

Player

Attack an enemy character

Pick up treasure from enemy or the ground

Can check if about to hit a wall.

Dies if health goes to 0

Wins if player survives through round 3

Number of responsibilities: 6

Maze

Enemy

Treasure

Game

Number of Collaborators: 4

Enemy

Attacks player

Drops treasure (certain probability)

Dies if health goes to zero

Player

Maze

Game

Treasure

Number of Responsibilities: 3

Number of Collaborators: 4

Maze

Generated by the Maze Generator

Keeps track of what level player is on.

Holds locations of everything.

Checks if the player is on the winning spot.

Maze Generator

Tile

Game

Number of Collaborators: 5

Number of Responsibilities: 3

Maze Generator

Creates the mazes

Maze

Checks if the player can get to the end of the maze (Flood Fill Method).

Outputs each maze to a .txt file.

Number of Responsibilities: 3

Number of Collaborators: 1

Treasure

Increases the stats of the player based on the type.

Can be dropped by enemy or found on the floor of the maze

Maze

Player

Enemy

Game

Maze Generator

Number of Responsibilities: 2

Number of Collaborators: 5

Weapon

Compares with the weapon of the player to see if the weapon is better than the player's

Player
Tile

Increases stats of the player.

Creates Unique Weapon

Number of Collaborators: 1

Number of Responsibilities: 2

Game

Runs the processes of the game

Manages the player, enemies, mazes, and treasure

Checks for winning and losing conditions using objects within the class.

Maze

Maze Generator

Player

Enemy

Treasure

Number of Responsibilities: 3

Number of Collaborators: 5

Tile

Holds player, weapon, treasure, or enemies.

Allows player to exit to the next level.

