



Abstract

Recently we have been faced with numerous changes in the way we sell and display our products. In the last few years, we have seen that it has become more and more difficult to start a business either because of COVID-19 or the inflation of the economy. We also face that every day it is more difficult to find high-quality shoes and bags and even the waiting time we have to get that product is too long. For this reason, an online store ("JAOR Wallet & Shoe") has been developed. "JAOR Wallet & Shoe" is an online store of high-quality shoes and wallets for men and women that will allow the consumer to buy from the comfort of their home and the administrator to sell these high-quality products. This will be a website where users can see the products with their respective information and add them to the cart.

Introduction

What is an online store? An online store is a website where consumers can view a catalog of products and purchase them online without the need to visit a physical store [1]. The idea of an online store is that a retail store or even a non-physical store can sell its products to a wider audience. The advantage of such a store is that it can sell its products without the need for a physical store. The objective of "JAOR Wallet & Shoe" is to provide accessibility to those merchants who want to start a store related to high-quality shoes and wallets, and to be able to expand their sales internationally without the need of having a physical store. This application is mainly focused on the merchant who wants to set up a physical store and does not have the resources.

Background

Today we live in a busy world where people have very little time to waste, waiting in long lines or searching from store to store. Davis and Heineke state that "as the standard of living in developed countries rises, so does the value of customers' time and, consequently, they seek those goods and services that minimize the expenditure of their time" [2]. Today's consumers expect quality and very fast service, with a minimum waiting time. On the other hand, we have the side of the entrepreneur who has to be patient with the customer at all times regardless of the customer's attitude. As Robert H. Schuller would say, "Never cut down a tree in winter. Never make a negative decision in the low times. Never make your important decisions when you're in a bad mood. Wait. Be patient. The storm will pass. Spring will come." [3] With this, he means that in almost all situations we know that we should not react instantly, but that only those with great patience have the mental strength to delay the fulfillment of a decision. One of the great advantages of having an online business is that you don't have to deal with the different attitudes of customers face to face.

Problem

As time goes by, we have been gradually impacted by the economic, natural, and pandemic changes. It is becoming more and more complicated to start a business since things are becoming more expensive and it is costly to start a business from scratch. This is related to the fact that the maintenance of an establishment is very expensive and is not sustainable, the consumer does not have complete access to the business since it cannot be accessed at any time and the situation during the pandemic. Due to this situation, the development of an online store arises.

Methodology

The system interface is composed of the following communication order (see Figure 1), which starts with the connection of the computer to the network (local network or internet, it all depends on the environment in which we are running the application). Then it connects to a browser, where the address of the web page is entered, and a request is made to the server where the web page is located and the web server allows the computer to access the web page.

