IQ Puzzler

Final Report

Game Of Objects

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1.Introduction

So far, we have implemented the basic mechanisms of the game. We can drag our 12 different shapes into our grid area and check those positions on the grid if they are occupied. Additionally, we came up with our main menu and other panels such as settings, credits and how to play. We can go through all the panels we designed by clicking corresponding buttons. So far, we just designed the first level of the game in order to make sure that we implemented the functionality correctly. And we have seen there was no problem for playing the game, we could finish our first level. However, we have not implemented the whole functionality of the game yet. We do not have our timer in the game. Also, we have not implemented other levels and the part which enables shape to be rotated as well. Since we do not have those parts which will be used to save the statistical data, we couldn't record the statistics for the game.

2. Design Changes

We decided it would be best not to go for multiplayer mode, but rather focus on the single player mode instead since a multiplayer mode would not be playable. Apart from the multiplayer mode we also decided not to implement the 3D mode into the system for the first implementation of the project.

3. Lessons Learned

The first and most important lesson that we have learnt is dividing the work into smaller parts so that we can work efficiently. In other words, this project allowed us to work as a group, and dividing the work into small parts had huge impact on process. We could progress faster that we thought by working this way. We have learned using different IDEs, setting layout for the panel screens, passing through those panels and linking our objects with listeners. At this point, all of us have more knowledge about java GUI. It is because, most of the functionality consist of several java GUI elements. We used different libraries such as java swing and java awt.

4. User's Guide

IQ Puzzler is fairly easy to learn and enjoy. The new players will not need time to adapt to the game as it is designed in an intuitive and user-friendly way.

4.1 System-Requirements and Installation

IQ Puzzler will have considerably low system requirements as it does not depend on any pre-developed game engines or any other side algorithms. The game uses java swing and awt libraries to deliver a visual representation of the object-based game to the player. A basic java development kit, along with a java version above Java SE7, is used to compile and run the game.

The game will require no installation as it will be in a compact form. The final state of the game will be in a .jar form which can also run on numerous operating systems.

4.2 How to Use

When executed, game will begin with a main menu for the player to navigate. At first, the player can select the level to play by choosing "Level Select". Then, by pressing "Play Game", the player is presented with the actual game screen with a game grid at the bottom and the available shapes to place on top. The player can drag the shapes and leave them into the grid, assuming the release point consists of free spaces. If a misplacement is done, it can be reversed by clicking on the misplaced shape to return it to the top. A time is present on the top to indicate the remaining time left. When the game is over, either by completion or resigning, by using the “back” button, the user is returned to the main menu. There the player can access the statistics to see his statistics. “Options” is also with a variety of settings available to change, including the sound level, available time, background color and the screen size preferences.

