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The Affluence of Tanjung Laboh: The Development of Tanjung Laboh E-Tourism Mobile Application.

Zuraida Binti Ibrahim*, **Tamil Arasi**, **Farah Aqilah Mohd Yani**, **Sakinah Balqis Nor Azman**

Department of Information Technology, Centre for Diploma Studies,
Universiti Tun Hussein Onn Malaysia, Pagoh Higher Education Hub,
84600, Pagoh, Johor, MALAYSIA

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Abstract: In the state of Johor, substantial efforts to create natural tourist products are still insufficient. There is currently less unique promotion in place to successfully promote nature as a tourism commodity. Mobile and wireless technologies have been identified as one of the most attractive areas of technological innovation for enhancing internet applications to tourism in the tourism management arena. In addition, there are previous studies on tourism applications such as Agoda, Trivago but these applications are booking applications and not a personalized-location application. Therefore, this study aims to develop an e-tourism mobile application to promote natural tourism in Tanjung Laboh area by designing an application that has food and accommodation recommendations and also games that gives knowledge about history in Tanjung Laboh. This research applied the waterfall approach. There are five phases employed, which are requirement, analysis, design, implementation and testing. Hopefully, the personalized-location applications namely “The Affluence of Tanjung Laboh” will attract more people participating in the tourism industry specially in Tanjung Laboh, Batu Pahat, Johor.

Keywords: The Affluence of Tanjung Laboh, Sulam, Tanjung Laboh, Tourism Malaysia, e-tourism mobile application.

1. Introduction

In the state of Johor, substantial efforts to create natural tourist products are still insufficient. There is currently no unique promotion in place to successfully promote nature as a tourism commodity. The application we are developing is about Tanjung Laboh in Batu Pahat city. This application aims to emphasise the potential for natural tourism goods in the Tanjung Laboh district [1].

Batu Pahat Town (Bandar Penggaram or BP) is a town on the northwest coast of the Malaysian state of Johor, within the same-named district. It is located in the south of Muar, west of Kluang, north of Pontian, and south of Segamat while Tanjung Laboh is a fishing pier and a little community with a variety of Malay native cuisine. It is located in Senggarang, District of Batu Pahat, Johor Darul Takzim. Due to its solitude and calmness with the sea wind, Pantai Tanjung Laboh is an interesting area for a quick gateway, leisure, and hanging out. Therefore, this place is suitable for tourism because tourists will find it attractive. To get to the beach, one must first go through the overgrown airfield area, which is densely forested, and then ascend a stairway across the cliff. The summit offers amazing views of the Malacca Strait and the sea [2].

The view of the sea is framed by a mangrove swamp forest and a marsh area with a rock structure ideal for catching live fishing baits. The beach is frequently visited by those who enjoy being near to nature, tranquil surroundings, and magnificent sunset views. This research is to present a method for increasing the profitability of the tourism industry by building a mobile application that serves to promote tourism in a particular state under the Sulam Project in Malaysia. SULAM project is to relate theory to practice in the real world. Next it is to help the well-being of the community through the contribution of ideas, knowledge, student's skill and competencies [3]

If this area is not developed as a tourist area, it will be marginalized and will receive less public attention. Therefore, the development of mobile applications with real view pictures and videos to help users plan their trip better together with the overview of the places that they intended to visit will help them experience an unforgettable trip in Tanjung Laboh. This application is also to test the effectiveness of the application as one of the potent marketing tools in enhancing the state economy together with the incomes of local sellers and the district government of Tanjung Laboh [4].

2. Literature Review

Tanjung Laboh is located in Senggarang Batu Pahat, due to its peacefulness and calmness with the sea wind, Pantai Tanjung Laboh is an interesting area for a short getaway, relaxation and chilling out. When the water recedes or the tide goes out, residents gather at the beach to collect seashells such as cockles and snails, if tourists are lucky, they will be able to witness a variety of seasonal and migratory birds flying throughout the area. Crabs and fish such as '*ikan belanak*' and '*ikan tembakul*' can be seen in places where the water is clean. The ships moving through the Malacca Strait's waterways may also be seen [1].

