Block Diagram Description
(Please note: Block Diagram is hard to read on Gitlab Viewer, please download to see a better version.)

- View Thread:
  - These are the XML files that were created to represent the different screens and pages the User sees and interacts with in the ApartmentFinder app.
- Activity Classes:
  - These classes handle the user interacting with the application. This includes clicking buttons, inputting data, and scrolling.
- Helpers:
  - This helper class holds constants that are referenced throughout the app. This mostly helps for our communication between server and client.
- Communication (Android Volley):
  - These logic classes are called by the Activity classes when necessary. These classes take care of correctly making JSON requests and handling JSON responses from the server-side.
- Logic Actions(functions):
  - The functionalities handle client requests of data from the database. These mostly involve sorting, getting, and setting data within the database.
- User Controller:
  - The User Controller translates client's requests into user functionalities within the server. The results of the server functionalities are packaged here and sent back to the client via JSON response.
- Apartment Controller
  - The Apartment Controller translates client's requests into apartment functionalities within the server. The results of the server functionalities are packaged here and sent back to the client via JSON response.
- Users Tables:
  - This table holds all information we collect about users. This information is mostly centered around being able to login. Specific information includes
    - User Name
    - Unique User Id
    - User Password
    - Users Email address
  - This table can be searched for specific information including finding specific users based on their unique user id or their username which facilitates logging in, and new users can be created allowing for the registration of new users into the system. Searches return JSON objects to each user for ease of use communication between front and back end.

- Apartments Table:
  - This table holds all the information we collect about apartments. This information is mostly centered around renting information, such as rent, number of bedrooms, and location.
    - Apartment Name
    - Unique Apartment Id
    - Apartment location
    - Number of rooms in the apartment
    - Address
    - User Rating
    - Rent
  - This table is mostly used in the displaying of apartments as a list with the given info so that users can browse available apartments, also being able to sort the list by rent, rating and number of rooms for a more customized experience, as well as specific searching based on the name or id of the apartment. Searches return JSON objects to each user for ease of use communication between front and back end.