

Al Hussein Technical University
National ICT Upskilling Programme

Capstone Project
Multi Vendor Listing providers

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**Full Stack Developer
Using PHP**

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Abstract

Technology has become an integral part of our lives , so online shopping has become a convenient and easy way for many people. It should not only be used to sell products or services but also to complete customer requirements related to providing a platform that acts as an interface between a customer and several vendors at the same time.

Instead of one seller selling his products or services to customers so that he doesn't offer a wide range of products to his customers, there are many sellers on one platform to facilitate the purchase process for the customer in addition to helping the seller reach a lot of customers.

Therefore , it is important to build a web system that mediates between customers and multiple vendors on one platform.

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1.Introduction

My project is a website designed to meet the requirements of customers and sellers at the same time, this site helps sellers to reach a lot of customers and increase revenues, in addition to the customer getting the opportunity to buy the product from several different sellers or brands, this helps customers to choose between a large and diverse group of the products.

In a multi-vendor marketplace, there are essentially 3 entities involved namely: Admin, Vendor, and Customer.

1.1.Problem Statement:

Buyers do not have the opportunity to choose in purchasing their products so it is difficult to meet the requirements of the buyers due to the limited product category.

1.2.Proposed Solution:

This project supports the idea of a multi-vendor market and this means more options the buyer will be able to purchase the products of his choice from the seller of his choice.

Thus, it facilitates the buying and selling process and makes it an enjoyable experience , while at the same time saving effort and time for the seller and the buyer.

2.Methodology

There are many types of models used in software design and development. Among them are the waterfall model, agile model, etc. In my project , I will use waterfall model.

2.1.Waterfall Model:

Waterfall approach was first SDLC Model to be used widely in Software Engineering to ensure success of the project. In "The Waterfall" approach, the whole process of software development is divided into separate phases. In this Waterfall model, typically, the outcome of one phase acts as the input for the next phase sequentially.^[1]

The following illustration is a representation of the different phases of the Waterfall Model.

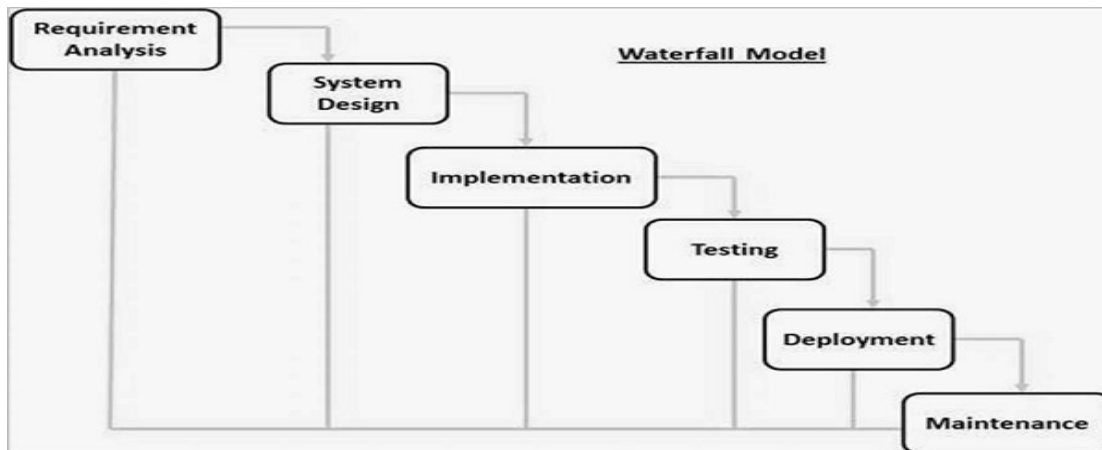


Figure (1): Waterfall Modal

-Requirements collection and analysis:

Initially, system requirements are understood, recorded and documented.

- **System Design:** After defining the system requirements, the system design preparation phase begins by determining the relationships between the requirements, building the database and designing a prototype of the system.

- **implementation :**Here you will start coding using web application development languages (PHP, HTML, CSS, JavaScript, Bootstrap, MySQL).

-**Testing:** During this stage, a system test is performed to ensure that the system is working properly by entering real data and verifying the correctness of the entered data. This stage also includes spotting and crushing bugs to make the project more flexible.

-**Deployment of system:** the product is deployed in the customer environment or released into the market.

-**Maintenance:** – if some issues which come up in the client environment. To fix those issues, patches are released.

3.System Design :

figures that describe my website process, it will include site map of the system, entity relation diagram (ERD) , class diagrams and Mock ups.