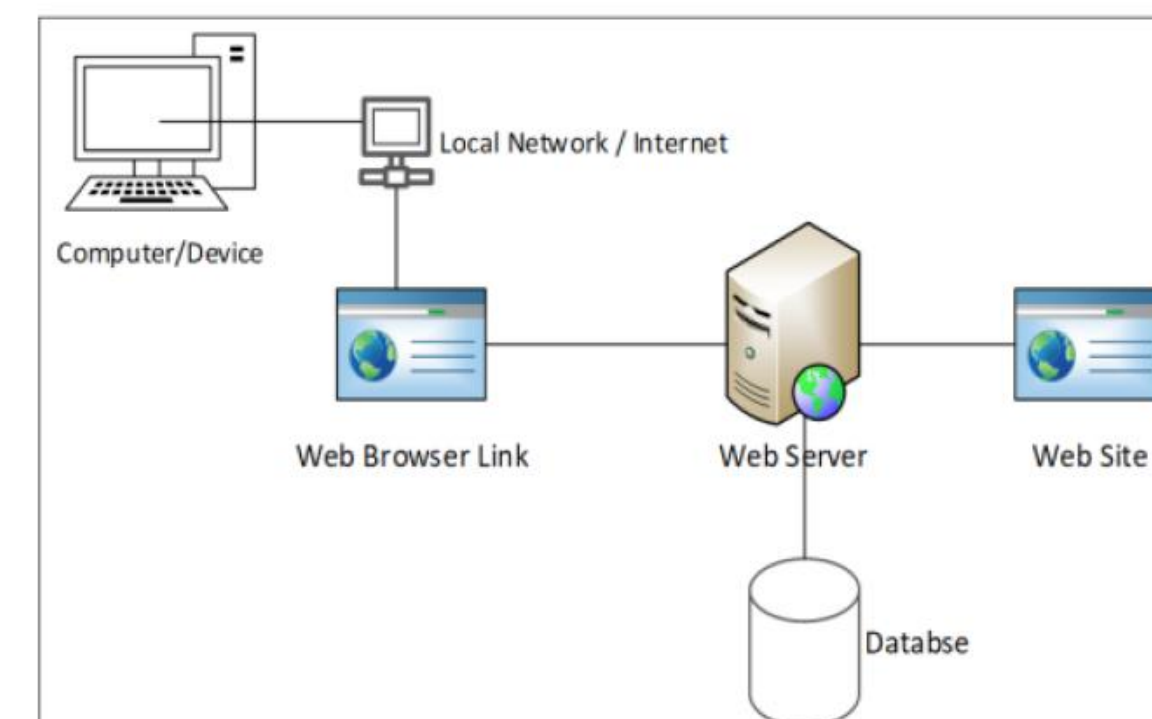


Figure 1 System Interface

This project consists of two interfaces: the shopping website interface and the administrator interface. The main function of the shopping website (see Figure 2) is to allow the user to make purchases of the products registered on the website, later we will discuss other functions.

