

## **Android Mini-App Project**

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Device used: Nexus 7, API 22, Android 5.1.1

Project Title: Bucket List Items Checklist

Our app functions in accordance with the specifications described in the project description. The first activity that the user is directed to is the MainActivity, where they can view a preloaded list of bucket list items sorted by date. From here, users can add items to their list with the “plus” floating action button in the bottom right corner, edit their list items by tapping an individual item, and also check and uncheck items as completed. Both the addItemActivity and editItemActivity contain fields to enter a name, description, latitude, longitude, and due date for a bucket list item, and can be added to the list displayed back on the main activity. However, when a user clicks an item to edit it, the next activity comes preset with the fields that were previously entered for that item. Users can return to the previous screen by tapping the back button in the top menu bar.

Throughout working on the app, one of the most important things we learned about was data persistence across different activities. We did much exploring into passing data when intents are called, and implemented various intent.putExtra() methods in order to pass arrays of item fields from activity to activity. Additionally, we struggled with using an OnClickListener as opposed to the onClick field in the xml files, especially when we needed to access the index of a certain view within its parent (we needed this when editing an activity to know which item was being selected). We also chose to use a “CheckedTextView” as opposed to a separate checkBox and TextView, which caused problems trying to format our items. Switching to separate objects

definitely made it easier. Overall, the largest structural lessons about Android development that we learned dealt with how activities can trigger and interact with each other, and how different data is shared across an entire application.