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ShopEasy-E-Commerce Website

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ABSTRACT

The business to consumer aspect of electronic commerce (e-commerce) is the most visible business use of the Word Wide Web. The primary goal of an e-commerce site is to sell goods and services online. This project is a web based shopping system. It is a marketplace for all kinds of products from different categories, where buyers can buy the products from the sellers like a real market. The project objective is to deliver the online shopping application. This project is an attempt to provide the advantages of online shopping to customers of a real shop. Sellers can list their products on the website and buyers can find it according to their choices. It helps buying the products in the shop anywhere through the internet by using a web site. Thus the customer will get the service of online shopping and home delivery from this shop. If shops are providing an online portal where their customers can enjoy easy shopping from anywhere, the shops won't be losing any more customers to the trending online shops such as flipkart or eBay. Because the website is available anytime and can be accessed from anywhere.

Keywords: E-Commerce, Shopping, B2C, B2B, Business, Customers, User

INTRODUCTION

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. The objective of this project is to develop a general-purpose e-commerce store where any product (such as books, CDs, computers, mobile phones, electronic items, and home appliances) can be bought from the comfort of home through the Internet. An online store is a virtual store on the Internet where customers can browse the catalog and select products of interest. The selected items may be collected in a shopping cart. At checkout time, the items in the shopping cart will be presented as an order. At that time, more information will be needed to complete the transaction. Usually, the customer will be asked to fill or select a billing address, a shipping address, a shipping option, and payment information such as credit card number. An e- mail notification is sent to the customer as soon as the order is placed.

EASE OF USE

Ecommerce usability will promote your website with improved consistency, design, and task focus.

Optimizing your shop based on such improvements allows for a more customer-centric approach that produces a better conversion rate from visitor to customer.

PROBLEM STATEMENT

Traditionally, customers are used to buying the products at the real, in other words, factual shops or supermarkets. It needs the customers to show up in the shops in person, and walk around different shopping shelves, and it also needs the owners of shops to stock, exhibit, and transfer the products required by customers. It takes labour, time and space to process these operations. Furthermore, the spread of the Covid-19 pandemic has caused a lot of changes in our lifestyle, people fearing to get outside their homes, transportation almost shut down and social distancing becoming all the more important. Big to small scale business that relied on the traditional incur a lot of consequence due to the lockdown issues. Some tend to more towards using social media platforms like Facebook to sell their product. However, the social media platforms have been beneficial for marketing purposes alone but leaves the whole task of customer and massive order management via direct messaging (DM), which takes a lot of time to respond to all customers.

OBJECTIVES

1. To design an online marketplace system for sellers.
2. To provide a solution to reduce and optimize the expenses of customer order management.
3. To create an avenue where people can shop for different products online.
4. To develop a database to store information on fashion products and services.

REQUIREMENT SPECIFICATION

Table 1: Software Requirements

OPERATING SYSTEM	LINUX DBN(RECOMMENDED)/ ANY OS
IDE	VISUAL STUDIO CODE
SOFTWARES	NODE JS, NPM

Table 2 : Hardware Requirements

CPU	MINIMUM 2 CORES AND 4 THREADS
RAM	MINIMUM 4 GB
MEMORY	MINIMUM 500 GB

- Database Requirements: Installation of MongoDB
- User Requirements:'

Any phone, tablet or PC with browser and internet connection.

TECHNOLOGIES USED FOR IMPLEMENTATION

- Front-end:
- HTML:

HTML stands for HyperText Markup Language. It is used to design web pages using the markup language. HTML is the combination of Hypertext and Markup language.

Hypertext defines the link between the web pages and markup language defines the text document within the tag that define the structure of web pages. HTML is used to create the structure of web pages that are displayed on the World Wide Web (www). It contains Tags and Attributes that are used to design the web pages. Also, we can link multiple pages using Hyperlinks.

