CS 319 - Object-Oriented Software Engineering

Final Report

Battle City

Group 1-B

Kaan Sancak

Mahin Khankishizade

Ozan Kerem Devamlı

Teymur Bakhishli

Supervisor: Ugur Dogrusoz

1. Implementation

After the second stage of the first iteration, we immediately started the implementation process. We implemented our code with the help of IntelliJ and uploaded our code to the GitHub, which was created in the beginning of the course. IntelliJ has many advantages. The main advantage of it is – the program is directly connected to GitHub, has an access to the classes of the written/created project. In addition, it is possible to pull and push, which came very handy for us. The process of updating the code was as following: first, we would commit the new code, then pull the old code and push the new code. In the end of the process, we would merge all the codes written.

The implementation was not divided from the first steps, we decided to try the classes which are easy for each of us individually. Thus, at first, Kaan implemented the basic structures of all classes. Later, Ozan and Mahin added methods to them. After this point, we divided the classes and tried to implement it more detailly by ourselves. For example, Kaan implemented the Menu, FileManager, CollisionManager etc. classes detailly. Ozan worked with Map, MapManager, GameManager and other important classes. Mahin implemented the Settings, PauseMenu and other needed classes. However, there were times when we needed each other's help, so we would skype and code all together.

Since we had the idea about the classes from the design stage, it was not difficult to implement the code. Nevertheless, there were some logic problems in our diagram. For example, we forgot to add PauseMenu class to the diagram, or we divided the Settings into two classes, when it could be implemented as one. Thus, working in the group all together helped us to realize our mistakes and improve them. Unfortunately, we did not have enough free time to meet in person regularly, since we all had full weeks as the deadline was approaching. Thus, there were days we could not focus on the code. That's why we could not complete it fully till the deadline.

