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MY Ole-Ole Application

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Abstract— Souvenirs play a very important role in tourism. These memorabilia represent a connection to people, places and including events. More often than not, customers will go around to different shops to compare souvenir items, which is time-consuming. As an alternative, MY Ole-Ole, an eCommerce site provides souvenir shopping within customers' fingertips. MY Ole-Ole is an e-Commerce platform dedicated to serving as a one-stop souvenir centre for tourists. This virtual store provides a wide range of Malaysian souvenir products, ranging from food to fabric items, which can be delivered or collected in-store. The aim of MY Ole-Ole is to provide customers the opportunity to select local souvenir items according to preferences and location. The target users of this mobile application are Malaysians purchasing local souvenir items as corporate gifts, as well as international tourists visiting Malaysia for leisure and MICE activities. Among the unique features of MY Ole-Ole are its speedy (same-day) delivery and the ability to filter gifts based on preferences (e.g., age, gender, product type, packaging, etc). This application also encourages customers to select and consider souvenirs according to their budget and preferences without any hassle. MY Ole-Ole will benefit local SMEs by extending the reach of their products to a wider market. Overall, the MY Ole-Ole a useful application for its user to easily search and compare souvenirs as it saves time and convenient to use.

Keywords— *souvenirs, application, eCommerce, travel, convenience*

I. INTRODUCTION

Souvenirs are an integral part of the travel experience, and most tourists return home with gifts to preserve and commemorate such experiences. A souvenir may be postcards, T-shirts, local crafts and art, accessories, jewelry, toys, and other items [1]. People like to be reminded of special moments in their lives and to hold evidence of those special moments. A souvenir can be a mass-produced trinket from a shop and the purchase of mementos and souvenirs is an established practice associated with many activities, including travel and other leisure activities.

Customers spend a lot of time to shop across numerous stores to compare prices in hopes for a good bargain. People nowadays live in a busy environment. They are doing things in a faster and more efficient way. Instead of just buying souvenirs from the store, the proposed MY Ole-Ole app is to increase user engagement by personalizing the app according to their preferences while browsing. With MY Ole-Ole it provides all these services that will attract customers to use the application. MY Ole-Ole uses geo-location which enables delivery and tracking, an easy and convenient option for users including tourists and to create globally trusted souvenir apps. This eCommerce store offers a wide range of Malaysian souvenir products.

The uniqueness of the souvenirs offered in this app is focused on the local product offerings that will help foreign tourists understand Malaysian culture. This app can be a tool for tourists to better understand and appreciate a place while on site by looking at the souvenirs offered. The efficiency and effectiveness of the MY Ole-Ole app also allow its users to make efficient purchases online to help them make souvenir choices more accurately and effectively based on their preferences. In addition, features enabled in this application can enhance the user experience. Furthermore, the MY Ole-Ole app will enable tourists to remember their travel experiences more clearly as it is also a platform that connects tourists with souvenirs based on the places visited. In addition, MY Ole-Ole can increase the motivation of tourists to revisit the places they visited with the experience of the souvenirs they purchased.

II. OBJECTIVE

1. To provide tourists the opportunity to select and consider local souvenir items according to their budget and preferences without any hassle.
2. Save customers time by simply purchasing souvenirs through MY Ole-Ole app.
3. To provide various types of souvenirs at a competitive low price.

III. MATERIALS

A. Software Prototyping Model

The development strategy for the MY Ole-Ole application is based on a software prototyping (Model: Canva) was used to design the wireframe. Canva Prototypes provide an easy and low-cost way of design. The prototyping model allows all or part of a system to be constructed quickly to understand or clarify issues. Requirements or design involves repeated investigation to ensure that the developer, user, and customer have a common understanding of what is needed and what is proposed. Rather than having separate specification, development, and validation activities, prototyping is carried out concurrently with rapid feedback across these activities.

B. Hardware

A laptop (Model: Acer) was used to develop the mobile application is a laptop, equipped with Intel Core i7 and 4GB of internal RAM. The operating system is Windows 10 (64 bits). Besides that, a smartphone was also used to test the application after the initial prototype development. The smartphone (Model: Samsung) with specifications Octa-core 1.6 GHz Cortex-A53 and system memory of 32GB 3GB RAM, was used. The operating system of the smartphone is Android 7.0 Nougat.

C. Java and XML

The language that has been used in developing the mobile application is Java and XML. JavaScript is a scripting language that allows truly interactive Internet applications to be constructed. Android Studio and Java Development Kit (JDK) SE 7 are the platform that has been used in developing the mobile application. SQLite is being used for the database. All the data in the application are stored in SQLite. SQL server is designed to accommodate more data, transactions and users with ease. The query processor in SQL Server also provides powerful support for large databases and complex queries. SQL Server is designed so that customers have the ability to work with data reliably from anywhere.