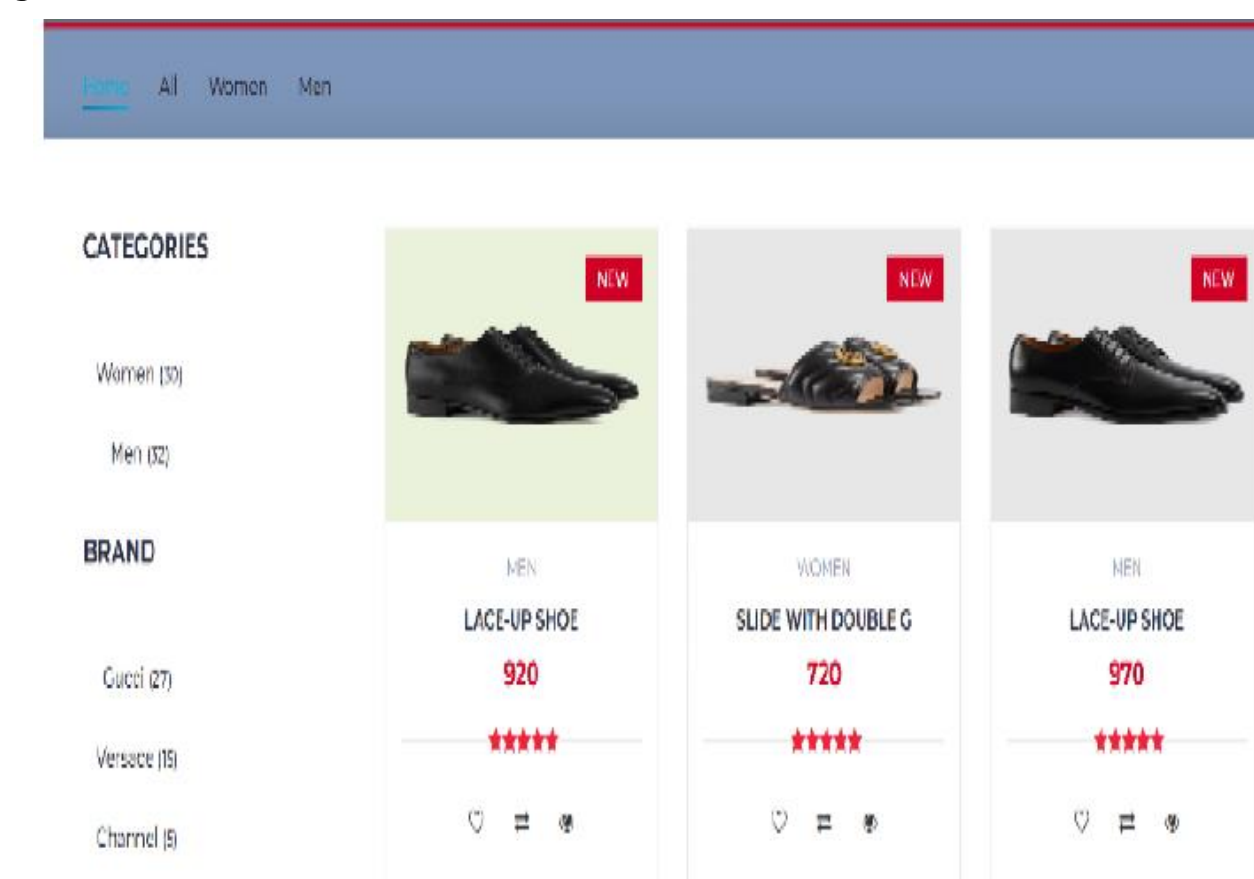


Figure 2 Shopping Website Interface

The main function of the administrator interface (see Figure 3) is to add products that will be reflected in the shopping website interface, later we will see the other functions of the application.

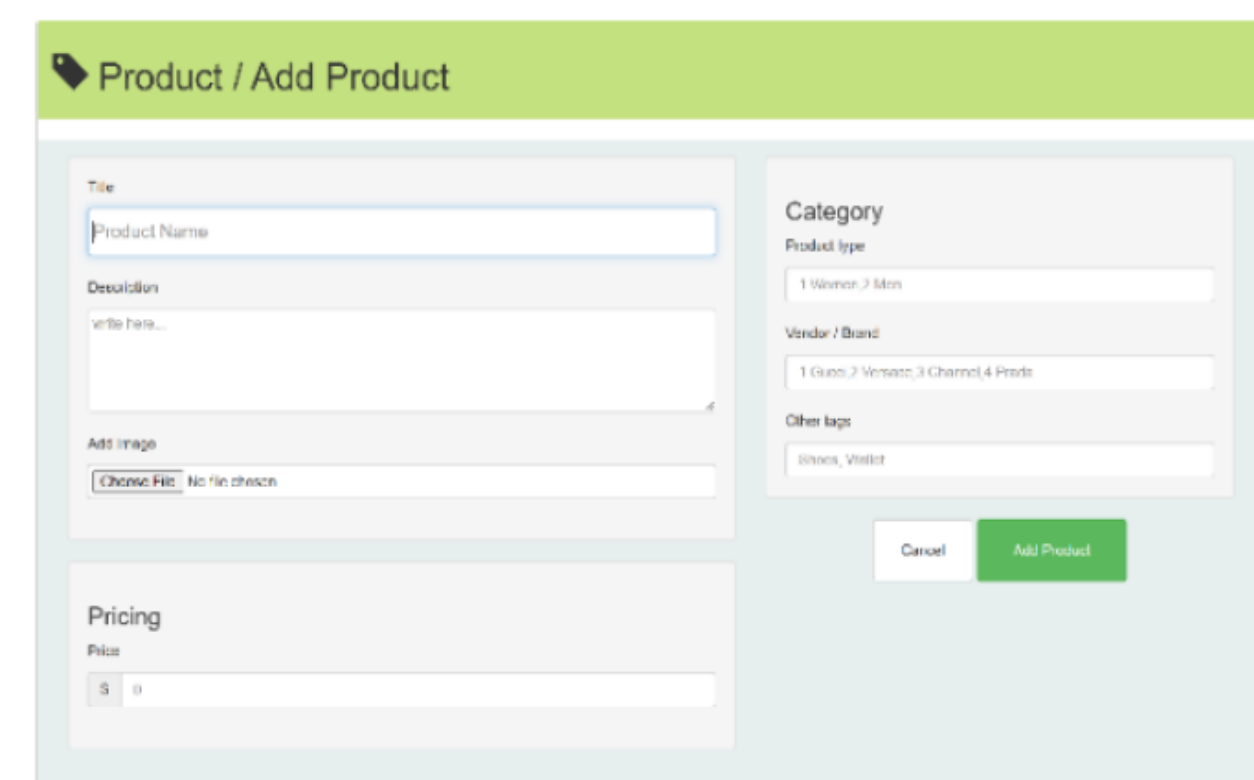


Figure 3 Administrator Interface

The management system used to create the database is MySQL, as it is the most secure database and compatible with the PHP back-end language. Much of the functionality of the project is due to the databases, which are used for adding products to the cart and the system and storing user information and selected products. The database name is onlineshop, with 8 tables (see Figure 4).

