# WALKTHROUGH

November 30, 2018

### Unit Test Coverage

Unit tests cover the subclasses of ParentTile, ParentManager, and ParentBoard (e.g Tile, SimonBoardManager, SimonBoard for the Simon game). These class are the main 'model' classes of our program and thus receive the most intense testing. Some other classes (Undo, Autosave) also receive unit test, while all the Activity class do not receive testing as they are 'view' and 'controller' classes.

#### **Most Important Classes**

The most important classes in the program are the Manager, Board, and MainActivity classes which are responsible for implementing the logic of the game, and displaying it to the user.

## Design Patterns

We implemented Observer, Observable, and Iterator design patterns.

#### **Scoreboard**

Each user has their top scores for each game as a variable in their corresponding UserAccount object. All users are stored in a map with their usernames as keys and UserAccount objects as values, and when ScoreboardActivity is activity is activated, the top 4 scores are shown to the user, alongside their personal best.