Number of Responsibilities: 2

Maze

Maze Generator

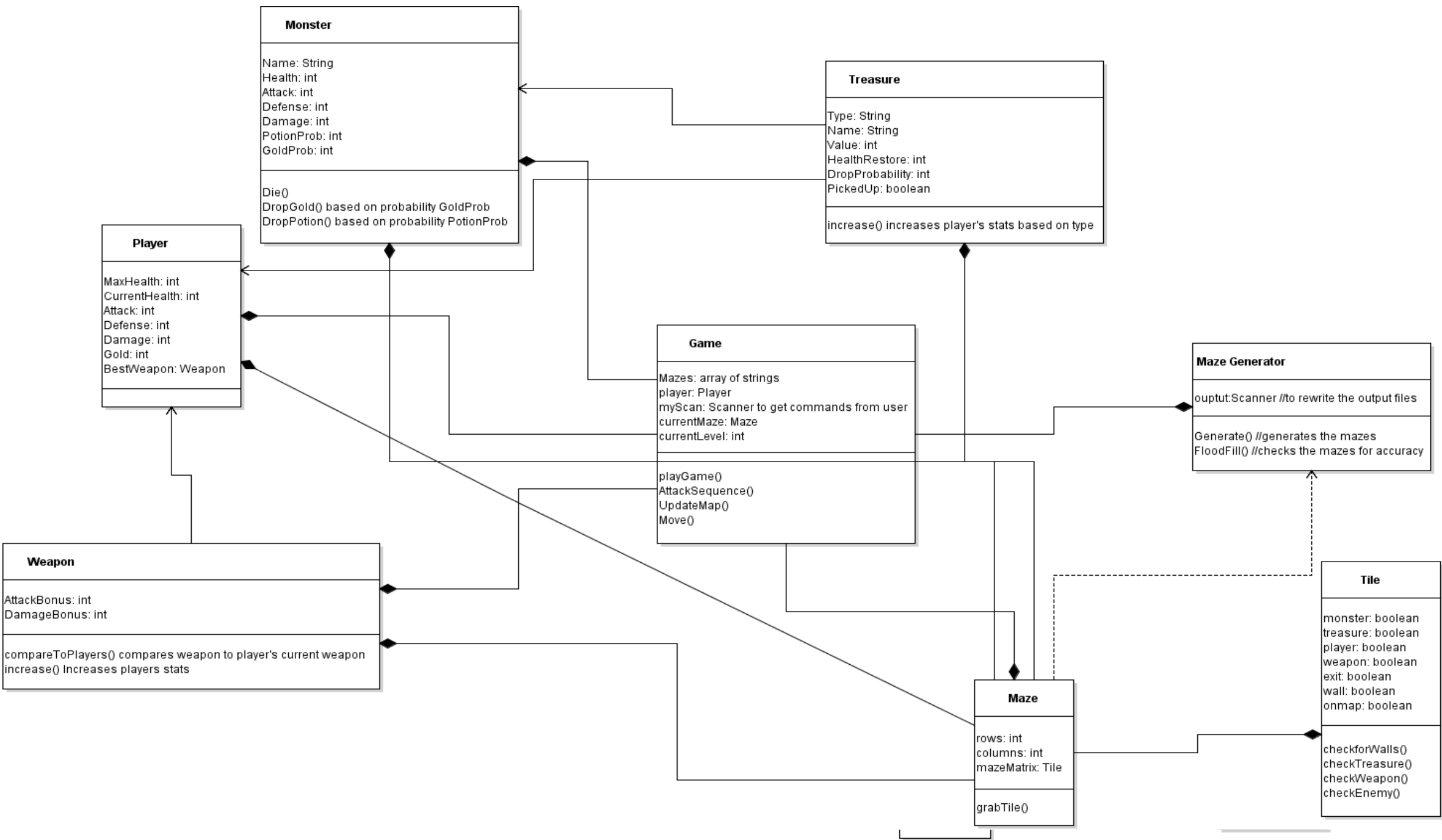