IV. METHODS

A. Phase I: Ideation Methods

There are several idea methods available at this point, including the original Method 635 (Rohrbach 1969), the brain writing technique, in which six participants wrote three solutions to the problem and then handed a piece of paper to their neighbor, who read the idea and added three ideas for further development. This stage of alternative brainwriting technique has characteristics similar to Method 635, namely the brain writing group and the pin card technique. The brain sketching technique stage involves each group member individually sketching their ideas by using the ideas that have been generated as a source of inspiration for new ideas. This is to compare versions of brain sketches that allow them to explain their ideas briefly after each round of idea sketches to brainstorming.

B. Phase II: Design

As shown in Figure 1, in this logo, it shows the words MY Ole-Ole, bag, and Bunga Raya. The capitalised "MY" in this logo means Malaysia, and it shows this application's focus product souvenirs on Malaysia. Apart from that, the Bunga Raya seen in our logo also symbolises Malaysia, where this Bunga Raya is the national flower of Malaysia, and this Bunga Raya also symbolises courage, strong administration, economic strength, and harmony in Malaysia. Next, the word Ole-Ole, which refers to the 4th edition, also carries the meaning of carrying from departure, souvenirs, or gifts [2]. In addition, the bag seen in our logo represents a souvenir or gift.



Fig. 1 MY Ole-Ole Logo

The colours chosen for our logo also have specific meanings. Colour has connotative meanings that are sufficiently shared by people. It is one of the main elements of logo design [3]. The colours chosen for the logo are red, orange, white, and yellow. In psychology, the colour red carries meaning as the dominant colour, representing originality and understanding the emotions of the buyer. The colour red is also often associated with love, life, and confidence. It is able to turn potential customers into loyal customers for life if used properly. Next, the orange colour carries the meaning of radiating aspiration and displays the energetic owner. The colour orange also represents passion, originality, and a fresh start. In addition, the white colour that we match with the word "Ole-Ole" in the logo also means radiating purity, freshness, and clarity. The colour white also serves as an element of stability. Last but not least, the yellow in our logo represents a fun and cheerful atmosphere, which gives sincerity to the brand personality [4]. In psychology, this yellow colour will continue to attract the attention of customers. However, it is best to balance this yellow colour so as not to overdo it. Customers can change their minds if they see excessive yellow tones. Therefore, we made the yellow colour in our logo look less like a neon sign or even a soft yellow. The colours chosen play a very important role in attracting the attention of the public.

V. RESULTS AND FINDING

The result of this project is that users will easily find souvenir shops, helping them to save time and energy. Browsing time is shorter than going to the souvenir shop. Moreover, the seller can also save on operational costs, have a wide variety of items available and have a wider market reach. Furthermore, the design is also made to make it easier for customers to access these apps. Design guide users to focus on a specific part of a screen at a time [5].

Figure 2 shows MY Ole-Ole search for souvenirs. Users can select the desired local souvenirs using this interface. For example, the users might require keychains, bracelets, and other local souvenirs. The application will display the entered souvenirs when the user searches for them and can select them. This will address the first issue, which is that visitors also have issues and difficulty deciding what to buy as souvenirs. Tourists can easily choose and take into consideration local goods for souvenirs based on their preferences and budget due to the variety of available local souvenirs.

Figure 3 shows an example of how users might search for keychains as local souvenirs. Many perspectives and various keychain types are shown when users search for keychains. Users can choose the keychains they desire after that. For instance, there will be a variety of keychains on show, such as letter charm keychains, mini teddy bears soft toy keychains, and resin geometric pendant keychains. These apps allow users to select the greatest souvenirs based on the available choices. Tourists and locals can save time by ordering souvenirs through our MY Ole-Ole app rather than going to the gift shop.



Fig. 2. Search Souvenirs



Fig. 3 Search Souvenirs (Keychain)

VI. CONCLUSION

MY Ole-Ole will encourage customers to select and consider souvenirs according to their budget and preferences without any hassle. This application will also benefit local SMEs by extending the reach of their products to a wider market. Overall, the MY Ole-Ole is a useful application for its user to easily search and compare souvenirs as it saves time and convenient to use.

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REFERENCES

- [1] Marzouki, S. H. (2020). *Studying the vital role of souvenirs industry as an essential component of tourist experience: a case study of the United Arab Emirates (UAE)*. Journal of Tourism, Hospitality and Sports, 46, 24-33
- [2] Kamus Dewan. (2005) (4th ed.). Kuala Lumpur: Dewan Bahasa dan Pustaka.
- [3] Bottomley, P. A., & Doyle, J.R. (2006) *The interactive effects of colors and products on perceptions of brand logo appropriateness*. Marketing Theory,6(1),63-83.
- [4] Clarke, T. & Costall, A. (2008) *The emotional connotations of color: A qualitative investigation*. Color Research & Application,33(5),406-410.
- [5] Mayer, R.E. & Moreno, R. (2003) *Nine Ways to Reduce Cognitive Load in Multimedia Learning*. Educational Psychologist, 38,1, 43-52.