4.3 Some Mockups

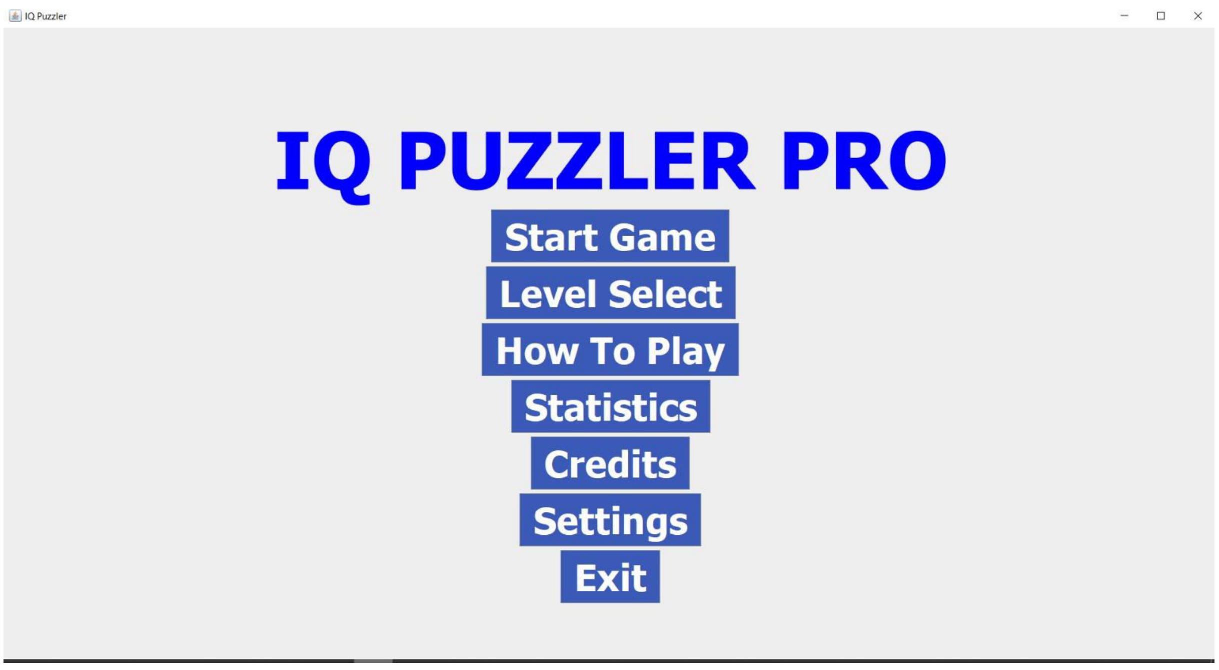


Fig1. Main Menu Screen

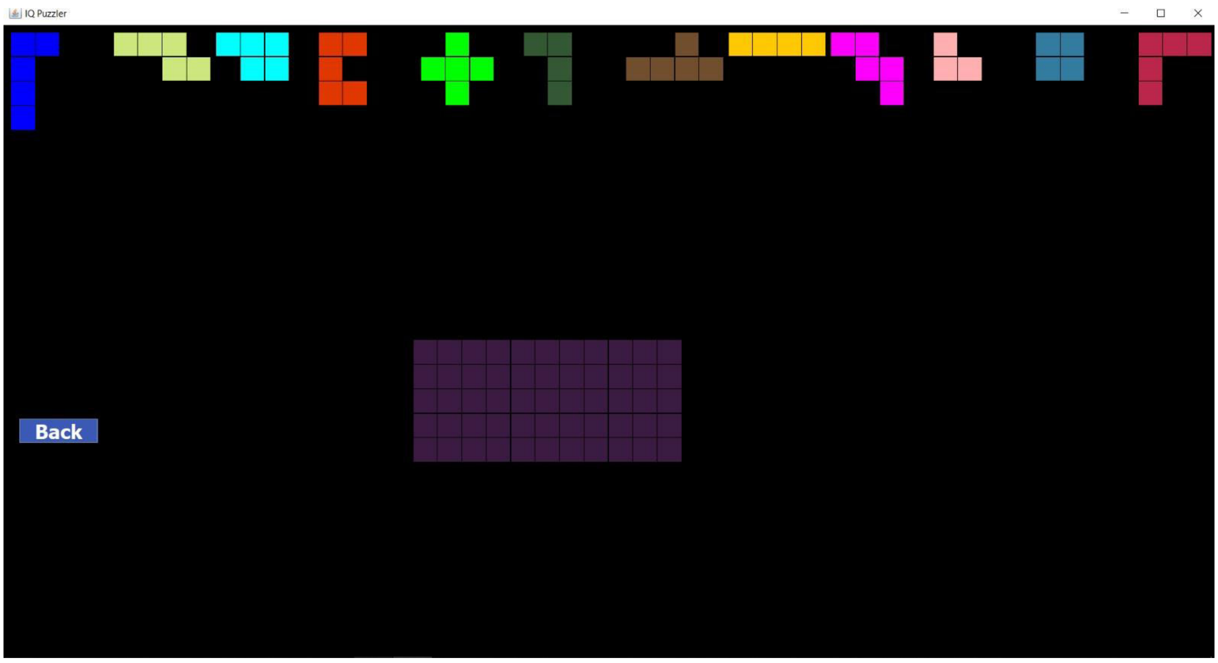


