PEARL BEAUTY – An E-commerce website

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Abstract- Pearl Beauty E-Commerce Website is designed to brings great convenience to both sellers and buyers. As ecommerce is growing much faster than retail, many people opt for online shopping and some of the young generation started to set up an e-commerce business. This project is motivated to make contribution to the consumers by providing them a convenient way to shop online with simple steps, capable of for easybrowsing, online tracking, 24/7 online shopping and simple payment method. In addition, the purpose of this project is to motivate both sellers and buyers to use this mobile application for purchasing their beauty and

skincare products. This project is to be developed and managed with popular system development methodology – Agile methodology. This methodology support incremental and iterative development in a consistent and disciplined way to execute the task. In agile methodology, it is mainly focus on incrementation and division of tasks into several time boxes. The proposed project aimed to be developed with current popular open source technologies. Android Studio is selected as the mobile app development tool which is easy to use and accurate programming. With Cloud Test Lab Integration, mobile app can be built for one and test on multiple android devices then further check about the compatibility and performance of an app using Android Studio. The expected implementation of mobile app selling beauty and skincare products is allow users to purchase beauty and skincare products without travelling, quick searching items by keywords and quick recognizing products by images. Moreover, there are some features such as "remember me", "forget password", live chat and chatbots powered software for realtime communication that developed to enhanced the user experience.

INTRODUCTION

In recent 20 years, the way people live has changed radically. According to A New Marketing Paradigm for Electronic Commerce, Hoffman, Novak and Chatterjee
suggested that a fundamental lack of faith between most online stores and consumers has prevented people from shopping online or even providing information to web providers in exchange for access to information. The price of online shopping is more transparent, and the usage is easier. With the update of smart phones, people can completely buy any products they want at home. However, as in other industries, user stickiness remains one of the most important factors for e-commerce companies. The tweaks and changes that shopping platforms make to user usability and stickiness are long-term process. Moreover, they still have a lot of space for improvement. A company never wants to see that it limit itself to some consumers or certain products. Therefore, all e-commerce platforms are working hard to find and broaden their user groups and find appropriate marketing methods. Consumption is a two-way behavior. On the one hand, e-commerce platforms will select some consumers and market the products they want to sell to them. On the other hand, consumers have their own preferences for different platforms. Therefore, in this paper, the author randomly select some consumers and ask them to evaluate different e-commerce platforms. At

the same time, the author try to help companies analyze different types of consumers, so that they can effectively market them.

The interaction among consumer segments: Policy decisions rest on assumptions about the nature and type of interactions among consumer segments This means that companies must be aware of comments about different platforms, both themselves and others. According to the website features and their individual characteristics to the context of the influence of the network shopping acceptance, Zhong Xiaona claims that: On the relationship between cognitive and behavioral, useful cognition has positive influence on consumer shopping frequency, PEU have indirect effects on frequency of shopping. Therefore, it is necessary to find out what factors affect consumer cognition from different perspectives.

PROBLEM STATEMENT

1.   To identify various applications and features of the existing e-Commerce platform related to beauty and skincare products.
2.   To develop pearl beauty web application with advanced optical character recognition techniques and image processing services.
3.   The pearl beauty is designed as a web application for the sale of brands cosmetic products and help the local cosmetic shop traders to get the best price of their products.
4.   The user friendly Ecommerce web application has a visually appealing user interface and simple navigation. Customers can simply purchase thing by adding them to their shopping carts, where they can then verify the total cost of the items they have added.

ECOMMERCE WITH PEARL BEUTY USING MEAN

E-commerce points towards the buying and selling of goods and services online, through an online platform. When combining e-commerce platform with pearl beauty site refers to sell the best brands cosmetic products and helps the local sellers to sell their products online and helps to increase their products online through E-commerce platform.

This platform allows sellers to reach a larger audience and potentially obtain higher rates for their products, while buyers have the opportunity to acquire goods and services at a potential lower prices through competitive bidding.

MEAN Technology:-

MEAN Stack is an assembly of JavaScript-based technologies to develop complicated websites and web applications, both progressive and responsive. MEAN Stack comprises MySqlDB, Express.js, Angular.js, and Node.js. Put merely, MEAN simplifies development and accelerates the process. MEAN Stack is widely accepted across industries, and developers are in demand. The developers enjoy the benefits of several compatible time optimization tools for system administration. MEAN Stack developers also make sure web apps, websites, and APIs are deployed easily and solve complex development challenges.