Table	Action	Rows
brands	Browse Structure Search Insert Empty Drop	4
cart	Browse Structure Search Insert Empty Drop	4
categories	Browse Structure Search Insert Empty Drop	2
orders_info	Browse Structure Search Insert Empty Drop	3
order_products	Browse Structure Search Insert Empty Drop	14
products	Browse Structure Search Insert Empty Drop	64
user_info	Browse Structure Search Insert Empty Drop	4
user_info_backup	Browse Structure Search Insert Empty Drop	5
8 tables	Sum	100

Figure 4 phpMyAdmin Development Tool

Results and Discussion

The process of developing and creating this project has resulted in a website (JAOR Wallets & Shoes) that contains several tools that allow the user to make online purchases in an easy and reliable way (see Figure 5).

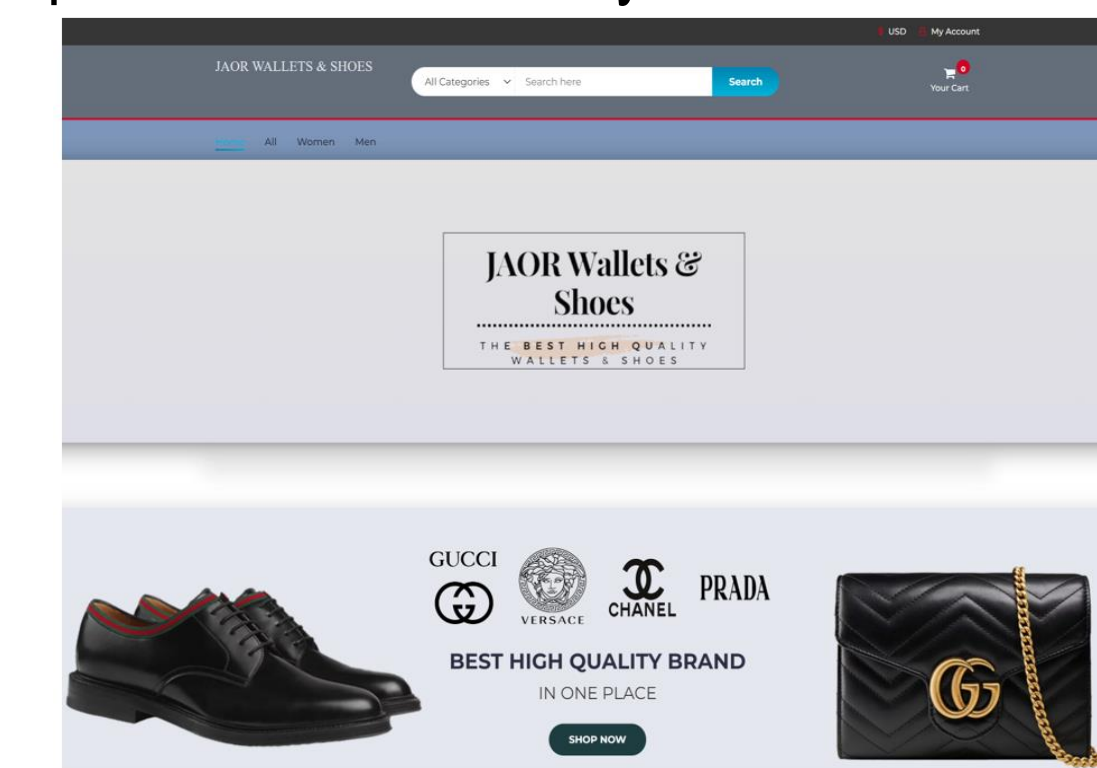


Figure 5 Shopping website

The website will allow the user to register (see Figure 6), login (see Figure 7), view the products available, add them to the shopping cart (see Figure 8) and purchase the products (see Figure 9).