Exposure to the numerous components that make up the accommodation and provide amusement has long been one of the key attractions of tourism. Food, beverage, accommodation, and history are all components of what is commonly referred to as tourism [2]. All of these components can be combined in one mobile application and introduced to the public to facilitate their affairs when traveling somewhere. Tourism is an activity that goes across traditional economic sectors. Economic, social, cultural and environmental inputs are all required. It is frequently regarded as multi-faceted in this regard. A tourism recommendation system generates recommendations for travelers based on their interest and planning equipment to assist them in putting up a leisure and tourism itinerary [4].

The term e-tourism system has grown in popularity in recent years to describe the extensive use and reliance on ICT-based industries and services associated with tourists. The primary aims in the smart tourism sector are to deliver real data, context awareness, and customisation. This approach improves tourism's quality of life by providing a usable and interactive environment for system users [4]. Therefore, the development of a tourism mobile application is to make sure users prepare in advance to make sure they are familiar with the place before going for a holiday or staycation.

Nowadays, academics and practitioners have already been concentrating on smart-tourism as a popular topic. Prior research has built a comprehensive understanding of smart tourism by incorporating

the viewpoints of travelers, industry practitioners, and destination governments. Some scholars analysed smart tourism projects through the service dominant logic, which appears to be an important theoretical foundation for comprehending smart tourism's consequences. Existing behaviour, and Technology Readiness and Acceptance Model, were also employed as theoretical foundations to investigate smart tourism behaviors [5].

Smart technologies and their applications are rapidly evolving, an up-to-date evaluation of the existing literature is required to give a firm foundation and direction for future research [4]. In previous studies, The Geographic Information System (GIS) appears to be a fascinating technology with a wide range of uses in tourism, both within the industry and in the development of ecotourism. It provides visitors with information and geographical context capabilities via interactive visualisations employing multimedia technologies such as transportation network, roads, railways and services such as restaurants and hotels and other business [6].

In the future, because travel entails the movement across time and space, the IOT-driven innovations have significant implications for tourism growth. This smart environment will evolve to be aware of, and able to fulfill the demands in ubiquitous yet non-intrusive manner. Sensors integrated in tourist sites, for example, will allow tourism service providers to track tourist's location and consumption patterns in order to deliver location-based service [7].

3. Methodology

This research applied the waterfall approach to create this e-tourism mobile application. There are five phases employed, which are requirement analysis, design, implementation, testing and maintenance.

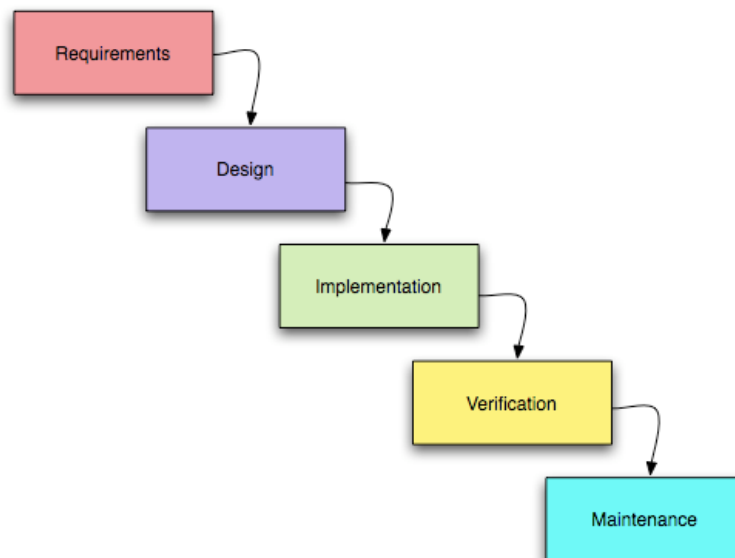


Figure 1: Waterfall approach

The waterfall approach is used is because the design errors are captured before any software is written which saves time during the implementation phase. The outstanding technical documentation is then included in the deliverables, making it simpler for us to become familiar with it at the maintenance stage. The strategy is also quite structured, making it simpler to gauge success in relation to definite benchmarks. Once the criteria have been established, an accurate estimate of the project's overall cost

can be made (via the functional and user interface specifications). The testing is then made simpler because it may be carried out in light of the scenarios listed in the functional specification.

