SWEN225 Assignment 1 CRC Cards

| CluedoGame | |
|---|---|
| Let players select characters | Player |
| Make sure there are 3 - 6 players | Board |
| Creates board | WeaponCard |
| Distributes cards to players, and keeps track of which player has which cards | CharacterCard |
| Takes in user input for movement/suggestion/accusation | RoomCard |
| Print output | Exceptions |
| Knows when the player's turn ends | |
| Knows whether the player is still in the game (incorrect accusation) | |
| Knows the solution (murder who what and where) | |
| No duplicates of anything | |
| No moving diagonally | |
| Cannot skip tiles | |
| No moving through tile twice in a turn | |
| If someone is standing in one tile, no other player can walk onto this tile | |
| Player can only make suggestions from rooms, and the suggested room must be this room | |
| When an suggestion is made, the person on the left must show one card from the suggested scenario (if they have it ) | |
| Player cannot be out of bounds, and cannot walk into inaccessible tiles (walls) | |

| Board | |
|---|---|
| Placement of all tiles | Tile |
| Starting position of all characters | Player |
| Knows where players are after each turn | Characters |
| Which player is which character | InaccessableTile |
| | Exceptions |

| Tile | |
|---|---|
| Coordinates | Player |
| Knows which player is standing on it | Exceptions |

| InaccessableTile | |
|---|---|
| Extends Tile | Tile |
| Is inaccessible (players are unable to walk into the tile) | Exceptions |
| Coordinates | |

| Player | |
|---|---|
| Knows which character they are | WeaponCard |
| Owns a few cards (distributed at start of game) | RoomCard |
| Knows where on the board they are | CharacterCard |
| | Tile |
| | Exception |

| Card | |
|---|---|
| Interface for cards :) | WeaponCard |
| | RoomCard |
| | CharacterCard |

| WeaponCard | |
|---|---|
| Implements card | Card |
| Name (Pipe/Revolver/…) | |
| Which player has this card | |

| RoomCard | |
|---|---|
| Implements card<br><br>Name (Hall/Library/…) | Card |

| CharacterCard | |
|---|---|
| Implements card<br><br>Name (Plum/Scarlet/…) | Card |

| Exceptions | |
|---|---|
| Out of bounds<br><br>Moving through walls<br><br>Not this person's turn<br><br>Blocked by someone<br><br>Not enough players<br><br>Incorrect suggestions<br><br>Incorrect character name | |

| Card Tuple | |
|---|---|
| Used for suggestions, accusations and the solution | WeaponCard<br><br>CharacterCard<br><br>RoomCard |