

## E- Commerce Website by Using Frontend WebDevelopment

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### ABSTRACT

We reside within the generation where everyone want to try and do any add easy way, so our generation is more passionate about internet, internet makes our life easier. The majority of individuals depend on technology to guide their lives and meet their everyday demands. Most folks in our generation buy clothes, groceries, and electronics via E-commerce websites. E-Commerce isn't only the website where you'll sell your products and buy someone's product. I've got developed an E-Commerce website by using Front-end Technologies like HTML, CSS, JavaScript. Some tabs on this site are responsive. There are several areas on the website, such as "Home", "Category", "Blog", "Contact" and so on, that when you click on these buttons or sections, you will be taken to the content. We have subsections in the Category Section with products organized by category. We have a shopping cart, a search bar, and a log-In page. Some tabs on this site are responsive. Here on the website we made a separate section of "Add In Cart", "Product Information tabs ". And we use smooth animations for making our website more attractive and our website is user- friendly, and surely the website will enhance the user experience And I used more CSS , JavaScript , PNG of product and a few images of background for make rather more user-friendly UI. We may buy numerous styles of Phones and choose different sorts of phones supported consumer interests by using this website. We will add different goods to the present project and delete them moreover. They are able to easily add products to their cart. Supported the things within the cart, then we've payment button this may responsive after Back-end will hook up with the website.

**KEYWORDS** --- Application development, HTML, CSS, Javascript, E-commerce, and front-end development are some of the keywords

### INTRODUCTION

We all know that in today's world, technology has become an indispensable instrument for online marketing. We can tell that most individuals throughout the world are interested in purchasing items via the internet. Furthermore, We can see, however, that many small shops and supermarket stores sell their products offline. Most of us will have a terrible experience with this style of selling. Might not remember of it, or the customer may require the merchandise quickly, within which case he will attend the shop, but the merchandise are out of stock, leading to a negative experience. Furthermore, clients may select from an oversized choice of products supported their interests and costs, and that they can compare prices from one store to a different via internet shopping. Creating an E-commerce internet utility is required for looking out and buying in each shop, after going through all the challenges and weaknesses of the offline buying device. These days, several e-commerce websites have been launched, such as Flipkart, Amazon, and Myntra, where people can quickly purchase their required things. These websites allow people to buy their products while remaining at home. Finally, we are able to see a difference in product prices, like after we see that the value of a product is slightly more in offline buying compared to online purchasing because it can help us create the foremost effective and powerful web applications, front-end are going to be the simplest option for building these styles of E-commerce web apps. E-commerce is described as the purchasing and promoting of items and services over a digital network, most many times the internet, as nicely as cash and facts transfers (electronic commerce).



**Fig 1: E-Commerce transaction cycle**



**Fig 2: E-Commerce selling process**

## PROBLEM STATEMENT

The goal of this challenge is to create internet software that will make it easier to find and sell telephones and Electronics devices. The administrator of this E-commerce web application can add categories such as summer sales, winter festivals, and other events that will attract clients. Customers can also simply find their favorite products. They can also quickly purchase them by just adding them to their cart, which they can then raise or decrease by clicking on the "adding" and "deleting" buttons. They can check the total amount of the items they've added to the cart after they've finished adding them. While I used to be encoding on this website. It had lots of issues, but I used to be ready to solve them after I rectified the bugs. E-commerce makes life simpler for human beings all round the world. Why did I pick out this specific subject? E-commerce should be an indispensable thing of our lives today. Where we may easily buy things through the website, and E-commerce websites have a bright future. People may confront numerous challenges in their lives if an e-commerce website does not exist. If an e-commerce website does not exist, people must go to a store to purchase things. E-commerce is a godsend for us in difficult situations such as COVID-19 and others, as it is a website where anyone can conveniently and efficiently buy and sell their products. E-Websites give us a platform on which we may grow our businesses and connect with an oversized number of people.

## E-COMMERCE

1. E-commerce, often referred to as digital commerce, is the process of buying and promoting things through the net, also due to the fact the motion of cash and information integral to completing the transaction. E-commerce wasn't well-known within the beginning, but because the use of mobile phones increased, more people expressed an interest in purchasing items online, and it grew in popularity. E-commerce comes in a very style of forms. E-Commerce commercial enterprise models are often divided into 4 categories. 1. Business-to-consumer (Business to consumer). It is an internet-based business model that permits us to sell things to the end-user. 2. B2B (Business to Business) is a type of business that occurs between huge corporations, organizations, and businesses; most e-commerce comes into this category these days. 3. B2C (Consumer to Business) Individuals can sell their things to businesses using this sort of E-commerce. Individuals will assign work to finish in a certain amount of time via websites or other electronic medium in this sort of E-commerce. Consumers can establish their own tag for his or her job during this variety of E-commerce. Freelancing is the quality illustration of this way of labor. 4. C2C (Consumer To Consumer) This sort of E-commerce connects consumers to consumers in order to exchange items and earn money through transactions, which will stimulate buyers and consumers.