MEAN stack consulting services are also in high demand since you can leverage these solutions to produce high-performance digital solutions that are quick to build and execute. Many big companies like Shutterstock, Tumblr, Forbes, YouTube, Flick, and Paytm use the MEAN stack for their mobile apps. These are the best MEAN stack projects in recent times.

MEAN Stack Components :-
MysqlDB: Document-based SQL database used for data storage in the form of JSON files.
Express.js: Back-end web app that runs on Node.js
Angular: Best front-end web framework that runs JS code in user's browser
Node.js: It is a JS runtime environment to implement backend applications in JS

B.   Advantage :-

Versatile Development:- MEAN stack developers are versatile and proficient as they can easily switch between server and client-side operations. Besides, they have access to a standard coding language, which further simplifies the development process.

Isomorphic Coding:- MEAN stack developers leverage the codebase sharing feature, so they don't have to write separate code for iOS and Android applications. This allows them to write a code once and execute it for both platforms individually. This is referred to as isomorphic coding – an inherent feature of MEAN web stack development. It also means development time and cost will be reduced.

Faster Development Speed:- With MEAN web stack development, developers can build an application quickly.

Scalable Testing:- The applications created using the MEAN stack are also easier to test, just like development testing. Furthermore, suppose the developers are using cloud-based solutions to develop and test the solution. In that situation, it is also simpler than what they will experience while using other technologies to develop the same solution.

C. DISADVANTAGE :-
Low community support :- No specific general JS coding guidelines.
Technical issues :- Once you have developed the first site using Mean stack technology, it's really hard to go back to the old approach.
Security issues :- It offers poor isolation of server from business logic.
You could lose records gradually.

LITREATURE REVIEW

This highlights 4 existing e-commerce platform that are famous among the younger generation nowadays. E-commerce trends are becoming more obvious because India tends to buy their favourite items from online stores. The current situation is people shop for the products at the comfort of their house instead of shop at the high street. Thanks to e-commerce platform sites such as Shopee, Lazada, Zalora, Amazon and so on, people can shop online and place order with just a click and goods will be deliver to their doorsteps. In this section, for each existing e-commerce site, their advantages and drawback in terms of its feature are reviewed in details.

Shopee
 Mobile app usage is growing 6% years over years and it significantly show that people nowadays prefer online shopping instead of visit brick-mortar store. According to a research done by Space technologies in 2019, Shopee mobile app was ranked top in 2019. Shopee is a Singaporean e-commerce platform which was first launched in 2015, then further expanded its reach to other country such as Malaysia, Indonesia, Taiwan, Vietnam and Philippines. At the early stage, Shopee was started its business with the concepts of C2C(Consumer-to-Consumer) and at the later state Sea group decided to move into B2C based business model. Shopee provide a convenient, simple and yet fast

online platform for Shopee users where they can purchase certain products or even start up a business by selling their own products. That fact is that Shopee was recorded as a high rating apps on Google Play and App Store as it is free of charge for all to download and most importantly offer cheaper price all the time compared to the stores outside. By browsing through Shopee platform, users first view a list of products with description and specification and add the interested items into the order cart and lastly make payment. Before placing order, users can compare the price and quality by scanning through the review and rating part. hased orders have been delivered, users can rate the seller and leaving any comments with at least 50 words regarding the products received or shipping services and also provide at least one picture in order to gain 3 Shopee coins. Although Shopee coins cannot be exchange for cash but it can be used to pay the products listed in the Shopee platform. The main purpose of Shopee coins is to reward Shopee users and help them save more in the next purchases. Shopee have some unique features such as Shoppe Guarantee, webchat, free shipping and so on. Firstly, Shoppe Guarantee -the payment will be collected from the buyer upon checkout and once the buyer got the order completely only then the payment will be release to the seller. In this way, we clearly see that Shoppe Guarantee is a policy that securely protect both sellers and buyers during transaction happen. In addition, Shopee have a free shipping program in collaboration with three couriers like Poslaju, J&T and DHL. If people wish to promote their own product and expand their business to Taiwan and South of East Asia, Shopee is the best choice. To buy and sell with ease with Shopee, webchat is introduced where users and sellers can communicate and interact actively. Thanks to this feature, trust and loyalty between both seller and buyer were able to enhance in the long run. Thirdly, both seller and buyer were able to gain benefit from Shopee free shipping program. For example, sellers can easily boost their sales by offering free shipping vouchers to their long-term customers. However, Shopee e-commerce platform usually set a specific amount also known as minimum spend in order to qualify for free shipping. Either the free shipping vouchers or Shopee coins is strictly not transferrable to any users. Besides that, the drawbacks of Shopee include lack of touch and feel when ordering items from Shopee website. For instance, a shopper was not able to test or try the clothes on and consequently buy the wrong size or unfit clothes. Last but not least, it is time consuming if buyers wish to request return or refund of their purchased items.