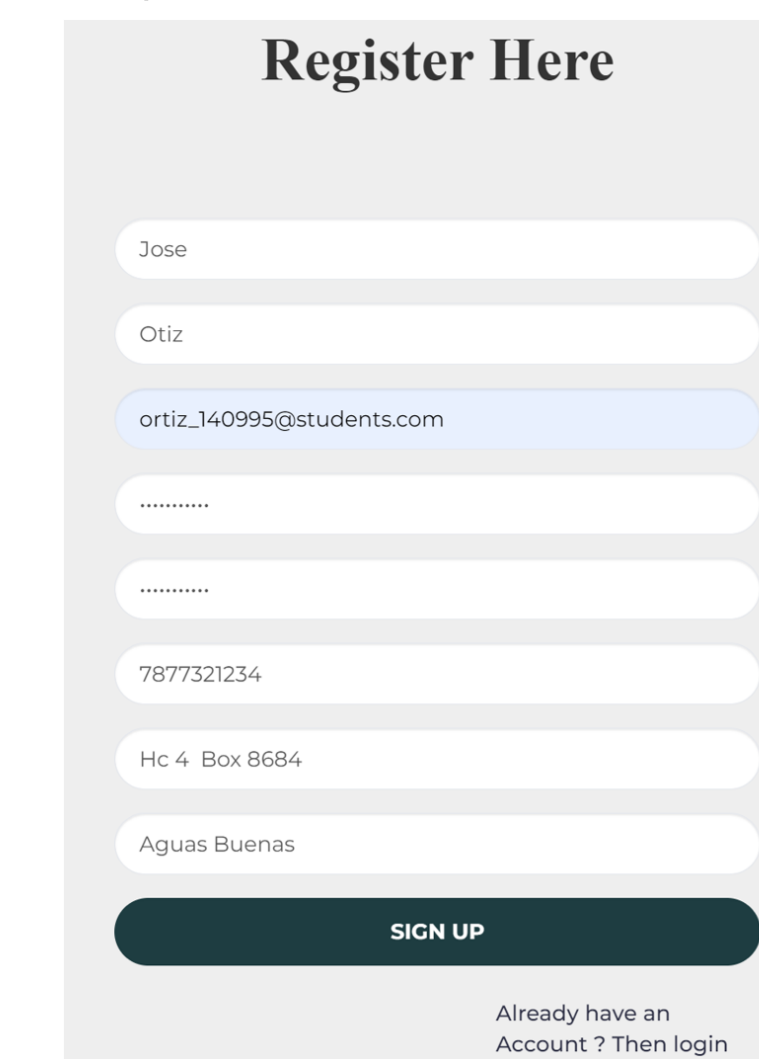


Figure 6 Register Section

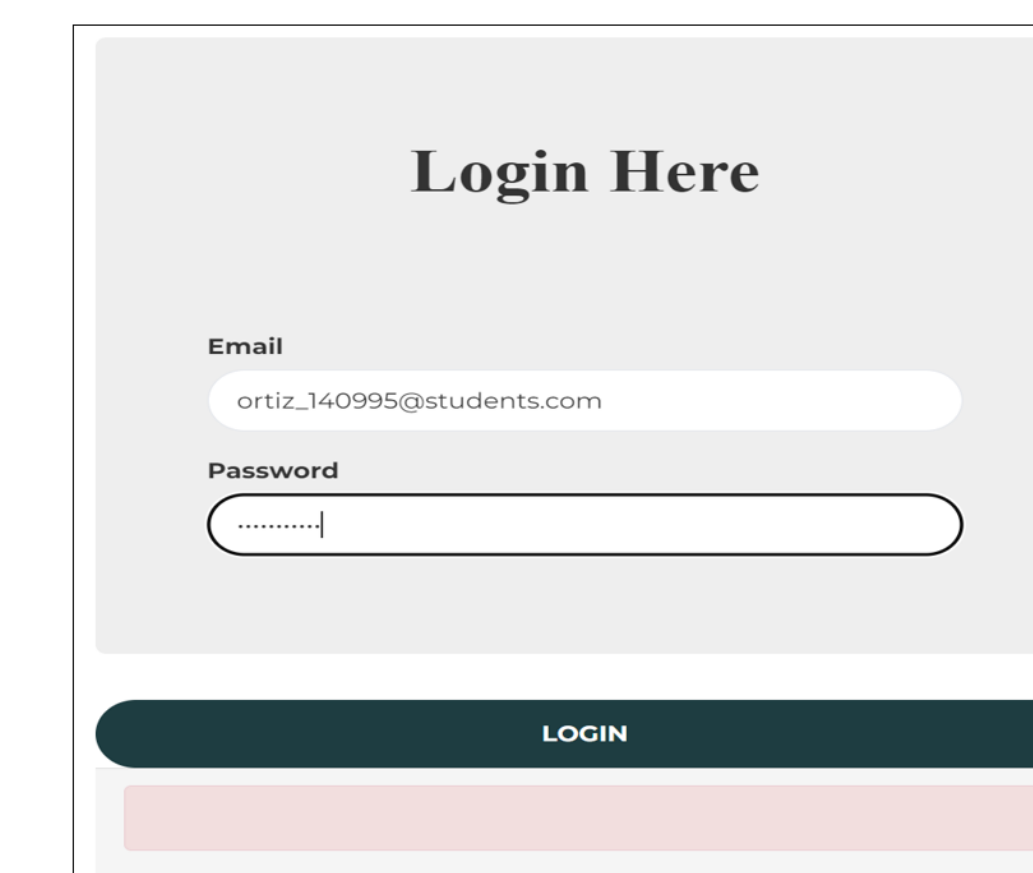


Figure 7 Login Section

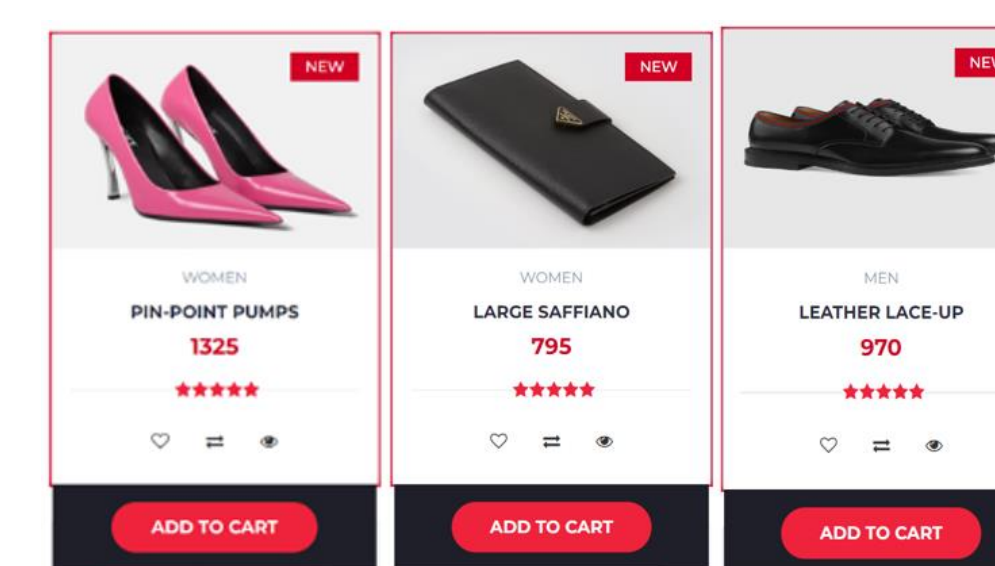


Figure 8 Available & Added Products

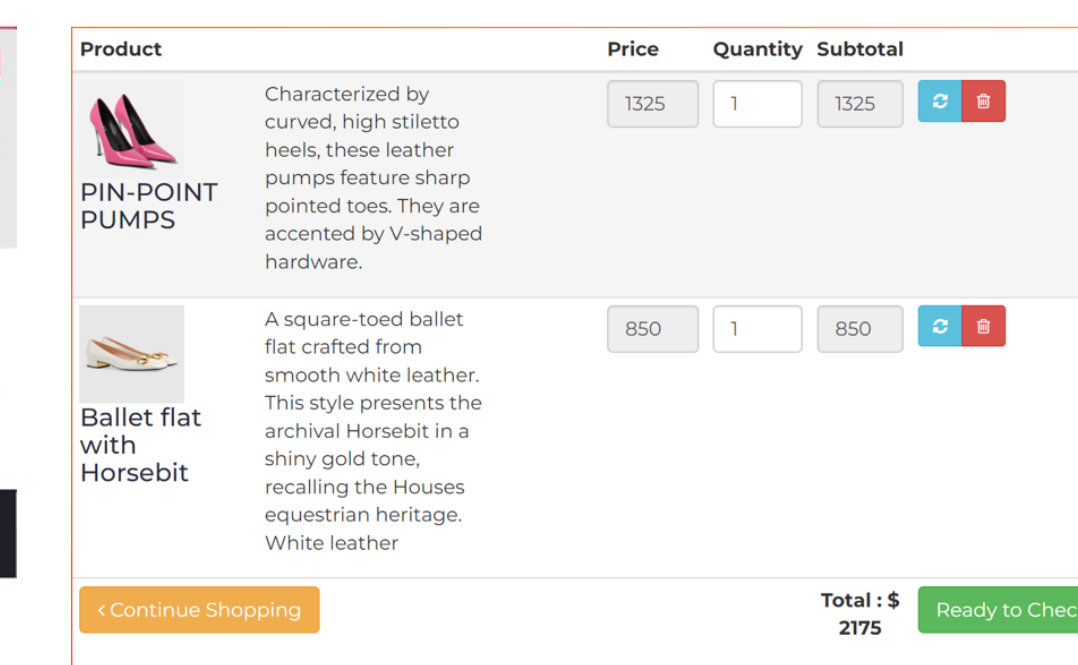


Figure 9 Edit Cart & Checkout Option

An additional website was also created for use by the administrator (see Figure 10),



Figure 10 Admin Panel Section

which will allow him to view orders (see Figure 11), add or remove products (see Figure 12), and manage user profiles.

Orders / Page				Products list / Page			
Customer Name	Products	Contact Email	Address	Image	Name	Price	Actions
Jose Ortiz	PIN-POINT PUMPS	ortiz_140995@students.com	H.C. 4 Box 8664 Aguias Buenas PR 00703		Leather shoe	100	View
	Leather lace-up				Leather lace-up	970	View
	Leather shoe				Leather shoe	1000	View
	Leather shoe				Leather shoe	1040	View

Figure 11 Orders Section

Figure 12 Product List Section

The performance of these websites was evaluated in several tests to verify that it was excellent. The focus of this project is to provide users with a secure and accessible environment.

Conclusions

