

## **WEB APPLICATION AS MEDIA INFORMATION AND TOURISM PROMOTION IN THOUSAND ISLANDS PRAMUKA ISLAND IN THE INDUSTRIAL AGE 4.0**

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### **ABSTRACT**

Tourism is one of the driving wheels of the economy for people living in Thousand Island. Tourists must get any information as easily as possible. Unfortunately, the Rumah Hijau Community still used traditional ways to handle ticketing, promoting, and handling other tourism activities in Pulau Pramuka and Pulau Panggang. Tourists would not get the newest information about tourism activities. Tourists will find it difficult to book homestays on Pramuka Island and Panggang Island. Likewise, if local MSMEs have souvenirs or other specialties that can be sold, so far the information they sell to tourists is only through word of mouth. Therefore, information media is needed, namely a website, which can distribute information quickly and precisely. The website will make it easier for Rumah Hijau to organize ordering and sales data. Tourists will also be able to view information easily. In this technology era, website applications can help to boost the promotion and sharing of information for tourism activities.

**Keywords:** web application, community development, tourism

### **1. INTRODUCTION**

Tourism is one of the driving wheels of the economy throughout the world (Wu et al., 2019)(Martín et al., 2018), including Indonesia, which has a high attraction for local and foreign tourists. There are even regions that rely solely on tourism activities for their economy. Therefore, tourism services must be supported by many aspects so that tourists can get easy access if they want to visit a tourist spot. Including getting proper information about the area they want to visit.

Pramuka Island and Panggang Island are part of the administrative area of the Thousand Islands. Just like other islands in the Thousand Islands, Panggang Island and Pramuka Island are islands that rely on tourism as one of the livelihoods of residents. Many of them provide lodging services, tour escorts, sell local specialties to tourists, and many others.

The increasing development of technology can help improve services for tourists to get proper information and can help organizations that manage to increase promotion, especially for MSMEs that manage tourism (Tavakoli & Wijesinghe, 2019)(Pencarelli, 2020)(Sigala, 2018). Rumah Hijau is one of the MSMEs that manages tourism activities on Pramuka Island and Panggang Island. Rumah Hijau Communities still uses manual methods for sales services of tour packages such as Homestay, tourist activities, and sales of MSME Products. This makes services ineffective and inefficient, such as customer data collection, which is still written in books, and customer queues that take a long time. Based on the above needs, Rumah Hijau Community needs an information system that can support the processing of order data quickly, accurately, and precisely and provide convenience for the admin in terms of service.

How can the application of using a website in booking tour packages be managed using this website so that it can be done optimally. In addition, it is also how to help admins manage ticket and tourism bookings to be effective and efficient and how to build and implement a tour package booking website system.

This research aims to create a website that can make it easier for customers to get information on package bookings, ticket reservations, departure schedules, MSME Culinary Products, and Homestay availability. This website was created to facilitate the travel agents, namely Rumah Hijau, in managing passenger data and booking tour packages and others.

### **2. METHOD**

Method to collect data in this research by using descriptive research. By using descriptive research, the author can understand and identify the problem by looking at the characteristics of the problem (Siedlecki, 2020)(Nassaji, 2015)(Çaparlar & Dönmez, 2016). 3 methods to collect the data:

1. Observation. The author makes direct observations of activities on Pramuka Island and Panggang Island so that the results of these observations can be recorded by the author, and from this observation activity, the author can find out the problems faced.
2. Interview. To obtain complete information, the authors conducted a question-and-answer method regarding tourism activities on Panggang Island and Pramuka Island. The resource person is a local community organization that has been managing tourism activities there, namely Rumah Literasi Hijau.
3. Literature Study. In addition to conducting observation and interview activities, the authors also conducted literature studies through literature or references in the library.

The method used to create this website is the waterfall method. Waterfall is one of the methods for developing websites. The details of the process of each stage are as follows(Sudrajat et al., 2019)(Heriyanti & Ishak, 2020):

1. Analysis

In this process, the system requirements are analyzed and collected, which include the information domain, required functions, performance, and interfaces. The results of the analysis and collection are documented and shown back to the customer.

2. Design

In the design process, the requirements are translated into a software design that is estimated before the coding process is made. This process focuses on data structures, software architecture, interface representation, and detailed procedural algorithms.

3. Integration.

Coding is the process of translating the design into a form that can be understood by machines using a programming language.

4. Testing.

After the coding process is complete, continue with the process of testing the software program, both internal logic testing and external testing. Functional to check whether the results of the development are following the desired results.

5. Maintenance

The maintenance process is at the very end of the development cycle and is carried out after the software is used. Activities carried out in the maintenance process. In this study, the stages used up to the test or testing stage are intended to determine whether the system used is as expected or not.

