

Development of Traveling Friends Search Service Through Mobile Application “Destinasi”

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Abstract

Traveling is a moving activity with the aim of recreation. The purposes of traveling are usually to relax, explore, discover or learn at someplace. A solo traveler is someone who enjoys traveling alone, while a group traveler is someone who travels together with other fellow travelers. When people want to travel together but do not have a partner to go to, a travel agency is often an option to get a traveling partner. For some people, a travel agency is inflexible, making the trip unenjoyable. Moreover, the fees charged to agents and tour guides are not ideal for backpackers with a low budget. This research aims to develop an application-based traveling companion search service called "Destinasi". The research method is carried out by distributing questionnaires to the traveler communities in Indonesia using Google Forms to find out how the traveler's interest is in developing application-based services. All the responses will be contributed as the input for the application features. The results show that some of the essential application features for Indonesian travelers are a tour guide, information on traveling places, sharing stories, ratings, selection of partners based on gender, chat, news, nature lovers, and mystical tours.

Keywords

Service Development, Traveling, Traveling-buddy, Mobile Application, Interface Design.

1. Introduction

A traveler who travels for a vacation is usually to relax, explore, make discoveries or learn at the destination. There are various tourist attractions generally visited by travelers, such as natural attractions, cultural and historical tours, tours around the city, and others. A solo traveler is someone who enjoys traveling alone, while a group traveler is someone who travels together with other fellow travelers. For some conditions, travelers usually prefer to explore destinations privately so that they are free to make an itinerary and determine the place and time of their destination.

When people want to travel together but do not have a partner to go to, travel agent services are often an option to get a traveling partner. Travel agent services make travelers feel inflexible for some people and do not even enjoy the trip. Moreover, the fees charged to agents and tour guides are not ideal for backpackers with a low budget. When joining a tour group through a travel agent, the travel agent usually sets a minimum number of participants. Tourists typically have to travel with many other tourists. This is undoubtedly a problem for some travelers who feel uncomfortable if they travel with many people. Some only want to travel with a small number of travel partners, for example, only 2-5 people.

Based on the problems found, this research aims to design and create a travel companion search service based on the needs and complaints found from the research results. Because at present, the world has entered the industrial era 4.0 where many aspects are facilitated due to the impact of rapidly advancing technology, the search for traveling companions is designed as a "Destinasi" with an Application basis so that the market can easily reach the service product.

This research has several objectives, including knowing and analyzing the types of tourism that the tourist community is interested in and getting information about what requisites are needed by today's travelers. The other objectives are knowing travellers' complaints when traveling, obtaining data on the percentage of interest in traveling alone and with

fellow travelers, justifying whether the application-based friend search service is in demand by travelers, and creating features that suit the needs of the traveler. The following section discusses the literature review related to this paper. Section 3 discusses research methodologies and flowcharts that showcase the contribution of this paper. Data collection is outlined in chapter 4. Results and discussion are explained in section 5. In section 6, conclusions are drawn from the results of the research.

2. Literature Review

Travel is a recreational activity of an individual or group moving from one place to another. Some of the reasons people travel are for business, medical, sightseeing, pleasure, friends or relatives visit, etc. The travel industry has thrived and become a significant driver of the economy and highlights the government's financial development strategy. For the past five years, global tourism has appeared to be a positive development. The expanding number of middle-class families and the diminishing unemployment around the world are triggers of tourism development (Friscinta and Alamsyah 2019).

The Indonesian tourism industry includes a significant part of the national economy. According to the Ministry of Tourism in 2017, the tourism industry became the second largest contributor to Indonesian foreign exchange by successfully generating 14.07 million tourists and 13.5 billion rupiahs to Indonesia's foreign trade. Thus, this industry holds a vital role in Indonesia (Haan 2018).

The primary reason Indonesians like traveling is for vacation (82,5%), while educational visits (11%). Indonesian tourists prefer to visit well-known tourist destinations. It is also known from the research that Indonesian prefer to plan an itinerary than use a travel agent (73.2%) (Azizah et al. 2019).

In order to determine different types of destinations, tourism can be classified into some features. Because some people prefer specific destinations, this industry is divided into several categories. Tourism categories are divided into several types, such as cultural tourism, health tourism, sports tourism, commercial tourism, industrial tourism, political tourism, convention tourism, social tourism, agricultural tourism, maritime tourism, nature reserve tourism, and hunting tourism (Besra 2012).

Domestic tourism is a trip around places where travelers permanently reside. Domestic tourism accounts for 80-90 percent of world travel. It is prevalent and most wanted because the cost is 5-7 times less than international tourism. Aside from that, there are more specific tourism classifications such as historical monuments, archaeological tourism, recreational tourism for recovery, and physical rehabilitation, tourism for health and medical purposes, religious tourism, ecotourism, hunting tourism, and gastronomic tourism (K.B. 2020).