Lazada

Just like any other e-commerce platform, Lazada is one of the powerful and useful online websites. It is founded in 2012 and implemented a B2B2C business model which is a mixture of B2B and C2C models. Lazada is a platform that acts as a bridge between users and sellers and a place that allow users to buy or trade items. In fact, anyone can easily shop with Lazada mobile app. According to a magazine article published in 2016, there are more than 30 million downloads in both Android and IOS platform since the launching of the Lazada mobile app in 2013. It is often suggested to set up an online store as Lazada University is a portal that guided and trained new sellers about the perfect and effective ways to manage the stores. Moreover, Lazada have been introduced Lazada wallet that make the checkouts more quicker and hassle free. For instance, when a buyer requested refund of a damaged items, it is more convenient if that buyer has a Lazada wallet account because the negotiation with the credit card issuers can be avoided and the refund money will be then directly transfer to the Lazada wallet. For those who do not own a credit card, Lazada had a COD services which allow the buyers to make an order from Lazada website and pay in cash only the order has been delivered to their hands. Lazada has a few benefits like buyer protection program, live chat services, bundled deals and many more. Buyer protection program guarantee anyone who buys from Lazada website receives the correct, complete and undamaged items. In others word, buyers can request refund or return of a specified product as Lazada offers 15days easy return. Lazada offers live chat services that lasts for 24 hours. This is to make sure the seller is responsive to buyers' inquiries. During birthday festival, users who own a Lazada wallet will be offered a 10% cashback for their purchase orders. Any users can make use of the digital payment method to pay for their orders offline. The transaction through Lazada wallet is truly fast and secure, besides that, all the transaction history will be recorded so that buyers can easily keep track of their expenses. The most important drawback is that e-commerce platform requires users to make payment online by either a credit card or debit card because for some people who does not own a credit card will suffer by not being able to buy anything online. Unlike Shopee, Lazada does not have online banking and Coins.ph. In addition, seller rating is a very important key to determine how well

the sales was because seller that failed to fulfil the satisfaction of customers tend to have a low rate that result in lower visibility. Another drawback of selling products on Lazada platform was seller unable to control on their store's look.

Zalora

Zalora, an online fashion retail shop was founded in 2012 and it is an e-commerce site that offers local and international brands. With the launching of Zalora mobile app, both men and women can experience the online shopping experience by placing products via Internet. Beauty categories, fashion dresses and pants, shoes and accessories just to mention a few of Zalora's selling products. Indeed, Zalora shoppers can catch up the latest trends if they are buying from its store because Zalora had a part named "New this week" that keep the customer up to date regarding current fashion. Instead of browsing Zalora website with a laptop, one can easily install the Zalora app in their mobile devices as Zalora has been launching its mobile shopping app for Android and IOS supported mobile devices. Research showed that 25% of revenues of Zalora were come from mobile app (Tan, 2013). redesign Zalora has a personal data protection policy that make sure every shopper was secure during making any transaction online. When the order has been shipped, an email was sent to the shopper's email together with the tracking number for the purpose of tracking. Truly, it helps to reduce the anxiety of shopper and the sellers can monitor the status of the parcels as well. As shown in figure 2.4, Zalora's users can easily shop by categories which make the searching more efficient and faster. Besides that, Zalora was ready to respond to any enquiries 24hours. For example, Customer service hotline or other services like Zalora chat, IG DM @zaloramy and Facebook chat were used for the interaction between buyer and seller at the same time handles the exchange or return items. Different from other e-commerce platform, Zalora accepted return of clothes or shoes that were not fit within 30 days of receipt with the condition of tags and invoice intact and original packing. However, Lee (2016) pointed out that not every products or items are exchangeable, earnings, beauty products, underpants, socks, earphone just to name a few of items which are not refundable because these items are not covered by Zalora' return policy. Moreover, Zalora shoppers can easily go to the nearby 7-Eleven outlets to collect the Zalora parcel. Instead of making payment via online banking, they can make the payment at any 7-eleven stores for the convenience of the buyers. The very first disadvantages were the price of the products selling on its site is quite expensive when compared to other e-commerce platforms like Shopee, Lazada and Taobao. Also, Zalora shoppers tend to develop a dependence habits as they nowadays rely on Zalora website to place order instead of visiting the stores at the street. Thus, this causes many sellers go for online to market their goods and products, resulting in competitors increase sharply. Other than that, Zalora's delivery service was unsatisfied because it did not provide international delivery except areas within Malaysia and Brunei only. However, there is also a no-delivery zones which are Free Trade Zones and P.O. Box Addresses.

