Building Android-Based Ecotourism E-Tourism Applications in Pringsewu District

Citrawati Jatiningrum[1)*], Abshor Marantika[2)], Edi Rahmat Taufik[3)], Mutiara Rengganis[4)]

[1)4)]Institut Bakti Nusantara

[2)] STIE Bangkinang

[3)] Universitas Sultan Ageng Tirtayasa

[1)] citrawati@ibnus.ac.id

Abstract

This Community Service activity aims to build an Android-based ecotourism search application in Pringsewu district. It is hoped that this application will provide convenience for tourists and the public in finding information about ecotourism in Pringsewu Regency. The method used in this application is the waterfall model SDLC method. The ecotourism search application was developed as a medium to make it easier for people to find information about ecotourism. This ecotourism application provides various information about ecotourism such as existing facilities and events or activities. This application also displays a map that can assist tourists in observing the direction of tourist objects. The contribution of this activity to the Pringsewu district is to help increase the number of visits by local and international tourists and promote tourism in the Pringsewu district..

I. INTRODUCTION

As a branch of the tourism industry that has developed, ecotourism is present as a tourism sector that has the potential to contribute to sustainable development and is introduced as a formation of sustainable tourism that is expected to contribute to conservation and development. In this case, ecotourism emerges as a development tool that aims to preserve the environment and cultural diversity (Tsaur & Lin, 2004). Ecotourism or ecotourism is an environmentally sound tourism activity by prioritizing aspects of nature conservation, aspects of socio-cultural economic empowerment of local communities as well as aspects of learning and education (Blitar Regency Environmental Service, 2023).

E-tourism is the idea of using data and correspondence innovation to increase productivity in the travel industry area, providing a difference in travel industry administration to tourists which makes travel industry advertising more open (Yeni, 2020). Based on this agreement, the web in the travel industry basically reflects the etourism framework insofar as the spread of the travel industry is more aimed at changing the progress of the travel industry towards the web which is usually a site or application (Putra et al., 2011)

The idea of understanding ecotourism has emerged from time to time. In fact, basically, the idea of ecotourism is a type of travel industry that is responsible for protecting areas that have not been polluted (common palm oil), providing monetary benefits and maintaining social justice for the surrounding area (Putra et al., 2011)

The advantages of ecotourism in Pringsewu as quoted from Lamppost.co, according to Sujadi (2021) "Pringsewu Regency has various kinds of tourism potential, be it historical tourism, educational tourism, health tourism, natural tourism, and so on. However, the tourism concept must be clear, one and the other must support one another

* Corresponding author

others must mutually support one another," said the Regent Monday, January 25 2021. The advantages of tourism with the Ecotourism concept are that visitors do not just travel but can learn how to preserve the environment, see local community culture and can enjoy traveling in one place with many places or various kinds of tours in one place without the need to move around. Reported by Andalans Tuorism.com, (Alib, 2022) In Pringsewu Regency itself there are 15 of them; Tursinah Hill, Blitarejo Hill, Beautiful Talang, Pangonan Hill, Watu Sewu Equestrian Rides , and so on. In the initial observation, namely information through electronic media or Google. The problem that occurs is first, the community does not know in detail about tourism with the concept of ecotourism. Second, the Pringsewu government has not implemented many tourist attractions with the concept of ecotourism in Pringsewu district. So, it is hoped that this title will be taken by the public to find out and understand information about ecotourism more easily. (Widodo, 2023) According to (Anggara et al., 2018) Designing Android-Based E-Tourism Applications as a Tourism Promotion Strategy for Lampung Province. This framework is done in an organized model with a cascade strategy. The E-tourism application was created with the idea of coordinating tourist data with versatile online using GPS and maps to determine the distance traveled and travel time (Alib, 2022). Applications are products that make it easier for clients to complete their work so that information interactions become results. (Susanti & Haevi, 2018).

