

CS 319 - Object-Oriented Software Engineering Final Report

Q-Bitz

Group 2-G

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1.Implementation

We started to implement our Q-Bitz game right after we upload our design report. However, we realized that we can not implement our classes and methods fully compatible with our class diagrams that we created in our design and analysis reports. We might have some alterations in our diagrams through the implementation process.

First of all, we began to implement our game with the GUI classes which are user interface classes of our game such as Main Menu class, Select Mode and Select Difficulty Level class. These classes are shown to the user before the game starts. Because game objects and game modes will be arranged according to choices in these classes, we started to implement our game with these classes. After we finish the implementation of GUI classes, we will start to implement the game object classes which are cubes, maps and cards. Then we will implement the commands such as put and change buttons in Mode Manager class and lastly, we will implent the control classes like Checker and isFinished classes.

This project is our first project which we should handle with so many classes with so many lines of codes. Besides we have some mistakes in our reports, we are getting experience about how to communicate with our project members, how to

work together and how to handle with challenging problems as a group. In addition to this, we are getting experience about how to write reports about the specific project and create vairous UML diagrams.



We have completed the Main Menu frame. There are four options for players that are available as buttons. By clicking each button, users will be able to play from "Play Game" button, see and read the game directions from "How to Play" button, change sound and background color from "Settings" button and see the credits from "Credit" button. Main Menu frame also includes a label which shows the "High Score" status of the user. When the latest high score is increased, this label will be updated and it will show new high score. Users should click the "cross" button on the right top in order to exit the game.



When user clicks Play Game button, system lead user to mode selection frame. In this frame, user will be able to select the mode to play. This frame resembles, the main menu frame in order to keep the simplicity. After selecting the mode system, system will lead user to difficulty selection frame.



We have completed the difficulty selection frame for our game. In order to access this frame, player must start a game initially, then select the game mode after these selections user is presented this screen. In this frame, player is given 4 options. "Easy", "Medium", "Hard" buttons are difficulty levels as their name

suggests and at the bottom there is "Back" button so that player can press and return back to main menu.

• In this part of the project we don't have the game panel. We will add it in the iteration 2.