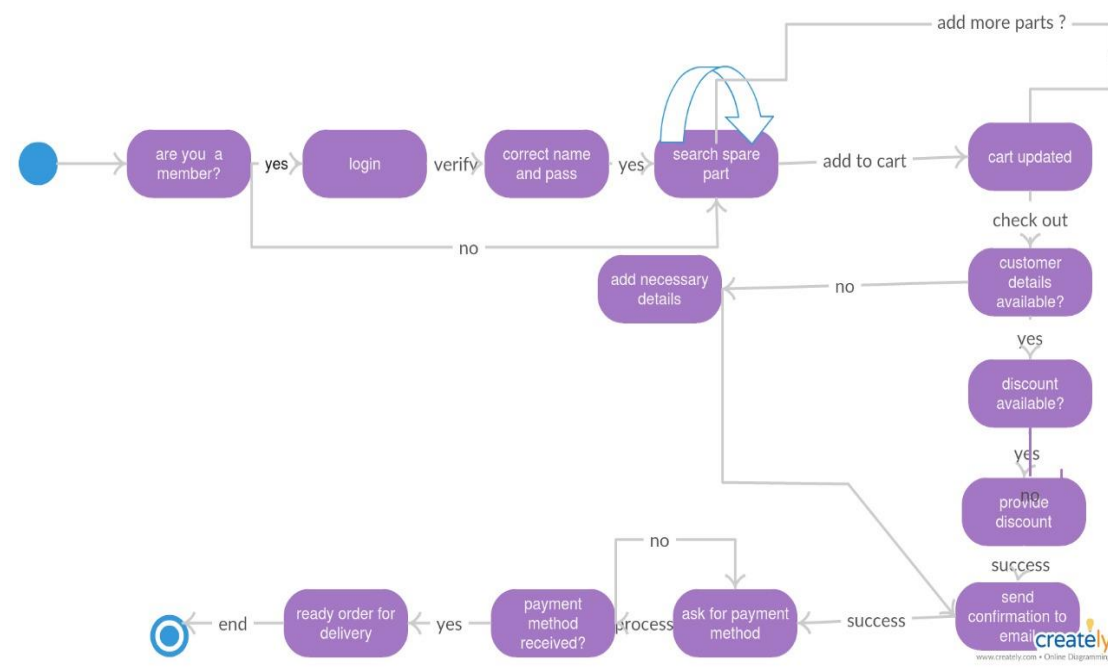
Entity Relationship diagram:
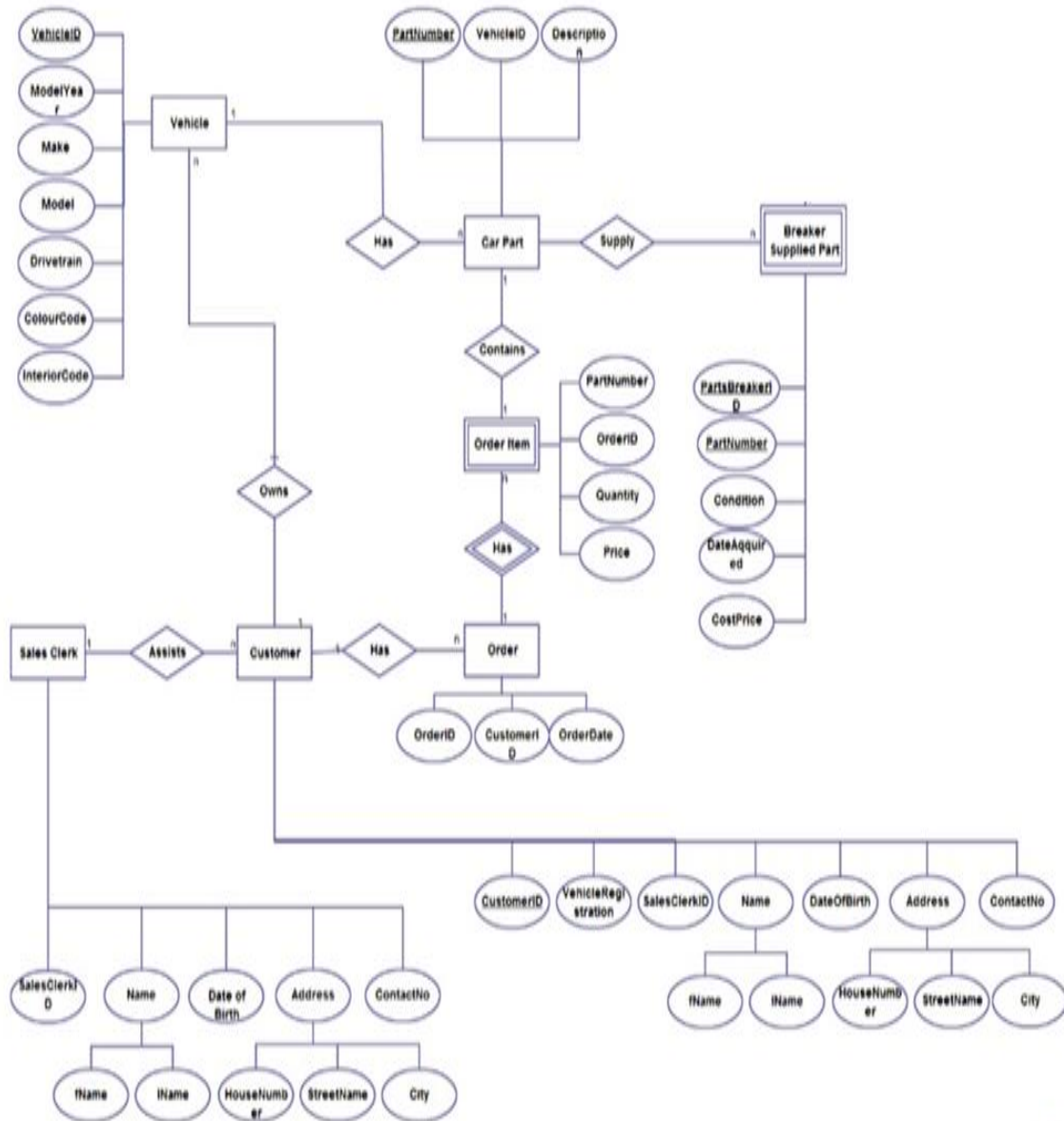
OEM Vs aftermarket