The purpose of the community service activity is to design an Android-based ecotourism search application in Pringsewu district, which is expected to make it easy for tourists to find information about ecotourism in Pringsewu district. Based on the observations that I made through social media information media in Pringsewu Regency, there are 6 tourist attractions that have the concept of ecotourism, including: Eco Taman Sari, Taman Sabin, Taman Tirta Asri, Taman Jomblo, Talang Indah, and Saung Cempedak. The use of Android in this application is because Android is a ready-made stage, (open source) and allowed to develop so that many people are using Android at this time. This application will provide data about ecotourism objects and their data. In addition, this travel industry application also displays a map that can assist tourists in observing the direction of the tourist object to be addressed through Google Maps using GPS. Android is a Linux-based framework that is used as an asset supervisor tool, both for mobile phones, mobile phones and tablet PCs. As a general rule, the Android framework is an open stage for designers to create their own applications for use by different mobile phones (Setyawan et al., 2018)

The purpose of this community service activity is to build an android-based ecotourism search application in Pringsewu Regency so that it can provide information about destination locations and travel guides for tourists. This application can help users to make it easier to find information about ecotourism in Pringsewu Regency. Increase knowledge and insight and experience in making ecotourism search applications in Pringsewu Regency based on android.

According to Kurniadi, Budianto (2018) in his research Design and Build an Android-Based Kuningan Regency Tourism Application Using the Location Based Service (Lbs) Method. This application provides existing traveler object data starting from area data, offices, opening and closing times and directions to arrive at the area using Location Based Service techniques. Every explorer can download the app and run it on the phone. Application users can select tourist objects based on class and the system will provide directions to the tourist sites they want to visit. This application is relied upon to be the answer to the problems above and to become a medium for the advancement of the travel industry in Kuningan (Setyawan et al., 2018). Meanwhile, according to (Joandani et al., 2019) regarding the Study of the Potential for Ecotourism Development as an Effort for Mangrove Conservation in Pasar Banggi Village, Rembang Regency. The results of the service activities show that the elements that have an impact on increasing mangrove ecotourism in Pasar Banggi Village are the diversity of mangrove species, the nature of human resources in caring for tourists, the accessibility of ecotourism fixed asset values in conservation efforts, the arrangement of the surrounding environment. government regarding guidelines and regulations regarding mangrove forest ecotourism in Pasar Banggi Village, the financial situation of the local area, and its supporting foundations.

II. METHOD

A. Data Collecting Technique.
1. Library Studies for this service activity are obtained from the internet, E-journals, scientific papers and news sources from other electronic media.
2. Observations in this community service activity are carried out by visiting ecotourism sites directly, seeking information via the internet and other electronic media.
3. Interviews for community service activities are carried out by directly interviewing the parties. Ecotourism managers and looking for information about ecotourism on the internet
4. Designing E Tourism Applications

B. System Development
In developing this application system the author uses the Waterfall model SDLC method, which is the simplest approach model.
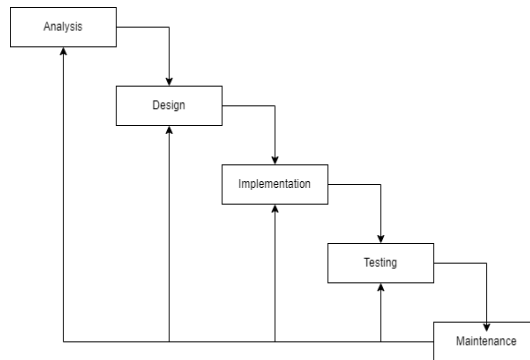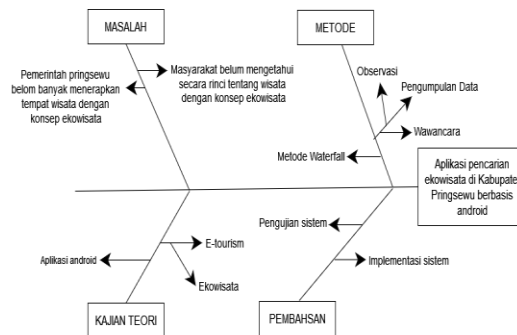

Figure 1. Waterfall Model

1. Analisis
   Dimana tahap ini akan dilakukan menganalisis apa saja yang akan dilakukan dalam membangun aplikasi.
2. *Design*
   Tahap dimana proses perancangan dan pemecahan masalah dalam membangun aplikasi.
3. *Implementation*
   Pada tahap ini sistem pada aplikasi akan di posting pada playstore dan yang diharapkan dapat memecahkan masalah tentang kesulitan mencari informasi ekowisata di masyrakat dan wisatawan.
4. *Testing*
   Fase ini adalah pengujian atau validasi dalam memeriksa sebuah solusi bahwa perangkat lunak memenuhi persyaratan.
5. *Maintenance*
   Pada tahap ini adalah memodifikasi solusi dari perangkat lunak.