Player

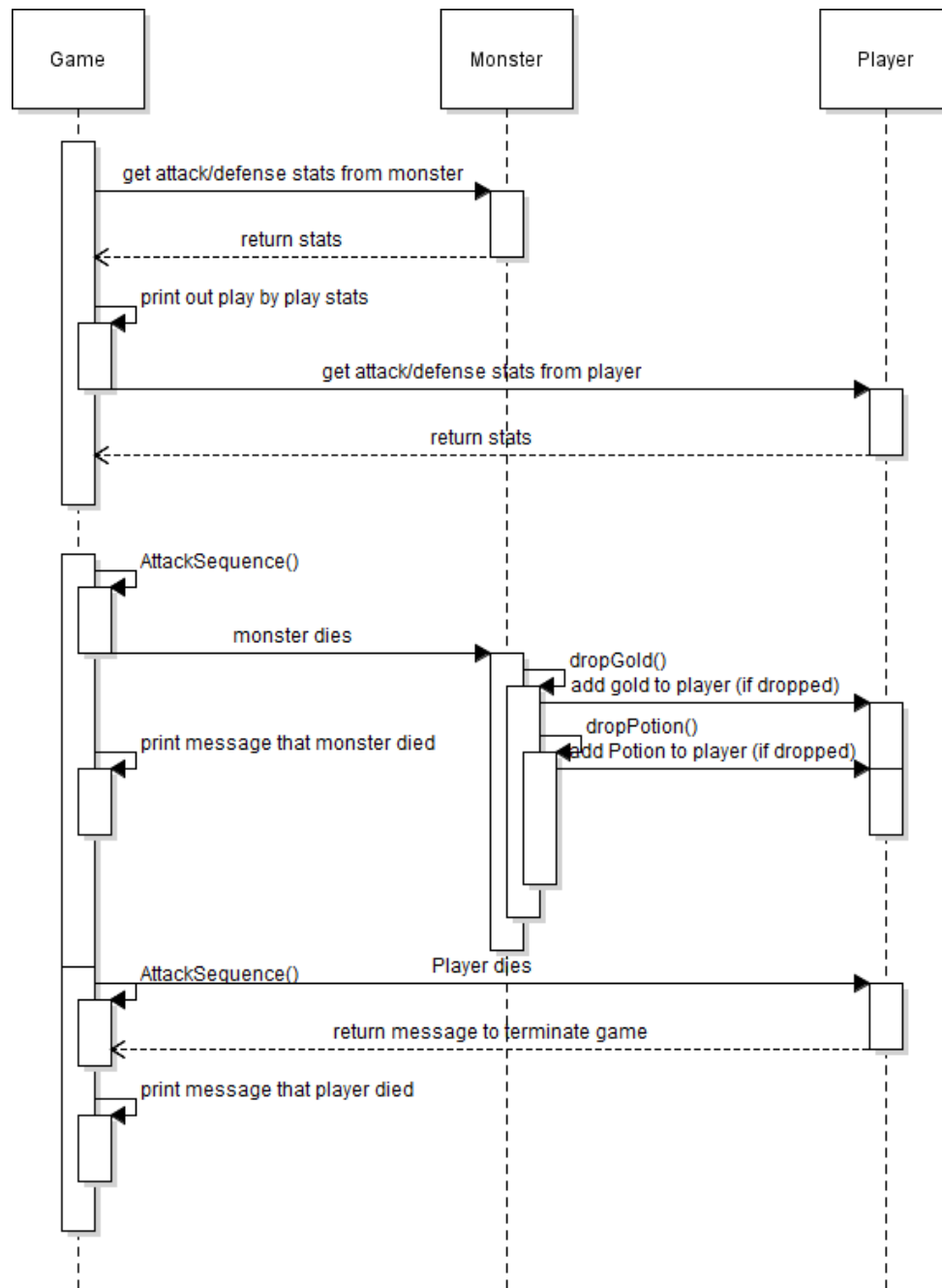
Weapon

Treasure

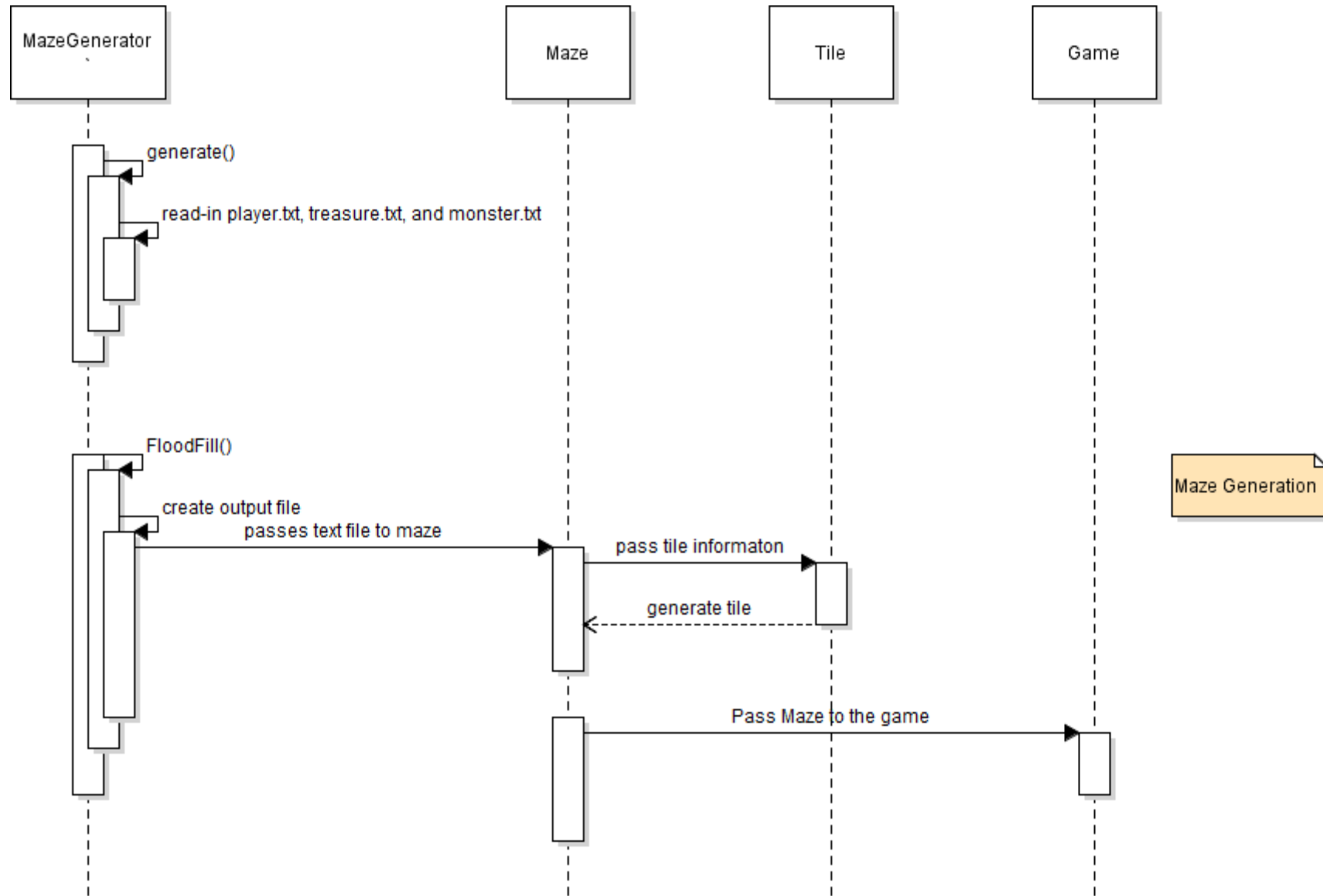
