# *Travel Guide Applications Based on Facebook Friend Recommendation And Uber Fare Estimate With One Day Trip Features On Android Platform*

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## *ABSTRACT*

*The tour is moving computing are friendly to meet the needs and desires of the visitors. The tour is everything that can attract tourists to come, see, and do activities. Visited tourist attraction is the natural fauna, flora, land created by humans that interest the visitor and places – historic places. Based on a survey by the Ministry of tourism of the Republic of Indonesia foreign tourists and traffic data (wisman) are accumulated in the year 2016 as much as 1,002,333 million and local tourists as much as 7,908,534 million [1]. Where tourists each year is increasing but it is not free from problems, tourists who travel to different cities typically do not know the exact location and did not know or specify an existing means of transportation in the regions visited .*

*This will be built on research-based android. Because android is an operating system for smart phones are widely used in the world of technology that is used is the Facebook API, API, Uber GoogleMap Ene is a feature that is used to get information on tourism based on friends using social media facebook, looking for the way to tourist attractions and provide information on the cost estimates.*

*Based on the results of the analysis and testing that has been done on Building Applications with the features of Gotrip OneDayTrip can help tourists visiting kedaerah to find friends according the location of the travelers are, and provide information the cost of transportation.*

*Keyword: mobile applications. Uber API, FACEBOOK API, tours.*

## *1. INTRODUCTION*

### *1.1 Background*

*The tour is moving computing are friendly to meet the needs and desires of the visitors. The tour is everything that can attract tourists to come, see, and do activities. Visited tourist attraction is the natural fauna, flora, land created by humans that interest the visitor and places – historic site [1]. Based on a survey by the Ministry of tourism of the Republic of Indonesia foreign tourists and traffic data (wisman) are accumulated in the year 2016 as much as 1,002,333 million and local tourists as much as 7,908,534 million [2]. Where tourists each year is increasing but it is not free from problems, tourists who travel to different cities typically do not know the exact location and did not know or specify an existing means of transportation in the regions visited .*

*In this study hold questionnaires to travellers, in August of the year 2017 is taken as many as 30 people correspondent that based on the results of the questionnaire data obtained 52% over this difficulty travelers informed of anyone's friends or families who are in locations that would be targeted next, 78% of tourists when it will go on the difficulty of getting reliable information on tourism and as needed, but 72% of travellers do not go on when go to tourist attractions so as to mengakibat a waste of time and money to various tourist attractions, 60% of tourists further difficulties determining the estimate of transportation costs. Expected with application of this android-based travel guide makes it easy.*

*Facebook also provides convenience for publishers to monetize their Instant Articles. With this feature, publishers can easily to set whether to display ads or not on the Instant Articles. On the construction of the onedaytrip application to connect facebook account on the*

*application and retrieve a list of friendship. Facebook monetization capabilities also enhanced through the renewal of the Marketing API. Facebook makes the monetization features easier to use. Facebook has redesigned the Ads and Offer Native Offers to make it easier to use the people in claiming the bidding on mobile applications as well as doing the entire device redeem, for calculating transport costs [3].*

*Uber API is a service issued by the uber to make it easy for developers to open transport services uber that exist in the larger cities. With the API, developers can integrate on-demand transportation services owned Uber into the application. Uber giving millions of people the flexibility to monetize according the schedule itself. Our Driver API allows you to create services and solutions that allow the driver to feel more productive and satisfied. With the permission of the driver, you can use the travel data, earnings, valuation, and others to shape the future of the economy on demand [4].*

### *1.2 Goal and purpose*

*The purpose of this research is to build applications based on facebook travel guide recommended and uber fare estimate with a feature one day trip on the android platform.*

#### *1.2.1. Purpose*

*As for the purpose of this study is as follows:*

- *Facilitate the tourists informed of anyone friends, family who were in the place of location of the tour destination.*
- *Facilitate tourists get information on tourism.*
- *Make it easy for tourists to get transportation information as well as costs.*

## *2. THE CONTENT OF RESEARCH*

### *2.1 The cornerstone of the theory*

#### *2.1.1 Tour*

*According to Marpaung tourist attraction is a form of all the amenities or activities that can attract visitors or tourists to come to a particular place. According to Drs. Sudjatmoto Adiksukarko cultural tourism is an activity which aims to recognize the results of local culture such as traditional, folk songs, traditional House, dance area and so on [3].*

#### *2.1.2 Facebook API*

*On the facebook API has created, the development and interaction, monetization, analytics, marketing, program. On the create features in it there is a menu of Facebook Login, Account Kit, Link application, Platform, an open-source camera effects*