METHODOLOGY

To develop and evaluate the E-commerce platform with an pearl beauty system, we followed the following technologies.

Requirement gathering : we conducted a survey of the needs of the e-commerce platform with an pearl beauty system. This include identifying the key features and functions of the platform, such as browsing and filtering the products, buying the products , review system and making payments.

Design and architecture :- based on the requirements, we designed the architecture of the platform and identified the different components, such as web server , the database , the application server , and any external services or APIs that were required.

Implementation :- we implemented the platform using a combination of HTML , CSS , AngularJS and Nodejs. We also need access to handle HTTP requests and responses as well as other resources for adding functionalities and user accessibility.

Testing :- we conducted a series of test to ensure that the platform was working as intended and met the requirements. This included unit testing of individual components as well as integration testing to ensure that the different components were working together as expected.

RESULT

Loading Page :-
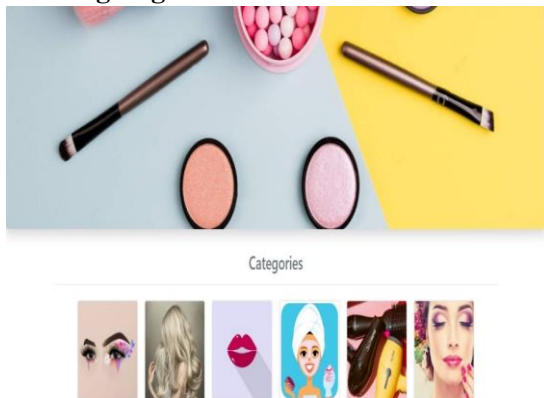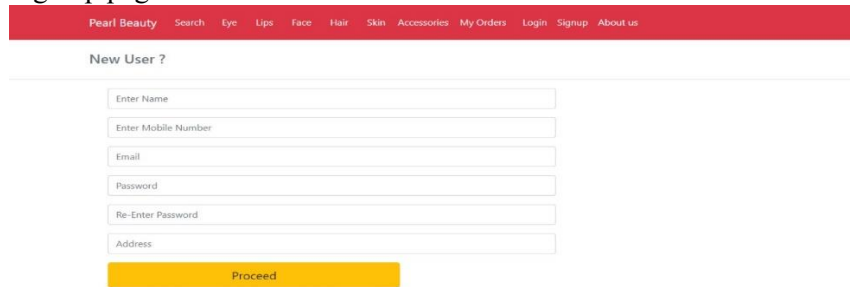
Loading page shows the listed categories of the product for E-commerce and header with option to navigate through different menu.

Sign in/Login page :-
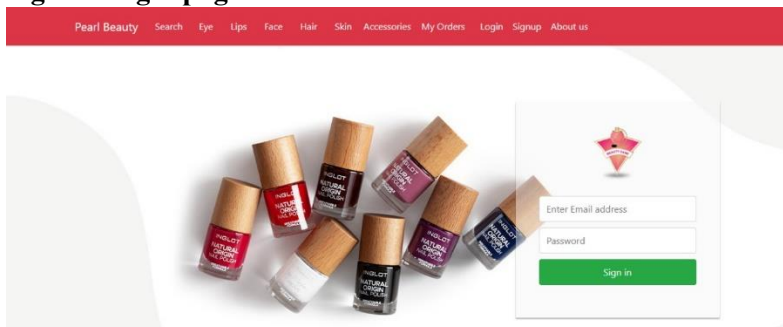
To purchase product from the website user have to login to website. For login in website, user need to sign in on website by filling required details such as email address and password.
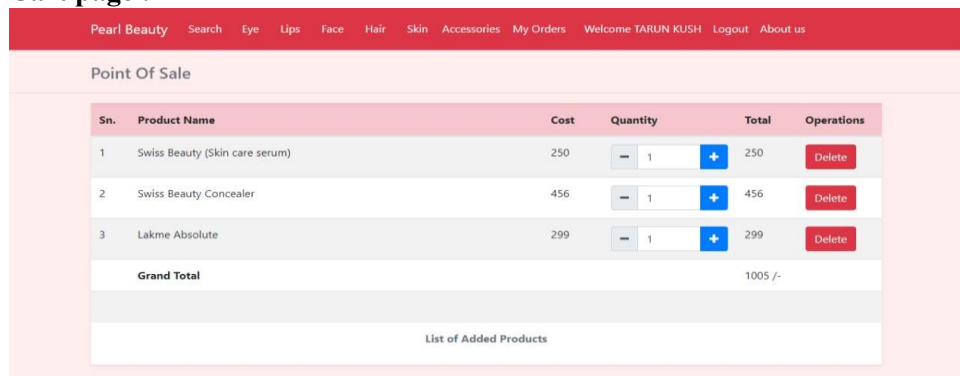
Sign up page :-

