Fishing Spots

Description

The App displays fishing spots on map, and allow the user to add new spot, to support the community of fishermen to save their times and go to the spots that are rich with catches

Intended User

Fishermen (Amateurs and Professionals) and yachts owners

Features

List the main features of your app. For example:

- Saves spots information

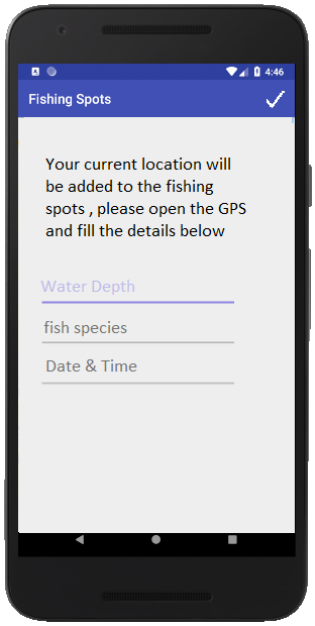
- Display all fishing spots on map
- Display selected spot's info in details

User Interface Mocks

Screen 1

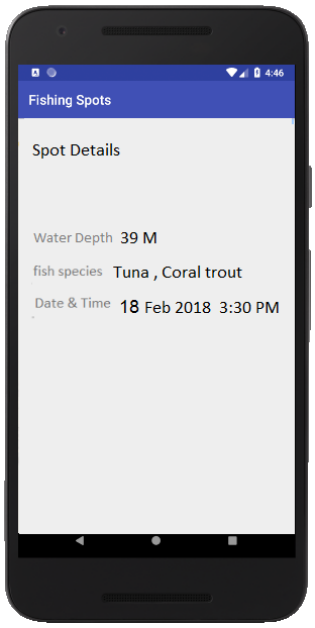
Main Screen displays all spots added before, and the FAB allow the user to add new spot

Screen 2



Allow the user to add spot details (water depth and some fish species) date and time could be pre-populated

Screen 3



When the user click on map marker, the app displays the spot details

App Widget

App widget will display the best times for fishing according to solunar theory , so that the user can do fishing in these times

Key Considerations

How will your app handle data persistence?

The app will use Firebase Real-time Database to save and get the data.
Firebase apps automatically handle temporary network interruptions. Cached data is available while offline and Firebase resends any writes when network connectivity is restored.

The App will enable disk persistence, the app writes the data locally to the device so app can maintain state while offline, even if the user or operating system restarts the app.

The app widget will display the best fishing times according to solunar theory and will get this data from rest API ,

This api calculates solunar times. There is a hypothesis that the times animals and fish are most active and feeding can be predicted based on factors such as sunrise/sunset, moonrise/moonset, moon up/moon down and moon phase. Fisherman and hunters use this data to determine the best days and times of day to catch fish or hunt game

When the user open the app will call the web service and passing it the location and date and time zone, and the API will respond with Json Object , this json will be parsed and the app will get the highest hour rates and display it in the widget

The API details on the next links .

https://solunar.org/
https://api.solunar.org/solunar/42.66,-84.07,20180225,-4

The app will use IntentService to call the API on a per request basis, the request will be started when the user open the app,

Describe any edge or corner cases in the UX.

The app will implement the material design guidelines

Describe any libraries you'll be using and share your reasoning for including them.

The app will use butter knife to simplify the view handling

Describe how you will implement Google Play Services or other external services.

The app will use device location to get the geo info of the fishing spot
The App will Use google map to display fishing spots
The will use Admob SDK to display ads to the user

Next Steps: Required Tasks

This is the section where you can take the main features of your app (declared above) and break them down into tangible technical tasks that you can complete one at a time until you have a finished app.

Task 1: Project Setup

- Get a map key from Google Developer API Console
- Set UP fire base
- Configure ButterKnife Lib

Task 2: Implement UI for Each Activity and Fragment

- Build UI for MainActivity contains Map Fragment and a Fab
- Build UI for Spot Details Screen
- Build UI for add new Spot Screen

Task 3: Screen 1

- Get The data from Firebase
- Draw map markers

Task 4: Screen 2

- Get Device location
- Save the data in Firebase
- Save app state

Task 5: Screen 3

- Add listener to the marker
- Display the spot details

- Display the spot details

Task 6: App Widget

- Implement the App widget