## ADVANTAGES

1. With conventional storefronts, merchants are unable to provide complete product information; but, in an E-commerce store, customers may obtain complete product information as well as read reviews from other customers who have purchased the product previously. As a result, if the merchandise is nice, there'll be more opportunities to get it.
2. We can compare the costs of things from one website to another on e-commerce websites. That way, we will quickly work out where we will acquire the merchandise for a

lower cost and procure a general notion of what quantity money we are able to spend on a selected product.

3. E-commerce allows you to achieve clients everywhere the globe and get anything you would like from the comfort of your house. People nowadays are accustomed to purchasing solely through their mobile devices. As a result, it'll benefit E-commerce.

4. If you order a thing through e-commerce, you will receive information about where the goods are being shipped and when it will arrive. You can also cancel the order if you simply do not like the product.

5. Customers can buy a variety of things from various locations in this vast world; we can buy electronics from Russia, shoes from Japan, clothes from London, and good old international products; the depth and advantages of E-commerce are infinite.

6. Customers will be in a position to spend much less time buying for their desired items. They may additionally quickly look through a large range of goods at as soon as and purchase what they want. Customers can find matters that are on hand in bodily shops far away from them or that are no longer handy in their region when they store online.

7. A bodily save owner may additionally solely be capable to contact a restricted variety of buyers. They can deliver to consumers' houses, however distance restrictions may apply. A number of e-commerce systems have their very own logistics and delivery systems.

8. Personalization appeals to buyers, and the equal is proper when it comes to paying for their orders. UPI, money on delivery, card on delivery, internet banking, EMIs on credit score or debit cards, and pay-later credit are all options available on e-commerce marketplaces.

#### **DISADVANTAGES**

1. When we order a thing through e-commerce, the item may or may not arrive on time; this is one in every one of the foremost typical e-commerce issues; it will take time depending on the distance between you and the organization from whom you ordered.

2. Despite the very fact that E-commerce offers more benefits to customers. When we use e-commerce websites for buying, people are afraid of handing their data to website owners; therefore it will provide security. International Journal for Modern Trends in Science and Technology concerns.

3. To establish an e-commerce website, one must invest a lot of money since he must verify all the possibilities and provide a decent security system to that website.

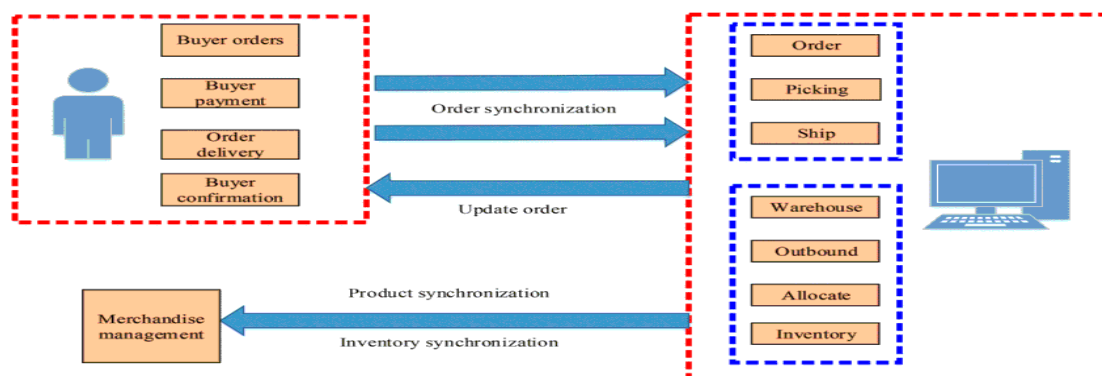
4. If you wish to shop for something from an e-commerce site, you'll need to pay taxes like GST, which is able to vary counting on your location and also the distance between you and therefore the product, and can be more than buying during a physical store.

5. E-commerce is definitely reliant on web access. A serious disadvantage of e-commerce is the inability to form purchases thanks to a site crash. Such a minor word site collapse can bring down an entire corporation in a matter of seconds.