Enemy

Number of Collaborators: 6

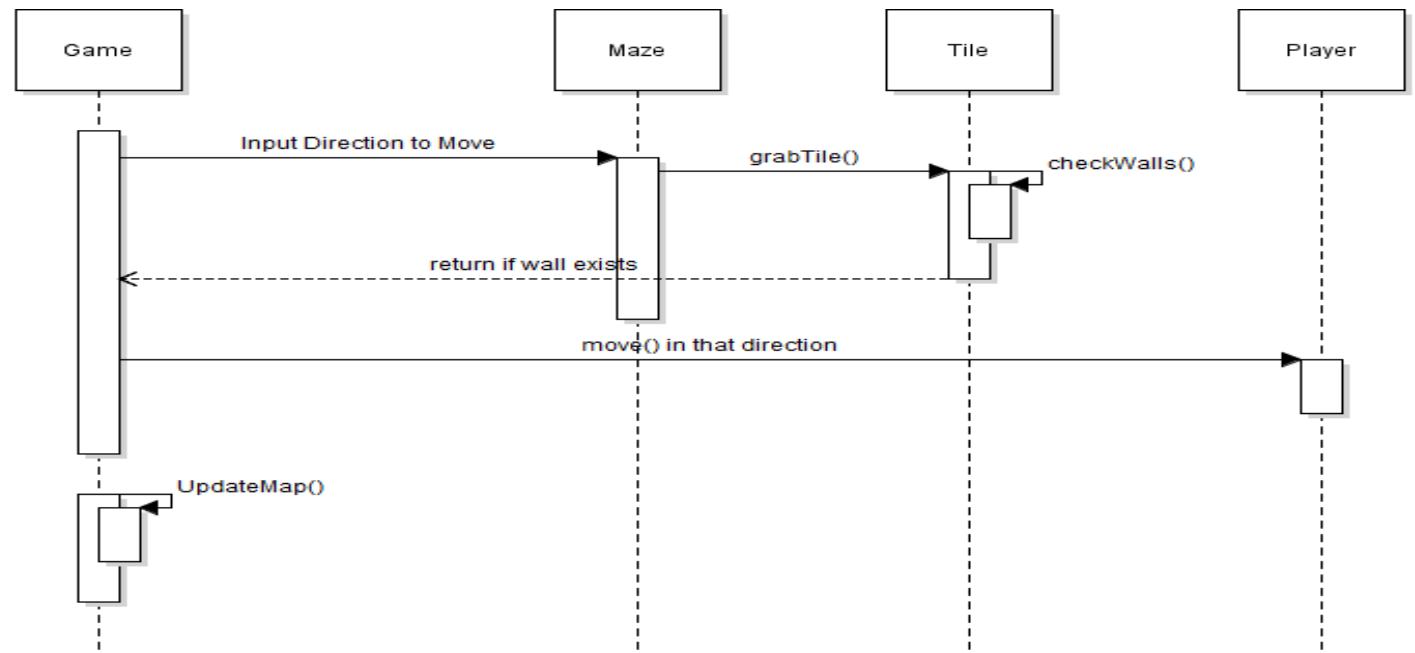




