

Terms with Chums: A Scrabble clone

Rules & Requirements:

- 2 players
- Each player gets 7 random letter tiles to start
- Each player can place >0 characters on the board in a turn. They must be in a line, and they must make valid word(s)
 - If there are any words on the board, the new word must be connected to an existing word
- Players must play off of existing words, which should count towards their score
- After each turn, the players' tiles should be replenished from the available pool of letters so they have 7 tiles
- Tiles that get moved into a player's hand after their turn should be removed from the pool of available tiles
- Once the pool of available tiles is empty, the game is over
- Each turn, players should have the optional ability to surrender, ending the game in a loss
- Should represent the board, moves, players, tiles, etc.
- Should end the game when it is won, printing the score and winner
- Files listing all tiles (count/score for each letter) and all accepted words (in a list) will be provided
- Command-line is OK, the interface is up to you.

Optional requirements:

- Should have two types of special squares on the board, your choice (word/letter score modifiers, other?)
- User profiles must persist across sessions (username and their ratio of won/total games)
- A top 5 scores list (and the usernames who made them) that persists across sessions
- Should have a debug mode which at least prints performance measurements for startup, move making time to the console. Optionally it can print other things.
- Allow for multiple (>2) players

Resources:

- For a dictionary, use the file located at /usr/share/dict/words (on all Mac/Linux machines) as your dictionary of 'valid' words. This will also be on the github.
- Character frequencies are on the github, and are in the format:
 - LETTER NUMBER_OF_TILES POINTS

Suggested Milestones:

8/14 Prototype UI done and Tile bag model done

8/22 functional 1-player game with word placement hooked up to UI

9/1 2 players, turns, scores & 'game end'

9/4 Presentation!