Fig2. Initial game state

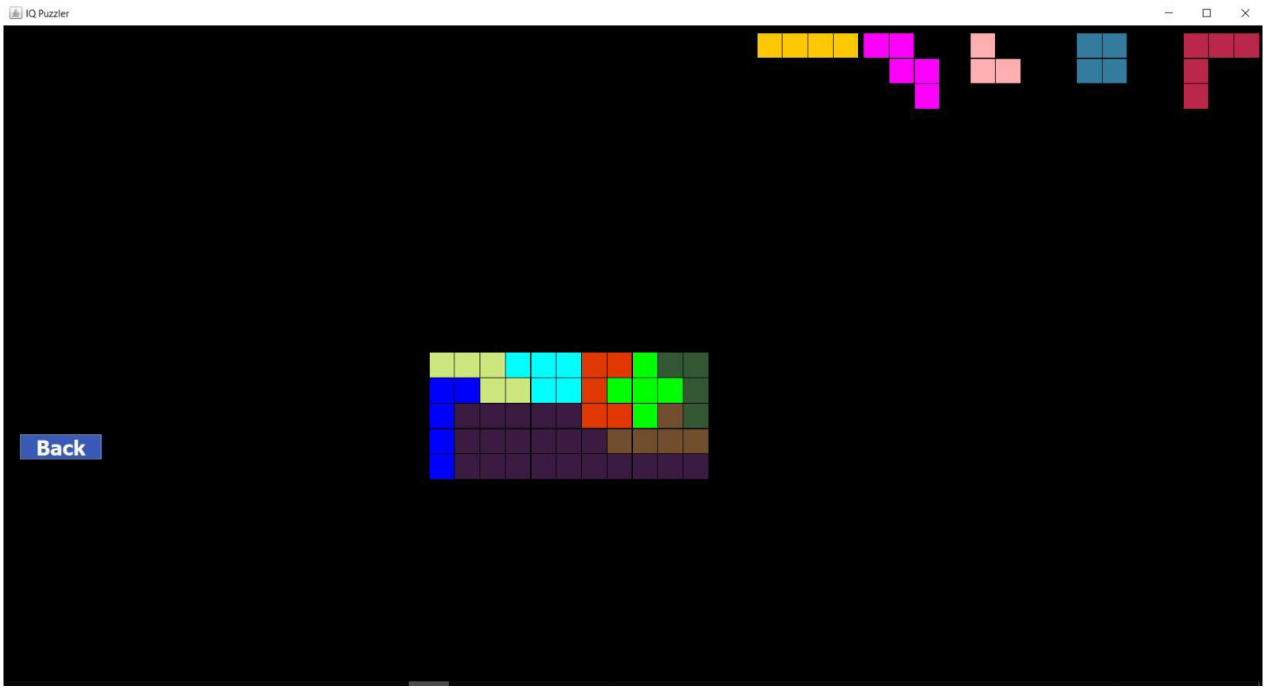
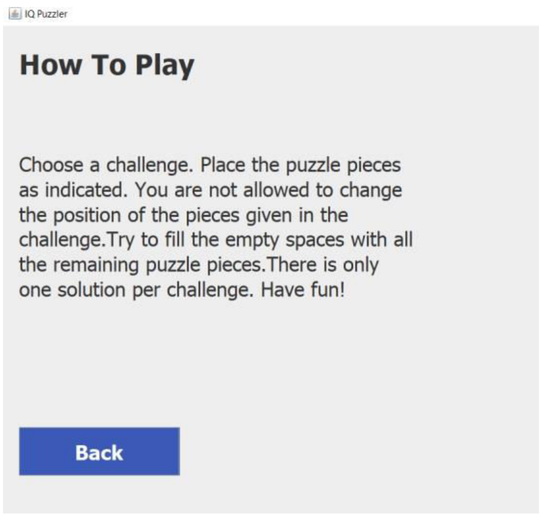


