Rags to Riches
Technical Documentation

Software Engineering

Team 5:

Alejandro Aguilar
Arjun Ohri
Deep Patel
Kartik Patel
Elisa-Michelle Rodriguez
William He
Bryan Benalcazar

March 29, 2017
Github Page

Purpose: This document will describe the functionality of our project. We described what each file does. The important functions in those files are commented and those descriptions will be on the project's github page as a HTML or a TXT file.
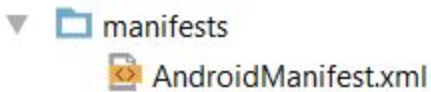
AndroidManifest.xml: Provides important information to the android operation system about the app such as the package name, required permissions, minimum operating system requirements need to run the application, and different activities of the application.
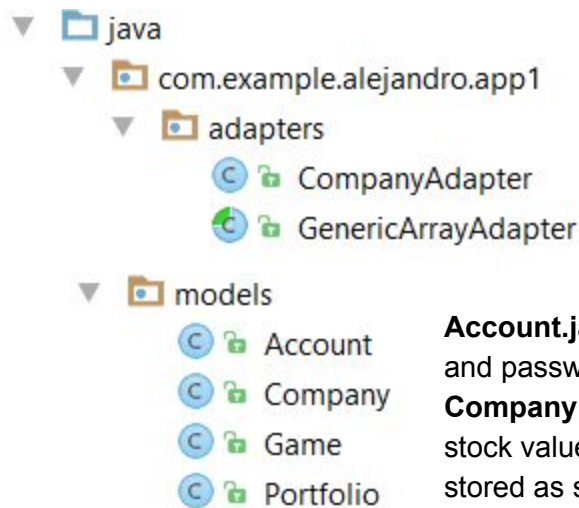
CompanyAdapter.java: All the information of the table in game that displays the company name, the stock value, the buy and sell options, and the stock value graphs are coded here.

GenericArrayAdapter.java: Used to initialize the array that stock data will be stored in.

Account.java: The user's account object class. Stores id, email, and password.

Company.java: Stores all the information about a stock and its stock values as a company object. The name, the ticker are stored as strings and the price history is stored as an array.

Game.java: Used to hold information about public and private games. Such as the private code required to enter a private game, game length, and the game queue that will start new public games.

Portfolio.java: Used to hold information about all the stocks a player owns in a game and balance. Portfolio is updated everytime a player buys or sells stocks.
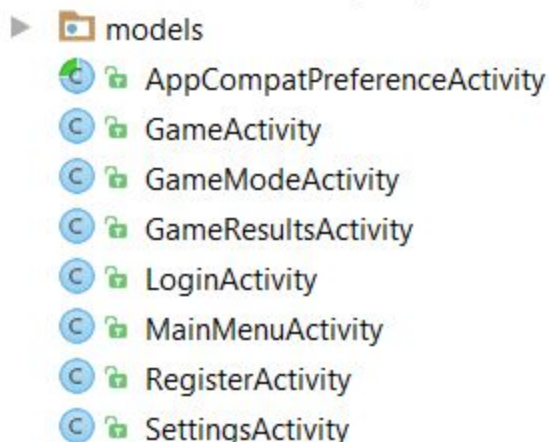
AppCompactPreferenceActivity.java: used to initialize the dialogs and menus.

GameActivity.java: Main file that does the work of setting up a game. It connects to the database to generate random companies and stores them in company objects. It calls the CompanyAdapter to display the stock data in the company list. Graphs are generated to show stock trends when stocks are clicked. Sets up the game timer and updates the turns and stock

values at the end of a turn. Listens to user activity for the buttons in game view.
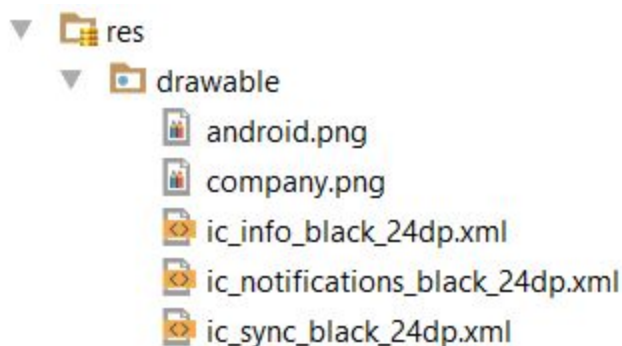
GameModeActivity.java: Responsible for the application view that users choose private or public game on.