According to research about the relationship between travelers and the big five personalities, the most significant role in the type of hard adventure trip is the openness trait between travelers. This can interpret that travelers who have an openness trait will prefer to do new activities. It includes being brave with challenges and enjoying meeting other people (Akhvani and Dewi 2021).

Social media plays a vital role in people's travel decisions. Research shows 106 respondents choose Instagram as the most social media used to plan a trip. This accounts for 53% of all respondents among various age groups. They believe that Instagram has the most up-to-date information (Toja et al. 2021).

Social media is a smart platform that can give opportunities for tourism sectors across the world. With specified social media Apps, it can carry out marketing strategies with more customer-focused. It can also answer the complexity of traveler's behavior by building and developing marketing strategies based on understanding the developing customer behavior. "Backpacker Indonesia" is one of Indonesia's most significant traveler communities, which has existed since 2009. With such an online community, travelers can interact with other members, collaborate and share information about each other's travel stories via discussion forums (Dwityas and Briandana 2017). The research found that the most popular source of information used when planning trips is social media (43.6%). The second source of information is their relatives, such as families and friends (43.6%), and the third source is mobile Apps sites and tourism information (35.6%) and (35.0%), respectively. In addition, the findings state that tourists never use travel agencies as their source of travel information (35.6%) (Ly and Ly 2020).

With the development of tourism sectors, many applications are available on the internet, providing various travel services. However, there is no complete platform on the internet that can give all the specific features that the customer needs. Because there are multiple applications for different traveling services, it will require a great effort from the user as it needs more time for the user to move into another application which can lead to users choosing not to use them. For instance, “MakeMyTrip” is used for booking and planning a trip, “Google Maps” is used to suggest nearby tourist attractions and show the direction of the destination. “Tripver” provides a platform for travelers to communicate with each other. All traveling needs in different mobile applications are not the best recommendation because the trip is stored on a different platform which can be frustrating for the user (Jain et al. 2021).

For instance, South Korea has become a smart tourism destination that enhances smart tourism through personalized mobile application services. The research was conducted among foreign tourists visiting South Korea to analyze the mobile applications used when traveling. The study conducted interviews with 110 short-stay and long-stay tourists in South Korea. Findings show significant concentrations of mobile apps used in bookings of accommodations, tourist attractions, online shopping, navigation, wayfinding, augmented reality, information searching, language translation, gaming, and online dating while traveling in South Korea (Brennan et al. 2018). Before visiting a place, tourists also want to get accurate information about transportation and lodging providers. Tour guides are also expected to contribute to the tourist areas visited (Wali et al. 2019).

As a predominantly Muslim country, with almost 90% of the population being Muslim, most Indonesian travelers want a trip that complies with halal regulations. Thus, tourism information is needed that can facilitate Muslim travel. The research identified six essential traveling needs for the Moslem: Halal food and respectful behavior, Islamic hotel environment, Islamic morality, entertainment and worship, washroom facilities, and destination choice (Mollah 2017).

User Interface is how a program and user interact. This terminology is somehow used as a substitute for Human-Computer Interaction (HCI) that includes all aspects of user and computer interaction. A UI designer is an individual who creates colour, icons, objects, and other requirements that are relevant to the interaction between system and user (Putra et al. 2019).

Figma is a tool that can be used for prototyping and is accessible through the internet and an App. Figma facilitates users to design anything such as user interface for websites, graphic images, etc. The most delicate thing is that Figma is a free User Interface tool for creating, collaborating, prototyping, and handoff. One of its top features is "The Figma Mirror" companion App available for Android and iOS and allows showing Figma prototypes on the mobile (Sharma and Tiwari 2021).

The development of a mobile application called “Travel Buddy” is a form of similar studies created to design online tourism. This app focuses on user interaction and personalized recommendations. Some of the accessible features are travelers can plan trips, compare hotels, book rooms, and get travel assistance. This app design also has a community feature for travelers with similar interests to interact via blogs. Travel agents and local business owners can market their products or services. The design of this platform is based on online tourism. Tourists want access to a service that can recommend tourist attractions, food based on their tastes, and a travel guide that can provide reviews from a fellow traveler. Due to the increasing need for travel services, a mobile application-based platform was designed, namely Travel Buddy. One of the application modules designed is a Booking System. It helps users to view all available packages and order the desired package. Users can also make plans when they want to visit a particular place. Hotel recommendations are given to users based on the price range, reviews, and facilities. In the nearby explore module, travelers get recommendations of all places when visiting a place based on ratings. With this feature, the travel assistant will help the user in booking the whole trip and suggest which places he should visit when he comes. Users can create their accounts in the community section to interact with other users. Between users can like posts, write reviews about specific places and give tips or suggestions about their trip. With the community feature, travelers can also create a community account where they can share any information and read blogs about certain topics they are interested in (Jain et al. 2021).

