Better Buy's, An E-Commerce Web-Portal using Cloud

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Abstract: *E-commerce, driven by computer and internet technology, has experienced significant growth in almost all fields during the past two decades. E-commerce has changed the rules of business.Numerous research institutions and enterprises made e-commerce quicker and more appropriate. Here In this paper, we propose a novel prototype of a next- generation e-commerce platform with an architecture framework and different modelsthat will be beneficial for users and will attract users. Portal Comes with a multi- model strategy including demand satisfaction, a better user interface to attractusers, can operate on multi-devices like on PCs and smartphones. By using a securedpersonalized portal, the users can complete transactions without intermediate traders. Itmay affect the overall transaction processthat can be reviewed, makes transactions safer, more transparent without involving traders, and more animating that makes it interesting for users.*

Keywords: Mobility Management,Android Application, Microservices, Cloud Computing, B2B, B2C, C2C.

I. INTRODUCTION

The term E-Commerce means electronic commerce which is one of the kinds of online business models that allows tobuy and sell products and services on digital media. The e-commerce works on few business models like business-to- business (B2B) e.g.: Shopify, business-to- commerce(B2C) e.g.: Amazon, consumer-to-consumer(C2C) e.g.: eBay or consumer-to- business. Many people are turning towards the e-commerce market which has disruptedthe offline retail business. The e-commerce industry is expected to grow to 55.4 trillion $by the end of 2022. The e-commerce business model had led retailers and small businesses to turn digital. Not only through e-commerce we can buy and sell goods and services, but we can transact online as well. We can transfer money, data, etc. through various online platforms. So, to sum up, e- commerce has vastly impacted the lives of people, and it has become a part of our day- to-day life.

II. CURRENT SITUATION IN INDIA OF E-COMMERCE

The e-commerce industry is growing at a very faster rate due to the increase in demand of the public. The increase and expansion of the e-commerce industry across the world have also increased its demandhere in India. More and more people areturning towards e-commerce platforms for their various needs. The Indian e-commerce industry is expected to grow at 8% till 2025 inthe food, grocery, apparel, and consumer electronics section. E-commerce ordersvolume for beauty products has increased by36% in 2020 being the largest beneficiary of e-commerce. Indian e-commerce is expectedto reach US$ 99 billion by the end of 2024 with overall growth in all the segments of theindustry.

From the above statistics, we can saythat there is increasing demand regardingthe usage of e-commerce platforms among people of India and the growth will continue to remain for the long run as well.
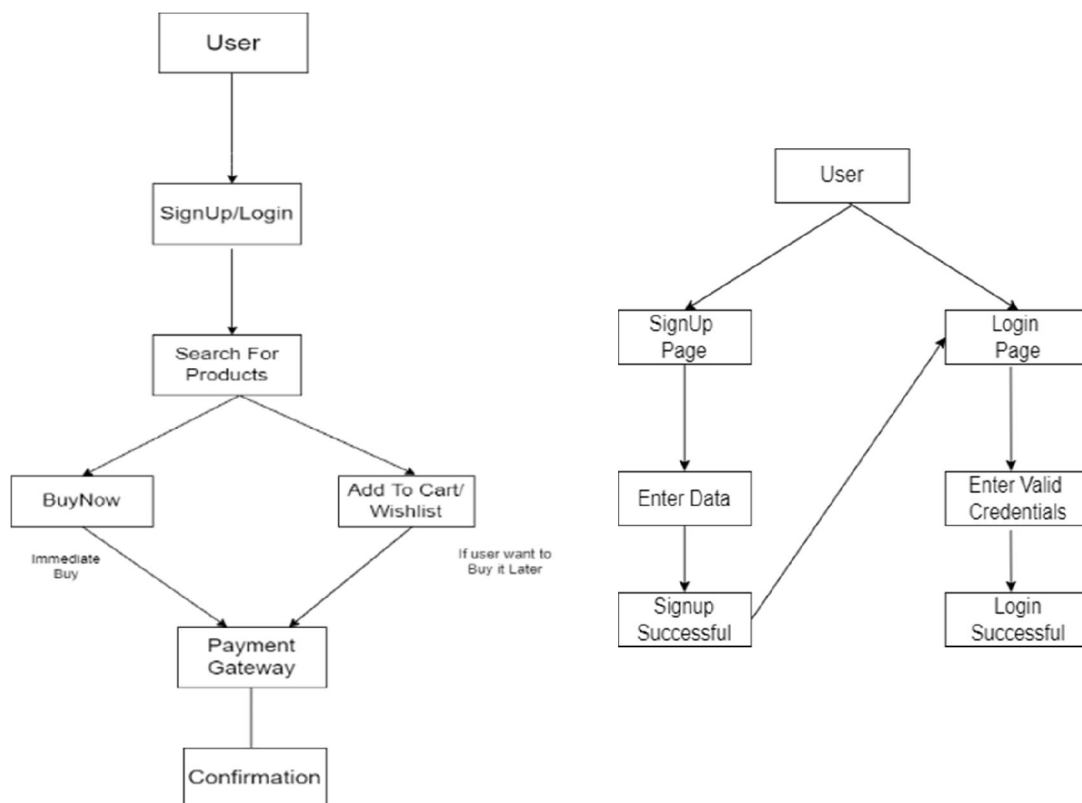
2.1 Cloud Computing

In the era of the 5G networks, cloud computing offers the possibility of heavy computational in parallel through different mobile terminals. This also offers us to use of mobile cloud computing to analyze fluctuations in user buying incentives. In an E-commerce business scenario, the Signup/Registration / Login/details of customers, purchase of products is being stored in an online database i.e., on a cloud platform like Microsoft Azure, Amazon Web Services, etc. In this paper, we proposed cloud computing for Databases to estimate the huge amount of user's data, and going to analyze is data isbeing secured or not? Is the system will handle/store multi-user's data at a single time or not?

