Implementation Website-Based Information Technology to Improve Tourism Destinations of Margacinta Tourism Village in Pangandaran Regency

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Abstract – This study aims to create a public facility in the form of a website-based portal application that can promote the diversity of tourism and culture in the Margacinta Tourism Village in Pangandaran Regency. The Rapid Application Development (RAD) method will be used as a system development model with requirements planning, RAD Design Workshop and implementation processes. The findings of this study are that the magnitude of the potential of the Margacinta Tourism Village is not matched by measures to promote the attractiveness of tourism, so a website portal application is created that can provide convenience for tourists in searching for tourist information, discovering tourist sites, booking homestays and culinary. It is also hoped that it can be a means to promote Margacinta Tourism Village so that it is better known and can increase visitors optimally in the field of tourism and culture, also can lift the image of Margacinta Tourism Village as one of the tourism and cultural villages that still exist in Indonesia.

Keywords: tourism, website, promotion, Margacinta, RAD[3]

I. INTRODUCTION

Indonesia is an archipelago that is rich in natural beauty and diversity of customs and culture. Located in the equatorial emerald ranks which have high-value cultural treasures and are very instrumental in shaping the character and personality of the nation.

One of them is Margacinta Tourism Village, located in Pangandaran Regency in the province of West Java, which is blessed with incredible tourism potential, ranging from historical heritage, art, natural beauty, to various arts and cultural attractions that can attract both domestic and foreign tourists. However, due to lack of publicity, its existence as a tourist area is less optimally explored.

Margacinta Tourism Village presents natural attractions by exploring the river or body rafting and river tubing precisely on the Pangancraan river. This nature tourism can be used as an alternative destination while on vacation in Pangandaran with full adventure, a river with several streams of waterfalls flowing through the rocks on either side of the river.

Margacinta Tourism Village also presents local cultural tourism that is routinely held such as Badud art which has become one of the cultural icons of Pangandaran district. Local cultural tourism performances that are held routinely are expected to be able to lift back the culture that included the old to exist again. In practice, Badud Art is used to accompany people parading crops to temporary storage. In subsequent developments Badud art is more often exhibited in circumcision ceremonies, and other traditional ceremonies to commemorate various special events.

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In addition to offering nature tourism and local cultural tourism, Margacinta Tourism Village also provides a variety of culinary specialties that can help increase satisfaction and also provide a memorable experience to the tourists who visit.

The magnitude of this tourism potential is not matched by steps to promote the attractiveness of tourism, this makes Margacinta Tourism Village less well known by tourists.

Another obstacle facing is the spread of various information about the Margacinta Tourism Village (natural, local cultural and culinary tourism) which is not so optimal because it is only information from word of mouth which results in confusion and a lot of uncertain and unclear information that can complicate the truth tourists to be able to reach the destination that results in the emergence of a sense of disappointment because the results obtained are not the same as information that is heard from word of mouth whose origins are unclear.

From some of the things that have been described above, it is necessary to have a public facility that can accommodate the delivery of information about the variety of tourism and culture in Margacinta Tourism Village. Utilization of information technology can be one solution to the problem. For this reason, a website-based portal application design can be used by tourists in searching for information, discovering tourist sites, booking homestays and culinary, making it easier for tourists because the data is presented in a simpler and computerized form in accordance with the wishes and needs of tourists.

II.   LITERATURE REVIEW

A. Tourism Information System

The information system is one of the useful tools and has advantages in terms of speed and accuracy in processing data with a large enough capacity, therefore this information system is very useful for all agencies both private and state agencies [1].

Tourism can be interpreted as a human activity that travels to an area and lives in a destination outside its daily environment for a certain period of time for pleasure or business purposes [2].

Based on the explanation above, this tourism information system is a collection of sub-systems that form an integrated system that collaborates with each other to collect, process, store and distribute data related to cultural outcomes, the way of life of a community and the natural characteristics of certain regions different from the everyday environment.

B. Website

At present information management tends towards electronic publication and leaves non-electronic services. The presence of online media technology can increase the exposure of an agency or organization, and can also play a role as marketing tools or marketing tools for a product through cyberspace [3].