Based on the literature study, there are so many application designs that can provide various tourism services. For example, the Travel Buddy mobile-based application provides services to customers to do travel planning, compare hotels, book rooms, and get travel assistance. However, as a country with an almost 90% Muslim population, Indonesian tourists have preferences and needs that can accommodate halal regulations. There is no one complete

platform that can provide specific features for the needs of Indonesian travelers. Thus, this study is reviewed to create an application-based platform design that can accommodate the Indonesian traveler community.

3. Methods

The research was conducted using qualitative methods, namely literature study, brainstorming, and survey. A literature study is an analysis sourced from books or journals that are carried out as an essential basis to understand the concept of tourism and the types of tourism. This research uses an online survey to support the project undertaken. This is due to the Covid-19 pandemic conditions, making it impossible to conduct field surveys. Thus, the survey instrument used to obtain supporting data is by distributing questionnaires to the traveler community in Indonesia using Google Forms. Before distributing the questionnaire, potential respondents were collected through several community websites and traveler association groups spread across several social media platforms such as Instagram and Facebook. The request to distribute the questionnaire link is given with the permission of the admin or community administrator, and the admin will ask its members to fill out the questionnaire. In several community groups on social media platforms such as Facebook, questionnaires are distributed directly and openly in discussion forums. Respondents have to fill in 25 questions that have been made based on the results of some literature input and brainstorming. The questions given consisted of 2 open questions and 24 closed questions. Figure 1 below shows the overview of the research flow chart.

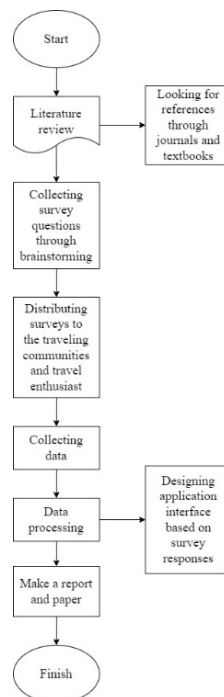


Figure 1. Research Flow Chart

4. Data Collection

At this stage, the results will be explained with a discussion of the data carried out from the google form survey. This research looks for Indonesian traveler communities spread across several social media forums to get respondents. There are 26 questions asked to get ideas for developing features that are suitable for the needs of the "Destinasi" application. From the 26 questions, there are two open questions and 24 closed questions. On 24 closed questions, four questions provide additional alternative opinions to give respondents space to spill more detailed answers. The two open-ended questions include the respondent's name and the statement about the needs and complaints encountered when traveling.

There are 222 respondent data collected. Most of the respondents were represented by people aged more than 50 years. The second-largest population is people aged 30-50 years. Only a few respondents were under 17 years old, less than 3% of the total respondents. Gender questions are also needed to obtain information that supports the project idea

from a male and female perspective. The results reveal the traveler's judgment regarding the possibility of what features and other requisites will be proposed as part of the application.

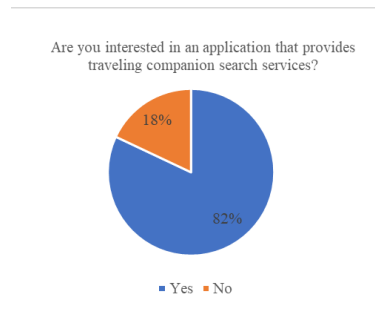


Figure 2. Percentage of Respondents Who Agreed to The Development of The "Destinasi" Application

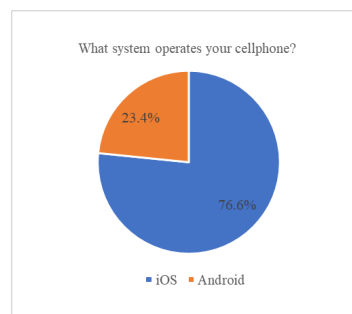


Figure 3. Operating System of Prospective Application Users

The question asking traveler's interest in the potential of Destinasi Application is an opening to ensure that the respondent correctly thinks this application service provider project is relevant in today's community. The results show in Figure 2 that the majority answered: "Yes" (82%). More than half who filled out the questionnaire were women. The Destinasi application is an application specifically for smartphone users. So that input from prospective application users is needed regarding what system operates the cellphone used. Figure 2 shows that most travelers are Android users (76.6%), and 23.4% are iOS users.

