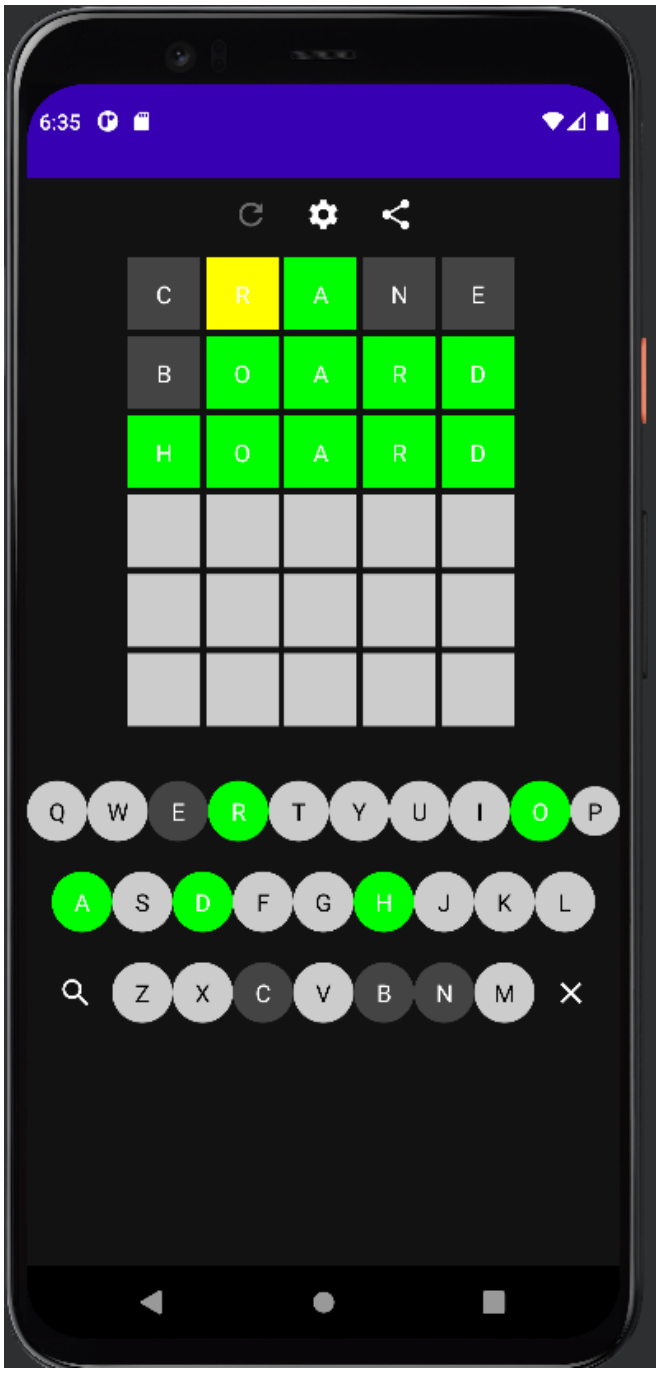
Project Objectives

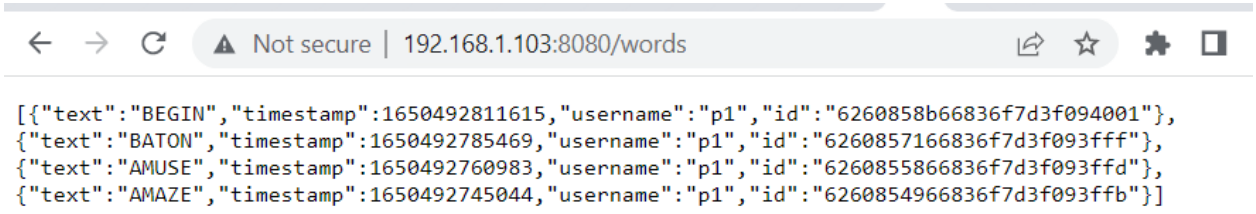
Make an Android app version of the popular online Wordle game. A user now can play the game through this Android app instead of opening the New York Time game link through a web browser.

Project Components

1. Client is an Android app with a Wordle game interface, similar to the current popular Wordle online game. Client also runs standalone as an offline app without a server.



2. Server side is a web service running on a PC. It provides the Word of the Day, the same concept from the New York Time game. Server stores the words contributed by users in JSON format (see the picture below)



Technical Highlights:

Client:

- Android Architecture
- Dependency Injection
- Screen Navigation
- Data Models
- Real-time communication with server via web socket

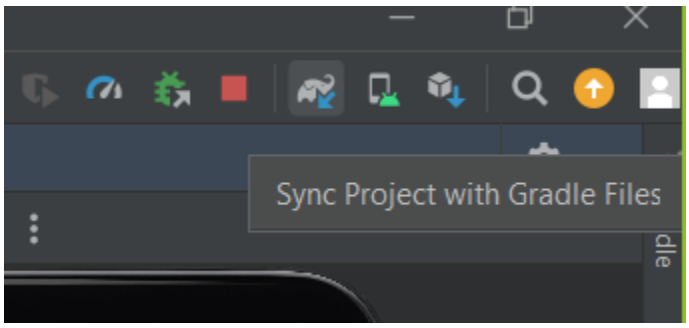
Server:

- Ktor (Web service framework from Jetbrain)
- Database to store user submissions (Mongo DB)
- Real-time communication with web socket

Build Instructions

Client

Step 1: Clone the GitHub https://github.com/albertcool3/4631s2022.git
Step 2: in Android Studio, open folder ‘wordle’ and load the project
Step 3: in Android Studio, press “Sync Project with Gradle Files” (see below). This may take several minutes.
Step 4: Run the project in an emulator or a physical device.



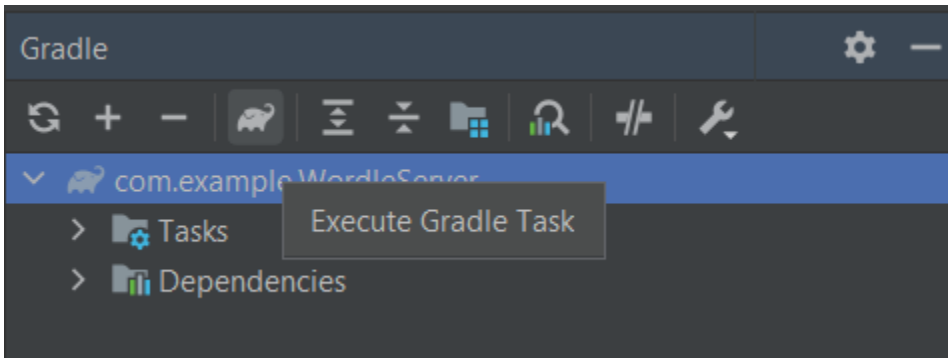
Server

Step 0: Download and install MangoDB Community Edition: https://www.mongodb.com/docs/manual/installation/

Step 1: Clone the GitHub https://github.com/albertcool3/4631s2022.git

Step 2: In IntelliJ Community Edition, open folder 'wordleserver' and load the project

Step 3: In IntelliJ Community Edition, click "Gradle" tab, refresh and 'Execute Gradle Task' (see below)



Step 4: Run the project

Launch Instructions

1. app-debug.apk is provided to launch the client as a standalone app.
2. Once the server is running on a PC, the client Android app simply add server's ip/hostname in its setting. The Android client is self-explanatory in either standalone mode or client/server mode.