

Samriddhi College

(Affiliated to Tribhuvan University)

Lokanthali-16, Bhaktapur

Project Report

On

“Computer Parts”

Submitted To

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The presented report entitled “Computer Parts” is prepared as an assignment of the subject “E-commerce”, B.Sc. CSIT 6th semester. This report is prepared on the basis of our own theoretical knowledge, guidelines, dedication, devotion and hard work.

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EXECUTIVE SUMMARY

To create an E-Commerce website for selling computer parts online was our mission. Oscar, which is an E-Commerce Framework for Django, was used to create our website. This project fits well in the market where the need for computer parts is ever growing. The online aspect of the project helps the buyers to compare and rate the available products more easily. The buyers can know the specification of the products in more detail without any assistance.

1 INTRODUCTION

1.1 GENERAL INFORMATION

E-commerce has seen massive growth in the recent internet era. It provides a convenient way of buying and selling of goods and services. The available products range in large numbers and it also allows users to select the most convenient product at the cheapest price possible.

Our project Computer Parts is an interactive e-commerce solution providing users with an opportunity to buy the computer hardware parts at an affordable price. Users can select the products from multiple renowned brands at the lowest cost possible. For the storage devices we provide a wide variety in their capacity which enables users to select the appropriate amount that fulfills their needs. So overall users can select the best fit by comparing all the available options.

1.2 BACKGROUND

E-commerce is fast gaining ground as an accepted and used business paradigm. More and more business houses are implementing web sites providing functionality for performing commercial transactions over the web. It is reasonable to say that the process of shopping on the web is becoming commonplace. In the context of Nepal, we have seen few emerging E-commerce solution providers like Daraz, SastoDeal who are doing considerably well in digitalizing the commerce.

1.3 PROBLEM STATEMENT

This project provides a solution to the traditional expensive and time-consuming commerce through an interactive e-commerce website. It also provides effective security measures that are required for safe and secure online transactions. The transactions are also comparatively cheaper than the traditional way of buying products in a physical store. So this project aims to provide a quick and cheap way of buying products online in a secure manner.

1.4 OBJECTIVE

The project is about to provide a digital platform for the commerce of computer parts. Also, it manages resources which were managed and handled by manpower previously. The main purpose of the project is to integrate distinct sections of the shop into a consistent manner so that complex functions can be handled smoothly. The project aims at the following matters

- Buying products
- To manage information of different types of items.
- Consistently update information on all the items.
- Managing security by providing authorized email & password.
- Managing databases efficiently.

2 BUSINESS MODEL

2.1 BUSINESS PROCESS

Our project “Computer Parts” is based on the Business to Consumer(B2C) E-Commerce Model since our website is focused on selling computer parts directly to consumers. A customer can view the products, choose it and order the same on our website.

The advantages include ability to handle multiple purchases of computer parts easily, there is lower cost in maintaining the store, customers can be easily retargeted with recommendations. The disadvantages include customers having to register on our website to order and checkout, there are higher security risks and customer personal data may be leaked, Internet and funding is required to maintain the customer and product databases.

2.2 MARKET ANALYSIS AND COMPETITIVE ANALYSIS

In terms of our country, the market size of computer parts is pretty small. However, the competition is high enough. Our competitors are mainly the offline computer storefronts. These storefronts provide customers with a wide range of selection and discounts. They are more open to different types of customers. Therefore, they have a larger customer base. They have more connections with the distributors.

However, if we are able to strike a deal with the distributors, we will be able to place newer parts and accessories for sale. Customers crave for new products in a market like ours. If we are able to provide new products faster to the customers, then we can increase our profit by a large margin. Moreover, since we do not have a physical store as we are completely digital based, we will be able to cut down the expenses and by keeping the margin slightly lower we will be able to outshine in the competition and generate a decent profit.

3. BUSINESS PROBLEM ANALYSIS AND SOLUTION

3.1 PROBLEM ANALYSIS:

1. Data Security

When it comes to e-commerce, one of the biggest challenges faced is security breaches. There is a lot of information/data that is involved while dealing with e-commerce and a technical issue with data can cause severe damage to the retailer's daily operations as well as brand image.

2. Customer Loyalty

The factor that shows the importance of customer loyalty are based on the below two facts:

- I. It can cost up to 5 times more to acquire a new customer than retaining an existing one.
- II. The success rate of selling to a current customer is 60-70% compared to only 5-20% success rate of selling to a new customer.

3. Pricing and Shipping

It is all heard of customers that prefer to purchase products from places that have free shipping. eCommerce giants like Amazon provide such attractive shipping deals those customers seldom want to look at other places. How does one bring down costs for shipping?