GameResultsActivity.java: Shows end game results. Shows the final standings of the game as well as if new achievements were unlocked by a player.
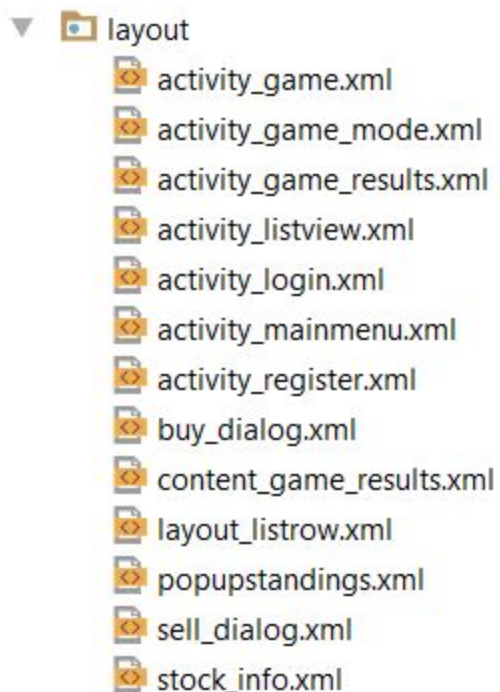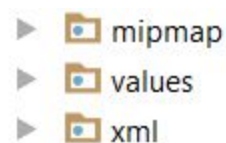
LoginActivity: Handles logging into the game. Checks the login information a user enters with account entries stored in a database after connecting to it.

RegisterActivity.java: Responsible for creating a new account. Connects to a database and uploads new account information.

SettingsActivity.java: Responsible for game notifications, changing user account information and other game related settings.

▼ ⬛ res
    ▼ 📁 drawable
        🖼 android.png
        🖼 company.png
        ◻ ic_info_black_24dp.xml
        ◻ ic_notifications_black_24dp.xml
        ◻ ic_sync_black_24dp.xml

The drawable folder in res stores the graphics we'll be using in the game. The mipmap, values, and xml folders store files automatically generated by Android Studio.

   ▶ 📁 mipmap
   ▶ 📁 values
   ▶ 📁 xml

▼ 📁 layout
    ◻ activity_game.xml
    ◻ activity_game_mode.xml
    ◻ activity_game_results.xml
    ◻ activity_listview.xml
    ◻ activity_login.xml
    ◻ activity_mainmenu.xml
    ◻ activity_register.xml
    ◻ buy_dialog.xml
    ◻ content_game_results.xml
    ◻ layout_listrow.xml
    ◻ popupstandings.xml
    ◻ sell_dialog.xml
    ◻ stock_info.xml

The layout folder stores how all the activities will be displayed. Where the buttons and data will be on specific screen will be stored in this layout folder.

Activity_game.xml is the main game file that holds information about where the buttons and the stock list will be on the screen. **Activity_game_mode.xml** is used to show the public and private game buttons.

Activity_listview.xml holds information about the stocks. **Activity_mainmenu.xml** is for the buttons on the home page. **Buy_dialog.xml, sell_dialog.xml**, and **stock_info.xml** are for the buy and sell dialogs and for the trend chart that is displayed when clicking a stock respectively. **popupstandings.xml** will be used to display game standings, **activity_register.xml** will be used to display the login screen. **Layout_listrow.xml** is used to generate the stock list on game page.