The main objective of carrying out the project of an online shopping site is to provide the user with a better alternative to make their purchases without the need to visit a physical store and waste time waiting. This project will allow the user to find a variety of shoes and wallet products for men and women. For this project, we had to analyze which programming languages would be the most appropriate for this type of scenario, which was to create a responsive website. It was also investigated and analyzed how high is the use of online shopping pages, to determine if it was worth the effort to develop one. It was also necessary to research which brands of high-quality shoes and wallets are currently the most popular. For the creation of each section of the website to be created, relevant research and analysis of the information to be provided on the website were conducted. The information considered most relevant for each section was chosen. Tables and flow charts were used to facilitate the organization of the website content.

Future Work

The realization of the website meets the initial objectives and is also suitable for implementing future improvements. The improvements that we could bring in the future for online shopping sites would be:

- Account verification email
- More payment alternatives, such as PayPal, Shop, etc.
- Integrate a chatbot, which can answer the user's questions.

These would be some of the future works that could be developed to continue improving the quality of the shopping website.

Acknowledgements

For the development of this application, the following sources have been of great help: GitHub, the Bootstrap and JQuery libraries, and the Electro template powered by yamincco.

References

- [1] Optimizely. (2022, March 11). What is an online store? Optimizely. [Online] Retrieved August 23, 2022, from <https://www.optimizely.com/insights/blog/what-is-an-online-store/#:~:text=An%20online%20store%20is%20a,retail%20business%20with%20a%20website.&text=An%20online%20store%20is%20an,services%20and%20electronically%20purchase%20them>.
- [2] Davis, M. M. and Heineke, J. (1993). Managing the customer's experience of waiting for service. R. Johnston, N.D.C. Slack.
- [3] Schuller, R. H. (n.d.). Robert H. Schuller quotes. BrainyQuote. Retrieved October 16, 2022, [Online] from https://www.brainyquote.com/quotes/robert_h_schuller_393754