3.1.Site map of the system

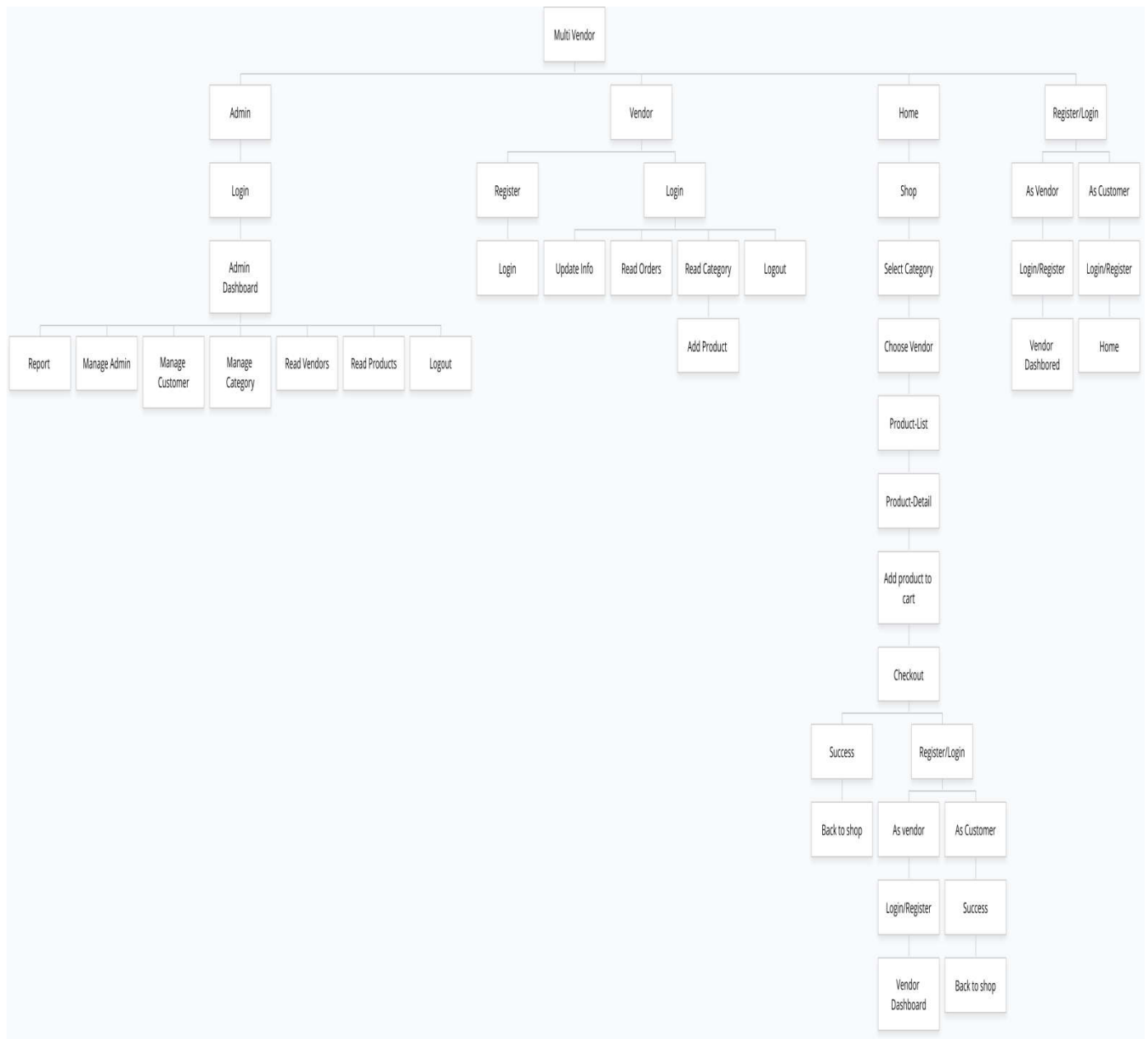


Figure (2): Site Map

3.2- entity relation diagram (ERD)

