I only list a series of important functions that I can think through so far and also ignore the get/set methods.

Operation: addSpecialTile(Player)

Preconditions: The player should move first.

The player need to have a special tile.

Postcondition: The special tile can only be seen from its owner.

Operation: addScore(Player)

Preconditions: The player should choose a valid place.

The player need to have a special tile.

Postcondition: The total scores calculated should be added to the player's score.

Operation: doSpecialTiles(Player)

Preconditions: The player should choose a valid place.

The player should move first.

Postcondition: If there is specialTiles at the location of the current added tile, they will be

triggered, therefore, they will effect the calculate scores method.

Operation: buySpecialTiles(Player)

Preconditions: Each specialTiles should have a price.

The player should have enough money to buy.

Postcondition: The specialTiles they can buy can be used immediately or later.

The specialTiles should be place on a valid location.

Operation: addTiles(Player)

Preconditions: The number should be larger than zero, and less than he number of inventory of

that player.

The player should move first.

Postcondition: The corresponding set of tiles will be removed from the tile package.

The player will get exact numbers of tiles they used to refill his inventory.

Operation: challenge()

Preconditions: The word that has been challenged should be words generated from last move.

After the player make the move then other player can challenge.

Postcondition: If challenge succeed, the player will lose the score of this word.

If challenge failed, the challenge player will skip next turn.

Operation: exchangeTile(Tile)

Preconditions: The change number should be larger than zero, and less than he number of inventory of that player.

Postcondition: The player will get the exact number of tiles they exchanged.