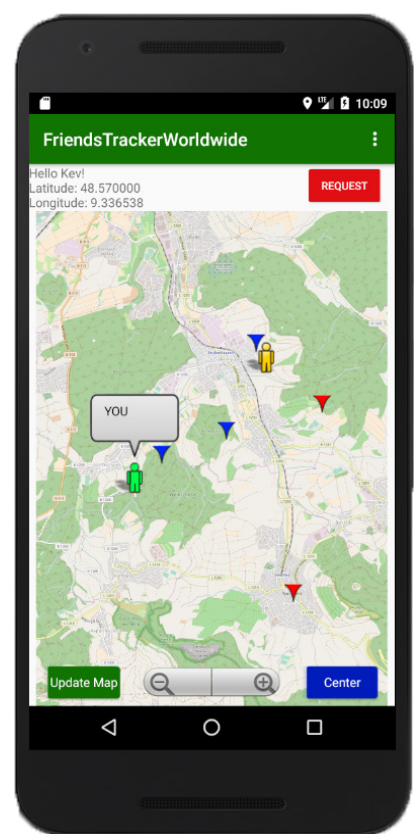
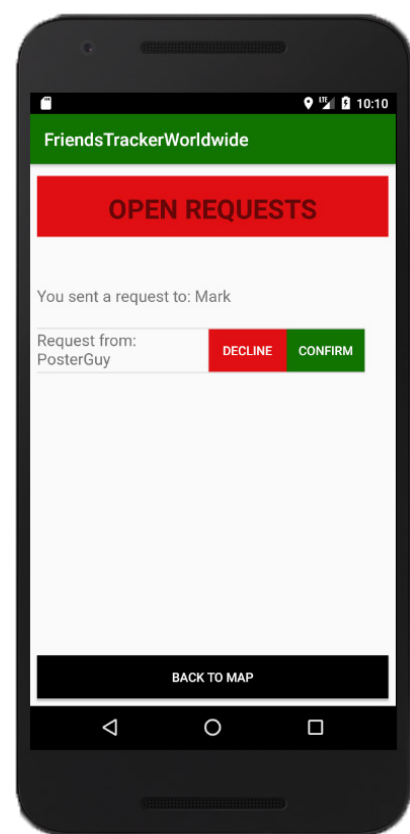


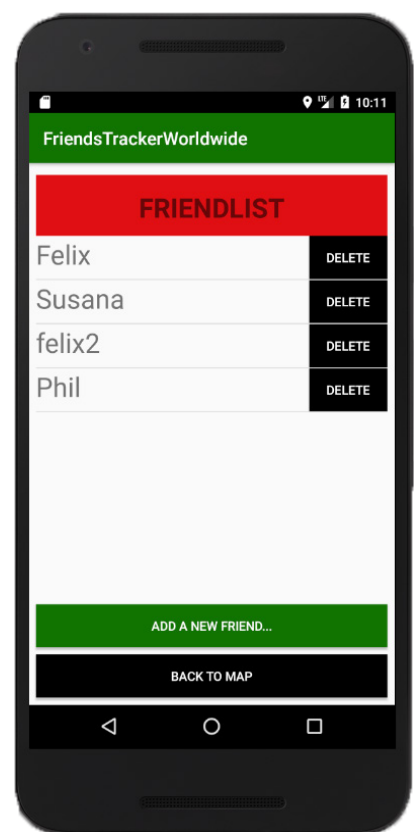
FTW - FriendsTrackerWorldwide



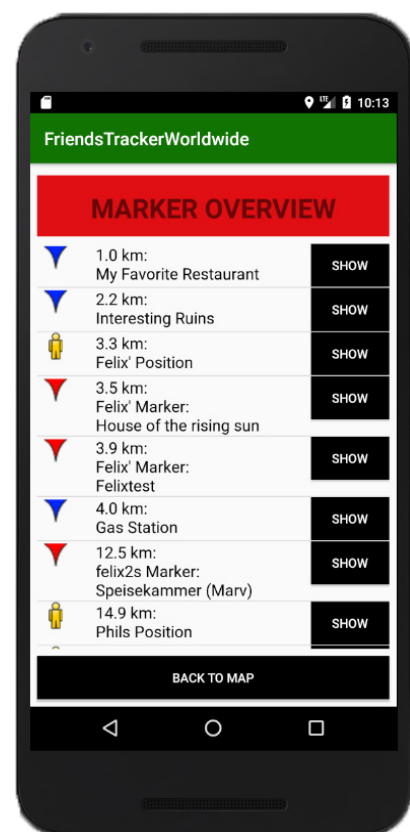
Main Activity



Request View



Friendslist



Markerlist

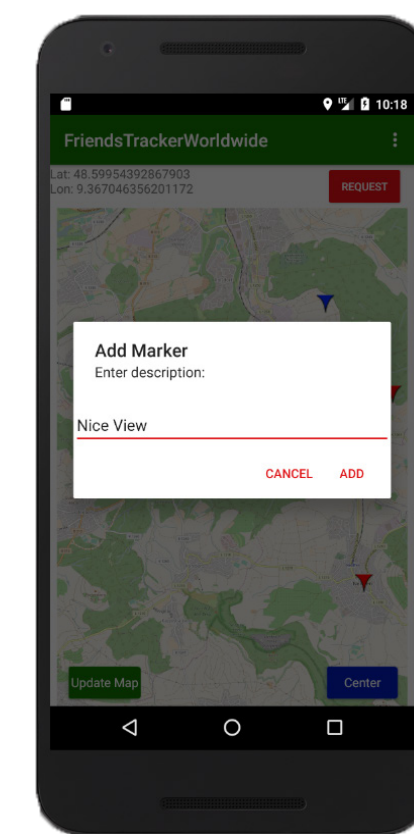
Functionality

Diagram left:

You can freely navigate around the map and scale it using a finger, double tapping, using swipe motions with two fingers or by clicking on the zoom buttons. The symbols on the map itself represent the locations of yourself, personal placed markers as well as positions of your friends and their markers together with user set descriptions. When you send or get a friend request, the app will inform you about that by showing a red "request" button on the top right of the map. It is possible to display all friends and to get an overview about all markers together with their distance to your own position.

Diagram Right:

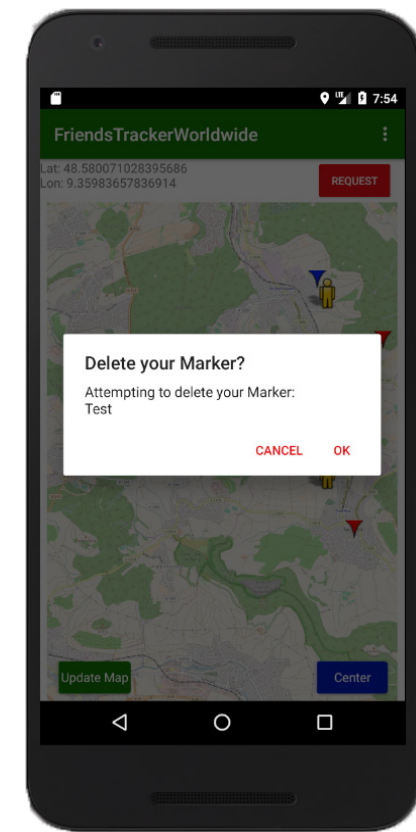
By performing a long tap anywhere on the map, you can easily add a new marker at the desired position. After that, a dialog will show up where you can enter a description for the new marker that will pop up when clicking on it, the marker will then be displayed in your map and in the map of your friends! When performing a long tap on one of your own markers, you can also delete it as simply as adding new markers to the map.



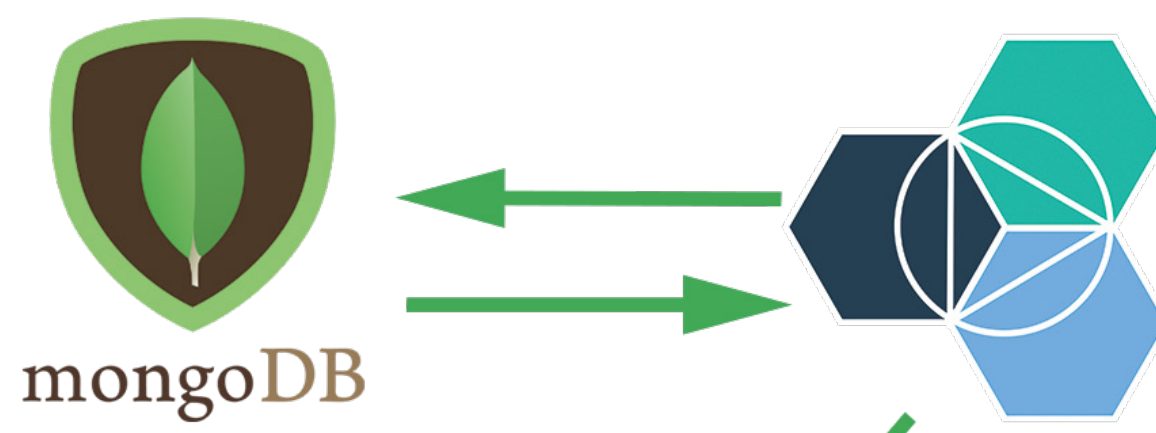
Add Marker



Marker Information



Delete Marker



Idea

The idea behind FTW is to provide an app that enables it for members of a group of friends to get information about the whereabouts of each other. To add a new user to the friend list, a user must send a friend request to the desired user, which then has to confirm the request. After that, both users appear in the associated friend lists. Another idea is to not only show the locations of friends but also be able to add points of interests on the map that can be seen by everyone in the friendlist. The last idea is to get some information about the distance of each friend or point of interest as well so a user can see how far away that particular marker is away from him.

System

FriendsTrackerWorldwide as a whole consists of the FriendsTrackerWorldwide Application, the FriendsTrackerWorldwide API and a MongoDB Database. The FTW Application serves as frontend interface to display information from the API with GPS-related data using a map from OpenStreetMaps osmdroid. The app creates an osmdroid map overlay to provide interaction with its elements whilst calculation of distances between all GPS-Elements and presentation of friends and markers are done by the application itself. The RESTFUL FTW API acts as a gateway to the MongoDB Database to make the Database applicable from all over the world. All requests from the application are handled by the API to perform relevant actions like user registration, login, saving GPS-Data of people and marker objects. The required data can then be stored and called using a MongoDB database.

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