**Project Assignment #3**

**Design Pattern:**

**Composite Design Pattern**

The Contact Class was used to create contacts to store into the database. Every contact would have the same data (name, number, group, blacklist) so it was easier to create a contact and then store it into the contact database.

<https://github.com/AdilVirani/3354-GroupA/blob/master/app/app/src/main/java/com/example/adilvirani/contactapp/Contact.java>

**Contact Database Add/Delete Test:**

<https://github.com/AdilVirani/3354-GroupA/blob/master/app/app/src/androidTest/java/com/example/adilvirani/contactapp/ContactDBTest.java>

**Contact BlackList Test:**

<https://github.com/AdilVirani/3354-GroupA/blob/master/app/app/src/test/java/com/example/adilvirani/contactapp/ContactBlacklistTest.java>

**Contact List Check:**

<https://github.com/AdilVirani/3354-GroupA/blob/master/app/app/src/androidTest/java/com/example/adilvirani/contactapp/ContactDatabaseTest.java>

**Directions:**

* Please go to Build > Clean Project and Rebuild Project if it does not work. As well as Build APKs.
* If the app was previously installed before, you might have to go to settings on the Virtual device and uninstall or clear data since there were changes made to database.

When the application starts up, it will show an empty screen since the database is empty. The menu will contain an alphabetical order feature (first name only) and at the bottom right will be an add button. The add button will take you to the Contact add screen where you can enter the following fields: first name, last name, group, phone. Also, you can checkmark if you wish to blacklist the contact. Once the contact is added, it will redirect you to the main activity with the contact present in a list. Clicking the contact will take you to the display contact, where you have the option to call the number or message the number. You can also delete it through the red X on the menu. Pressing the edit button will take you to the edit screen with fields filled in ready to be edited. These are the simple functions of our contact application.