- CSS(Bootstrap):

Bootstrap is a free and open-source tool collection for creating responsive websites and web applications. It is the most popular HTML, CSS, and JavaScript framework for developing responsive, mobile-first websites. Nowadays, the websites are perfect for all browsers (IE, Firefox, and Chrome) and for all sizes of screens (Desktop, Tablets, Phablets, and Phones). All thanks to Bootstrap developers – Mark Otto and Jacob Thornton of Twitter, though it was later declared to be an open-source project.

- JavaScript:

JavaScript (JS) is the world's most popular lightweight, interpreted compiled programming language. It is also known as a scripting language for web pages. It can be used for Client-side as well as Server-side developments.

- React:

React uses a declarative paradigm that makes it easier to reason about your application and aims to be both efficient and flexible. It designs simple views for each state in your application, and React will efficiently update and render just the right component when your data changes. The declarative view makes your code more predictable and easier to debug. A React application is made of multiple components, each responsible for rendering a small, reusable piece of HTML.

- Back-end:

- Node Js:

Node.js is an open-source and cross-platform runtime environment built on Chrome's V8 JavaScript engine for executing JavaScript code outside of a browser. You need to recollect that NodeJS isn't a framework, and it's not a programing language. It provides an event-driven, non- blocking (asynchronous) I/O and cross-platform runtime environment for building highly scalable server-side applications using JavaScript.

IDE:

- Visual Studio Code:

Visual Studio Code (famously known as VS Code) is a free open source text editor by Microsoft. VS Code is available for Windows, Linux, and macOS. Although the editor is relatively lightweight, it includes some powerful features that have made VS Code one of the most popular development environment tools in recent times. VS Code supports a wide array of programming languages from Java, C++, and Python to CSS, Go, and Dockerfile. Moreover, VS Code allows you to add on and even creating new extensions including code linters, debuggers, and cloud and web development support.

- Database:'
- MongoDB:

MongoDB, the most popular NoSQL database, is an open-source document-oriented database. The term 'NoSQL' means 'non-relational'. It means that MongoDB isn't based on the table-like relational database structure but provides an altogether different mechanism for storage and retrieval of data. This format of storage is called BSON (similar to JSON format).

A simple MongoDB document Structure:

{

title: 'Geeksforgeeks', by: 'Harshit Gupta',

url: 'https://www.geeksforgeeks.org', type: 'NoSQL' }

SQL databases store data in tabular format. This data is stored in a predefined data model which is not very much flexible for today's real-world highly growing applications. Modern applications are more networked, social and interactive than ever. Applications are storing more and more data and are accessing it at higher rates.

Language Support by MongoDB:

MongoDB currently provides official driver support for all popular programming languages like C, C++, Rust, C#, Java, Node.js, Perl, PHP, Python, Ruby, Scala, Go, and Erlang.

PROPOSED MODEL

For a better online purchasing experience, a new and intelligent shopping model was created. The following graphic is essential to the software development life cycle(SDLC) since it outlines all the system's requirements.It is intended for usage by programmers who want to improve the system further. The goal of this software development is to design and implement online shopping which will allow users to conduct typical home buying over the internet. All needs were understood in advance. The software development life cycle for our ShopEasy E-commerce website is as follows:

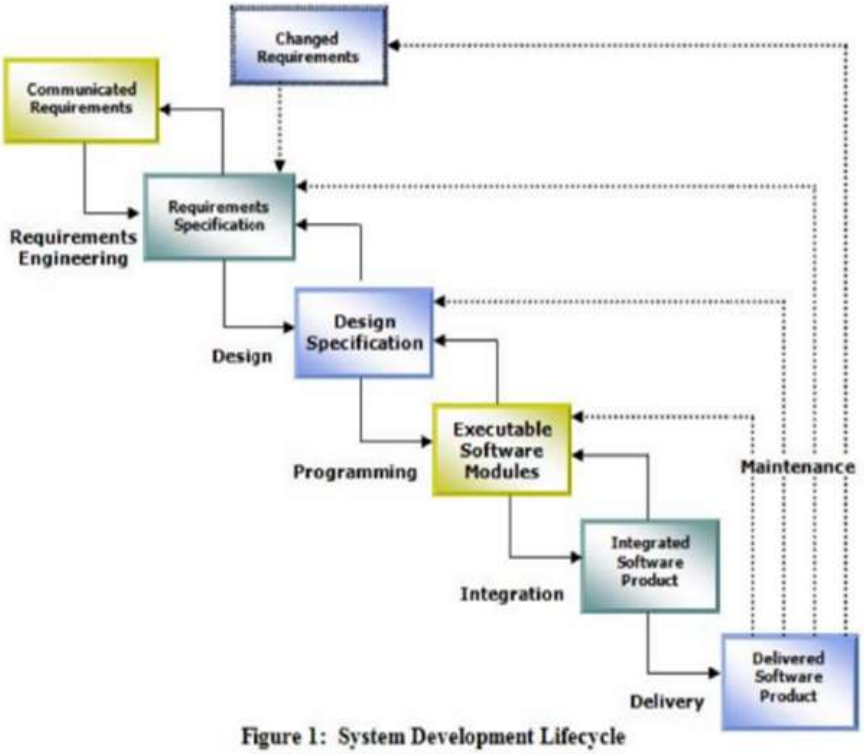

Figure 1: System Development Lifecycle

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Conclusion

This research served as the initial stage of a larger research project whose ultimate goal was to uncover and quantify the user experiences and web-based characteristics that are connected to the enjoyment and quality of the newly built, more intelligent shopping model. The motives and needs of online shoppers should also be taken into consideration when developing a website's design and strategy. For instance, most internet customers do not demand or expect "high touch" care until they have inquiries or issues with customer support, in which case they anticipate reasonably prompt responses (within 24 hours) that are appropriate to their particular issues. Goal-oriented consumers are more satisfied with any features that give them a greater sense of control and independence, such as order monitoring, purchase histories, preserving information to speed up future sessions, and opt-in email notifications of new items and promotions. This model offers a limited number of appealing alternatives. For instance, a customer can choose between the economic and brand modes to swiftly complete his transaction. All of the accessible information on clients, goods, daily transactions, etc., would be generated by this system. Then, using computational intelligence theory, we may use massive data to extract knowledge. A crucial idea that practically everyone has now come across is "big data”. But in the realm of e-commerce, a sizable proportion of companies have not yet completely committed to using this large data to provide important insights and produce lucrative modifications.

References

[1]. Cox, Beth. "The E-commerce Revolution. " E-Commerce- Guide. E-commerce - Evolution. Dir. Sandeep Chagger. http://www.youtube.com/watch?v=LW4X3b_j0eE, https://www.researchgate.net/publication/306167259_Systematic_literature_review_of_eCommerce_implementation_studies

[2] https://www.geeksforgeeks.org/

[3]. W. W. Hill and S. E. Beatty, "A model of adolescents' online consumer self-efficacy (OCSE)," Journal of Business Research vol. 64, pp. 1025-1033, 2011.

[4]. J. Kim and S. Forsythe, "Factors affecting adoption of product virtualization technology for online consumer electronics shopping," International Journal of Retail & Distribution Management, vol. 38, pp. 190- 204, 2010.

[5]. J. Lian and T. Lin, "Effects of consumer characteristics on their acceptance of online shopping: Comparisons among different product types,"Comput. Hum. Behav., vol. 24, pp. 48-65, 2008.

[6]. J. Carlos Roca, J. Jos Garca and Jos de la Vega, Juan, "The importance of perceived trust, security and privacy in online trading systems,"Information Management & Computer Security, vol. 17, pp. 96-113, 2009.

[7]. S. Wu, "The relationship between consumer characteristics and attitude toward online shopping," Marketing Intelligence & Planning, vol. 21, pp. 37-44, 2003.

[8]. P. Zhang and N. Li, "Consumer online shopping attitudes and behavior: An assessment of research," in Proceedings of theAmericas Conference on Information Systems (AMCIS'2002), Dallas, 2002, .

[9]. Retail Industry Global Report – 2010 . Available: http://www.clearwatercf.com/documents/sectors/IMAP_Retail_Report_2010.pdf