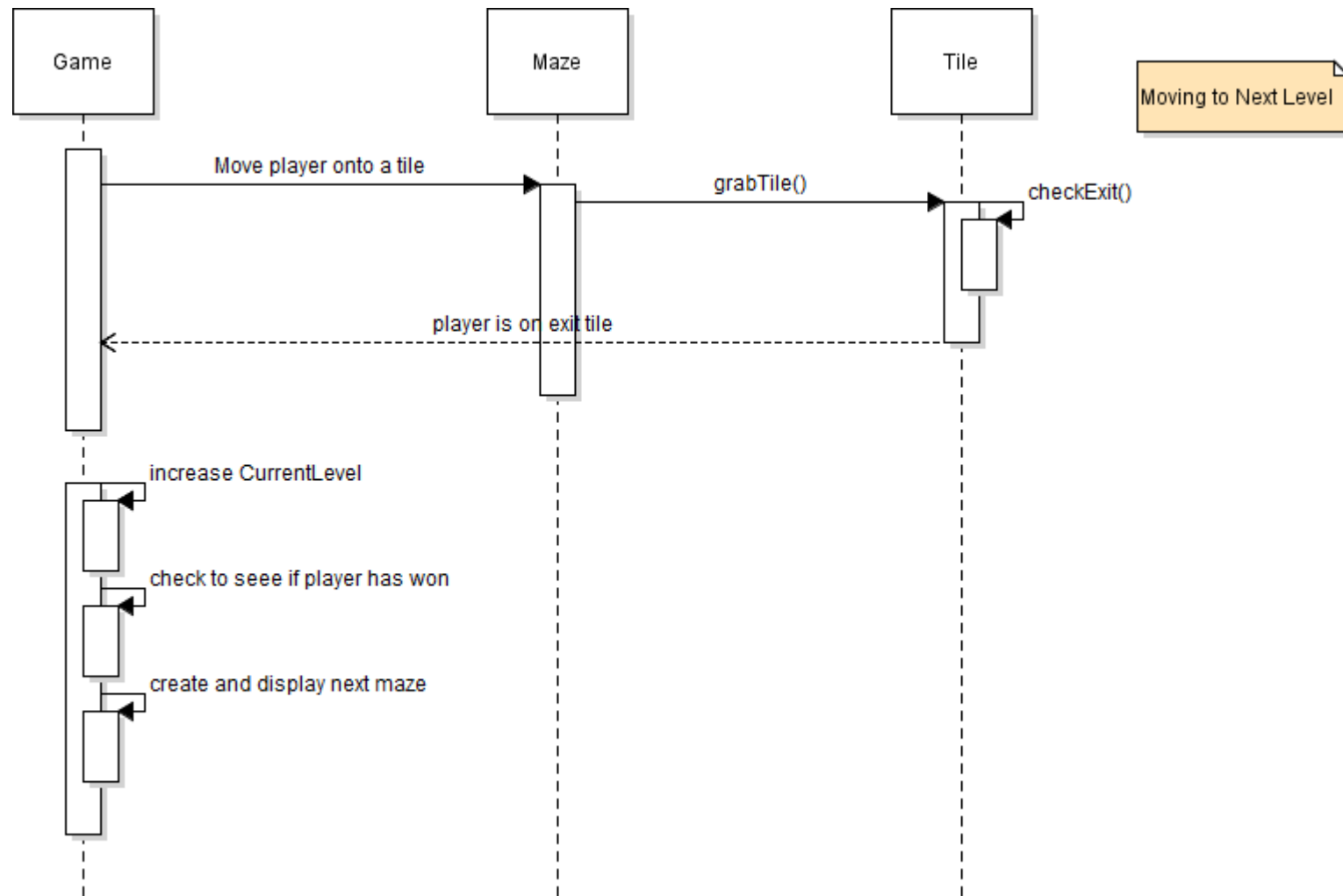
Sequence for Player and Enemy Attacking

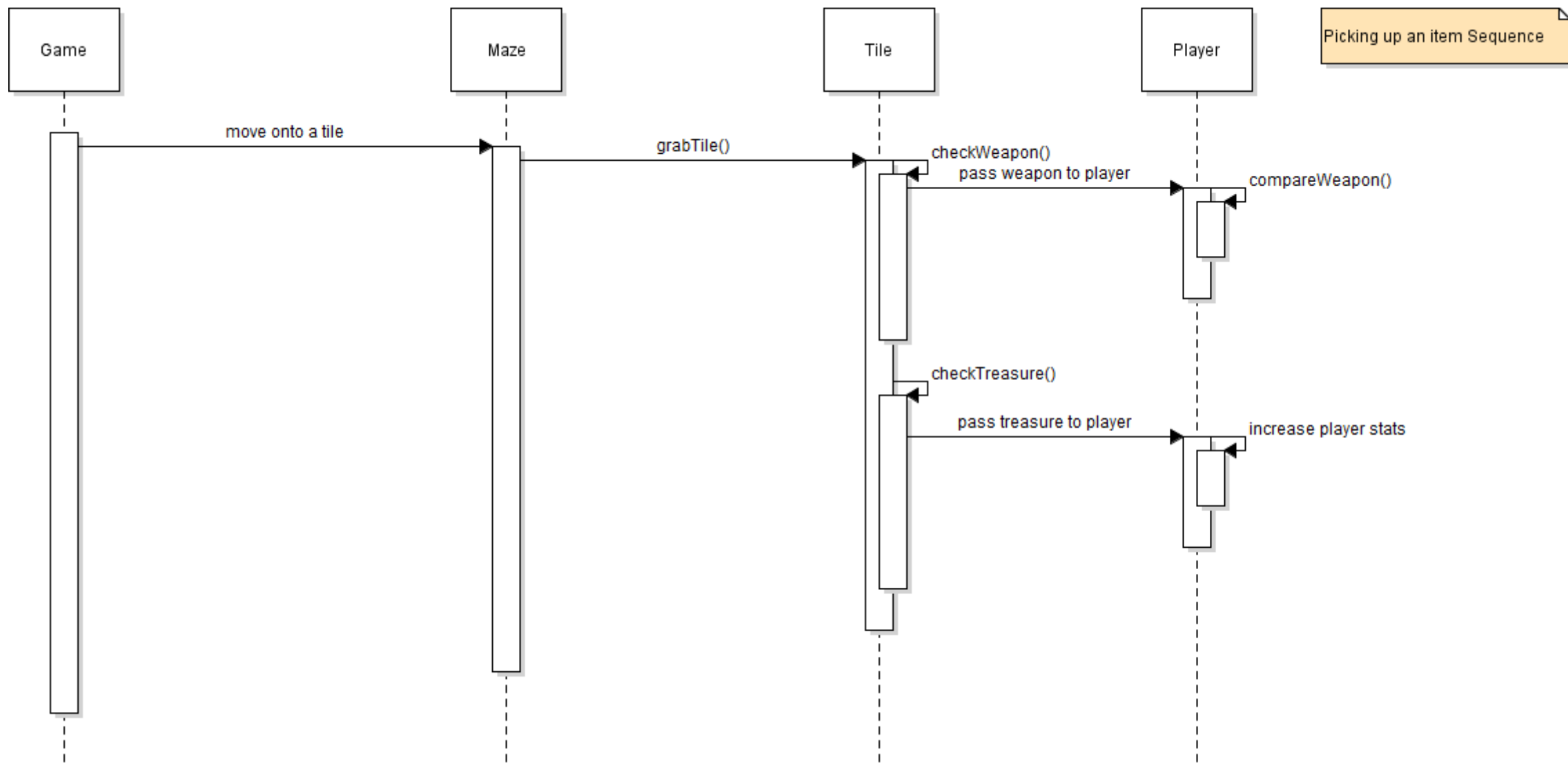