According to Napitupulu in Lesomar, a Website is a fairly efficient and effective way to publicize or commercialize a product from a company [4]. Website is a very popular internet resource and is used as one of the profitable alternatives in the publication or commercialization of a product of a company when compared to the traditional way of mass media such as newspapers, magazines, TV and radio that require substantial investment. [5].

Website has various advantages as a medium of information that is easily accessible and can reach a wide market. To introduce and market a variety of products / services offered, the website is a very effective display media because it is easy to customize and update.

C. Rapid Application Development (RAD)

According to Pressman, Rapid Application Development (RAD) is an incremental software modeling process that emphasizes a short development cycle. This model is an "high-speed" adaptation of the waterfall model, where rapid development is carried out using a component-based construction approach. RAD method implementation will run optimally if the application developer has formulated the needs and scope of application development properly [6].

According to Kendall, there are three phases in Rapid Application Deveopment (RAD) that involve the user and the analyst in the requirements planning stage, the RAD design workshop (modeling), and implementation. The following are the stages of application development from each phase of application development can be seen in the figure below [7]. Figure 1 shows the phase of RAD cycle.
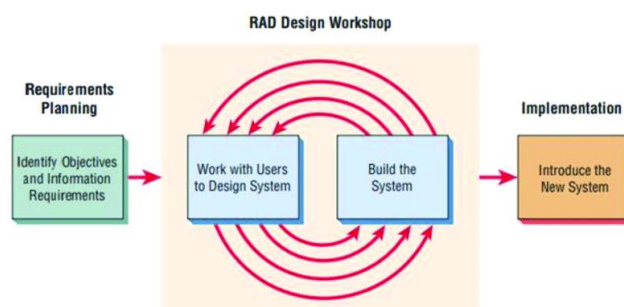
Figure 1. Rapid Application System Cycle (RAD)

1) Requirements Planning

In this phase, the user and analyzer come together to discussing the goals and to identify the information requirements of the application or system arising from those objectives [7].

2) RAD Design Workshop

At this phase, the programmer and analyst work together to create and display visual representations of design models and working models for the user. This design workshop can take several days because it created or built based on the size of the application to be developed [7].

3) Implementation

At this phase of implementation, the analyst and users work intensively during the course and determine business and non-technical aspects of the company. Once these components are agreed upon and systems are built and evolves, new systems or system components are tested and then introduced [7].

III. METHODOLOGY

This research methodology uses the Rapid Application Development (RAD) approach with 3 phases of application development including requirements analysis, modeling, and implementation. So the stages of the research carried out follow the stages that have been described above.

A. Requirements Planning

This stage aims to identify the needs and limitations of the system to be built by conducting interviews with Margacinta Village, Pangandaran Regency. In addition to interviews, the author also made observations to several managers of tourist attractions. After conducting interviews and observations, a solution was obtained regarding the specifications of the tourism management website in Margacinta Village, Pangandaran Regency.

B. RAD Design Workshop

This stage of modeling has the aim to analyze all activities in the overall system architecture by involving the identification and description of the underlying software system abstractions and their relationships [8].

The results obtained are modeling in the form of use case diagrams and class diagrams.