In the requirements analysis phase, we specify the users who will utilize our application and the objective of our applications. Our applications will focus on Malaysian citizens who intend to visit Tanjung Laboh either for leisure or business purposes. Our project's objectives are to create an e-tourism mobile application that will serve as a guide for travelers who want to visit Tanjung Laboh and learn about its history. Next, is to include the content with an actual view of images and videos of Tanjung Laboh to assist users in better trip planning and familiarising themselves with the location. The e-tourism mobile application will also be put to the test to see how well it works as one of the most effective marketing strategies for raising seller and district government incomes in Tanjung Laboh.

Meanwhile, for the design phase, we made a storyboard to imagine the final product's appearance and functionality to assist in making sure that no crucial information is overlooked during the development process. We also use Unity to create this e-tourism mobile application, and for the objects in the mobile application Adobe Illustrator will be used. The content for these e-tourism mobile applications were selected and categorized into popular food recommendation, accommodation, and game to test user knowledge about Tanjung Laboh. In this e-tourism mobile application there is information such as accommodation, food recommendations, and games to test users' knowledge about Tanjung Laboh. The purpose of the accommodation features is to tell guests about the lodging options available in Tanjung Laboh. Next, as for the food recommendations, visitors can use this app to learn about the fine dining in the Tanjung Laboh area. There will be five restaurants which serve local food that will attract tourists. Last but not least, the game in this app is designed to test travelers' knowledge of Tanjung Laboh.

The project will be validated by the supervisor during the implementation phase. Afterward, the mobile application will be uploaded through the Google App Store. This mobile application will be evaluated to make sure if it can function as what we plan. This App will be name as the Affluence of Tanjung Laboh because it promotes history and facilities that located in Tanjung Laboh.

In the testing phase, a User Acceptance Test (UAT) will be carried out. A few people will be asked to use the mobile application and answer a set of questionnaires regarding the Affluence of Tanjung Laboh e-tourism applications such as the interface, bugs and more. If the e-tourism mobile application has other technical issues and bugs such as if the player movement in games stuck and cannot move, maintenance will be needed to guarantee that the mobile application runs smoothly and may be accessed by the general public.

4. Result and Discussion

Based on the questionnaire created for the UAT in the testing phase using Google Form. There were 30 people who had already responded to our questionnaire. The table below summarizes all of the survey results by section B and C as Section A is a personal information.

Table 1: Summary of the survey on the application

Question	1	2	3	4	5
1. Do you think our application's interface is user friendly?	0.0	0.0	8.8	32.4	58.8
2. Do you think our application's features are understandable for user?	2.9	0.0	5.9	44.1	47.1
3. Our Application can be beneficial for tourists	2.9	0.0	5.9	32.4	58.8
4. There are no bugs or malfunctioning in our application	20.6	11.8	23.5	17.6	26.5
5. Do you think the designed game is good for historical purpose?	5.9	0.0	8.8	41.2	44.1

6. How do you rate the quality of our application	2.9	0.0	8.8	38.2	50
7. Do you recommend people to download and use our application?	2.9	0.0	5.9	35.3	55.9

Table 1 summarized all the user's feedback. Majority respondents strongly agreed that our app's interface is user friendly. The interface that we have built is based on people's choice that we have survey and done research in the internet. This shows that our app's interface is good and has attracted users. Next, Majority respondents strongly agreed that our features are understandable because the features that we have included in the app is based on research at Tanjung Laboh. We gathered the information from the internet and listed it out accordingly. After that, majority strongly agreed that our app is beneficial for tourists, since we have added history of Tanjung Laboh in the gaming part in our app, tourists not only can travel but they can also learn about Tanjung Laboh.