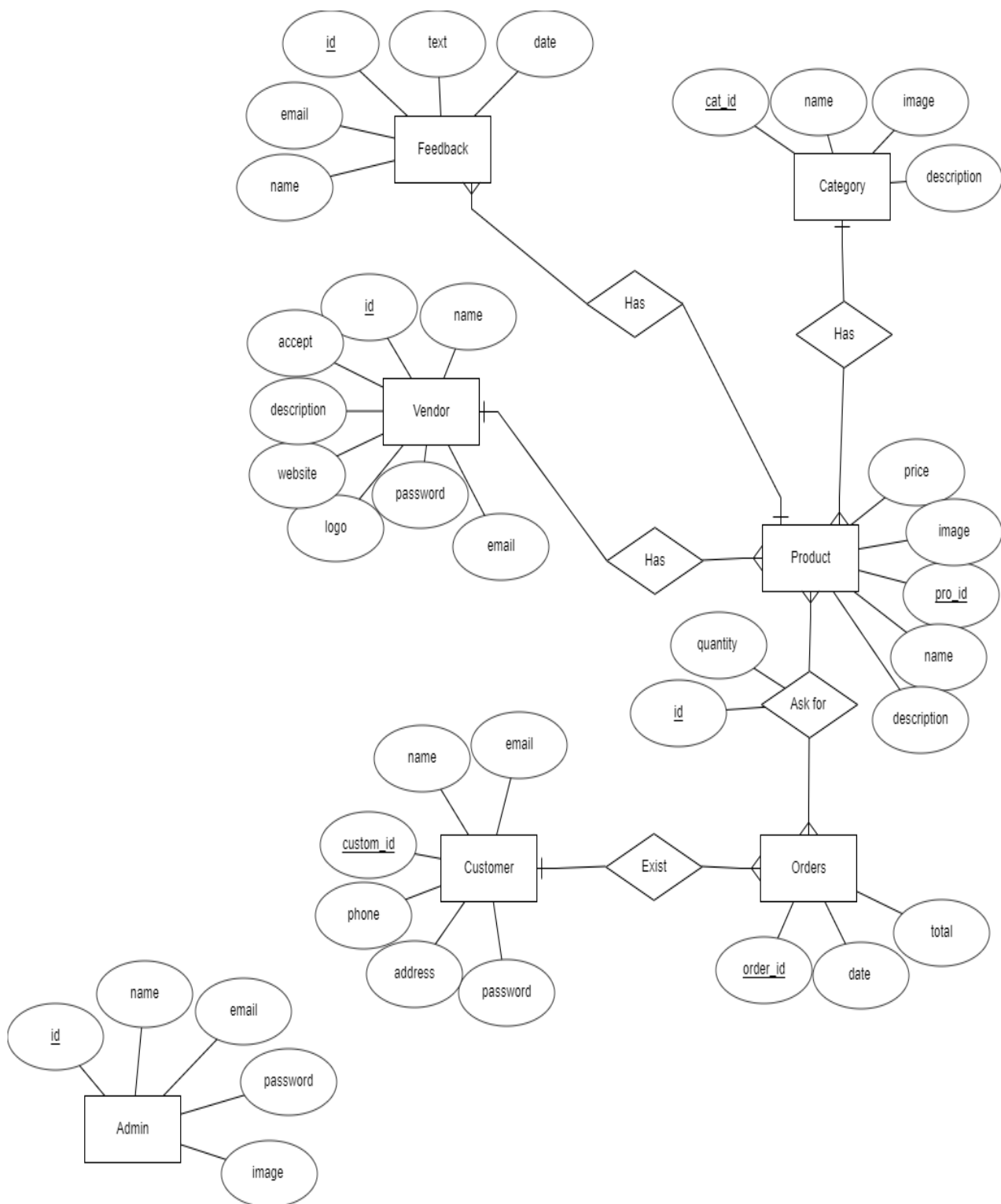


Figure (3): ER Diagram

3.3 - class diagram

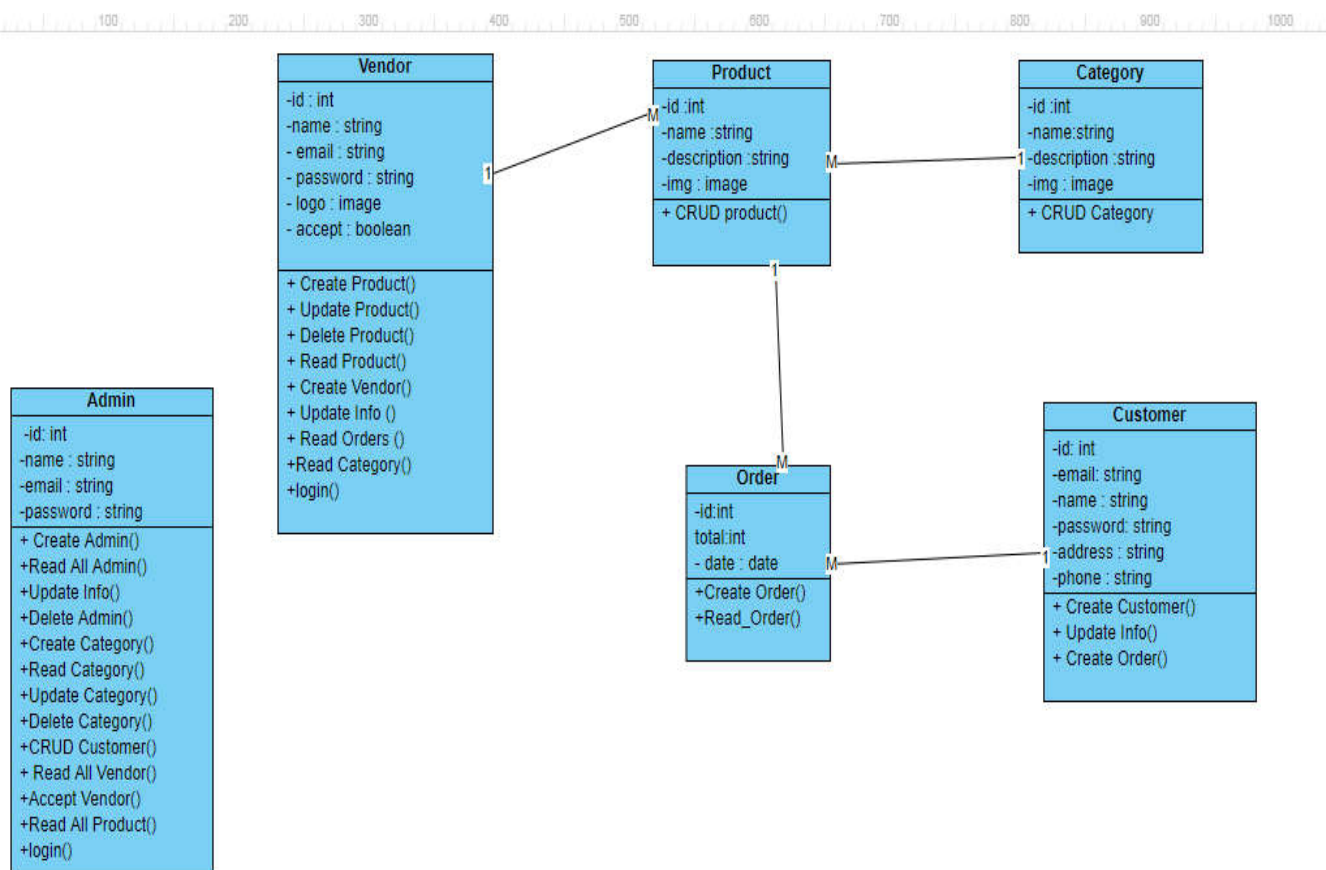


Figure (4): Class Diagram

3.4 Mock-ups

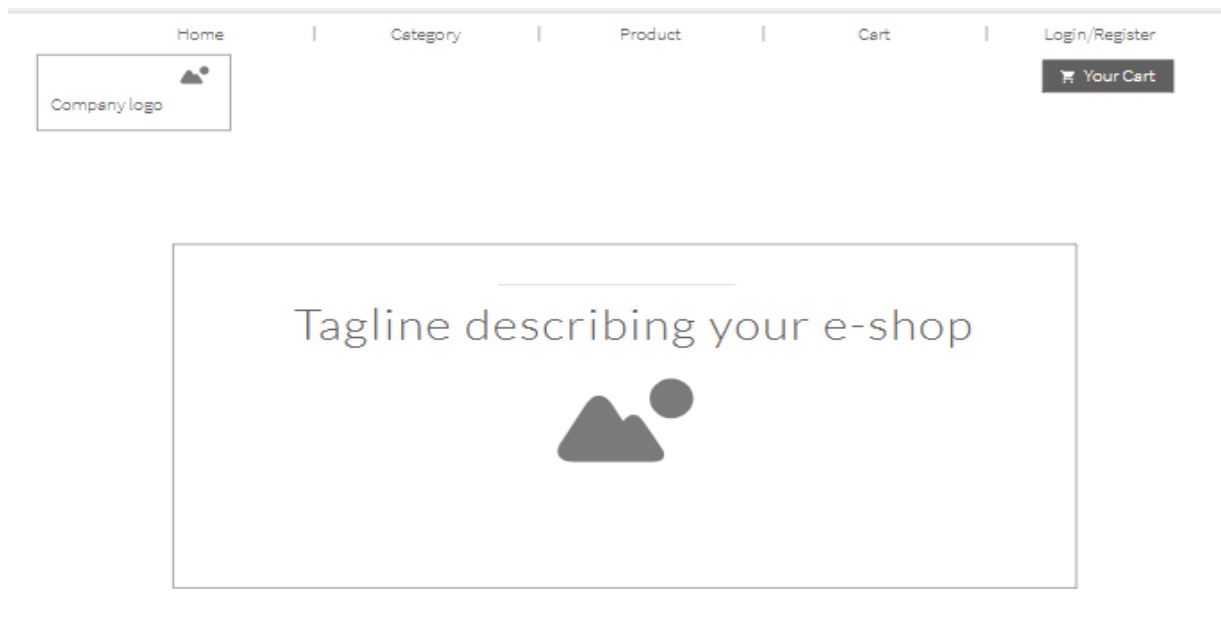


Figure (5): Header Section



Figure (6): Category Section

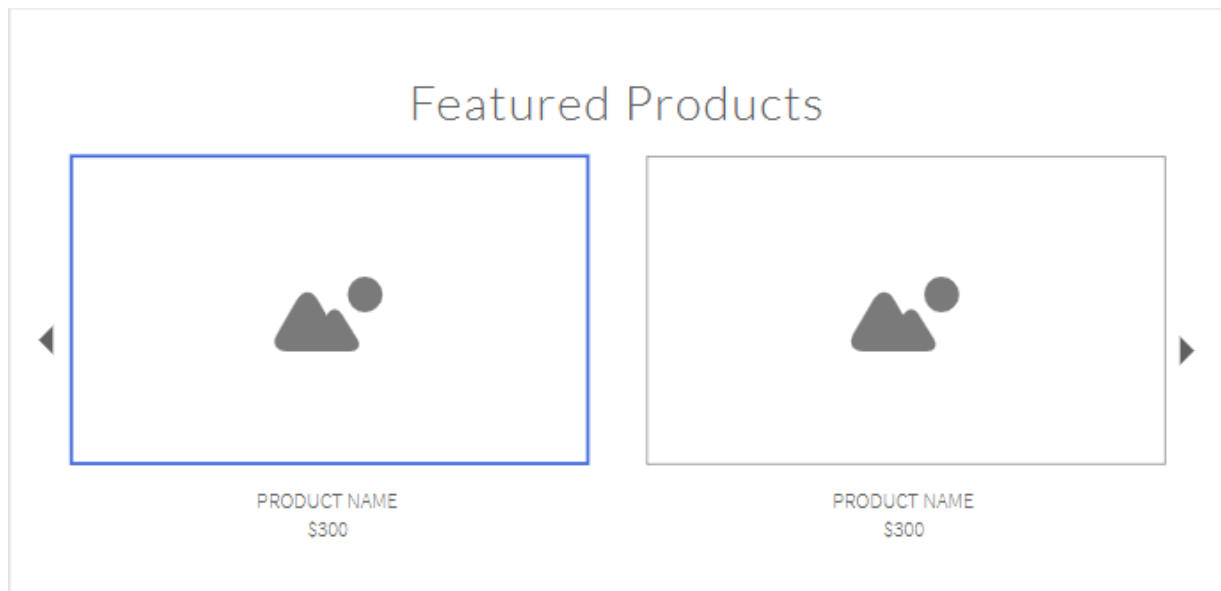


Figure (7): featured product Section