1) Use Case Diagram

The use case diagram is a functional requirement that describe an interaction between one or more actors with the system and that is explained from the viewpoint of the system user. The use case diagram answer the question of how the user interact with the system and describe the action will take by the system [9]. Figure 2 shows the use case diagram for Administrator and Figure 3 shows the use case diagram for User.
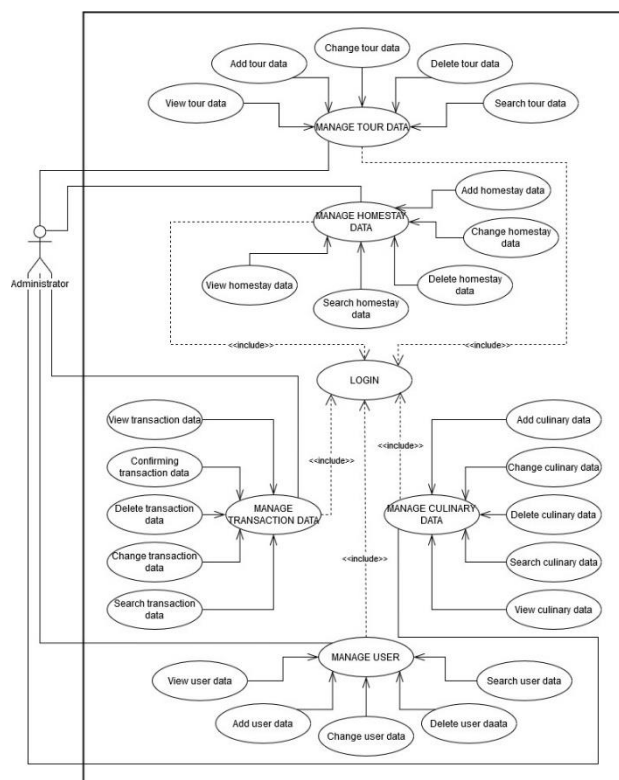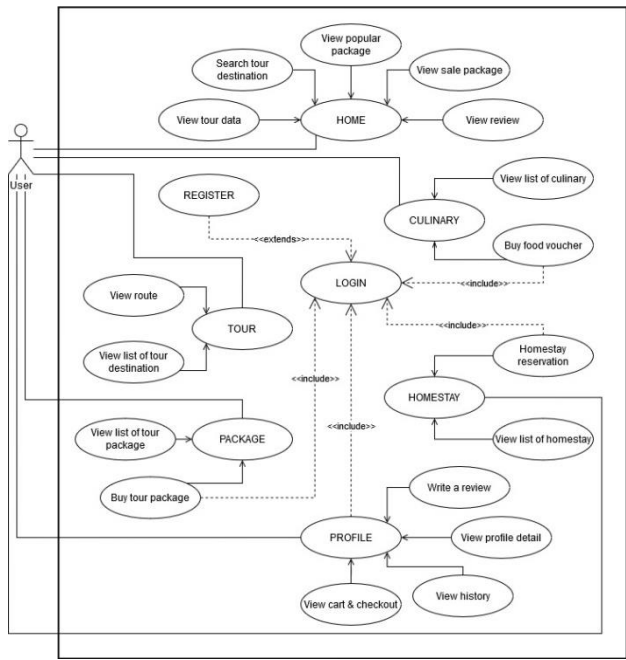
Figure 2. Use Case Diagram for Administrator

Figure 3. Use Case Diagram for User

2) Class Diagram

Class diagrams are considered as one of the best and most helpful types of UML diagrams because they clearly illustrate the structure of the system by modeling system operations, classes, object relationships and attributes. [10]. Figure 4 shows the class diagram analysis for the proposed system.
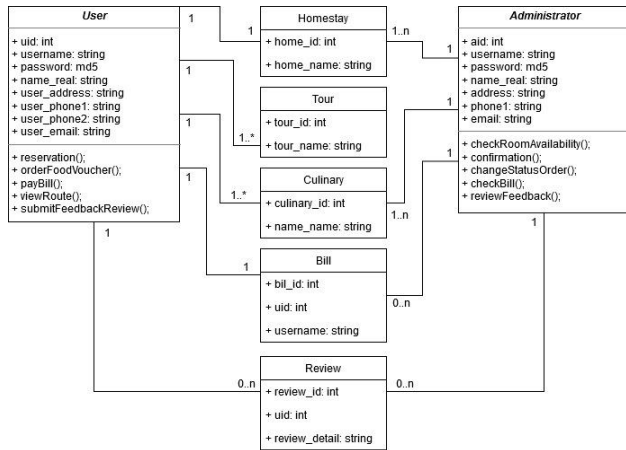

Figure 4. Class Diagram Analysis

C. Implementation

This stage aims to make the system construction and application of methods in programming to the results of system requirements and will be explained in the implementation phase of Database and Program Coding.

At this stage, determining the implementation environment, making the user interface design, database system design, code writing, testing and debugging.

The results obtained from this stage are the application user interface, main data and program code.

Here are the results of the implementation of the design of each web page that has been made.

