

Learning Goals:

One aspect of the game we will focus on and learn about is adding music. When we first started developing the game, we thought about how background music in games positively impacts the experience. We also agreed on the fact that the sounds accompanying achievements in games encourage players to play more and engage with the game. Therefore, we added background music to the start screen to set the atmosphere of our game and incorporated sound effects as we made progress in the game. We even added a slide bar to manage volume at the start screen which affects the volume of the sound effects all throughout the game.

Related resources: [How to play sound in Java | 100% best for beginners](#)

<https://docs.oracle.com/javase/8/docs/api/index.html?javax/sound/sampled/AudioInputStream.html>

Another learning goal of ours was screen design. Throughout the game development, we tried to make each element of our screen intentional. From each item to our beloved character itself, the game consists of pixel art that we made. The layout was also carefully designed by us. Our upper left corner of the screen is reserved for notifying our player. The top left consists of lever, timer and customer request information. These added features allow the player to follow the game actively. In the lower right corner of the screen, there is an inventory slot to track what the character has in its hand. You can also see the item you have by dropping it on the ground and picking it up but the inventory increases the comfort of the player. At the same time, there are stations at certain points of the screen where we can process and receive objects. We chose the positions of these stations strategically spread out to make the game play somewhat challenging while also manageable. From the symbols on top of these stations you can easily decipher what item you will get from using it. The stations to cut items and combine them are also self explanatory, but just in case of any confusion we explained them in our rules section of our start screen.

Related resources: <https://www.guru99.com/java-swing-gui.html>

Other Resources Used:

Our main source of inspiration was the series “How to Make a 2D Game in Java” from “RyiSnow”. He builds a pixel art game in which we learned the basics such as keybinds and map creation. However, since he made a game in which he fights monsters for loot, we had to derive information regarding topics such as object pick up and adjust it for our game.

https://www.youtube.com/watch?v=om59cwR7psI&list=PL_QPQmz5C6WUF-pOQDsbsKbaBZqXj4qSq

Handling items was one of the main technical focus points for this project. We had to learn how to pick up an item if the player is in range, how to place it at the position of the player or on top of a station tile if within range. We also created basic logical algorithms for recipes and specific them in our rules section. For instance, to create a doner-wrap with lettuce, the player had to first create a simple wrap with doner meat then add the processed item cut lettuce to it. We adjusted the information online to fit our needs.

Related resources:

https://www.youtube.com/watch?v=RoNr6opGjWc&list=PL_QPQmz5C6WUF-pOQDsbsKbaBZqXj4qSq&index=36

https://www.youtube.com/watch?v=H23OmhqLo3E&list=PL_QPQmz5C6WUF-pOQDsbsKbaBZqXj4qSq&index=37