Figure (8): Vendor Section

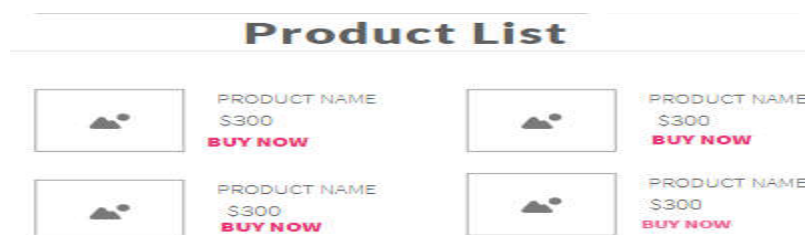


Figure (9): Products Section

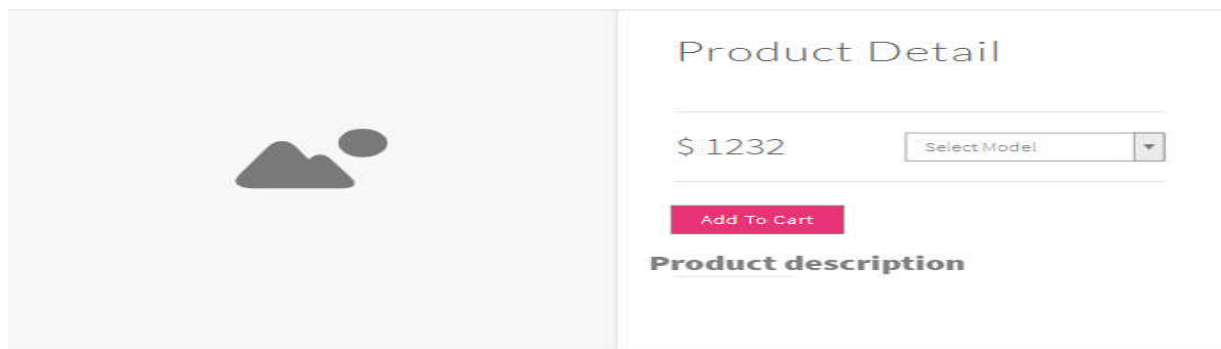


Figure (10): Product-Detail Section



Figure (11): Cart Section

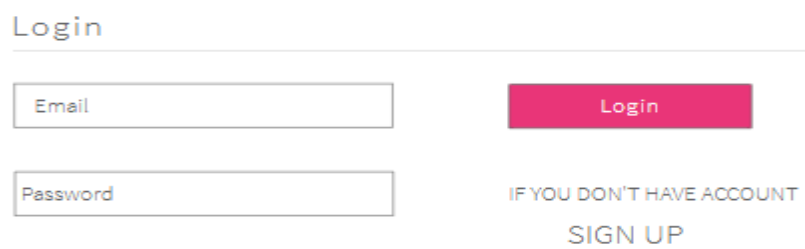


Figure (12): Login Section

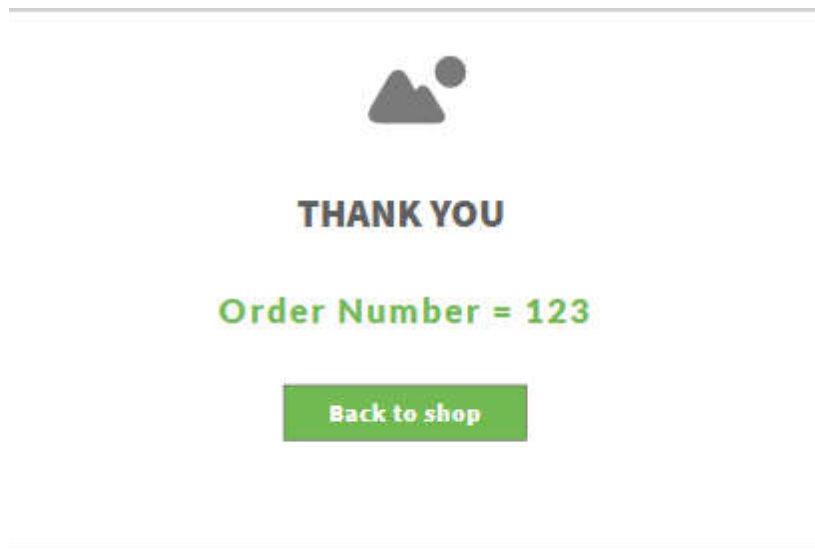


Figure (13): Order Success Section

Summary

Finally, the site diagram, the entity relationship diagram for the database, and the class diagram of the database relationships are used for designing the system and building an overview of the system.

4.Graphical User Interface Implementation

4.1.Public Website

-Home Page : In this page customer can see all category and featured products.