Table 1. Questionnaire and Respondent Data Results

Questions	Choices	Percentages
Are you interested in the application that provides a tour guide service to guide your trip? If not, why?	Yes	94.1%
	No	5.9%
Do you need information services regarding transportation and accommodation? (Traveloka, Booking.com, Airbnb)	Yes	97.7%
	No	2.3%
Are you interested in a share story feature? (you can tell your traveling experience)	Yes	91.4%
	No	8.6%
Does the vacation rating feature help you determine your interest in visiting a place?	Yes	98.6%
	No	1.4%
Do the "food near me" and "food culinary" features help you find a place to eat or drink while on vacation?	Yes	99.1%
	No	0.9%
What type of traveler are you?	Solo traveler	3.6%
	Mini-group traveler (2-5 people)	59.5%
	Big-group traveler (>5 people)	36.9%
In choosing a traveling partner, is gender a consideration for you?	Yes, I want to travel only with my same gender	82.9%
	No, I don't consider gender in choosing traveling partners	17.1%
Will a personal chat/group chat with your traveling partner make it easier for you to communicate your trip?	Yes	98.6%
	No	1.4%
Does the clarity of news or updated information (disasters, floods, strikes) help you in considering your trip to a particular destination?	Yes	99.1%
	No	0.9%
Questions	Choices	Percentages
Are you a nature lover traveler? Who likes to explore natural attractions such as mountains, waterfalls, lakes, beaches?	Yes	76.6%
	No	23.4%
If so, are you interested in the special feature for nature lovers to find information on interesting destinations and new communities that can be	Yes	84.7%
	No	15.3%
Are you interested in visiting mystical/historic locations?	Yes	71.6%
	No	28.4%
How interested are you in visiting mystical/historic locations?	1 (not interested at all)	13.5%
	2	12.7%
	3	23.4%
	4	29.7%
	5 (very interested)	20.7%
Are you interested in parter-finder feature for short trips (1 day trip) to recreational areas such as Dufan, parks, cinemas or museums?	Yes	45.5%
	No	54.5%
How interested are you in finding friends for a short trip (1 day trip)?	1 (not interested at all)	21.2%
	2	24.8%
	3	23.9%
	4	18.0%
	5 (very interested)	12.1%
Do you need a service to guide you finding or using public transportation around your destination?	Yes	95.0%
	No	5.0%

Table 1 presents the questionnaire and the response that will be studied as input to the needs and complaints of the traveling community. The data obtained will be the feature idea developed in the application design. Fourteen proposed feature ideas will become possible services provided in one Destination Application platform. The first

function that is considered a feature in the application is the tour guide feature. This feature gives application users access to a tour guide when visiting tourist attractions. From all the answers, almost all respondents need this feature, evidenced by 94.1% answering that they need the tour guide feature. The second function considered to be used as a feature in the application is information services related to transportation and accommodation. This feature provides information related to transportation and accommodation in destinations tourists visit. From all the answers, almost all respondents need this feature, evidenced by 97.7% answering that they need it. The third function that is considered a feature in the application is share stories. This feature allows app users to share photos and share their travel experiences in a particular place or country. From all the answers, almost all respondents need this feature, evidenced by 91.4% answering that they need it. The fourth function that is considered a feature in the application is rating. This feature provides space for application users to assess the travel experience that has been carried out. From all the answers, almost all respondents need this feature, evidenced by 98.6% answering that they need it. The fifth function that is considered a feature in the application is the nearby location search feature. This feature gives application users access to use location markers when they want to visit locations around tourist attractions such as places to eat, gas stations, mosques, and others. From all the answers, almost all respondents need this feature, evidenced by 99.1% answering that they need it. The sixth function that is considered a feature in the application is the traveler type. This feature determines the proportion of tourists who like to do solo traveling, mini-group traveling, and big group traveling. From all the answers, 59.5% prefer mini-group travelers (2-5 people), 36.9% choose big-group travelers (>5 people), and only very few like to do solo traveling. The seventh function that is considered a feature in the application is the search feature for selecting traveling partners based on gender. This feature is a friend search support feature that gives application users the choice to determine traveling partners based on gender. From all results, almost all respondents need this feature, evidenced by 82.9% answering that they need it. The eighth function that is considered a feature in the application is the chat feature. This feature gives application users access to connect with fellow travelers and tour guides to communicate on the “Destinasi” platform. From all the answers, almost all respondents need this feature, evidenced by 98.6% answering that they need it. The ninth function that is considered a feature in the application is the news feature. This feature gives application users access to the latest news or information about travel, such as disasters in certain areas, steps to apply for a visa, and restrictions on tourist attractions. From all the answers, almost all respondents need this feature, evidenced by 99.1% answering that they need it. The tenth function that is considered a feature in the application is the nature lover feature. Before knowing the tourist interest in this feature, it is necessary to know the proportion of tourists who explore nature. The results showed that 76.6% of all respondents answered that they liked to explore nature. The eleventh function that is considered a feature in the application is the nature lover feature. This feature gives application users access to information and connections about natural tourism in Indonesia. From all the answers, almost all respondents needed this feature, as evidenced by 84.7% answering that they needed this feature. The twelfth function that is considered a feature in the application is the mystical and historical tourism feature. This feature provides information related to mystical or historical places around Indonesia that can be visited. Most of the respondents were interested in this feature from all the answers, as evidenced by 71.6% answering that they needed it. Furthermore, follow-up questions can provide further information about how interested respondents are in visiting mystical and historic locations in the range 1-5. The results show that the highest proportion answered number 4, which was interested at 29.7%, followed by number 3, which was quite interested at 23.4%. In addition, there are 20.7% answered number 5. The thirteenth function that is considered a feature in the application is the short trip feature. This feature aims to help application users find partners to visit tourist attractions in a short time or only one day. From all the answers, more than half of the respondents answered that they were not interested, which was 54.5%. Next, follow-up questions are made to provide further information about how interested respondents are in the search for short trip friends in the range 1-5. The results show that the highest proportion answered number 2, which was not interested at 24.8%, followed by number 3, which was quite interested at 23.9%. In addition, there are 21.2% who answered number 1, which is very disinterested. The last feature is the provision of services to find public transportation around the destination area. This feature makes it easier for users to search for public transportation. Users do not need to bother looking for public transportation manually. The diagram shows that 95% of respondents agree with public transportation search services.

