1. How to run this program:

Before running this program, make sure you have Java and JavaFX environments.

Note that we will initially have 6 items in our map:

"Key": C5.

"Compass": D4.

"Bow": B2.

"Old Man": C1.

"Boss": B5.

"Triforce Piece": B6.

"Map": C3.

When running the program, first you need to enter a name for the player, and click on the button, you will go to a new main page.

For this program, the Player class would has “items” List to store the items he already gets. The puzzles would be stored at the “MapOfTheEagle” class, and the inventory will also be in the “MapOfTheEagle” class, which is a tree structure (“StringBinarySearchTree” class). The items will be placed at the map, and once the player go to one coordinate (X is from “A” to “F”, and Y is from 1 to 6), he will get the item. Since I already set all attributes in “MapOfTheEagle” class static, the puzzles and the inventory can be manipulated by user (via adding items).

At first, you are at the entrance. You can go to a place (X is from “A” to “F”, and Y is from 1 to 6). If there is an item in that place, you will get the item and the label will show the item you get.

You can also add item. If the item is already existed on the map or the position you enter already has an item, you will not add the item successfully.

2. What is easy and what is challenging

I think designing a UI interface is easy because through the mid term project, I am familiar with how to design a UI interface.

The difficult thing is that the logic of the game. We should consider how to add item in the game, and we need to make sure the relationship between the position and the item. We do not allow the duplicated item exists.

I do not need to change something about something surprising. I am a little surprised about the convenience of JavaFX.