4.1

Fragments -

4.2

Activity: Showing Bands

Singleton patterns

|  |  |  |
| --- | --- | --- |
| Model | View | Controller |
| 1. Band.java 2. BandDatabase.java | 1. activity\_details.xml 2. activity\_list.xml 3. fragment\_details.xml 4. fragment\_list.xml | 1. DetailsActivity.java 2. DetailsFragment.java 3. ListActivity.java 4. ListFragment.java |

Model – The Model is composed of two classes

View--   
The View defines the app's UI and is composed of the activity and fragment layout files

Controller--   
The Controller is composed of the code that manipulates the list and details activities and fragments

4.3

Different fragments working together

4.4

. The ***observer pattern*** is a software design pattern that defines the interaction between a subject and an observer that wants to be notified when something of interest happens to the subject, like the user pressing a button.

4.5

**RecyclerView - scroll list**

4.6

4.7

4.8

Dice Roller App- new app

4.9

Dialogs

4.10

4.11