#### *2.1.3 UBER API*

*Uber API, developers can integrate the Uber on third party applications, on calling the API can figure out information of the types of cars available, the location of the driver's presence, estimated time, estimated price, history and activity of the user account. Documentation of the API have UBER techniques in launching applications from the iOS or Android. The FIRE itself contained a guide to style and licensed assets. The program can provide FIRE money Uber steady and removing the cost of credit to new users who join through the application due to the three* [4]

#### *2.1.4 Google MAPS*

*Googlemaps is a map which can be viewed by using a browser. We can add features to the web in GoogleMaps we have made our blog or on a paid or free though with GoogleMaps API. Googlemaps API is a library in the form of JavaScript. Layananan Google Maps used to show the recommended attractions in application development onedaytrip.*

### *2.2 The analysis of the*

#### *2.2.2 Analysis FACEBOOK API*

*Phase analysis of the Facebook API to retrieve data based on the permissions granted on the application. Control is not only limited to the moment they see the sign-in dialog. They can choose not to provide certain permission during the process of admission. They can also cancel a permit on their Facebook privacy settings at anytime. The application should check the validity of the permit before trying to call APIs that are required over the application. For example, by ensuring publish_actions is still given before trying to publish the story of the open Graph. On the construction of application OneDayTrip the facebook API is used to retrieve data, and taking data feeds, friend of the form region is displayed in the appropriate application the user is located.*




***Figure 1 Sample Skrip FACEBOOK API***

### *2.2.3 UBER Analysis API*

*At this stage of the analysis the uber API only gives tourists Ask the product Uber application travel guide to find out the costs that will be incurred by travelers on perjelanan to attractions based on the areas visited,*

```
# Get upfront fare for product with start/end location

RideRequestParameters rideRequestParameters = new
RideRequestParameters.Builder().setPickupCoordinates(37.77f, -122.41f)
    .setProductId(productId)
    .setDropoffCoordinates(37.49f, -122.41f)
    .build();
RideEstimate rideEstimate =
service.estimateRide(rideRequestParameters).execute().body();
String fareId = rideEstimate.getFareId();
```

***Figure 2 Sample Skrip UBER API***

### *2.2.3 OneDayTrip Analysis*

*Analysis of the one day trip tour sequence is based on places nearby and far away places where this data comes from the advice of friends who connect by facebook. The recommendation will vary based on the user's position is its own coordinate in this example is used in the following example from bandung City recommendations onedaytrip.*

***Table 1 Data OneDayTrip***

| *The name of the place* | *Latitude* | *Longitude* |
|---|---|---|
| Kebun binatang bandung | -6.890155 | 107.6069588 |
| Museum geologi | -6.9007031 | 107.6193019 |
| Trans studio | -6.9261148 | 107.6338923 |
| Curug dago | -6.8655172 | 107.6159991 |

*In this case the coordinates of travellers are on unikom at coordinates latitude 6.8868192 and longitude-107.6131064, and the next stage of measurement with a place travelers with tourist spots using google the SE waypoint so obtained the results of the distance each of the attractions of the site users are located and analyzed based on the proximity of the location to the other location and measured based on units of metres distance of each attraction.*

***Table 1 Rekomendasi OneDayTrip***

| | Unikom | Kebun binatang bandung | Museum geologi | Curug dago | Trans studio mall |
|---|---|---|---|---|---|
| Unikom | 0m | 1200m | 2900m | 3100m | 7300m |
| Kebun binatang bandung | 1200m | 0m | 2500m | 3900m | 7700m |
| Museum geologi | 2900m | 3100m | 0m | 6100m | 5200m |
| Curug dago | 3100m | 3900m | 5600m | 0m | 9900m |
| Trans studio mall | 7300m | 9100m | 6700m | 12000m | 0m |

*On the results of the calculation with the TSP has been visited will not be counted again the distance is calculated and a place that has not been visited, thus generating the optimal solution as follows can be seen in table 3. The results of tourism OneDayTrip travel recommendations are as follows;*

***Table 3 results of Recommendations OneDayTrip***

| ***No*** | ***Tourist attractions*** |
|---|---|
| 1 | Kebun Binatang |
| 2 | Museum Geologi |
| 3 | Trans Studio Mall |
| 4 | Curug Dago |

### *2.2.3.1 Cost Analysis Of Transportation With UBER API*

*Analysis of the cost of transportation is to provide travel fare via the medium of the*

*UBER-request data transport requested via UBER API. After the recommendation of optimal results are obtained by onedaytrip is "Unikom-bandung Zoo-Geological museum-trans studio mall and the last one curug dago" then at this stage done the calculation of the cost of the first location up to the last location.*

***Table 4 results of travel costs***

| *Starting place* | *Purpose* | *Cost* |
|---|---|---|
| Unikom | Kebun binatang bandung | 10000 |
| Kebun binatang bandung | Musesum geologi | 10000 |
| Museum geologi | Trans studio mall | 19500 |
| Trans studio mall | Curug dago | 32500 |
| Total | | 72000 |

The following sample pictures to get cost of unikom to the Zoo of bandung, bandung Zoo to the Museum of geology, the geological Museum to transtudio mall transtudio mall and to the curug dago.




