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The game is composed of: a Board, Players, normal tiles, special tiles, a Dictionary, and a control class game.

A Board consists of a matrix of Locations, which may contain a special tile and a normal tile. Some of Locations are special. Their factor is more than 1, like DW, DL. The Board is in charge of managing all locations such as adding or removing tiles, getting strings, taking effect of special tiles.

A Player has a name and has several tiles and special tiles to be played. His tiles are put in a rack. A rack has at most 7 normal tiles and 2 special tiles. A player can only manage his rack.

In the design, Game is the controller and coordinator as a referee which means the Game own Players, Dictionary, TileBag and Board. At each time, the Game gives a player a command like skipping, submitting and checks, changes the status of the game. For example, the Game asks the Board to check the validation of a location and looks the dictionary. The Game calculate the score and update the score. At the end Game will decide whether the game ends, and if yes then determines the winner, if no then it gives the next Player in the row commands, repeating the cycle.

A normal tile has a letter that it represents and a value. A special tile, distinct from normal tiles, that have some interesting effects, and are only visible to the player that purchases them. Each Location has at most one normal tile, and one special tile.

The TileBag has all other tiles that are currently not in the game. The Game fills the rack of a player with tiles from TileBag. When the Game exchanges some tiles of a player or when some tiles are removed from the Board due to the effect of special tile, the removed tiles will return to the TileBag.

A Dictionary consists of a list of words extracted from a standard Scrabble dictionary. It is immutable and only used to check whether a word is valid.

To sum up, the Game control the game and other classes can only manage their own information. GUI will associate with the Game.