### 3. RESULTS AND DISCUSSION

#### A. Website Implementation

The web application has been successfully created with three main menus, Homestay, Destination, and Culinary, that are useful for increasing the productivity of MSMEs managed by Rumah Hijau. Other menus and details about website applications:

1. Home

The home menu is the initial display of this application. Details of this menu can be seen in Figure 1. Home Menu Display.

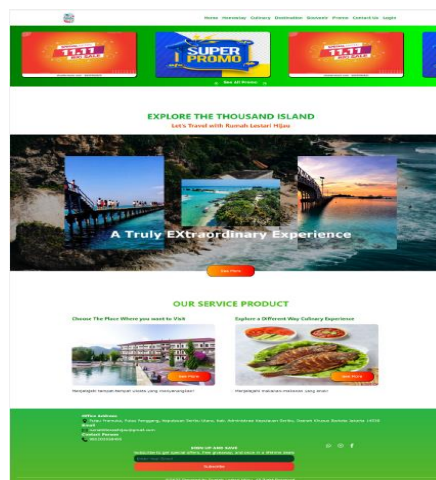


Figure 1 Home Menu Display

## 2. Homestay Menu Display

In this menu, tourists can see detailed information about the lodging they want to stay in and can make reservations from the website. The initial appearance of the menu and details of the menu can be seen in Figure 2 and Figure 3.

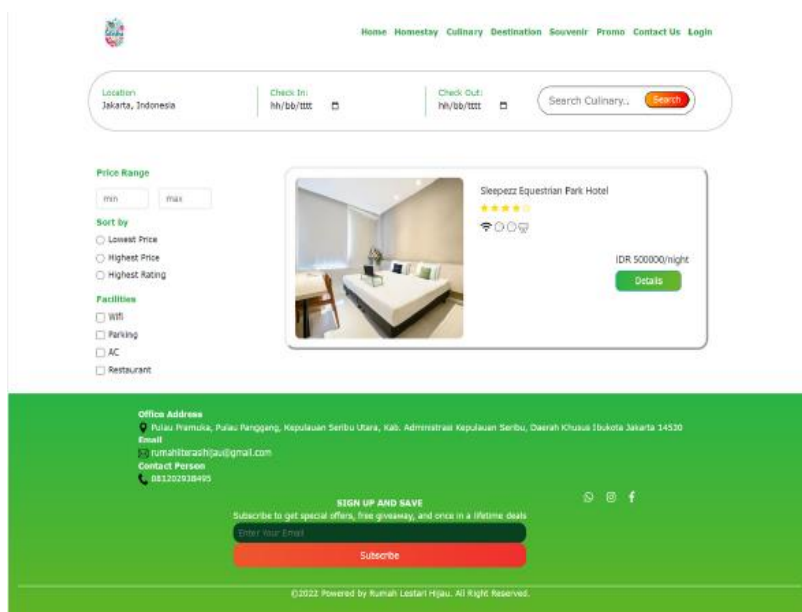


Figure 2 Homestay Page

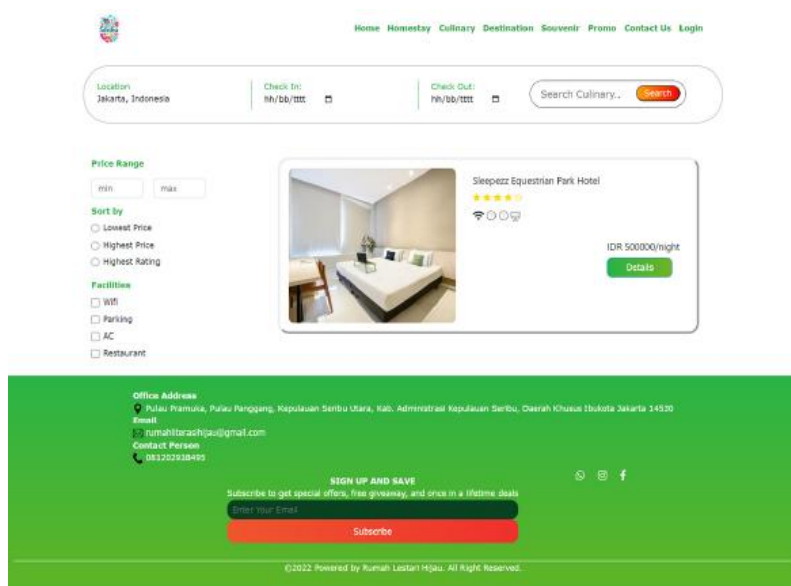


Figure 3 Homestay Page Detail

## 3. Culinary Menu Display

This menu is a menu for MSMEs to sell food products that they want to sell to customers. Later, ordering can also be done through the website. A detailed view of this menu can be seen in Figure 4, Culinary Page.