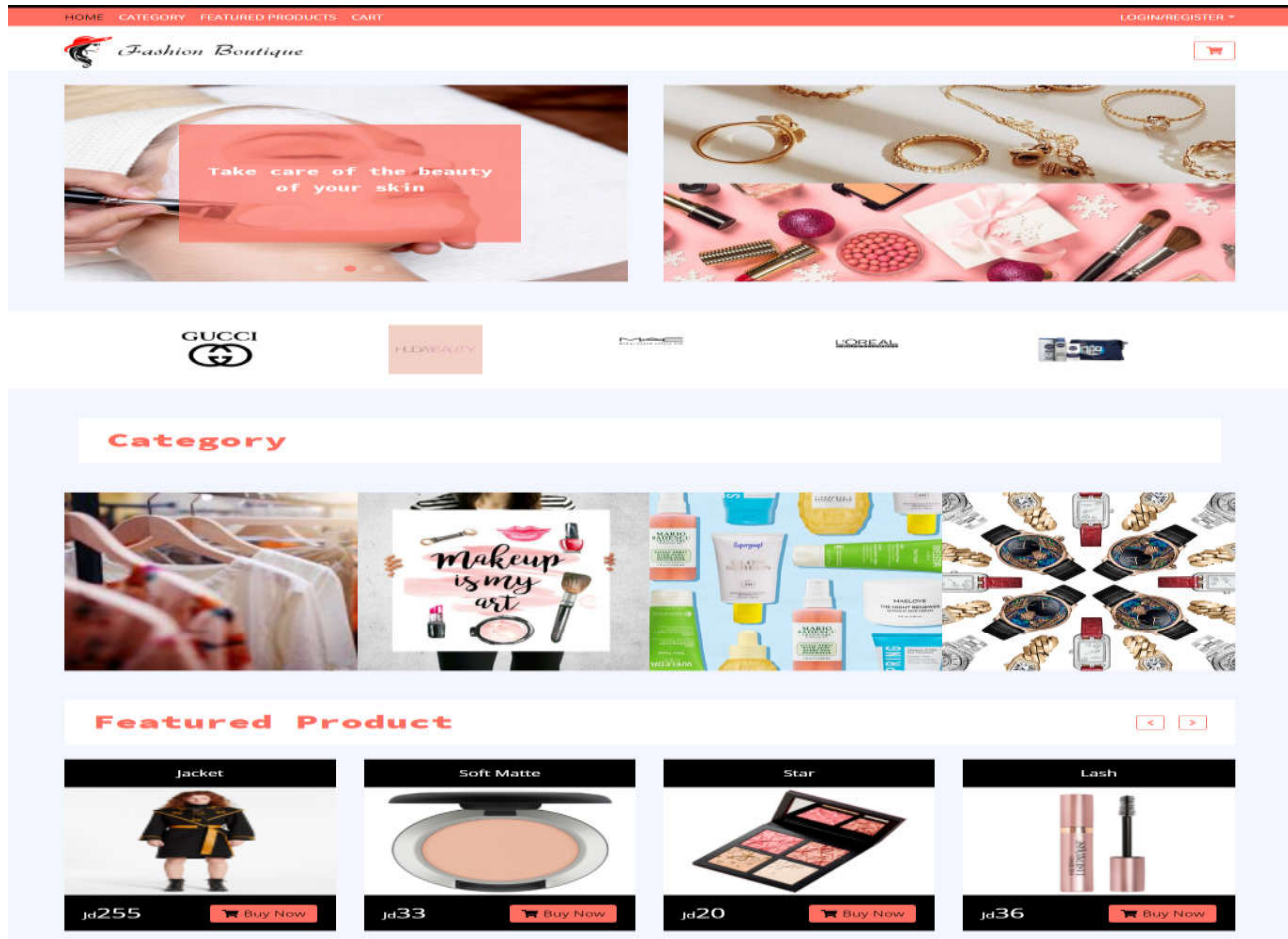


Figure (14): Home Page

-Vendor Page : After choosing a specific category , the vendors page will appear.

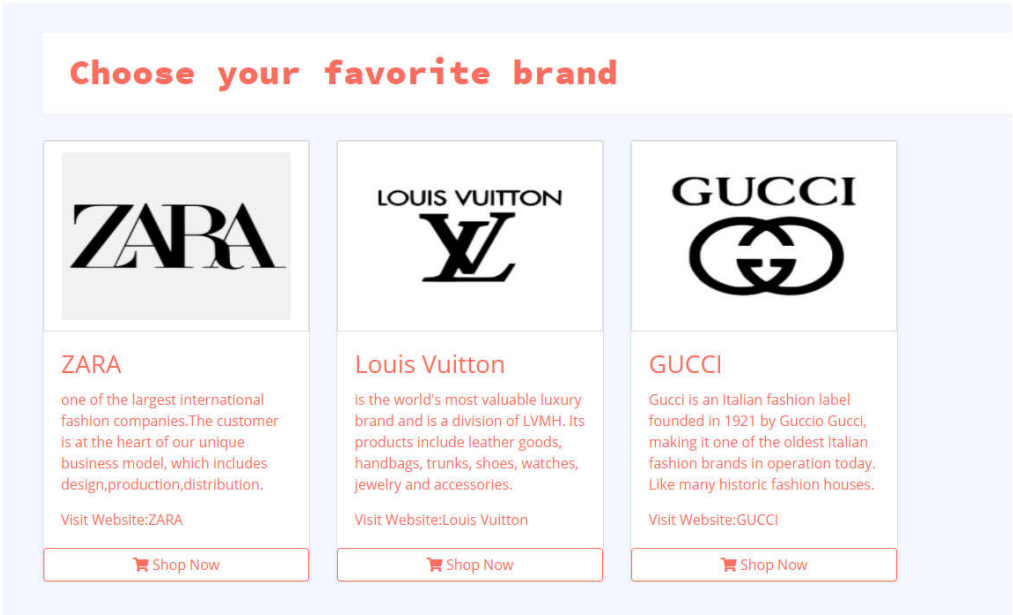


Figure (15): Vendor Page

-Product-List Page : After choosing your favorite brand , the Product page will show .