***Figure 3 travel expenses Kebun Binatang***

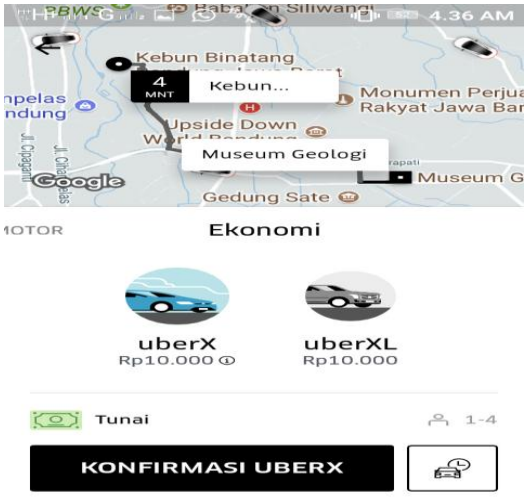



***Figure 4 cost of travel Museum Geologi***

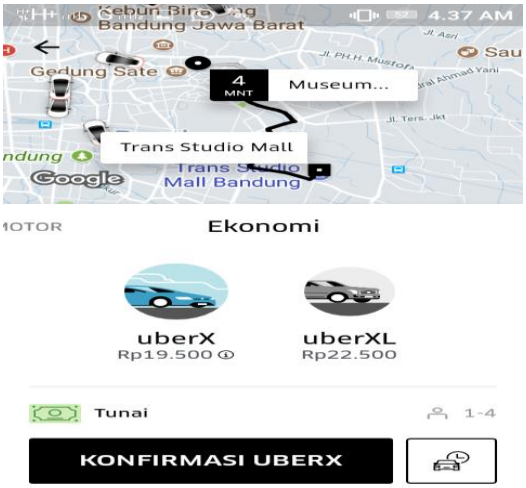



***Figure 5 travel expenses Trans Studio Mall***

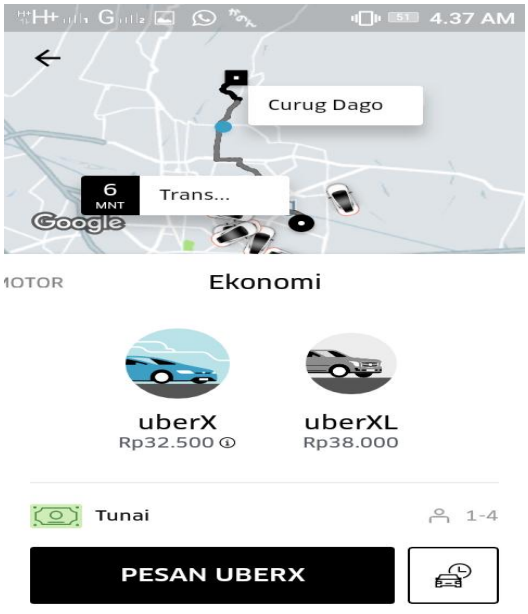



***Figure 6 travel expenses Curug Dago***

#### *2.2.3.1 Analysis Of System Architecture*

*Analysis of the design of the system architecture is the stage in the depiction of any software or hardware that is used. On the construction of the onedaytrip application architecture and mobile as the main display to get information.Smartphone request data rekomendasi wisata ke Facebook API melalui webserver.*

- *Webserver receives request data from smartphones and determines the type of request demanded to Facebook api*
- *Facebook API request received request data from the webserver and meresponse request data to the webserver.*
- *Webserver receives response data from facebook API and continue the response data to the smartphone results recommendations.*
- *Smartphone data rate request asking for transport to the UBER FIRE through the webserver.*
- *UBER FIRE received the kind of request data rates travel costs and continued response data rate of the requested travel expenses to a webserver and a smartphone.*