After getting the views of prospective application users on the potential features, there is also space given to respondents to express their needs or complaints about their travels openly. Based on this, they argue that some of the conditions that they hope to make their vacation easier are information on the location of places of worship and halal restaurants, costs of public transportation, toilets, accommodation, weather conditions, and recommendations for recreational areas.

5. Results and Discussion

Figure 4 below is the overview of the proposed interface design with its connections for Destinasi application development.

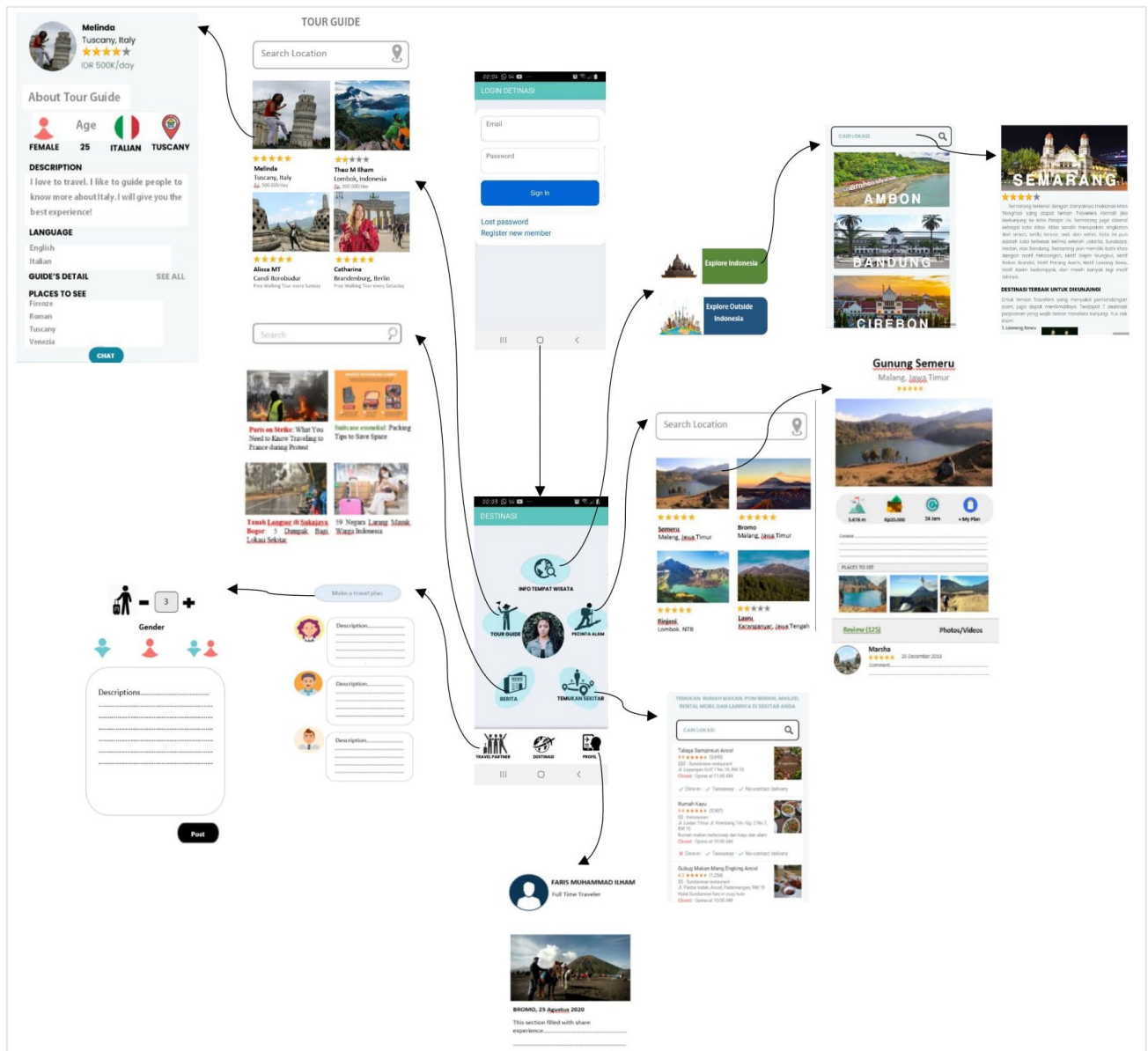


Figure 4. Proposed Interface Design For Application Features

When the user has downloaded the application, the user can see a login screen, as shown below. To access the Destinasi application, users must log in by entering their email address and password. New users can register their profile by clicking "Register new member". After the user has successfully logged in, the application will show the main page, which both the login screen and main page can be seen in Figure 5. On the main page, there is a user profile photo display in the middle surrounded by five features, namely "Info Tempat Wisata" or Tourist Attraction Information, "Pecinta Alam" or Nature Lovers, "Temukan Sekitar" or Near Me, "Berita" or News and Tour Guide. In addition, at the bottom of the screen, there is information to find travel companions, which can be accessed through the "Travel Partner" menu. Returning to the main page can be accessed by clicking "Destinations" and going to the user profile page by clicking "Profile".

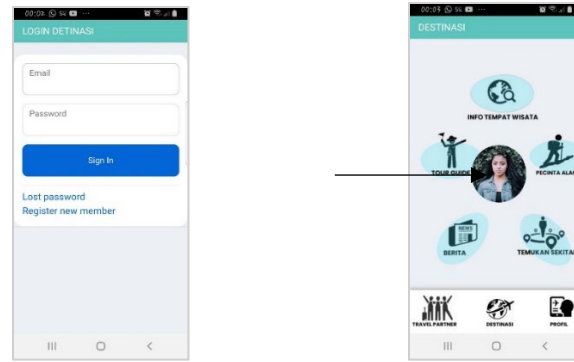