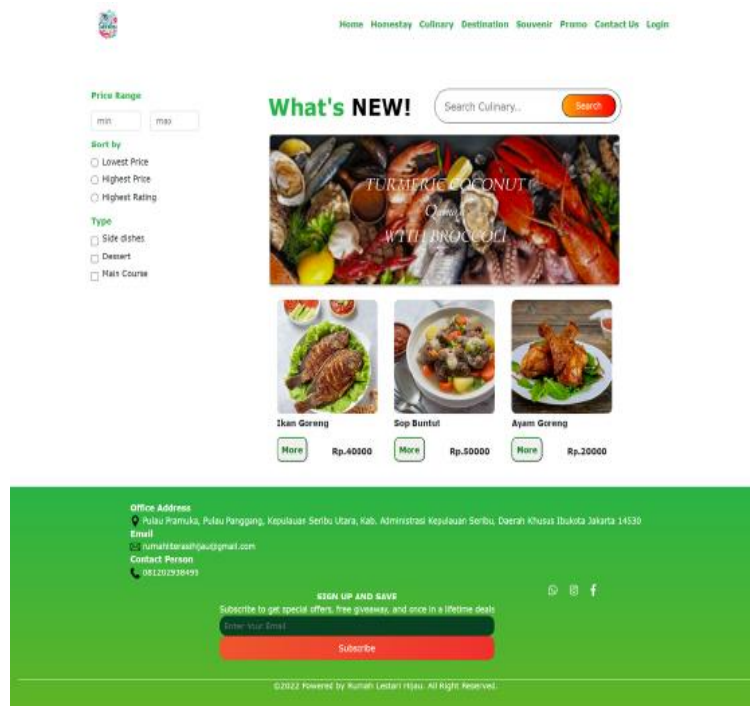


Figure 4 Culinary Page

#### 4. Destination Menu

In this menu, travelers can select tour packages that have been provided by the application and can choose the package they want. Details of this page can be seen in Figure 5.



Figure 5 Destination Page

## 5. Souvenir Menu

Souvenirs are also part of tourist activities. Therefore, there is one menu, namely the Souvenir menu, which is intended for MSMEs to sell souvenirs typical of Pramuka Island and Panggang Island. Details of this menu can be seen in Figure 6.

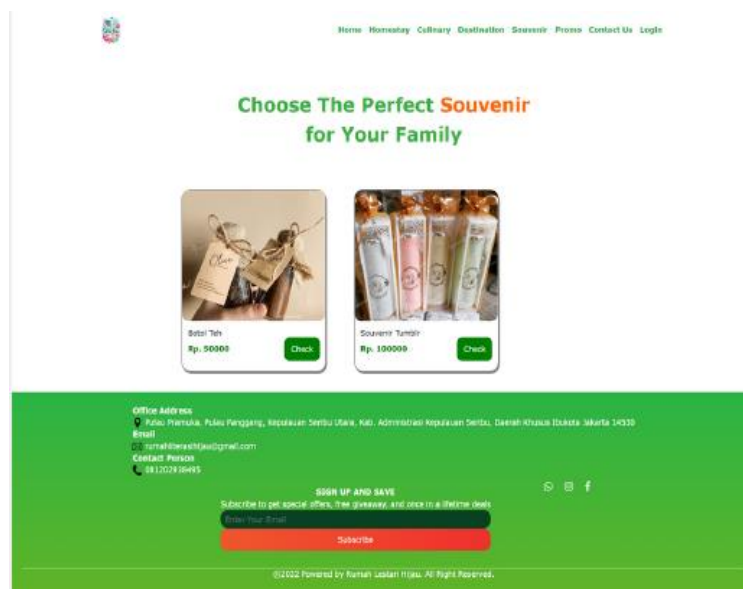


Figure 6 Souvenir Page

## B. Website Training for MSMEs

This application is aimed at developing tourism activities on Pramuka Island and Panggang Island. The author and team have conducted website training for Rumah Hijau MSMEs, who will be the managers/admin of this website. The training activities were carried out well and received positive responses from MSME players.

## 4. CONCLUSION

Tourism activities must be supported by every party. Especially tourism activities managed by local MSMEs. This website aims to help promote and manage tourism activities managed by Rumah Hijau MSMEs on Pramuka Island and Panggang Island. This website was also welcomed by MSME players there and is expected to help increase tourism activities on Pramuka Island and Panggang Island and improve the economy of residents.

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