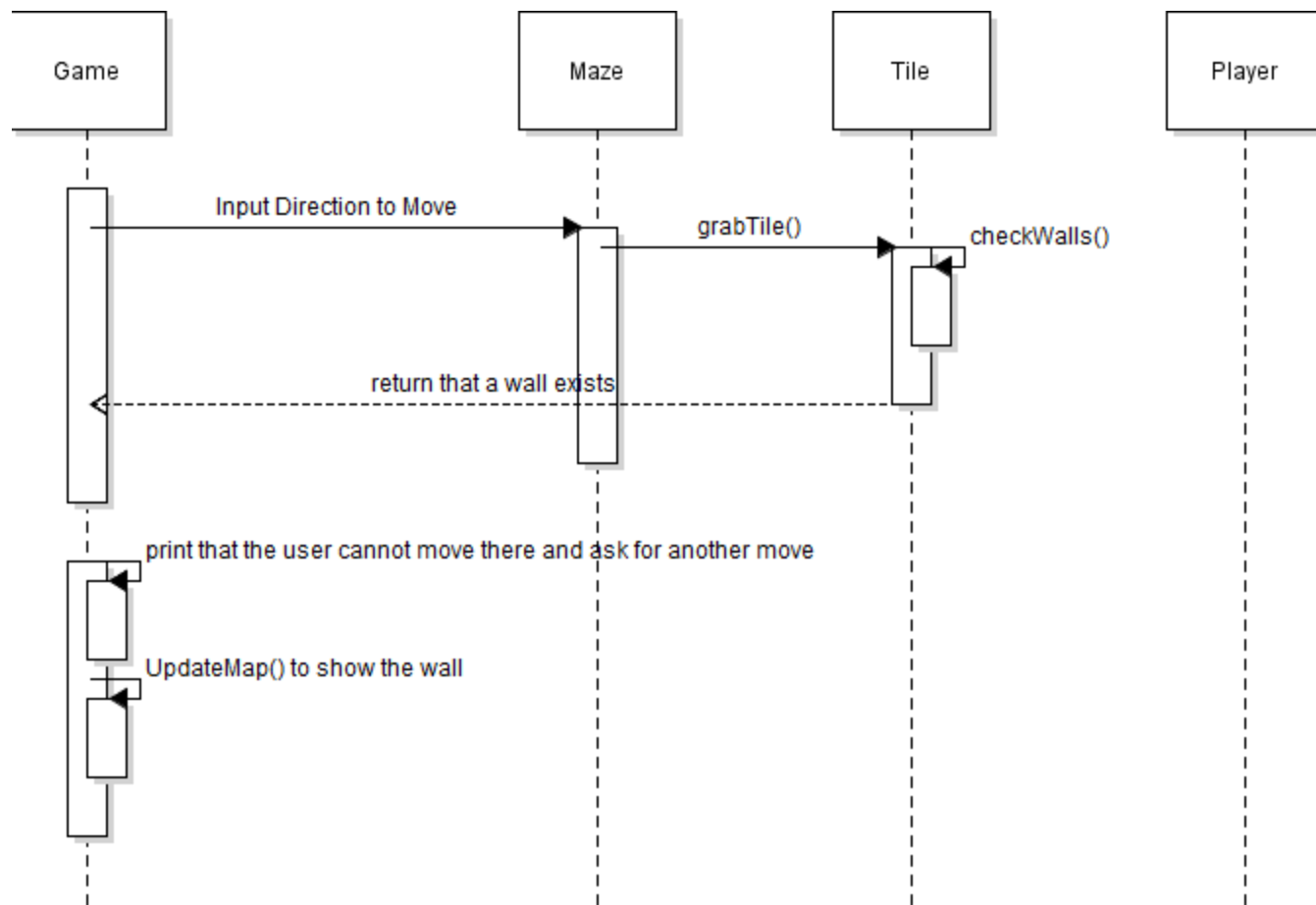
Movement Plus Map redraw Sequence Diagram



Sequence for Moving a player







Run into a wall and Updating Map Sequence Diagram