

Game

| Responsibilities | Collaborators |
|---|---|
| <ul style="list-style-type: none">• Runs the game• Oversees player interaction | <ul style="list-style-type: none">• Board• Turn• Player |

Board

Responsibilities

- Model of the cluedo board
- Is a 2D array of BoardTiles

Collaborators

- BoardTile

BoardTile

Responsibilities

- Abstract class
- The board is made up of many BoardTiles
- A BoardTile is either a Hallway tile, a Door tile, or a Room tile.

Collaborators

- Character

Room

Responsibilities

- Represents a room on the board
- All spaces in the 2D array for the room contain the same room object
- Can have characters or weapons inside it

Collaborators

- Character
- Weapon

Door

Responsibilities

- Acts as a link between a Hallway tile and a Room
- Players can only enter a room through the door (unless they are summoned because of a suggestion).

Collaborators

- Room
- Hallway

Hallway

| Responsibilities | Collaborators |
|---|--|
| <ul style="list-style-type: none">• Acts as nodes between rooms• Players must traverse through Hallway tiles until they run out of moves or reach a Room | <ul style="list-style-type: none">• Door |

GameObject

Responsibilities

- Abstract class for objects that have positions on the board

Collaborators

- Board

Character

Responsibilities

- Represents the characters of the game (Scarlett, Plum etc).
- Each has a name, and position on the board

Collaborators

- Board
- BoardTile

Guess

Responsibilities

- Represents a 'suggestion' that a player makes while in a room.
- Has a room, weapon and character.
- There is a special case of a Guess which is the murder evidence, if a suggestion matches the evidence, the player wins the game

Collaborators

- Room
- Weapon
- Character
- Player

Player

Responsibilities

- A user controlled character that plays the game
- Has the identity of one of the six characters
- Controls character movement around board
- Makes guesses when in rooms

Collaborators

- Game
- Guess
- Board

Turn

Responsibilities

- Represents one 'revolution' around the game players.
- Each player rolls the dice, chooses where to move, and makes a suggestion if they are in a room

Collaborators

- Player

Weapon

Responsibilities

- Represents the nine weapons that could have been used for the murder.
- Each weapon is located in a room

Collaborators

- Room
- Guess