TRAPCART – AN ECOMMERCE WEBSITE

PROJECT REPORT

TITLE:

TRAPCART – AN ECOMMERCE WEBSITE

ABSTRACT:

This project will demonstrate how we can incorporate HTML, CSS, PHP, JAVASCRIPT and most importantly a SQL (Structured Query Language) DATABASE. This project an ecommerce website is and can be a real model of an actual website that sells electronics.

KEY WORDS:

- PHP
- HTML and CSS
- MySQL and MySQLi
- JAVASCRIPT
- phpmyadmin
- Ecommerce
- XAMPP

ACKNOWLEDGEMENTS:

This project has provided to me a learning opportunity to progress as an avid Computer Science Engineer. I would like to thank my teacher Prof. Gopinath MP for teaching and supporting me throughout the project and clearing my doubts in class.

INTRODUCTION:

We all use an ecommerce website time and again in our day to day lives to buy – sell – rent etcetera. What we never find out ever is how a typical E-commerce website (like amazon.com) actually works. This project for me has been a learning experience as to what a database actually stands for in the functioning of a website or application, but also the intricate workings of a Database. This project has also taught me the nits and picks of backend programming (server-side management) and a substantial bit of front-end programming (User Interface and User Experience).

TOOLS USED:

1. HTML – HyperTextMarkupLanguage used to display and arrange content in a webpage
2. CSS – Cascading Styling Sheets used to style and add colours and different fonts in a webpage, it compliments HTML.
3. MySQL – A Structured Query Language used to Build and Manipulate Databases to store important Data.
4. PHP – Personal Home Page a server-side scripting language, easy to use and can be used within a HTML script.
5. XAMPP – stands for X-OS, apache, MySQL, PHP, Perl indicating the languages and operating systems it supports to act as a server for storage and manipulation of data.
6. A laptop – this whole project was made using all the above tools installed in a Laptop.

EXECUTED METHODOLOGY:

I began my project by creating a legible schema for my database in localhost/phpmyadmin using XAMPP servers and brought in a clean schema to start with then I began with creating a working front end layout using HTML and CSS. I focused on the main index.html page, made sure I had the layout and then added content to it and then I moved on to next parts.

As I progressed I started making my front-end from static to more and more dynamic with adding buttons and responsive hovers and then introduced PHP into my HTML code because they can work interchangeably along with CSS.

Then I moved to creating an all-new insertion page where one could insert products, this was going to be included in my admin-panel which was separate from the main website. I made this because the Database needed products that are inserted into proper categories and brands along with a proper description of the product. This was done mainly using PHP in a different script.

After the insertion page was done I moved on to displaying the inserted products into the main webpage. Within this I introduced brand and category based products display which could be done easily with click of buttons.

After the display of products, I moved on to handling the Shopping Cart of the website, it was arguably the toughest most twisted part of the entire project. Once the cart was created I had to display Total Items in the cart after that the Total Price and then updating the cart each time the user added something new, I also introduced a delete feature and partially made the checkout page, the checkout page couldn’t further proceed because customer registration page was not done yet.

The next part was Customer Registration and Logout and Login functionality, after this was done I had to fix the User Interface for the Customer Registration Page like editing, updating, changing password and deleting account of the user.

The next part was by far my most favourite part, the admin panel. The insertion page that we had set up was now going to be part of something bigger, I created the layout of the admin panel and then proceeded onto making the View Products, Editing Products, Updating Products, Deleting Products and Inserting New Categories, Brands and viewing them.

Now I had to make the admin panel safe from foreign loggers who would want to take advantage of the site, so I created a login system for the admin panel and the login system was successfully implemented.

The next bit wasn't successful for me, I tried integrating PayPal but was unsuccessful. I am pointing out my issues in this project report to give a clear picture of what happened and what went wrong. I couldn't get through the developers.payapal.com portal which required authentication from my bank account which I was reluctant to provide. I alternatively tried implementing Google Pay but was unsuccessful because I needed certification that I was and actual business.

RESULTS & CONCLUSTIONS:

I was successfully able to understand and implement multiple database models within a real-world scenario project where I meticulously stood my ground to fix my code time and again. I would spend hours figuring out a small bug that I made. I am glad I took up this project and it helped me learn a lot.