4. Product Return and Refund Policies

When an ecommerce site says "no returns or refunds" it makes a shopper nervous and less likely to trust the retailer. When shopping online, customers want the flexibility of making a mistake that doesn't cost them.

5. Customer Experience

Customer experience or user experience is key to a successful ecommerce website. Shoppers expect a similar if not same experience as one they would get in a brick-and-mortar store. The flow of the website, the segmentation of the website and the retail personalization of products based on the shopper's preferences are imperative.

3.2 SOLUTION:

Customers should be given an option to return the product after buying in a fixed amount of time. Cash on Delivery option should be provided to the customers. Better deals and discount schemes should be provided to the customers.

4. SOLUTION MODEL

4.1 WEBSITE DESIGN:

The project is made with the help of Django Oscar E-commerce framework with SQL as database. Oscar is an e-commerce framework for building domain-driven applications. It has flexibility baked into its core so that complicated requirements can be elegantly captured.

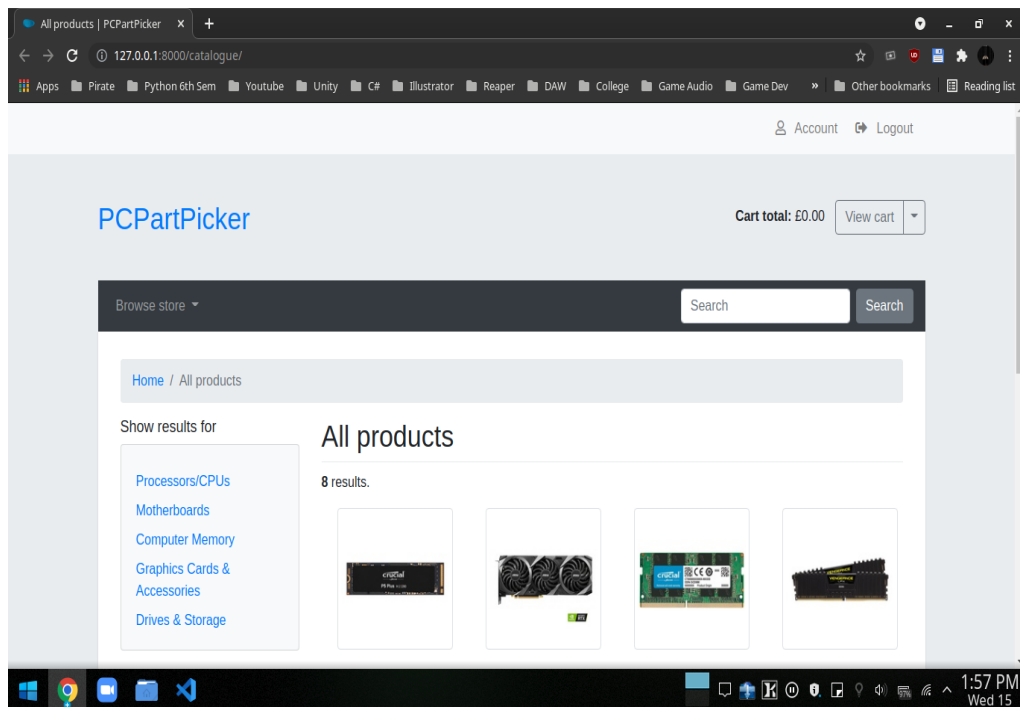


Figure 4.1.1: - Homepage

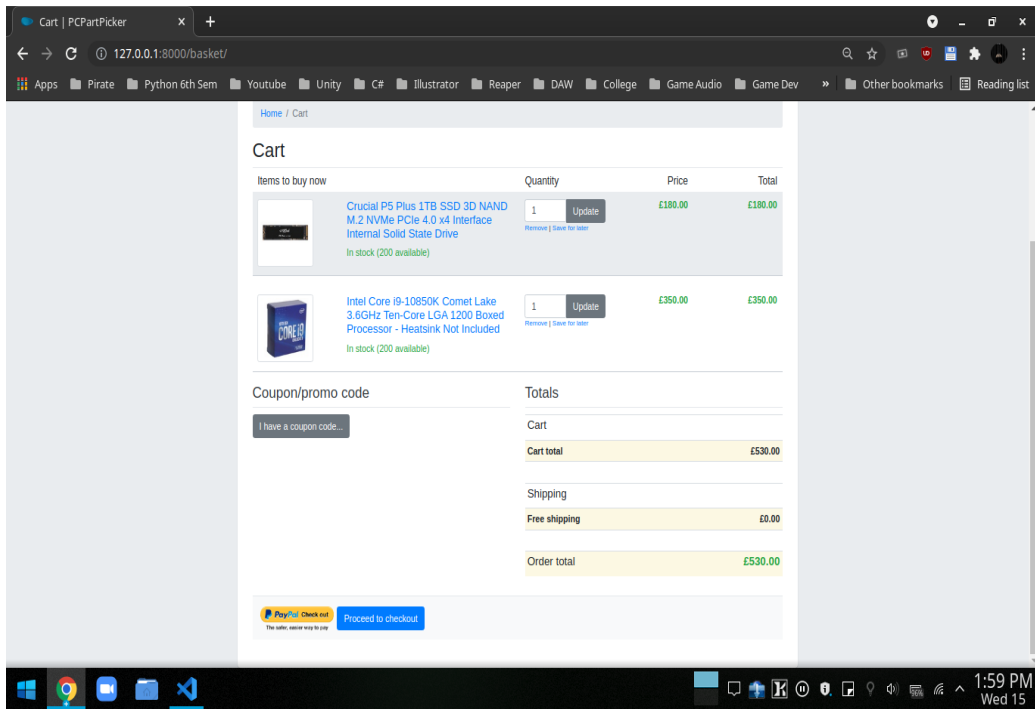


Figure 4.1.2 Payment Gateway

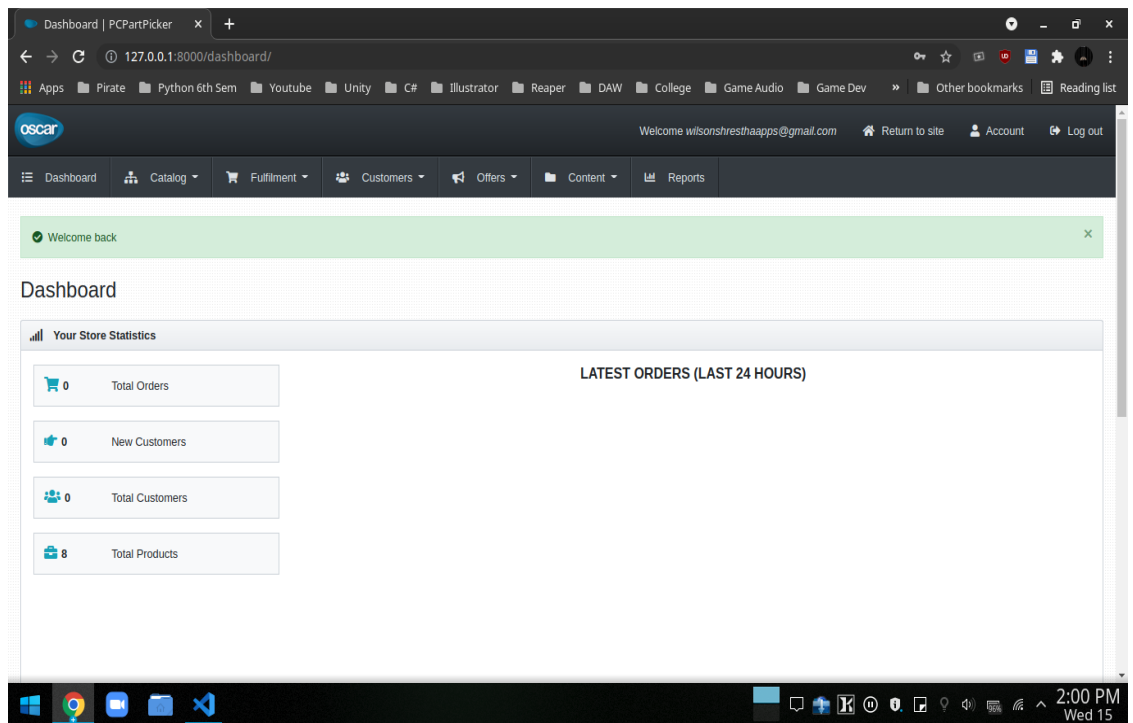


Figure 4.1.3 Admin Page

5. CONCLUSION:

This website provides a digital version of computer parts shopping. It makes the entire process online where users can search for the product, buy the product and pay for the product as well. It also has a facility for users to login into the system where users can add the products to the cart and make the purchase. Moreover, it provides the facility of admin's login where admins can add various items, review user's activity and also give occasional discounts and also add info about different events for the customer.

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