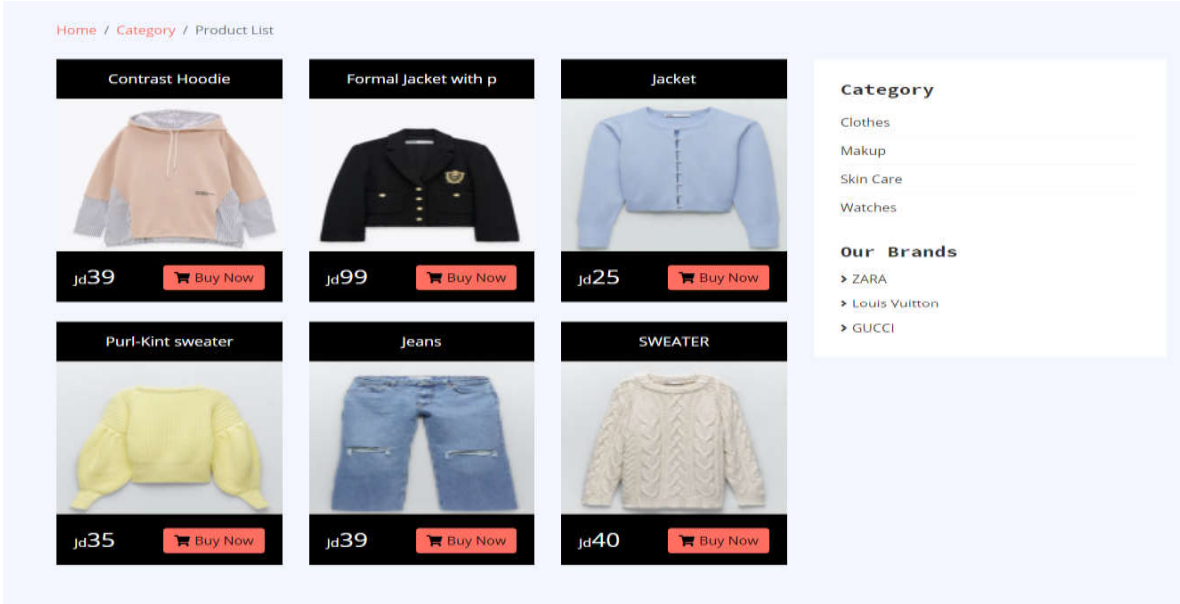


Figure (16): Product-List Page

-Product-Detail Page : After click on the product you want to purchase, the product detail page will appear.

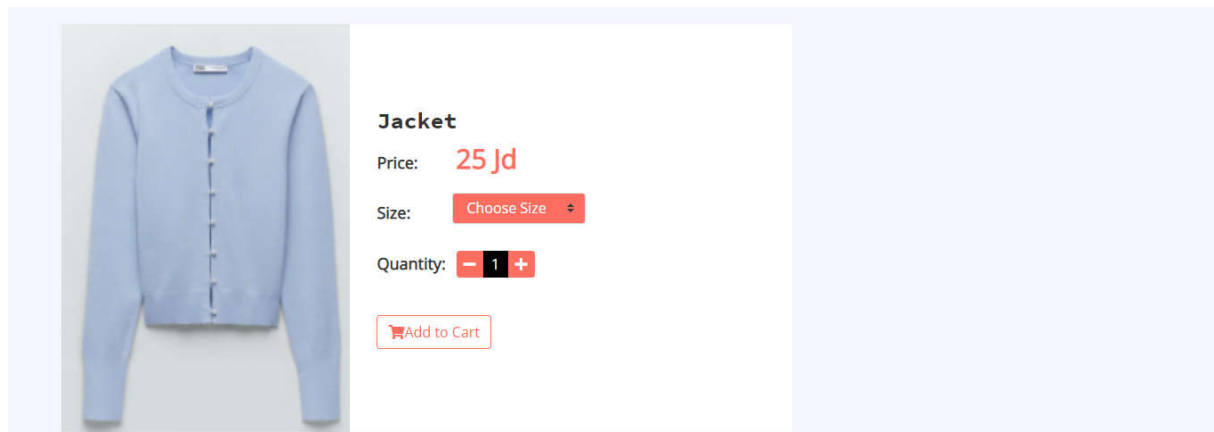


Figure (17): Product-Detail Page

-Cart Page : If you click add to cart in product detail page , the product will add to cart.