1) Home page

This home page displays the homestay search on the date desired by the user. Also on this page displays tour packages that are popular, attractive travel deals, and reviews of tourists who have visited. Figure 5 shows the home page.
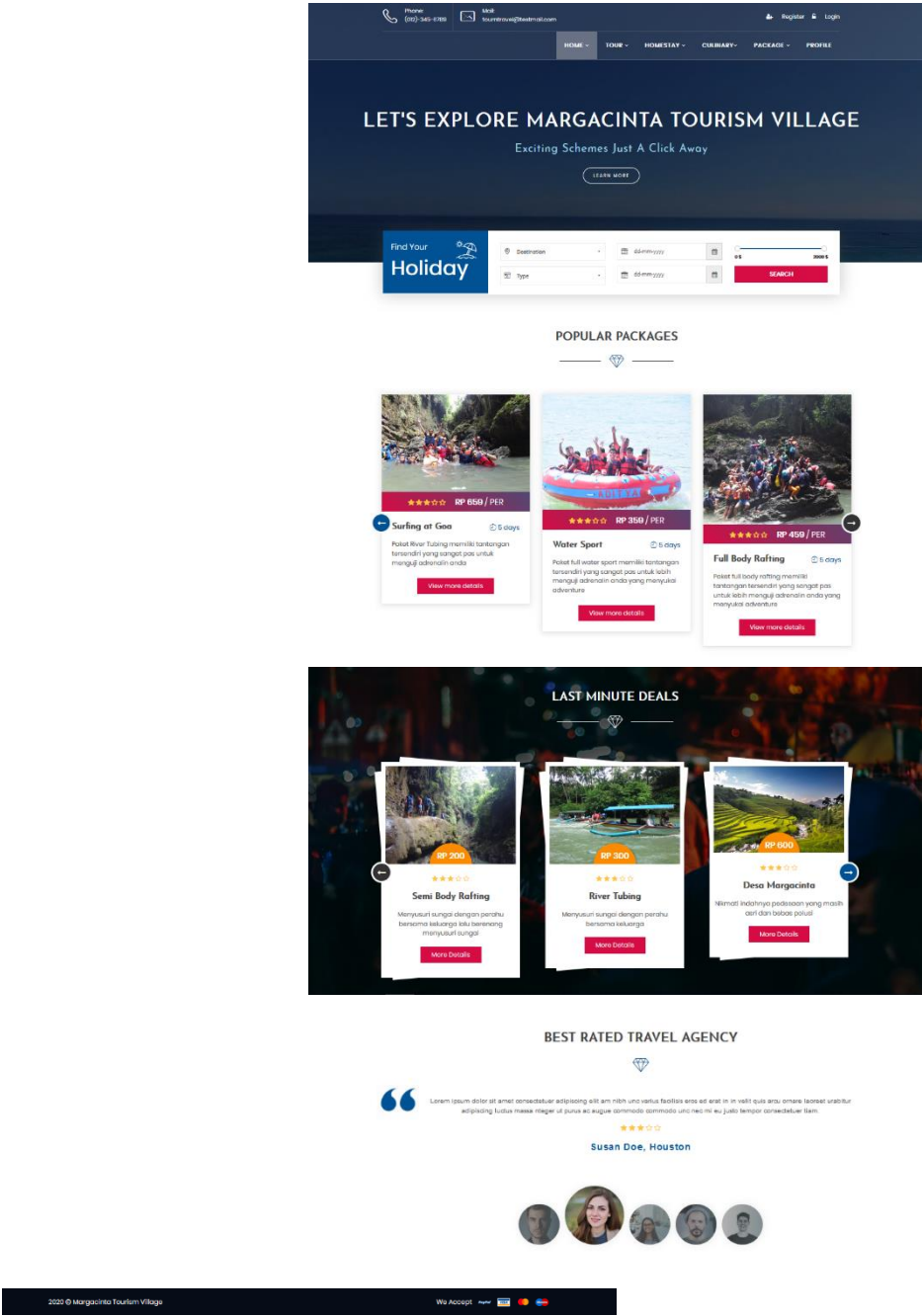
Figure 5. Home page