Besides that, aftermarket parts also don't necessarily confirm to laws and regulations for quality and performance.

The answer on most asked question, if the used OEM Parts are really worth It -in short, would be yes. It's impossible to generalize the aftermarket parts out there as they may or may not be up to the OEM quality standards and they may not come with a warranty, but that's part of the risk. Used OEM parts are the safe bet and come with a provider warranty.

Functions:

E-commerce is one of the best online-based shopping stores to make great shopping experience at free will. The question that you asked is the use of E-commerce, the main need is "shopping", buy anything with coupons and at cut-off rates.

The standard of shopping has changed its view from the old period to latest home delivery services and the best part is that one can easily own such a palace of products in the display with a fair amount of money

Advantages to customers:

☐ A customer can put review comments about a product and can see what others are buying, or see the review comments of other customers before making a final purchase.

☐ E-commerce provides options of virtual auctions.

☐ It provides readily available information. A customer can see the relevant detailed information within seconds, rather than waiting for days or weeks.

◻ E-Commerce increases the competition among organizations and as a result, organizations provides substantial discounts to customers

Advantages to society:

- **Customers need not travel to shop a product, thus less traffic on road and low air pollution.**
- **E-commerce helps in reducing the cost of products, so less affluent people can also afford the products.**
- **E-commerce has enabled rural areas to access services and products, which are otherwise not available to them.**
- **E-commerce helps the government to deliver public services such as healthcare, education, social services at a reduced cost and in an improved manner.**

Selecting new product:

Sell what the customer wants to buy, not what you want to sell! This is a common mistake, especially when merchandisers are given a great price to sell a particular product. If nobody wants to buy that product, it doesn't matter what price you set it at

Using Process Model (iterative):

Unlike the more traditional waterfall model, which focuses on a stringent step-by-step process of development stages, the iterative model is best thought of as a cyclical process. After an initial planning phase, a small handful of stages are repeated over and over, with each completion of the cycle incrementally improving and iterating on the software. Enhancements can quickly be recognized and implemented throughout each iteration, allowing the next iteration to be at least marginally better than the last.
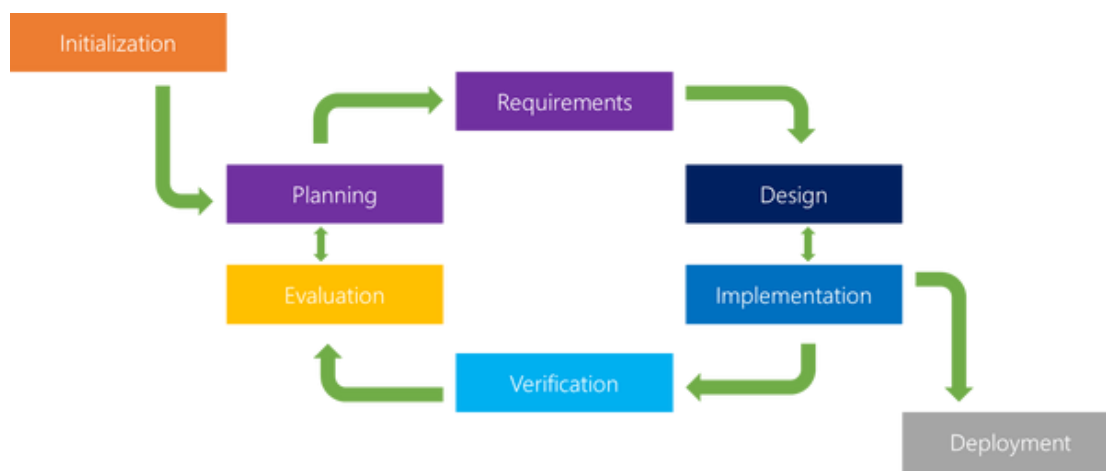
Advantage of this process:

