

Recnplay

The way the game play is recorded is by saving the maze, and player's data inside of a JSON file, that is by storing the initial layout of the maze as a JSON object first, as well as each move that the player makes as multiple JSON objects, all of which would be stored inside of a JSON array, and when the player finishes the level, or closes the game, the file corresponding to that level's game play would be saved, and another file will be created to store the next game play. Furthermore, when the player chooses to replay a recording, they will be asked to choose a file to replay. After that, the maze's layout will be extracted from the JSON file, and a maze object will be created with the given layout; moreover, the player's movement will also be retrieved and stored in an ArrayList; such that, the element in the first position would correspond to the first move that the player made, so whenever the player presses the button to go forward, the next move in the ArrayList would be applied to the maze object. On the other hand, displaying previous moves is not as straight forward, as the way it works is by going through the initial movement array and getting the opposite of each move that was taken by the player; for example, if a recorded move translates to the letter "w" in the original movement array, then an "s" would be added to that previous moves' list to simulate movement in the opposite direction.