CMPT 276 Project phrase 2 group 19

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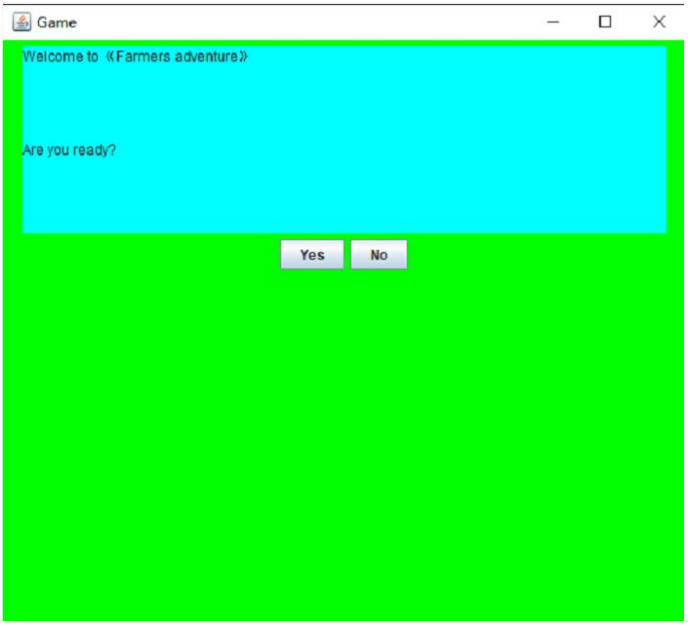
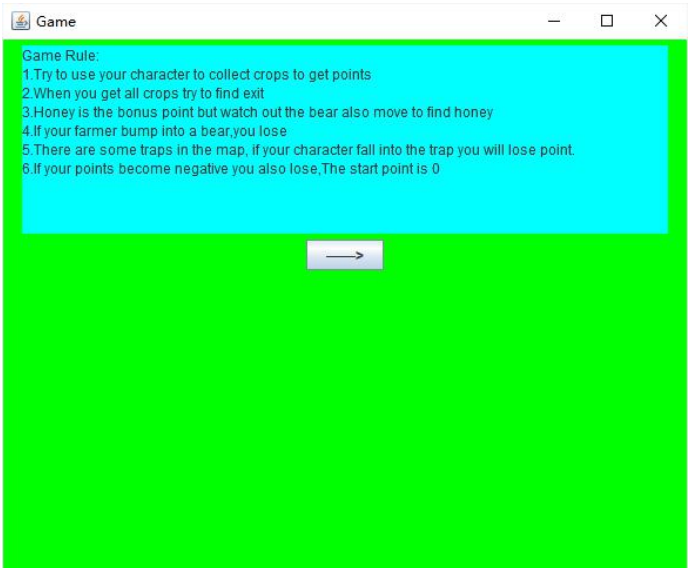
1. The overall approach to implementing the game

First, we need to enter the game interface and make the game run. The composition logic of the initial interface should be similar to phrase1.

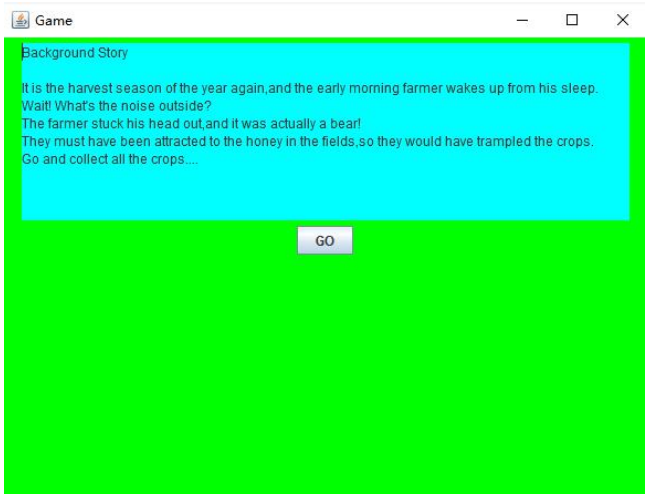
(The start interface)



