

Final Project App: **Wordle**

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App Description: A word-based game where players have six attempts to guess a five-letter word with feedback given for each guess in the form of colored tiles. These colored tiles indicate which letters match or occupy the correct position.

Major Features:

- Allow users to use hints if they are struggling to complete the daily Wordle challenge. (Note: doesn't have to be daily words)
- Allow users to register for the application using OAuth2 with Facebook/Google API (can also include Captcha verification)
- Allow users to see how they compare to others in the leaderboard.
 - The leaderboard can have search functionalities based on different attributes and can also sort by the various attributes.
- Allow users to keep track of their progress, win percentage, current win streak, max streak, and guess distribution (guess # history) in a Firebase database.
- The system sends out notifications to subscribers (possible observer pattern can be used here) when the new daily word becomes available.
 - This is if we want to do a daily word approach

Android Concepts to be Used (any 10 from the list):

- **API**
- Navigation
- **Fragments**
- WorkManager
- **Firebase**
- **Room**
- **Unit Testing**

- ViewModel
- **LiveData**
- **MVVM Pattern**
- **Repository Pattern**
- RecyclerView
- **Permission Material Design**
- **Notifications**

We plan to use the bold choices above in our project to accomplish the features of the app. Additionally, we plan to use the technologies above to help us modularize our code and eliminate any inefficient duplications of code.