Sign up page allow user to create account on our website which allows user to purchase products online. And get notified for the new brands & product added on the website
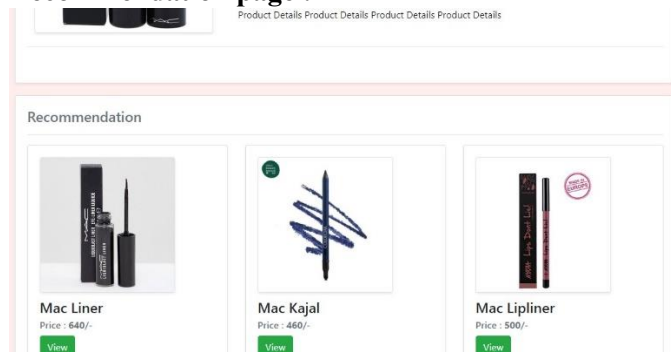
Cart page :-

When user click on add to cart button of any product the that product goes to cart page where user can see all the products that he choose to buy in one place. User then can procced to purchase product by filling required details such as payment method and user address.
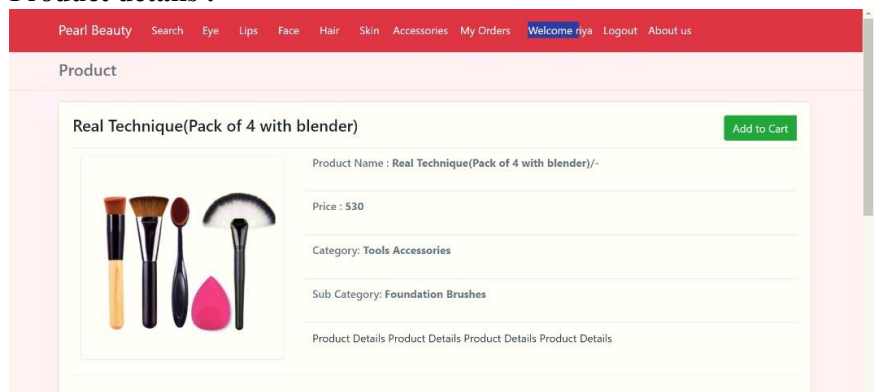
Recommendation page :-

When user click on the any product or search for any product on pearl beauty the user will see the different recommendation of the projects on the basis of his/her previous searches of the product.

Product details :-

After clicking on the product from landing page, user will be rendered to that product detail page which consist of product title, image , price , category , sub category , and add to cart option.

Product order detail page :-
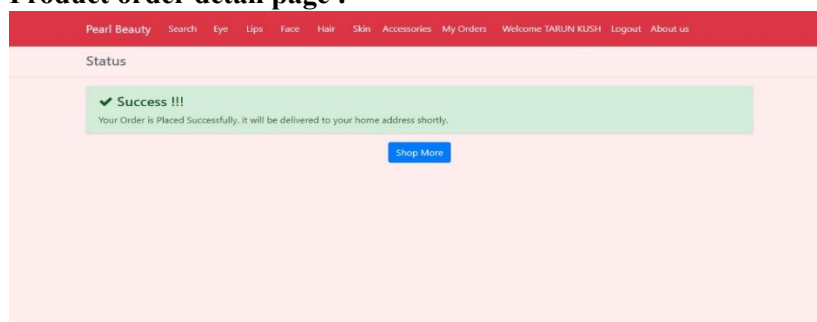
After adding products to the cart comes is the final page of place order and payment page once a order is placed one can track the order summary and also have the feature of shop more through which one can go to products page and shop more within the listed products.

CONCLUSION

In this research paper we presented the development and evaluation of an ecommerce with pearl beauty created using the MEAN stack, which offers a large range of features and functionalities aimed at improving the online shopping experience. Our evaluation of the platform has demonstrated that is a more efficient , secure , and user-friendly solution then existing standalone ecommerce platform.

Overall our research suggests that the ecommerce for the cosmetic products using MEAN technology has the potential to revolutionize the online shopping . providing a more efficient, secure, and user-friendly solution for buyers and sellers. Future research could explore additional features, such as artificial intelligence and machine learning , to further enhance the platforms functionality and user experience.

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