III. LITERATURE SURVEY

Sr. No	Title	Author	Methodology	Limitations
1	Study & Development of E-Commerce Website.	Aaftab Aalam	It is developed for doing business online through computer network.	Customers had concerns regarding privacy and security
2	Research on E- Commerce Website Design Based on User Experience.	Dr. Lulu Cai	The focus of this research is on quickly finding the consumers of the target products and completing the shopping process quickly and clearly.	The main focus in this research is on quickly find the consumers the target products and complete the shopping process quickly and clearly.
3	Future of E-Commerce in India.	Dr. Shahid Bhat	Security of data safety is the major concern were discussed in this paper.	Security of data safety is a major concern.
4	A study on Web Application Security and Detecting Security Vulnerabilities.	Sandeep Kumar	The important security functions and properties that secure web applications were discussed in this paper.	There is a lack of system security, reliability, or standards owing to poor implementation
5	A Systematic Literature Review on Microservices.	Dr. Rajesh Shettar	In this paper, the Author discussed, that microservices aim to divide the business behavior into small services which can run independently of each other.	There is an issue of website Crashes that were not discussed in this module.

IV. SYSTEM ARCHITECTURE

In this paper, we proposed the above systemarchitecture.

To Access our portal, the first user needs to register on our portal using Signup to purchase a product. If the user has alreadyan account associated with our portal, they need to log in to our portal instead of registering to purchase a new product. After Successfully Registering on the portal, the credentials are being stored in a database that is hosted on a cloud platform like Azure, AWS, 000webhost, etc. If the credentials of the user are matched during login, they will be redirected to the Home page as logged-in users. Else if Credentials will not match with our database user will getan invalid popup. After successfully login in, the user will be redirected to the home page, where they cansearch the products according to their need and can purchase.
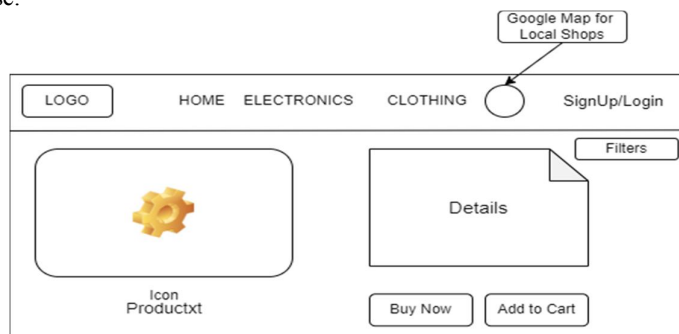

Figure: UI Architecture

After Finding a product, users can open the product to see the full description, information about their chosen product. If a user wants to buy the product immediately, the user can click on Buy Now button and willredirect to the Payment section. If a userwants to buy a product later, they will click onAdd to Cart and the product will be added tothe user's Wishlist so that the user can purchase it later.

For secure and fluent transactions, we are going to use Payment gateways like Paytm, PhonePe, Razorpay, etc. It will become with advantages of Credit cards, debit cards also UPI, and payments through wallets also. After successful payment, the user will get confirmation on the screen that their transaction is successful, and the product is placed successfully.

V. MAP_STORE GOOGLE MAP FEATURE

If there are conditions like the product that user finding on our portal which will be Out of stock or Unavailable or user visited our portal just for checking product features, details but he/she don't want to purchase that product through online, they want to purchase that from their nearby marketplaces. So that we are proposed this feature if users want to purchase the product from their nearby places, then they will click on the Map_Store button it will redirect them to Google Maps where they can directly seeElectronics shops, Glossary shops, or any stores nearby their location. These users need to grant/allow map permission on theirsmartphones or PCs.

VI. PREVIOUS E-COMMERCE APPROACH

There are 2 billion people in the worldwho are using e-commerce websites. Today we are known biggest technical evolution all time where more and more people getting on board and selling online and buying online. So, our county is at 2nd in terms of overall sales growth of selling and buying products on e-commerce. E-commerce is growing 20% every year on year. In India, there is many companies' holdings position on top like Amazon, flipchart but user face many problems like privacy, security, dataleak when we are processing payments card security but these companies overcome this type of problem but not all solved like damaged products, duplicate products, fake companies sell products on e-commerce.

VII. WITH OUR APPROACH

Our proposed system comes with full security so that the data of customers will remain safe. We are storing our database on a cloud platform such as Microsoft Azure,Amazon Web Service, and 000Webhost which provides free hosting for websites andfree hosting for databases also. In our portal,we are proposed a special feature'Map_Store'. The Map_Store feature will be beneficial for users to buy products directly from nearby stores so that users can visit the nearby storeand can handle products in real-time.

VIII. CONCLUSION

This paper gives us important points about what is e-commerce and why we use itfor our future benefits, and how many valuations of e-commerce hold Having an e- commerce application will allow you to reachout and offer your products and services to customers around the world, regardless of the distance and time zone. Customers will enjoy the round- the-clock convenience of being able to purchase what they want and when they want it, and you won't lose out on sales withan online shop that is open 24 hours a day, 7days a week, compared to regular store hours, that's why 2 billion people are on e-commerce.

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