## Android Fundamentals Project Self-Evaluation

**Instructions:** Once you’ve completed your Final Project, please evaluate it against the components of the rubric below. For each criteria that you met, put an “X” in either the “Does Not Meet Specifications” or the “Meets Specifications” box. For some criteria, we ask you to provide an explanation of where and how it was implemented in your app. This is a chance for you to briefly explain to the grader your thought-process during development. Once you are done, include this with the source code and accompanying files you are submitting. Then, give yourself a pat on the back for making a great app!

### Required Components

To “meet specifications”, your app must fulfill all of the criteria listed in this section of the rubric.

|  |  |  |
| --- | --- | --- |
| **Criteria** | **Does Not Meet Specifications** | **Meets Specifications** |
| Standard Design |  |  |
| App does not redefine the expected function of a system icon (such as the Back button). |  | X |
| App does not replace a system icon with a completely different icon if it triggers the standard UI behavior. |  | X |
| App does not redefine or misuse Android UI patterns, such that icons or behaviors could be misleading or confusing to users. |  | X |
| App includes a tablet layout which takes advantage of the additional space (if possible). |  | X |
| App includes at least two distinct views and uses intents properly to move between these views. |  | X |
| **Navigation** |  |  |
| App supports standard system Back button navigation and does not make use of any custom, on-screen "Back button" prompts. |  | X |
| All dialogs are dismissible using the Back button. |  | X |
| Pressing the Home button at any point navigates to the Home screen of the device. |  | X |
| **Permissions** |  |  |
| App requests only the absolute minimum permissions that it needs to support core functionality. |  | X |
| App does not request permissions to access sensitive data or services that can cost the user money, unless related to a core capability of the app. |  | X |
| **Please elaborate on why you chose these permissions:**  The following permissions are required by the maps api:  <uses-permission android:name="android.permission.ACCESS\_NETWORK\_STATE" />  <uses-permission android:name="android.permission.INTERNET" />  <uses-permission android:name="android.permission.WRITE\_EXTERNAL\_STORAGE" />  and the location services need this permission:  <uses-permission android:name="android.permission.ACCESS\_FINE\_LOCATION" /> |  | X |
| **Performance and Stability** |  |  |
| App does not crash, force close, freeze, or otherwise function abnormally on any targeted device. |  | X |
| **ContentProvider** |  |  |
| App implements a ContentProvider to access locally stored data. |  | X |
| If it regularly pulls or sends data to/from a web service or API, app updates data in its cache at regular intervals using a SyncAdapter.  If it needs to pull or send data to/from a web service or API only once, or on a per request basis (such as a search application), app uses an IntentService to do so. |  | X |
| App uses a Loader to move its data to its views. |  | X |
| **1) What's the content provider called, and how is it backed?**  Content provider is called **LocationLogProvider** and the backend is a SQLite database created in **LocationDbHelper**. The contract is **LocationContract**.  **2) What backend does it talk to? What is the SyncAdapter called? What mechanism is used to actually talk over the network?**  **3) What loaders/adaptors are used?**  The ListView on the **ListFragment** uses a CursorAdapter named LocationLogAdapter. The ListFragment implements LoaderCallbacks<Cursor> and uses a CursorLoader. |  | X |
| **User/App State** |  |  |
| App correctly preserves and restores user or app state. |  | X |
| When the app is resumed after the device wakes from sleep (locked) state, the app returns the user to the exact state in which it was last used. |  | X |
| When the app is relaunched from Home or All Apps, the app restores the app state as closely as possible to the previous state. |  | X |
| **Please elaborate on how/where your app correctly preserves and restores user or app state:**  **MainActivity** saves current location (Location) and address (String) from onSaveInstanceState callback and retrieves them in onCreate (if savedInstanceState not null).  The **DetailFragment** and the **ListFragment** both call setRetainInstance(true) in their onCreate methods to make them survive acitivity re-creation. |  | X |

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### Optional Components

To receive “exceeds specifications”, your app must fully implement all of the criteria listed under at least two of the four categories below (e.g. Notifications, ShareActionProvider, Broadcast Events, and Custom Views).

|  |  |  |
| --- | --- | --- |
| **Criteria** | **Does Not Exceed Specifications** | **Exceeds Specifications** |
| Notifications |  |  |
| Notifications do not contain advertising or content unrelated to the core function of the app. |  | X |
| Notifications are persistent only if related to ongoing events (such as music playback or a phone call). |  | X |
| Multiple notifications are stacked into a single notification object, where possible. |  | X |
| App uses notifications only to indicate a context change relating to the user personally (such as an incoming message). |  | X |
| App uses notifications only to expose information/controls relating to an ongoing event (such as music playback or a phone call). |  | X |
| **Please elaborate on how/where you implemented Notifications in your app:**  In **LocationLoggingService** when location change then an ordered broadcast is sent with a MainActivity.LOCATION\_UPDATED\_EVENT. **MainActivity** registers itself as a listener for this event in its onResume call and unregister again in its onPause call. MainActivity’s receiver sets the result code to MainActivity.IS\_ALIVE so in LocationLoggingService we can see if MainActivity is running and did receive the location update. If the result code is not MainActivity.IS\_ALIVE then we build a notification with a pending intent to start **MainActivity**.(proximityNotification method in LocationLoggingService). |  | X |
| **ShareActionProvider** |  |  |
| Uses ShareActionProvider to share content with an outside application. |  | X |
| Makes use of Intent Extras to send rich content (i.e. a paragraph of content-specific text, a link and description, an image, etc). |  | X |
| **Please elaborate on how/where you implemented ShareActionProvider:**  There is a shareActionProvider on **MainActivity’s** menu (menu\_main.xml) and on the **DetailFragment’s** menu (menu\_fragment\_detail.xml).  In **MainActivity** the share intent when location change is handled by visiting the **SharingHelper**. In **DetailFragment** this is done in onLoadFinished. |  | X |
| **Broadcast Events** |  |  |
| App intercepts broadcast events. |  | X |
| App responds to Broadcast events in a meaningful way. |  | X |
| **Please elaborate on how/where you implemented Broadcast Events:**  As described in the Notifications sections **LocationLoggingService** sends broadcast events that are received by MainActivity and by itself. |  | X |
| **Custom Views** |  |  |
| App creates and uses a custom View. |  |  |
| App uses a novel View that couldn’t sufficiently be satisfied by the core Views in Android. |  |  |
| **Please elaborate on how/where you implemented Custom Views:** |  |  |