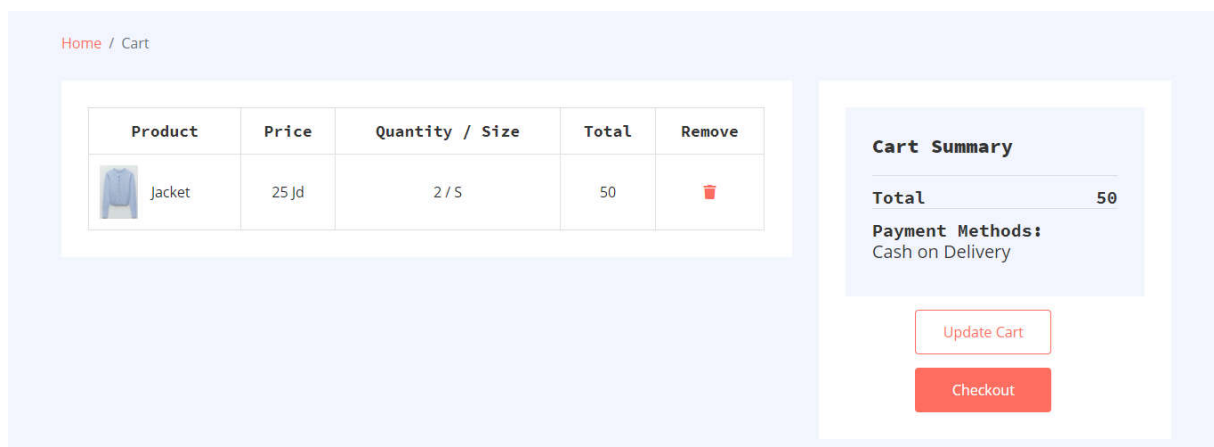


Figure (18): Cart Page

-Check out Page : If you click Checkout , you will be taken to the login page .

If you login before , you will go to the checkout page.

In this page you will show order detail , if you click on confirmation button

The success page will show where contains your order number.



Figure (19): Checkout Page

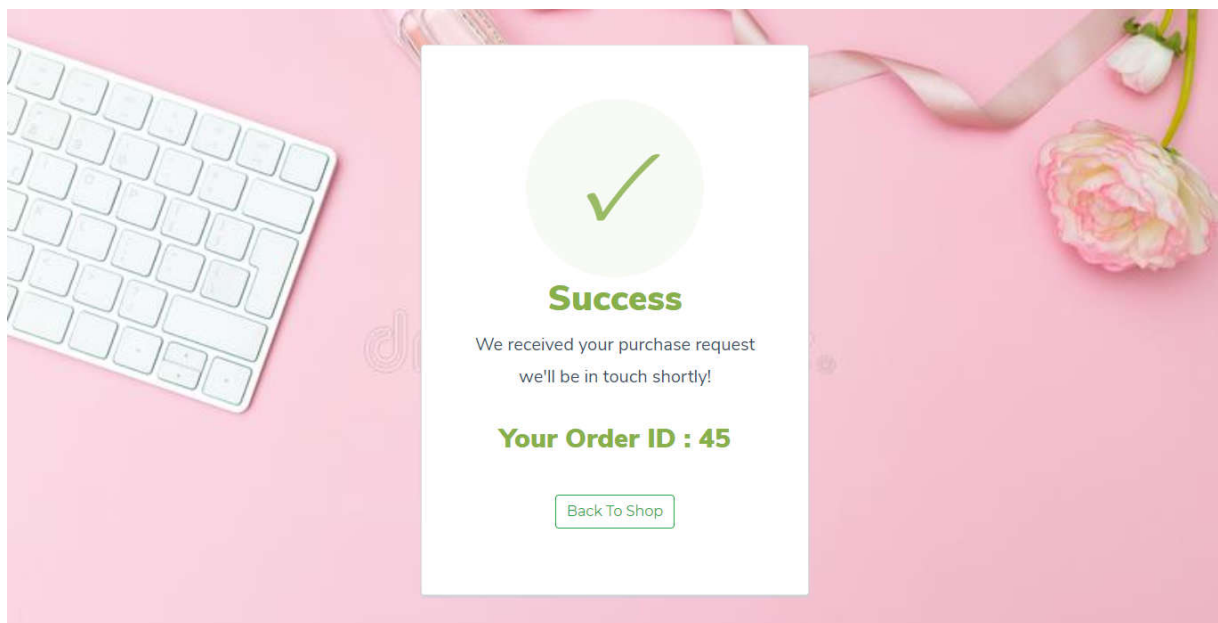


Figure (20): Success Page

5.Test Cases

| # | Test cases |
|---|---|
| 1 | Check the e-mail and password on the login page , in the event that one of them is wrong, it doesn't login. |
| 2 | When modifying the user's information, the information entered is verified if it is correct or not. |
| 3 | Check that the cart is being added correctly. |
| 4 | Ensure that the vendor has the ability to add products in a specific category. |
| 5 | Ensure that the admin gives permission to the seller to log into the site after verifying his information. |

6.Conculsion

In this project, we tackled the topic of a multi-vendor e-commerce website. This web system acts as an intermediary between the seller and the customer, as it benefits both parties.

In my opinion, the multi-vendor e-commerce system is more effective than the traditional e-commerce system, the seller has the opportunity to reach a larger number of customers and at the same time the customer has the ability to choose products in a wider range and in one place.

7. Reference

- ^[1] https://www.tutorialspoint.com/sdlc/sdlc_waterfall_model.htm
- <https://online.visual-paradigm.com>
- <https://app.mogups.com/>
- erdplus.com
- <https://www.gloomaps.com/>

APPENDIX A

The code has been uploaded to github

GitHub: is a code hosting platform for version control and collaboration. It lets you and others work together on projects from anywhere.

GitHub Account : <https://github.com/Abeer-otoom/capstone-project>