

Note: Since this project uses assets, as well as a third-party library for JSON files, we had to zip the entire project folder. We had approval from Prof. Johnson to do this.

#### Summary:

This is an old Java game I wrote in 2019.

We're looking to improve the code quality and add features that were never finished. The end result should implement all the mechanics necessary for a Zelda-type game.

#### Collections:

In ParticleGenerator.java, there is a LinkedList for storing active particles. It was chosen because a LinkedList is efficient at removing elements in the middle.

In Room.java, there are HashMaps for identifying Tiles by their coordinates, and LinkedLists for storing Entities and Ttiles.

#### Changes:

We rewrote the logic for loading levels. It uses a node-based system of connecting rooms (as opposed to the previous grid-based system). This allows for greater customisability of rooms, and it makes the code more efficient. Prior to implementing this system, the way of loading large rooms was very convoluted. All the level files and dialogue files are stored in .json format.

#### New additions:

- .JSON file format-
  - For Rooms and dialogue

- Player Controls -
  - Add tutorial
  - W/S = forward backwards
  - A/D = rotates character
  - Escape accesses inventory
  - Add inventory management
  - Add a game over

- NPCs -
  - Different types of NPC
  - Idle unless provoked
  - Trader NPC with dialogue, buying/selling items
  - Drops coins if killed

- Multiple levels -
  - Scrolling screen on larger rooms
  - Game over screen when player dies
  - Fade in/fade out on level transition