Android Fundamentals Project Description - Location Logger Project

**Problem**

Being a hobbyist nature photographer I have often regretted not being able to pinpoint the exact location where my photos are taken, since my dSLR have no gps. Having a list of locations ordered by date and time would make it easier for me to match locations against image capture times.

It would be nice having an easy way to add points of interest (POIs) to a list. Easily looking up POIs, finding distance and eventually navigating to them.

**Solution**

So I propose building an app with a simple user interface that allows you as a user to add the location where you are right now as a POI.

This app has three different activities/screens (two on large devices). The main activity screen consists has a large Google map. It has a small text field at the bottom of the screen and an action bar at the top. While in the foreground the map is continously updated to show the users current location. When a new and yet unknown location becomes known to the app then a message below the map instructs the user to long tap the map to fetch an address. When an address is fetched then the address and current location is automatically stored as a POI in a local database.

The user can tap the sharing icon on the action bar to share the current location as a text message. This will open a chooser showing other apps on the device that are capable of sharing text messages.

Tap the folder icon to the right of the sharing icon to view page with a list of your logged points of interest. The list of points is ordered descending by the time of logging.

Selecting an item from the list will take you to a detail page showing the point on a map together with the distance from current location, the address and the time of logging. On the detail page there is also a sharing function like on the main page.

On larger devices the list and details are in one page . Here the details are shown to the right of the list.

**Notifications**

There is also an option to receive notifications when the app is in the background and one of the users locations are close. On the main activity select the settings menu from the overflow area and select “Background updates”. This will keep the location service running in the background from where it will issue a notification when the current location is within a short distance from one of the logged locations. The user can view the nofication and jump to the app detail page directly.

**Future...**

I have developed the app to a point where I believe it will meet the requirements for this final project, but I know there is lots of room for improvements and I intend to develop it further as time permits. Maybe an option to manage / delete loggings could be nice.

**Issues**

( ) when opening notification. There seems to be two MainActivities on the stack.