Figure 5. Login Screen and Main Menu

The primary purpose of the Destinasi App is to find friends to travel with. The user can do this in the Travel Partners section of the menu in the lower-left corner of the display screen. The menu display shown in Figure 6 is this application's homepage that can provide users information about other users who are looking for friends to travel to certain tourist attractions. In addition, users themselves can also make travel plans to find traveling companions by clicking "Make a travel plan". Users can adjust the number of travel companions and the gender of the travel companion they want to travel with, the location they wish to visit, and other details.

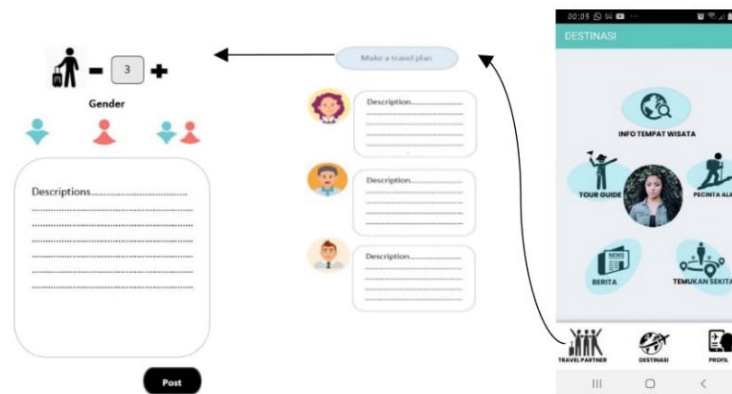


Figure 6. Traveling Friends Search Features

In the lower-right corner of the main page display, the user can go to the personal profile page, shown in Figure 7. A profile page is a space for users to share their travel experiences to places they have visited in the form of photos, videos, and writings. This can be a private memory that can also be shared with fellow app users.

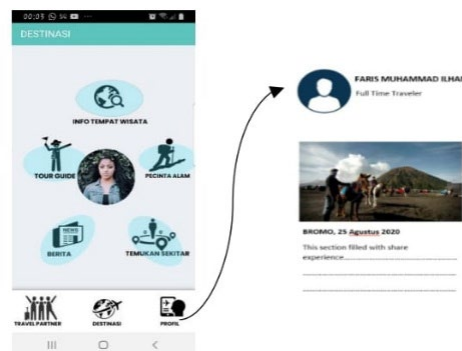


Figure 7. Profile Page

The "Info Tempat Wisata" feature or Tourist Attraction Information provides users with information on tourist locations within and outside Indonesia. For example, in Figure 8 below, a user who wants to find information on tourist attractions around Indonesia can click "Explore Indonesia" and choose a city. In this case, the user selects the city of Semarang, where the user can see the recommended places to visit around the city of Semarang along with the reasons and explanations about the place in outline.