It is rather obvious that most software development life cycles will include some form of versioning, indicating the release stage of the software at any particular stage. However, the iterative model makes this even easier by ensuring that newer iterations are incrementally improved versions of previous iterations. Moreover, in the event that a new iteration fundamentally breaks a system in a catastrophic manner, a previous iteration can quickly and easily be implemented or "rolled back," with minimal losses; a particular boon for post-release maintenance or web applications.

Database Tables:

Table ▲	Action
☐ brand	⭐ 🔲 Browse 📝 Structure 🔍 Search ➕ Insert 🗑 Empty ⊖ Drop
☐ category	⭐ 🔲 Browse 📝 Structure 🔍 Search ➕ Insert 🗑 Empty ⊖ Drop
☐ category_sub	⭐ 🔲 Browse 📝 Structure 🔍 Search ➕ Insert 🗑 Empty ⊖ Drop
☐ category_sub_sub	⭐ 🔲 Browse 📝 Structure 🔍 Search ➕ Insert 🗑 Empty ⊖ Drop
☐ engine	⭐ 🔲 Browse 📝 Structure 🔍 Search ➕ Insert 🗑 Empty ⊖ Drop
☐ engine2part	⭐ 🔲 Browse 📝 Structure 🔍 Search ➕ Insert 🗑 Empty ⊖ Drop
☐ make	⭐ 🔲 Browse 📝 Structure 🔍 Search ➕ Insert 🗑 Empty ⊖ Drop
☐ make2year	⭐ 🔲 Browse 📝 Structure 🔍 Search ➕ Insert 🗑 Empty ⊖ Drop
☐ model	⭐ 🔲 Browse 📝 Structure 🔍 Search ➕ Insert 🗑 Empty ⊖ Drop
☐ part	⭐ 🔲 Browse 📝 Structure 🔍 Search ➕ Insert 🗑 Empty ⊖ Drop
☐ submodel	⭐ 🔲 Browse 📝 Structure 🔍 Search ➕ Insert 🗑 Empty ⊖ Drop
☐ year	⭐ 🔲 Browse 📝 Structure 🔍 Search ➕ Insert 🗑 Empty ⊖ Drop
12 tables	**Sum**

— Brand: brands of auto parts

Data fields

id: int(10) unsigned

title: varchar(255)

class:int (3)

— Category: Top categories

id:int(11)

title:varchar(255)

—

—

—

— **Engine:**

id: int(11)

title: varchar(255)

submodel_id: int(11)

make: varchar(255)

year: char(4)

model: varchar(255)

submodel: varchar(255)

num_parts: int(10) unsigned

Customers Tables description:

CustomerRef 8-character text string

- **Unique 8-character reference for this customer based on first 4 letters of surname (e.g. SMIT0001). This will make it easy to find individual customers. This field is the primary key.**

- **CustomerFirstName**

- **20-character text string**

- **CustomerSurname**

- **25-character text string**

- **CustomerAddress**

- **255-character text string**

- **CustomerTel**

- **15-character text string**

Hardware and software requirements

Computer information:

cpu:i7

memory: 8gb Ram

windows 10

Hard disk: 1-Tb

Language used:

- Html

- CSS

-JavaScript

-PHP

Chapter 4 : Main Pages Layout

Chapter 5 Future goals:

The idea it helps the areas that it doesn't have the most spare parts available. So, the idea it saves time & money for client that's what all we need to spend our other times doing another useful things in our life, because we living in an age of speed.

-We make track orders for the shipment

- Protect the site, control panel and database from hacking and intrusion.

- Bilingual Arabic, English and Multi-currency.

- Send promotional messages and discounts to customers via the application in mobile, similar to Whatsapp messages.

- Make more sale.
- Build a good will.
- Best customer service.
- Minimum Shipping time.
- Increase the number of reviews.
- Get Positive feedback.
- Reduce the number of refund item.
  - Customer follow up

Acknowledgments

In the name of "Allah", the most beneficent and merciful who gave us strength and knowledge to achieve what we want to do, Being useful people in anyone's life is good thing.

Me Mohammad R. Yasin doing this report I,

Special Thanks for <u>Abdullah Saeed Bajahzar</u> & My family who helps me fulfill this report. being helpful and kind With me & always telling me to be Self-dependence, He was patient while suggesting me the Outlines of this report. I thank him for his overall support.

,And for mum for supporting me who gives me Morale boost for finishing anything and being strong in any situation.

I also thankful to everyone who all supported me, for completed my report effectively and moreover on time. they gave us many helpful comments which helped me a lot in preparing this assignment.