Below are the things we could finish for the deadline:
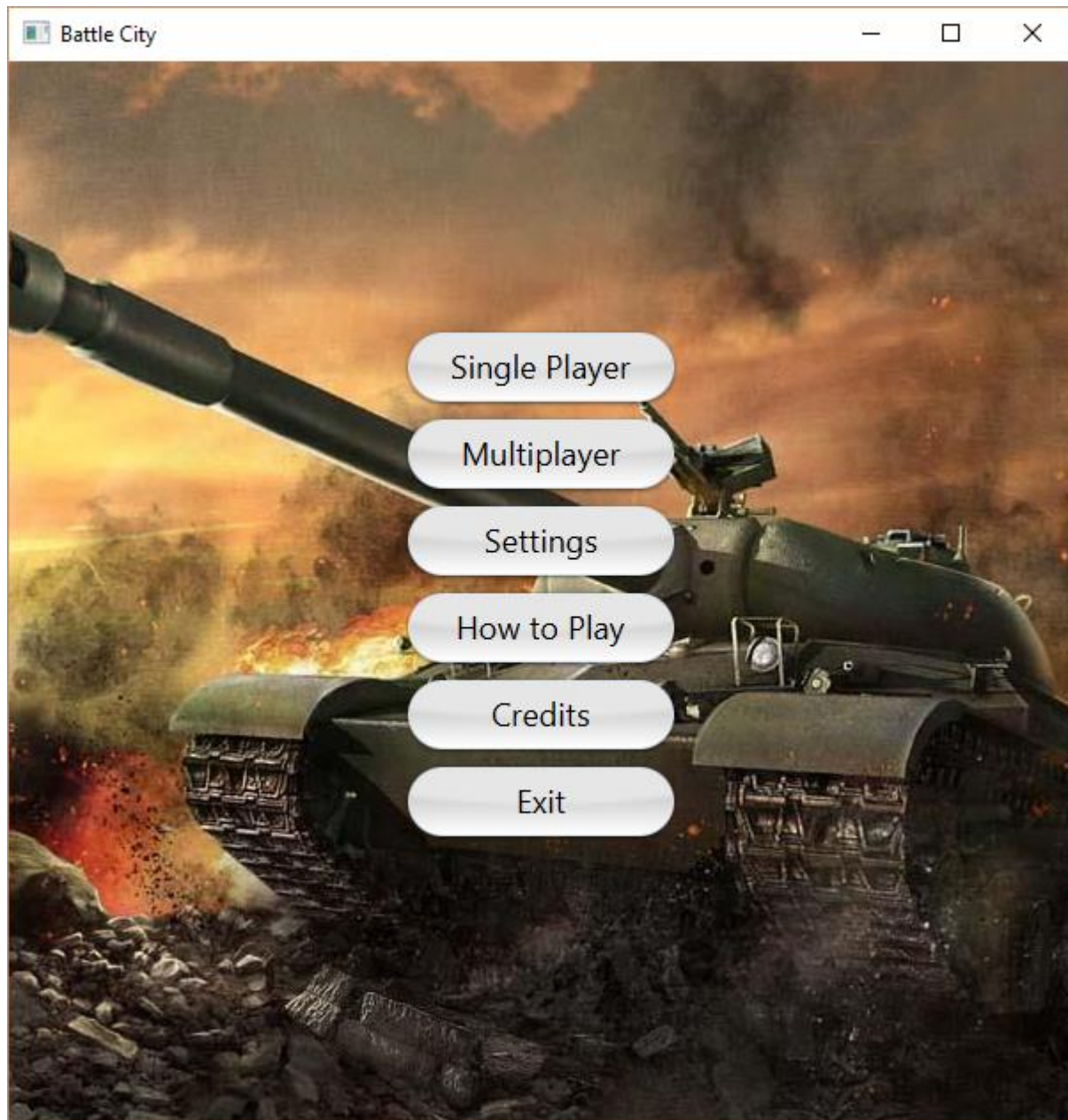
Menu frame is completed, by clicking each button, the user will be able to play, change settings, read how to play and credits. The user may exit the game with the exit button. In addition, when the mouse is approached to the button it becomes darker, as in the picture below. We managed to do it with the help of css.
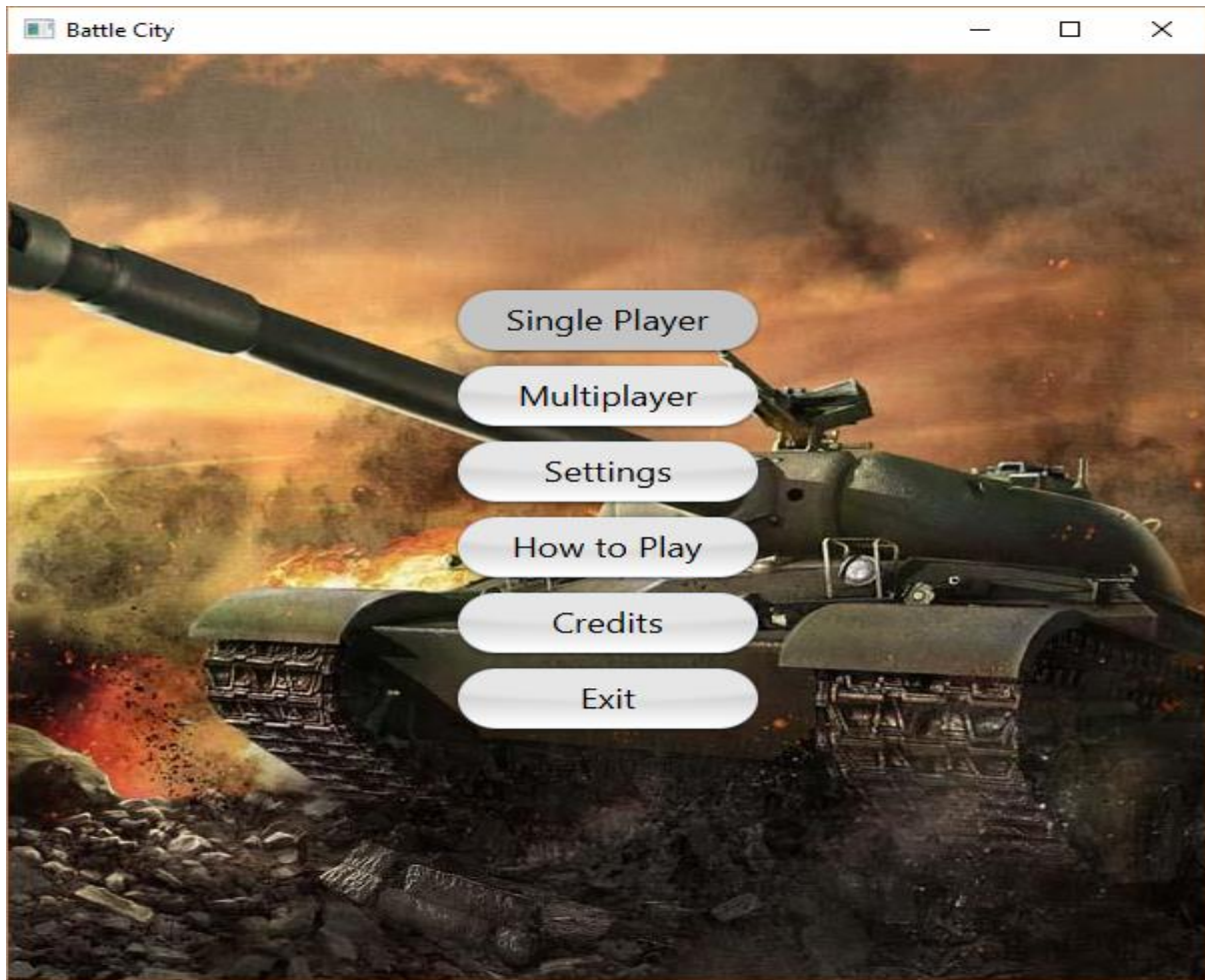
