ANGRY BIRDS

Vadim Kuznetsov 907271

Aleksander Truss 994925

Shahram Barai 729983

Isroilkhon Salikhodjaev 783437

12.12.2021

1.   PROJECT OVERVIEW

Project is based on game of Finnish company Rovio. As original game our project uses 2DBOX library, which simulate physics for 2d objects.

The gameplay is very simple. The goal of the original game is kill all pigs on map, by shooting birds at them using catapult. Catapult is controlled with mouse. Difficulty of level is based on number of given birds and forts that defend pigs.

Our project has basic features given in project description.

The game is created using Microsoft Visual Studio 2022. All codes for project are written on C++ language, which is later compiled by Visual Studio to be launched from EXE-file.

After launching file, a window opens. In window user can see main menu where he can choose one of three levels. After level is chosen its map gets shown. Player can shoot birds like in original game.

Also, there are click-buttons to restart level and return to main menu.

2.MANUAL

Launch EXE-file to launch the game.

To Close game click "Lower left button"

Click "Play Button" to see available levels.

Choose wanted level by clicking on one of three given buttons

To Return to level choosing click left button.

To restart level click right button.

Press left mouse button and move mouse to wanted direction and release button to launch bird.

3.USED LIBRARIES

Project uses only two libraries – SFML and 2DBOX. 2DBOX is used to simulate physics of game objects, like falling and colliding. SFML is used to visualize menu and connect textures to objects from 2DBOX.

4. FILES

Project uses only PNG-files for textures and TXT-files for building levels. TXT-files contain only numbers. Each row represents one object of level. First numbers represents object id, which is 10 for bird, 20 for box and 30 for pig. Four next numbers are width, height and coordinates.

5. KNOWN PROBLEMS

We had no time to code simple "Simple user interface that shows information such as points and throwables left, enemies left." and "At least 1 bird with a special action, for example: speed boost or explosion."

All other basic features are completed.

6. DEVIATIONS FROM THE PLAN

As we all never coded in group before we had no division of labor. We could not get together at same time so we coded in small groups. We all had only in three last days of deadline. So we did not finished job before December as planned.

It was difficult to find tutorials for 2DBOX as they were done 6-8 years ago and library has changed in this years.

7. EVALUATION OF RESULT

It is a great job for project done in 3 days. Also only half of the team coded the biggest part of the program as the other half could not launch project in Visual Studio and we did not find out why.