C. Frameworks

Gambar 2 *Fishbone* diagram

III.   RESULTS AND DISCUSSION

A. Use Case Diagram
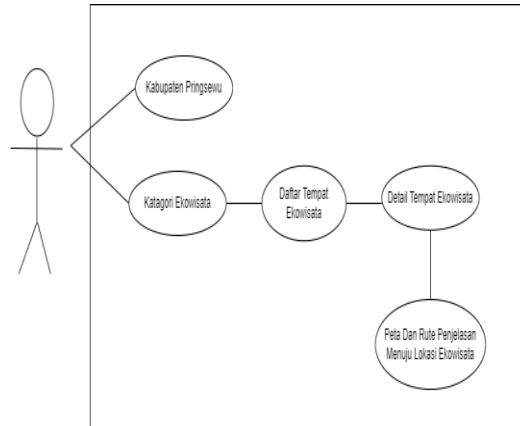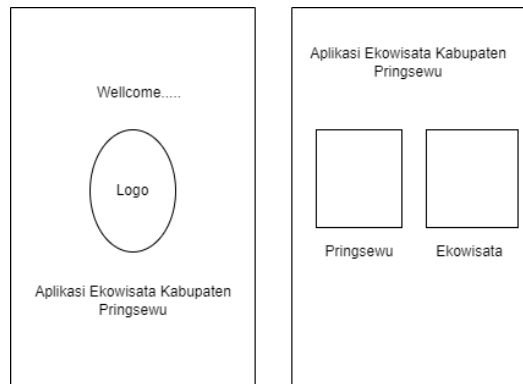

Figure 3. Use Case Diagram

B. Cover Design

Figure 4. Splash Screen

C. Implementation

Implementation describes the assembled application, In particular the implementation of the e-Tourism main framework for selecting tourism objects based on the model which is one of the main page connection executions, the point of the application is made.

1. Splashscreen

Splashscreen is a presentation that initially appears when the client opens an ecotourism application symbol in the priswu area which contains the underlying stacking screen when we run an android application in an interesting way. What's more, the principle menu of the ecotourism application.
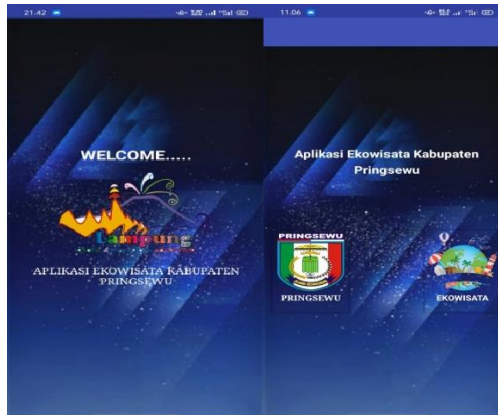
Figure 5. Splashscreen

2. Pringsewu Display
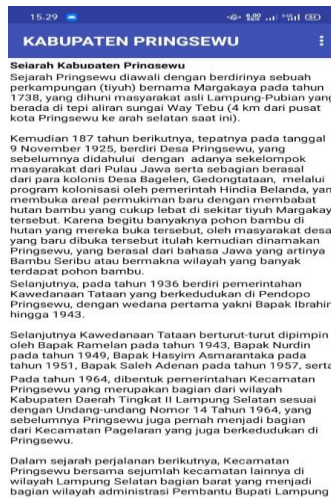
Display of the page consists of Pringsewu stories.

Figure 6. Pringsewu Stories

3. Eco Tourism Page

This page displays a list of ecotourism places in Pringsewu district which contains ticket prices, locations, opening and closing hours, events on Sundays, facilities and ecotourism information at Tirta Asri Park

Figure 6. Eco Tourism Page

IV. CONCLUSION

Based on the results of the community service activities above, the existence of the Ecotourism Search Application in Pringsewu Regency is able to provide convenience for the community and tourists in finding information and data about ecotourism and can be a promotion for tourist attractions that use the ecotourism concept in Pringsewu. With this system it is hoped that it can help community or tourists in search of information and can develop ecotourism-themed tourist attractions in Pringsewu Regency.

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