Project name: travel assistant

Platform: Android, IOS(hopefully), website(hopefully)

Actors: Non-registered users, registered users.

Functional Requirements

1. Travel planning service

This service provides serval travel schedule planning methods

* 1. Auto generate

Users input the travel time the number of people, the travel behavior(want to go to more place/ long or short distance), the purpose of the day(do some spa, eat or go to theme park), the system will auto generate a travel plan for the user. With the location, the route, transportation, the travel time, the stay time.

* 1. Self-customize planning

The app will scan the travel spots nearby first, then the system scans other travel spot near the first spot and let the user select the next spot. If the user wants to add more activity to the schedule. Repeat the procedure until it hits the travel time limit.

* 1. Applying travel guide

User can select whether the whole travel plan, the day schedule or the travel spot uploaded by another user. Where there is a community that the user can share their travel plan.

* 1. Plan editing function

When a plan is done, user can edit the plan such as adding activity and editing the activity detail (stay time). In the card interface, users can easily drag and drop the card to edit the plan.

* 1. Activity recommendations

When the user is adding a new activity, the system will scan the place and activity nearby and gives recommendation. Users can also input the activity they want to do and recommends the place nearby.

1. Adding new travel spot

For some travel spot may not appear on the google map, a “I found a new place” service is provided. Users can press the “I found a new place” button. And input the information of the place (Restaurant? Spa? Open time?)

1. Travel guide

Users can create a travel plan for the users by the working flows like the Self-customize planning function. Users can directly apply the whole travel plan and give rating to the plan and the tourist.

1. Login system

Only the registered user can Upload the travel guide for the users. Only registered users can rate the travel plan and the user as tourist.

Hopefully these functions can be added into the project

1. Special recommendation for unexpected weather

By using the weather forecasting api (<https://openweathermap.org/api>). The system provides recommendations for the unexpected weather

1. A very convenient hotel and ticket booking

By using the apis, users can use book the flight through skyscanner(<https://partners.skyscanner.net/affiliates/travel-apis>) or Flex api(<https://developer.flightstats.com/>) and booking hotels through trivago(<https://developer.trivago.com/>)

1. Local activities suggestion

The system can show the local activities(music festivals, competitions) in the planning interface. Users can select the activities and add them into their plan.

* How to do it(Use what techniques)

Whether the map, travel spot or the route services are provided by google map services. The google map api and sdk are free and easy to use. Below is the website of the google map api’s website.

<https://developers.google.com/maps/documentation/?hl=zh-tw>

* How to generate the plan
* In what interface

In the planning interface, a card view is used in one column so that the user can drag and swipe the card to plan in the easiest way.