### *2.2.4 Use Case*

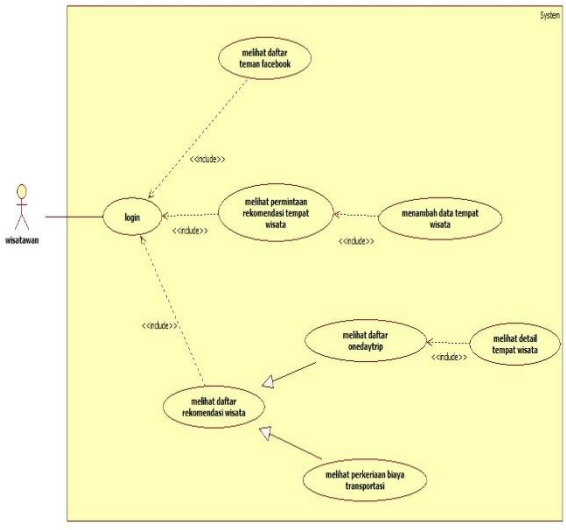



***Figure 3 Use Case Diagram***

***Table 2 Definisi USE CASE***

| No | *Usecase* | *Description* |
|---|---|---|
| *1* | *Login* | *Users can login using the account application Faceboook* |
| 2 | *See a list of facebook friends* | *User can view the list of friendship on facebook* |
| 3 | *See the sights of recommendation request* | *Users can post a request for recommendations to attractions based on the list of friends who come by* |
| 4 | *Add a data tourist attractions* | *Users can add data attractions* |
| 5 | *See a list of recommendations for tourist attractions* | *Users can see a list of the recommendations given by friends* |
| 6 | *View a list of onedaytrip* | *The user can see the display onedaytrip display in the form of maps and tour order* |
| 7 | *View details of attractions* | *Users can view detailed information of the selected tourist attractions* |
| 8 | *Looking at estimated cost of transportation* | *The user can see an estimate of the cost of transportation* |

### *2.2.4 The Design Of The Menu*

*The design of the structure of the menu is a function – function to facilitate the use of that application. Menu structure contained on the application of the recommendation of tour guides based on facebook friend recommendation and uber fare estimate with a feature one day trip on the android platform*

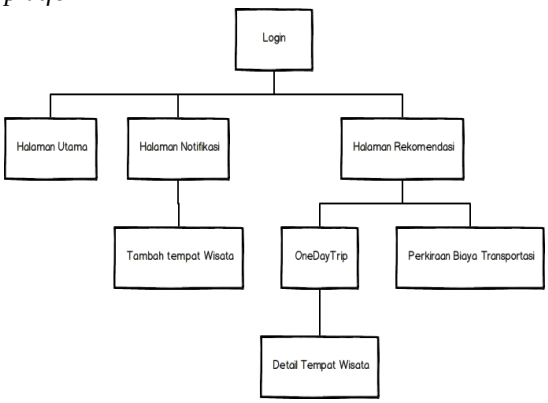



**Figure 4** ***The Design Of The Menu***

### *2.3 Research Results*

#### *2.3.1 Display Notification*

*The notification is the menu page to see the results of the tour data requests by users to friends in the area that is being visited.*