When the options button is pressed, user enters the options frame. Here, the user will be able to mute, unmute the song, choose the song to play, change the key list for each user, submit the changes etc. The interface of Options is not as good as in Menu, but we have an idea of it, thus we focused on the game itself.
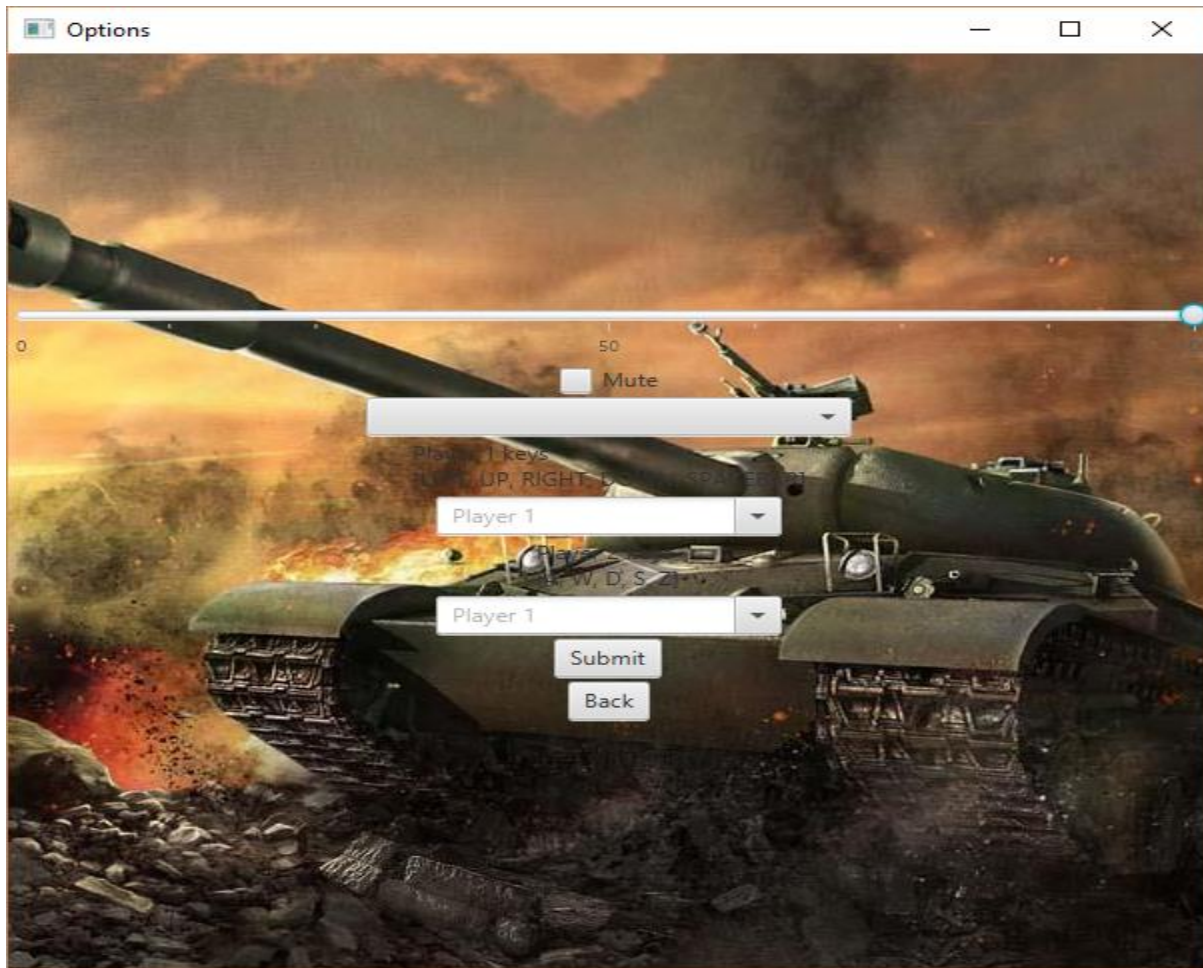
When the exit button is pressed the confirmation box appears to make sure if the user