Most respondents strongly agreed that there are no bugs or malfunctioning in our app. Every page and buttons of our app, is connected and designed correctly. We have also used simple icons and symbols for users to understand. Most respondents strongly agreed that designed game in our app is beneficial for historical purpose. Tourists can learn the historic places in Tanjung Laboh through playing the game in the app. We have inserted some details about the historic places for each level in the game. Next, majority respondents strongly agreed that our app is a quality application, because ur app is not only filled with informations but also can entertain users. Users can gain knowledge and travel to Tanjung Laboh without any preparation. Lastly, majority people recommend other people to download and use our application because our app promotes the local tourism place such as Tanjung Laboh to Malaysians. Respondents have agreed that our app will be useful for many people.

5. Conclusion

This e-tourism mobile application will be used as a guide to entice travelers to visit Tanjung Laboh and experience its sights. Existing smartphone services for this e-tourism mobile application are still in their infancy. Although there seem to be more mobile applications that examine information for guiding tourists, there is still a lack of context to fit the interest, preferences and needs of users. Function of this e-tourism mobile application is to search for objects such as hotels and restaurants. All of these are highlighted as important features of location- based services for travelers. Therefore, with more thorough data about this place, more people will be interested in using this application. This research study will specifically benefit local communities where the tourist activities usually take place. With the advancement of mobile devices (laptops, tablets, smartphones and other similar devices, it is now possible to provide online services to individuals at any time and from any location. These features of e-tourism mobile applications are very useful for persons visiting new places. With this, tourists can now use an e-tourism mobile application to plan and participate in tourism at Tanjung Laboh.

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References

- [1] A. E. Hamdi, M. Maryati, and M. Shafiq Hamdin, "The Potential of Nature Tourism at Muar and Tangkak Districts, Johor, Malaysia," *IOP Conf. Ser. Earth Environ. Sci.*, vol. 269, no. 1, 2019, doi: 10.1088/1755-1315/269/1/012008.
- [2] U. Gretzel, M. Sigala, Z. Xiang, and C. Koo, "Smart tourism: foundations and developments," *Electron. Mark.*, vol. 25, no. 3, pp. 179–188, 2015, doi: 10.1007/s12525-01

- [3] G. Hackett and D. Melia, "The Hotel as the Holiday / Stay destination: Trends and Innovations.," pp. 0–10, 2012, [Online]. Available: <https://arrow.tudublin.ie/cgi/viewcontent.cgi?article=1028&context=tfschcafcon>.
- [4] S. Alnusairat, R. Elnaklah, M. S. A. Yajid, M. G. M. Johar, and A. Khatibi, "Information System, Geography, Information Management System and Tourism Planning: a Geographical Perspective From Malaysia," *PalArch's J. Vertebr. Palaeontol.*, vol. 18, no. 2, pp. 42–60, 2021
- [5] G. Panduan, "Garis Panduan Pelaksanaan SULAM @ UiTM," p. 36, 2020, [Online]. Available: http://www.islam.gov.my/images/garis-panduan/garis_panduan_pelaksanaan_ibadah_qurban.pdf%0Ahttp://kkgerik.jpkk.edu.my/v2016/images/kkgp/2012/garis_panduan_pengurusan_ibadat_qurban_jakim_20121105.pdf.
- [6] K. P.-J. 1 and M.-V. F. 2 Igor Linkov, Benjamin D. Trump, "Htm @ Www.Mdpi.Com," *Remote Sensing*, vol. 6, no. 1. 2017, [Online]. Available: <http://www.mdpi.com/2071-1050/5/12/4988/htm>.
- [7] R. A. Hamid *et al.*, "How smart is e-tourism? A systematic review of smart tourism recommendation system applying data management," *Computer. Sci. Rev.*, vol. 39, p. 100337, 2021, doi: 10.1016/j.cosrev.2020.100337.