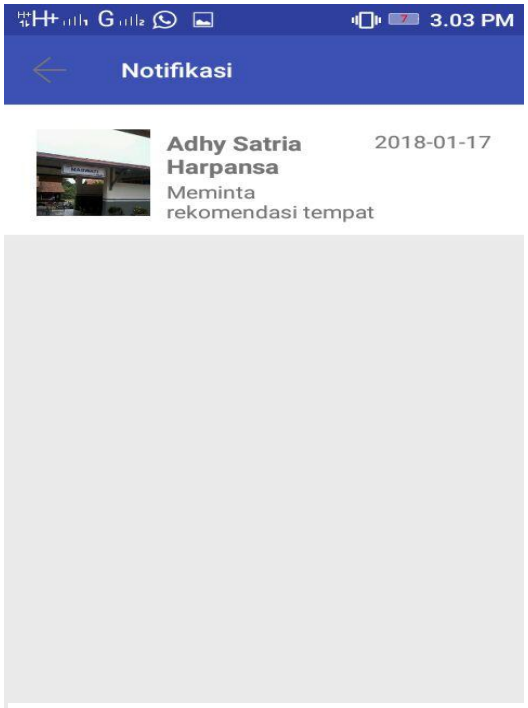



***Figure 5 Page Of Notificatin***

#### *2.3.2 Add Data Display Tour*

*Tour data page is a function to add the tour data*

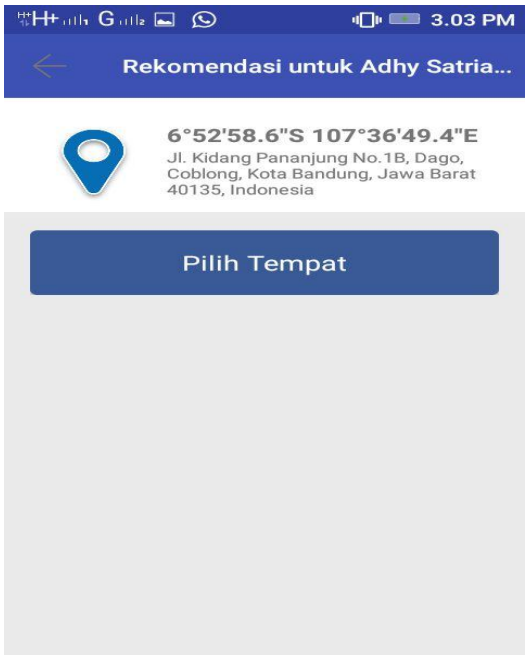



***Figure 6 Add Data Display Tour***

#### *2.3.2 Display OneDayTrip*

*Onedaytrip page to display the result of the recommendations from the nearest place ordered to the farthest place*

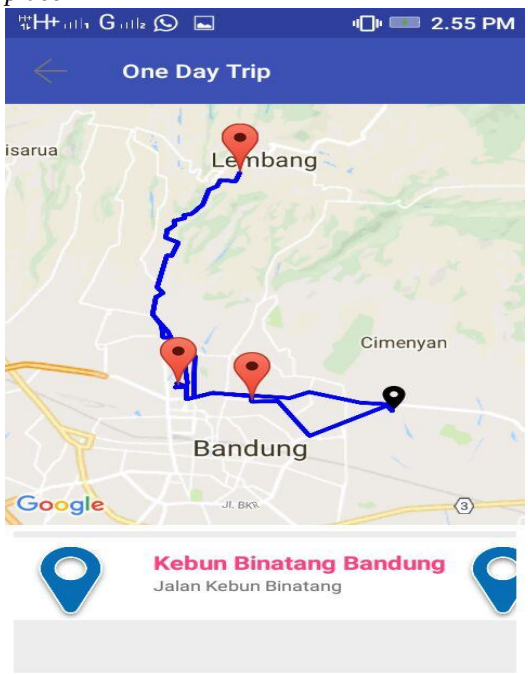



***Figure 7 Display OneDayTrip***

### *2.3.3 Display Results Recommendations*

Page to display the given recommendations of friends who get notifkasi tour requests by users




**Gambar 8 Halaman Hasil Rekomendasi**

### *2.3.6 Beta Testing*

*Beta testing is the testing that was done objectively where tested directly onto the field IE users are concerned regarding the satisfaction with application usage content points i.e. fulfilment of the goals of the initial development application Gotrip OneDayTrip.*

*Based on beta testing in the form of kuisiner which aims to conclude the results of application development Gotrip OneDayTrip.*

- *Application Gotrip can help travelers in providing information based on the friend area visited.*
- *Gotrip Application can provide a recommendation given by the friends of the application*
- *Gotrip Application provides information OneDayTrip, corresponding to the farthest to the closest tour based on the location of early travelers are.*
- *the application being built gives the corresponding map display area to tourists are located.*
- *applications that are built can help travelers to determine an estimate of the cost of transportation to sights*
- *Easy User in the operation of applications and easy to understand features that exist in the application*

## *3. COVER*

### *3.1 Conclusion*

*Based on the results of the analysis and testing that has been done on the application development Guide Tours based on Facebook Friend Recommendation and Uber Fare Estimate with a feature One Day Trip On the Android Platform can be taken based on the conclusions the purpose of this Gotrip application development. Following are the results from the application Gotrip development goals*

- *Make it easy for travelers informed of anyone friends, family who reside in a place of tourist sites that will jump to been fulfilled because the application can provide a list of facebook friends that are based on user location.*
- *Facilitate the tourists get a trusted information on tourism and corresponding needs are already being met because of the built in applications can give recommendations.*
- *Make it easy for tourists to get information on the application of berseta transportation costs to apply already can be fulfilled so that application Gotrip can provide estimated travel costs based on the obtained.*

### *3.2 Advice*

*In building the application Gotrip is still a lot of kekurangnnya. Therefore need to be developed and further refinement*

- . Add objects supporting tour around the tourist areas, such as ATMs, hotels and a means of worship.
- The utilization of other online transport API, so that travelers can find alternative transportation that is available in the city that is being visited.
- The addition of notification to friends if user is in a specific, so users no longer need to ask for a recommendation in the application.

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