really wants to quit the game, as following:
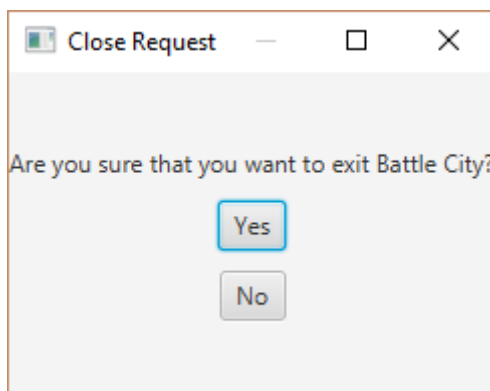
The game itself appears as below:
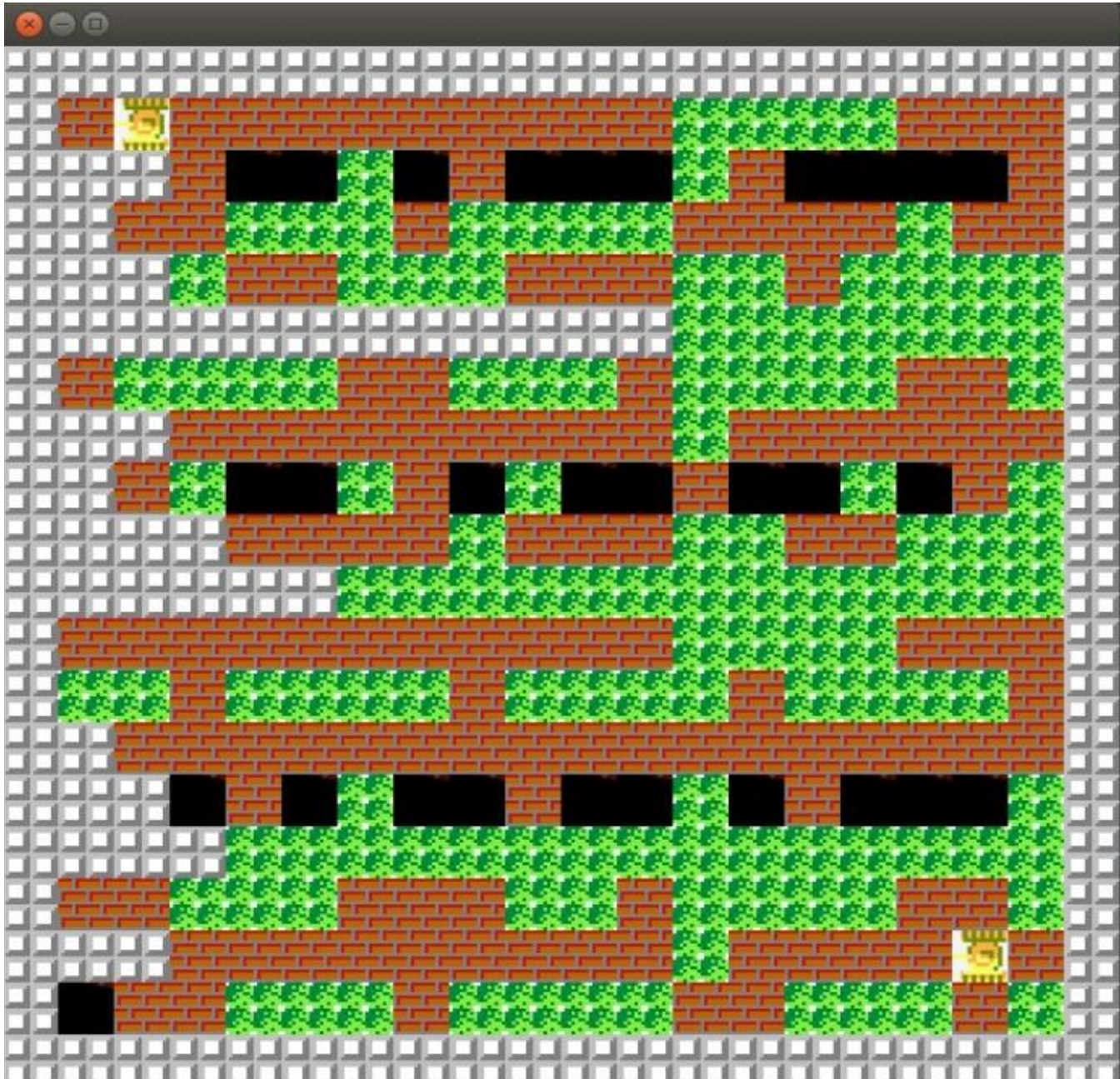
We could not finish the game and some user interface details are missing, however we have learned how to work with IntellliJ, GitHub, javafx, css etc. We will try to finish the game for the next iteration.