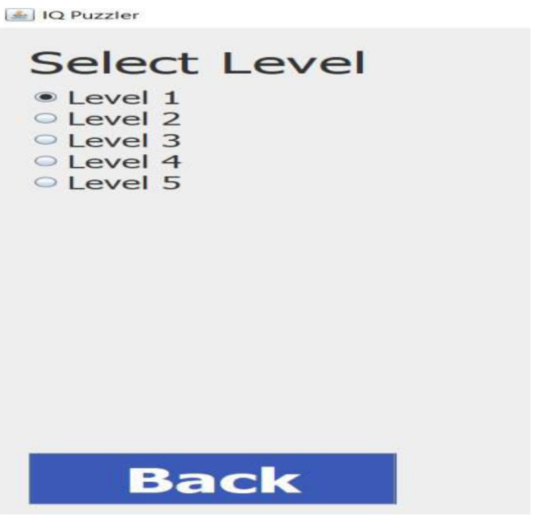
Fİg3. Mid game state

Fig4. End game state



Choose a challenge. Place the puzzle pieces as indicated. You are not allowed to change the position of the pieces given in the challenge.Try to fill the empty spaces with all the remaining puzzle pieces.There is only one solution per challenge. Have fun!

Fig5. HowToPlay Screen



[✓ Level 1]
Level 2
Level 3
Level 4
Level 5

Fig6. Level Select Screen

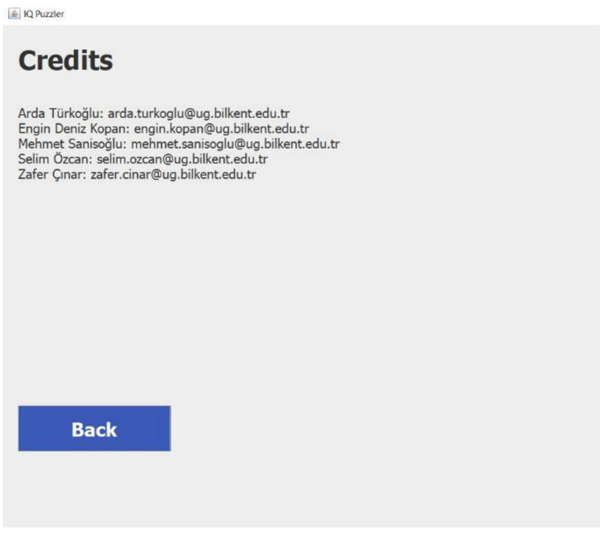


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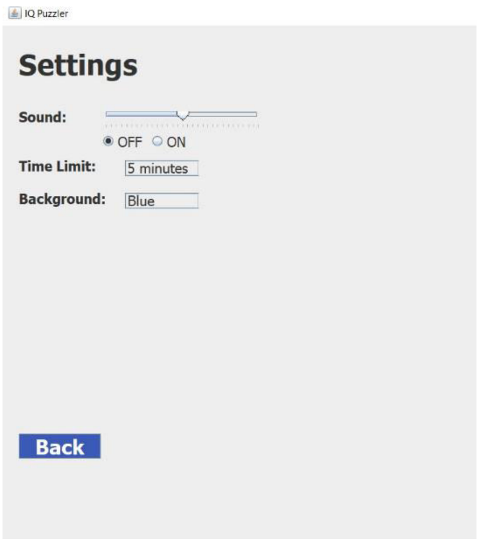
Fig7. Credits Screen



Sound: [✓ OFF] ON
Time Limit: 5 minutes
Background: Blue

Fig8. Settings Screen