6. One of the foremost significant disadvantages of an e-commerce platform is that a consumer is unable to undertake and evaluate the merchandise for himself. We are accustomed to purchasing products in physical stores after trying them out multiple times, and it takes a lot of courage to break this lifelong habit of not being able to touch, try, or test them beforehand.

7. E-commerce encompasses a widespread drawback in phrases of privacy. Before making a purchase, a consumer must supply personal information such as his address, name, and phone number.

8. Several cyber laws have been enacted to safeguard both the seller and the buyer's rights. If you want to construct a website, you should familiarize yourself with both local and internet laws so that you don't run into any complications later.



**Fig 3: E-Commerce seller to buyer process**

## RESEARCH AND DEVELOPMENT

There are numerous applications for developing a web application, and in this study, we used Front-end technologies like HTML, CSS and JavaScript to develop an E-Commerce website. HTML (HyperText Markup Language) and CSS (Cascading Style Sheets) are two of the foremost common web content construction technologies. For arrange of devices, HTML provides the page structure and CSS offers the (visual and auditory) layout. HTML and CSS, along with images and coding, are the foundations for creating Web pages and Web applications. Find out more about: HTML The language used to describe the shape of web content material is HTML. Authors can use HTML to strive to the following: Create online documents that include headings, text, tables, lists, images, and more. At the touch of a button, you'll be able to access online information via hypertext links. Create forms for attempting to find information, making reservations, ordering products, and other transactions with remote services. CSS is a language for describing how Web pages are presented, including colors, layout, and fonts.

It enables the presentation to be adjusted for various varieties of devices, like huge displays, small screens, or printers. CSS is also used with any XML- based terminology and isn't contingent HTML. The separation of HTML and CSS makes it easier to maintain websites, share style sheets across pages, and customize pages for diverse situations. The separation of structure (or: content) from display is referred to as this.

JAVASCRIPT JavaScript may additionally be a text-based artificial language that allows you to assemble interactive websites on both the purchaser and serversides. Whereas HTML and CSS provide structure and aesthetic to web content, JavaScript adds interactive components that keep users engaged. Why do we need JavaScript JavaScript can be a scripting language that's often accustomed to creating sites. It enables us to add dynamic behavior to the homepage as well as special effects. It is primarily used on websites for validation purposes. JavaScript allows us to do complicated tasks and allows websites to communicate with users.

## CONCLUSION

The primary goal is to create an e-commerce electronics device selling web application by front-end development Even though the stock market and commodities plummeted, E-Commerce was able to survive and receive a high volume of transactions. In the course of our operations in Malaysia, e-commerce presents a huge opportunity. It's also about incorporating new approaches and styles into a transaction. It is truly much better to bring the goodness of the individual or the state by using the broad E-Commerce in the Internet world... Our project is merely a side project to meet the demands of those who need to manage their project work. Several user-friendly coding systems have also been implemented. This bundle will prove to be quite effective in meeting all the needs. In India, the complete E-commerce enterprise is envisioned to have a promising future. But also globally, the online sector is rapidly growing. E-commerce is verified because the principal approach of promoting products and services is within the close to future. E-Commerce has certainly risen to prominence in our society. Companies who take E-Commerce seriously and devote

appropriate resources to its development will be successful in the future. E-commerce isn't just a technical problem; it's a full-fledged commercial venture. Companies who utilize it as an excuse to totally re-design their business operations are presumably to learn. Furthermore, E-Commerce may be a beneficial technology that enables customers to attach with businesses and enterprises everywhere the globe.

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#### **REFERENCES**

- [1] Rossi, G., Schwabe, D., & Lyardet, F. (1999, November). Web application models are more than conceptual models. In International Conference on Conceptual Modeling (pp. 239-252). Springer, Berlin, Heidelberg.
- [2] Hoque, S. (2020). Full-Stack React Projects: Learn MERN stack development by building modern web apps using MongoDB, Express, React, and Node.js. Packt Publishing Ltd.
- [3] Nemat, R. (2011). Taking a look at different types of e-commerce. World Applied Programming, 1(2), 100-104.
- [4] Niranjana Murthy, M., Kavyashree, N., Jagannath, S., & Chahar, D. (2013). Analysis of e-commerce and m-commerce: advantages, limitations and security issues. International Journal of Advanced Research in Computer and Communication Engineering, 2(6), 2360-2370.
- [5] Mai, N. (2020). E-commerce Application using MERN stack.
- [6] Ullah, S. E., Alauddin, T., & Zaman, H. U. (2016, January). Developing an E-commerce website. In 2016 International Conference on Microelectronics, Computing and Communications (MicroCom) (pp. 1-4). IEEE