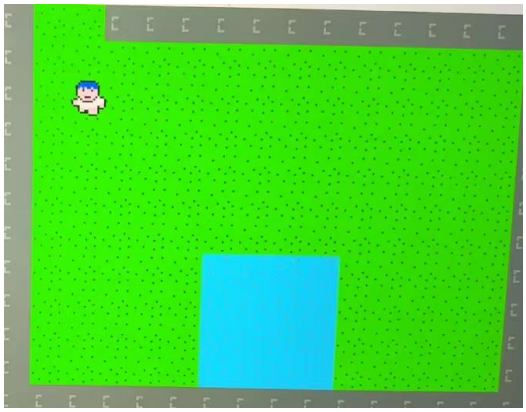
(Game rule)



(Background story)

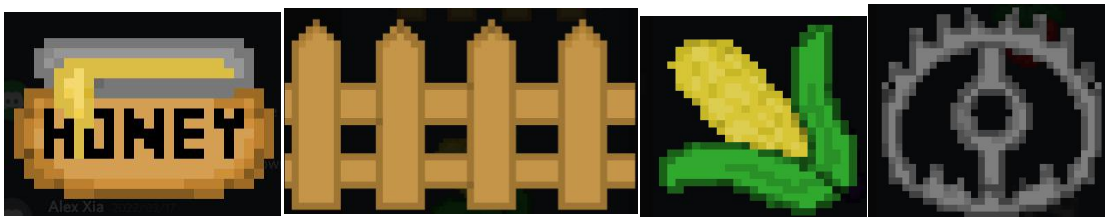


And then we will let user to enter our game, the game interface will like this and the user will following the rule to try win the game, WASD is basic rule to control the character.

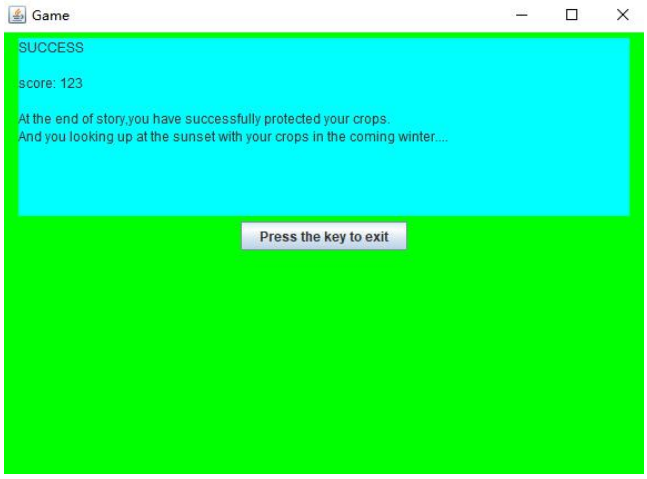


The icon of the main character is like:

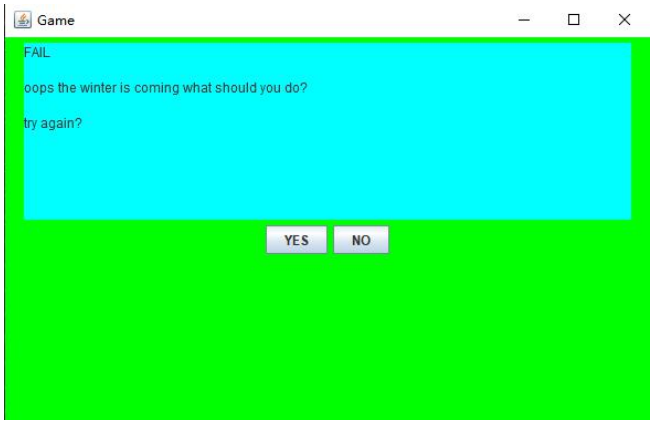
And the icon in the map is like



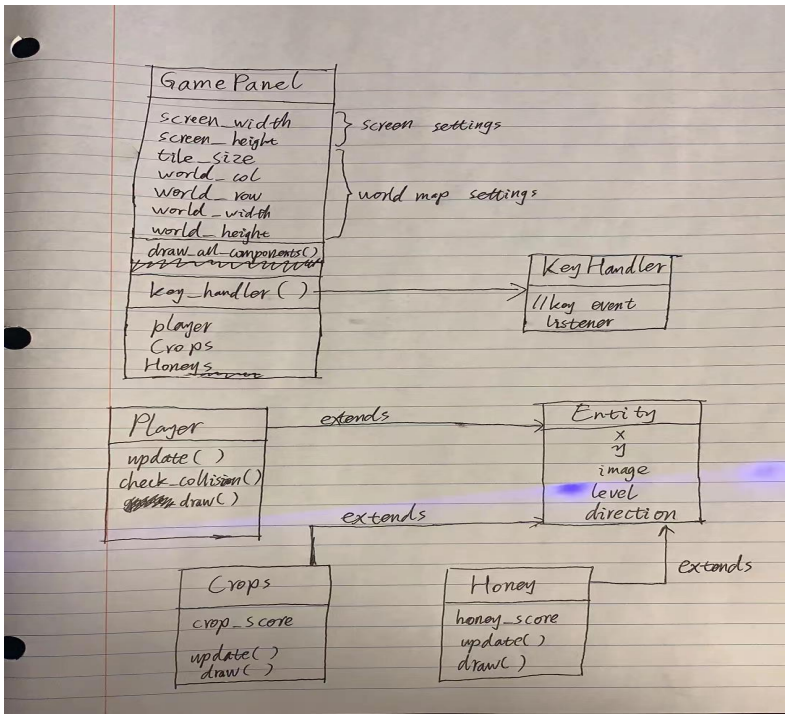
Then the user will play the game, if user win the game, the game will tell user that he/she win then press the button to exit the game.



If the user lose the game(the point is become negative) the new window will came out and ask user if they want to play again. If yes then game will back to map, if no it will exit the game.



2. State and justify the adjustments and modifications to the initial design of the project (shown in class diagrams and use cases from Phase 1)



As shown in the class diagram, the design remains the same with our initial design except the GamePanel class. We found out we need a class to hold all component for our program. In this way, we can take an GamePanel as an argument when creating an instance of Player, which would help us to develop our game logic.

3. management process of this phase and the division of roles and responsibilities

In this phrase we think that we need to construct a general map interface that the user needs first. This part is completed by ZiHan. Then in the code, we need to make the characters move and need to make judgments in different situations. The design of the enemy task is by Jooyoung Completed together with HAIZHOU, and the judgment in different situations is completed by HAIZHOU. The coordinates of the characters and the coordinates of the different judgments are drawn by Jooyoung. After that, the UI of the other initial interfaces and the completed UI that we need will be built by ZHEQI, and will lead to write this report.

4.
For GUI we use:
Import java.awt.event.*
Import java.awt.Graphics2D
Import java.awt.*
Import java.swing.*

5.
1) Test the code that make sure there will no serious bug, and modify the logic and judgment of the code through the results of continuous test runs.

2) Try to increase the readability of our code that let others can understand what we do here.

3) Try to decrease the repeat part that let the code more shorter.

6.
The biggest challenges is how to connect each part of this game, and how to determinate the character in each situation, and how to add the icons into our game. If the user lose and want to try again, how to let he/she to go back to the map interface.

First problem we had is how to make the character animation. The initial approach is just draw() each frame with loaded pictures, which is a static image that have no animation. We achieved this goal by use 8 different images, 2 different poses for each directions.

We are still having issues with our coordinate calculations. The design for now is character moves in tiles, but the back ground canvas is calculated by pixels. Our goal is to make all objects follow the tile design. We are making progress on this issue and will improve this in the next phase.

The biggest challenge we had is to “repaint” the whole GUI as character always in the middle of the screen. Because this design would allow us to have a much larger map. In order to make this work, we have to recalculate all game objects’ coordinates based on character’s position and re-draw them after each step the character moves. After 2 days of struggle on reconstructing the whole code and debugging, we discarded this idea due to limited time. Now we are keeping the game design that all game objects moved according to their own coordinates like the Pacman game.