## Player

- name
- totalScore
- game
- scrabbleBoard
- tileBag
- scrabbleServer
- clientServer
- hand of tiles
- play word
- pass turn
- draw new hand
- swap tiles
- shuffle tiles in hand

- Game class
- Tile class
- ScrabbleBoard class
- Hand class
- TileBag class
- ScrabbleServer class
- ScrabbleClient class

## Tile

- get letter value
- get score value

- Word class
- Hand class

## ScrabbleBoard (the View)

- display scores of all players
- display specific player's hand
- have "play word" button to submit word
- have "pass turn" button to skip turn
- have "swap tiles" button to swap tiles for new tiles
- display how many tiles are left in the bag

- Tile class
- Word class
- Player class
- GameManager (Controller)
- tileBag class

### Word

- dictionary
- tiles in the word
- word (String)
- game
- check validity of submitted word
- check validity of other new words
- find boundaries of word to be scored
- holds an array of tiles placed

- Tile class
- Player class
- ScrabbleBoard
- ScrabbleDictionary class

# TileBag

- array of set number of Tile objects
- remove tile (player draws)
- add tile (player switches tiles)

- Tile class
- Player class
- Game class

### Hand

- tiles in hand
- holds an array of seven tiles
- add tiles to hand
- remove tiles from hand
- swap tiles
- shuffle tiles
- rearrange tiles (GUI)

- Player class
- Tile class
- Game class

### HandView

- array of JLabel tiles
- converts Hand object to HandView object
  - converts array list of tiles to array of JLabels representing the tiles
- setJLabelHand
- drawTile (drawing new JLabels)
- sets corresponding tile image to the JLabel

- Board
- Hand
- ScrabbleBoard
- TileBag

#### **Board**

- array of JPanels with JLabels
- setBoard
  - JLabels of board labels to tile labels when tile is placed on the JPanel from the Handview/hand
  - when undo button is pressed reverses the JLabel changed back to a board label
- keeps track of where the triple letter word, triple word score, etc. are to score the words/ tiles played correctly

- Scrabbleboard
- Hand
- Handview