Figure 8. Tourist Attraction Information Features

The next feature, namely "Pecinta Alam" or Nature Lover, is a special feature dedicated to users who have a hobby of climbing mountains. Many Indonesian people like to climb mountains. However, they often find it difficult to get information about the mountains they want to visit. In addition, there are also many mountains in the area around Indonesia which are very beautiful but rarely known. So, most of them only visit the famous cliffs. This feature can provide information on all the mountains in Indonesia that can be visited. The information provided also includes costs, reviews of previous visitors, and a description of the mountain itself. Visual details of this feature can be seen in Figure 9.

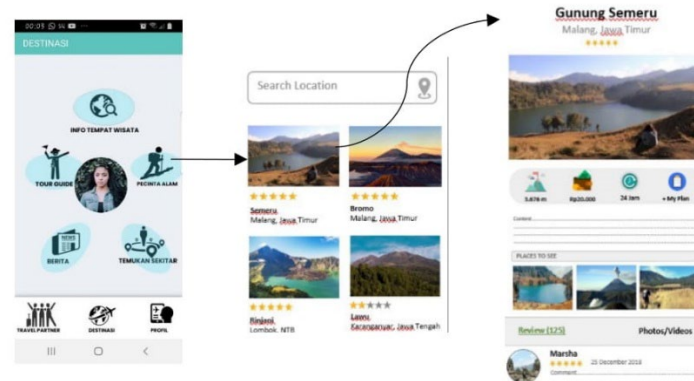


Figure 9. Nature Lover Features

Users can connect to the navigation feature on the "Temukan Sekitar" or Near Me options. This section makes it easy for users to integrate with locations around them. For example, in Figure 10 below, users who want to find a place to eat or a place of worship in a nearby area can be directed to that place by navigating to this feature.

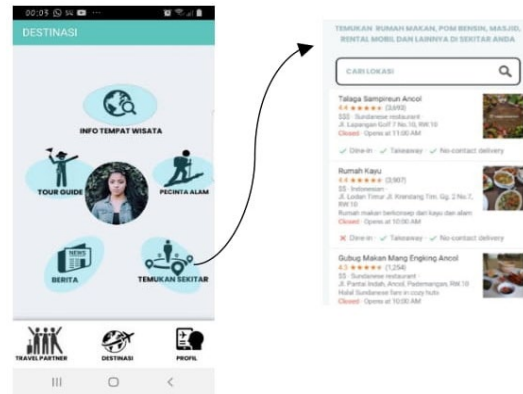


Figure 10. Navigation Features

Furthermore, Figure 11 below is the "Berita" or News feature. This section provides information related to the latest travel news and tourist attractions. For example, news about reconstruction or disasters such as fires at certain tourist spots, tips and tricks for making travel itineraries, and information about the best tourist attractions in a certain period.

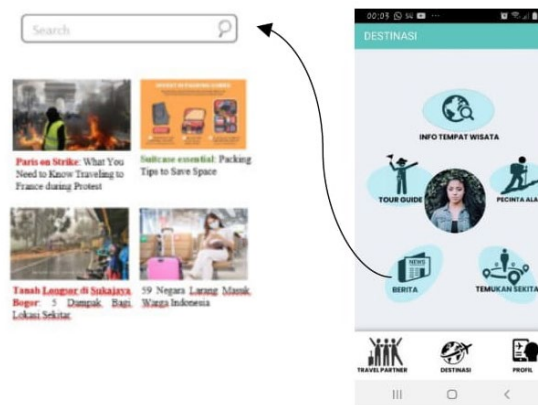


Figure 11. News Features

The last feature shown in Figure 12 is the Tour Guide. As the name implies, users can access this feature when they want to find a tour guide independently when traveling in a foreign place. Users can choose their tour guide according to their wishes and the tourist locations they wish to visit. Users can find details about the tour guide, such as gender, age, nationality, and location. In addition, users can find more detailed tour guide information such as the language the tour guide speaks and the covered places to visit when traveling.

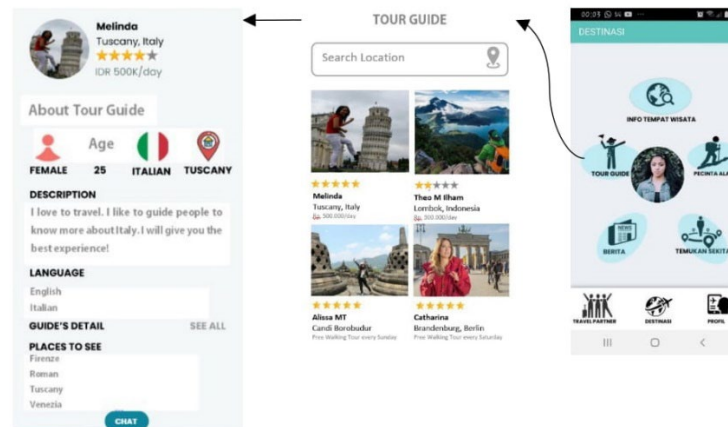


Figure 12. Tour Guide Features

6. Conclusion

The conclusion obtained from this research are:

1. Tourism is a trip to individuals or groups for recreation from one place to another. The classifications of tourist attractions are ethnic tourism, culture tourism, recreation tourism, nature tourism, resort city tourism, and agro-tourism.
2. The needs found by most tourists when traveling are the need for a tour guide, clear directions, accommodation, transportation, internet connection, and others.
3. The complaints that most tourists find when traveling are difficulties finding places of worship, clean toilets, halal food, places to eat according to taste, and others.
4. The survey results show that tourists like to do solo traveling, mini-group traveling, and big-group traveling. From all the answers, 59.5% prefer mini-group travelers, 36.9% choose big group travelers (> 5 people), and only 3,6% like to do solo traveling.
5. The traveler community is very interested in a traveling companion search application. This is evidenced by a survey that has been conducted showing 82% of respondents agree with the idea of this project.
6. The features selected to be implemented in the Destinasi application based on the survey results are the tour guide feature, information on traveling places, share stories, ratings, selection of partners based on gender, chat, news, nature lovers, historical and mystical tours. However, one feature idea is not implemented because the respondents answered that they do not need it, namely the short trip feature.

References

- B. Ly and R. Ly, "Effect of Social Media in Tourism (Case in Cambodia)," *Journal of Tourism & Hospitality*, p. 1, 2020.
- B. S. Brennan, C. Koo and K. M. Bae, "Asia-Pacific Journal of Multimedia Services Convergent with Art, Humanities, and Sociology," *Smart Tourism: A Study of Mobile Application Use by Tourists Visiting South Korea*, pp. 1-8, 2018.
- D. Jain, G. Mistry, T. Inchanalkar, R. Dholakia, J. Dalal and U. Rote, "Travel Buddy: Travel Companion using Knowledge Graph Attention Networks," *SSRN Electronic Journal*, pp. 1-2, 2021.
- D. K.B., "CLASSIFICATION AND TYPES OF TOURISM," *International scientific review*, Bukhara, Uzbekistan, 2020.
- E. Besra, "Potensi Wisata Kuliner Dalam Mendukung Pariwisata Di Kota Padang," *Jurnal Riset Akuntansi dan Bisnis*, p. 79, 2012.
- F. N. Azizah, D. R. K.Kausar, I. M. A. Gunadi and Y. Yuan, "The Preferences of Indonesian Outbound Tourists Toward Travel Types and Tourism Attributes," in *The First International Conference on Global Innovation and Trends in Economy*, Tangerang, Indonesia, 2019.
- J. d. Haan, "The Indonesian Tourism Industry: A Bright Future and Opportunities for Australia," *Future Directions International*, Dalkeith, Australia, 2018.
- L. A. Akhrani and C. F. Dewi, "Indonesian traveler study: analyze the role of the big five personalities on hard adventure traveler type," *Journal of Sustainable Tourism and Entrepreneurship (JoSTE)*, p. 92, 2021.

- M. R. A. Mollah, "MUSLIM TOURISTS' TRAVELING NEEDS: AN UNDERSTANDING FOR NON-MUSLIM DESTINATIONS," *Journal of Business Studies*, p. 94, 2017.
- M. Wali, R. Akbar, T. Iqbal and F. . P. Al-Bahri, "Development Of An Android-Based Tourism Guide (A Case Study : Sabang City, Indonesia)," *INTERNATIONAL JOURNAL OF SCIENTIFIC & TECHNOLOGY RESEARCH* , p. 887, 2019.
- N. A. Dwityas and R. Briandana, "Social Media in Travel Decision Making Process," *International Journal of Humanities and Social Science*, pp. 194-199, 2017.
- P. B. A. Friscinta and A. Alamsyah, "Indonesian Tourism Demand Forecasting Using Time Series Approach to Support Decision Making Process," *Journal of Business and Economics KINERJA*, pp. 69-70, 2019.
- T. M. B. Toja, D. R. K Kausar and Y. Yuan, "Analysis of Information Search Behaviour Based on The Age of Indonesian Outbound Traveler," *Global Research on Tourism Development and Advancement*, p. 77, 2021.
- V. Sharma and A. K. Tiwari, "A Study on User Interface and User Experience Designs and its Tools," *World Journal of Research and Review (WJRR)*, pp. 42-43, 2021.
- Z. F. F. Putra, H. Ajie and I.. A. Safitri, "Designing A User Interface and User Experience from Piring Designing A User Interface and User Experience from Piring," *International Journal of Information System & Technology*, p. 309, 2019.

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