

MAD Assignment 2-Report

3rd party API/Libraries used:

- Room (Google)
- Navigation Component (Google)

Room

Room is a persistence library apart of the Android Jetpack suite by Google. It is an abstraction layer built on top of SQLite. It allows for regular Kotlin data classes to double as a database table. The data stored in these databases are accessed by database access models (DAOs), which are interfaces which dictate what type of SQL queries/operations can be performed. This means there is a lot less boiler plate needed to get up and running with the database, as compared to vanilla SQLite, where database helpers, models and cursors are needed to access the database

Paired with the ViewModel, the data can be made live, meaning observers can be added to database via a ViewModel, meaning updates to the data will automatically update other views that are displaying database data such as lists etc.

Navigation Component

Also a part of the Android Jetpack suite, the navigation component makes navigating around the app with less boilerplate needed. It does away with activity intents, fragment transactions, handles the back stack and passing of type safe arguments (without key value pairs). It introduces a graph-based navigation hierarchy, which is represented by XML. It is used by simply adding a NavHostController to a single activity, which will handle fragments that can be navigated between. The NavController is then used within the source code to perform navigation actions or the passing of arguments between fragments.

This makes fragment transactions much easier, with less boiler plate code needed if the app has many fragments to navigate between.