2) Detail Of Tourist Attractions

On this page attached details of tourist attractions along with what facilities are provided. Besides, a map page is also displayed to direct tourists to these tourist attractions. Ratings from tourists who have visited are also displayed on this page. Figure 6 shows the detail page of tourist attraction.
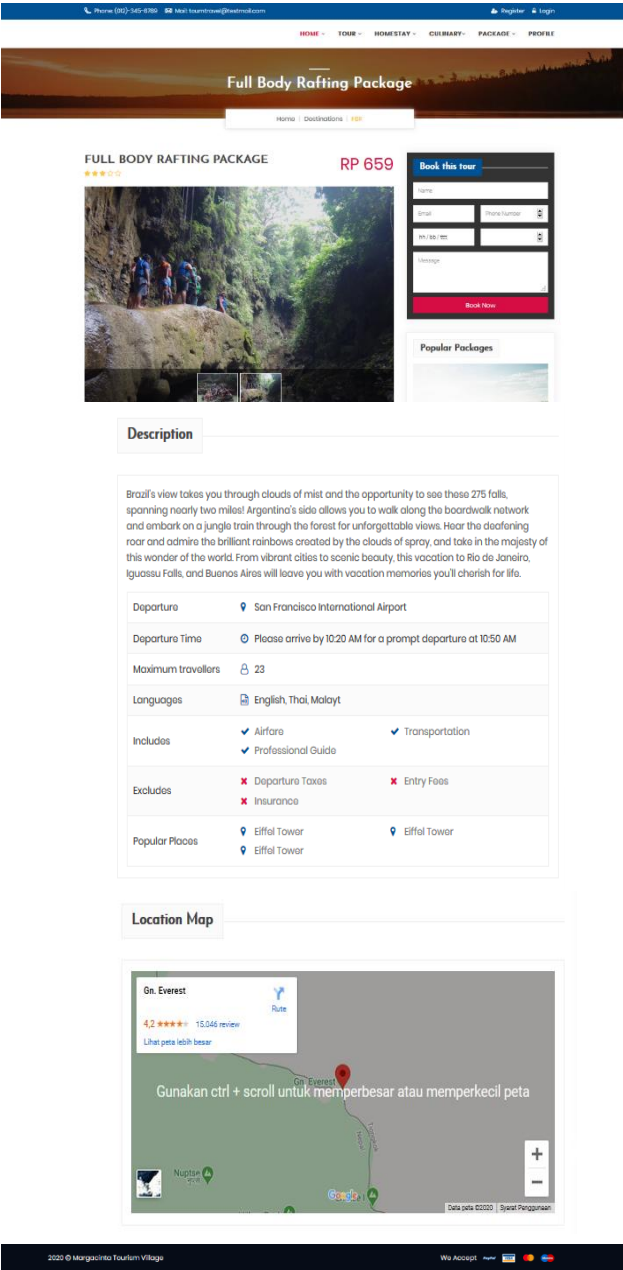
Figure 6. Detail of tourist attarction

3) Booking Page
   On this page tourists who have logged in to the application can make a booking by filling in the data as stated on the web page. Figure 7 shows the booking page.

Figure 7. Booking Page

4) Booking Confirmation

On this page tourists who have booked on the previous page, can confirm reservations and can proceed to the payment page. Figure 8 shows the booking confirmation page.

Figure 8. Booking Confirmation

5) Payment Page

On this page tourists can choose a payment method and make payments in accordance with the nominal listed on the website page. Figure 9 shows the payment page.

Figure 9. Payment Page

IV. FINDING AND DISCUSSION

From the research conducted found a core problem that is the magnitude of the potential of Margacinta Tourism Village is not matched by measures to promote the attractiveness of tourism, this makes Margacinta Tourism Village become less well known by tourists so that a public facility in the form of a website-based application portal is made so that it can accommodate information delivery activities as well as a means of promoting tourism and cultural diversity in the Margacinta Tourism Village.

The difference with previous research is that in the present study the researchers focus on building a website-based portal application specifically to promote a variety of tourism and all information about Margacinta Tourism Village in Pangandaran Regency making it easier for local and foreign tourists to search for information, discovering tourist sites, booking homestays and culinary.

V. CONCLUSION

Based on the stages of research conducted in the previous chapter, it can be concluded as follows:

1) This website-based portal is expected to help promote Margacinta Tourism Village so that it is better known and can optimally increase visitors in the field of tourism and culture, also can raise the image of Margacinta Tourism Village as one of the tourism and cultural villages that still exist in Indonesia.
2) This system can facilitate local and foreign tourists in finding information, finding tourist locations, booking homestays and culinary.
3) This system can provide visual information interactively by displaying images and videos of tourist attractions.

After analyzing this system, it is suggested that further development of the system is technically suggested to make an Android or iOS based mobile application so that the application can be used more practically and efficiently.

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