



## CS 319 Term Project Final Report

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Project Group Name: Oldies but Goldies

Project Topic: Risk Board Game

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# 1.Introduction

After receiving feedbacks from our design report, we started implementing the project in accordance to the diagrams we designed before. We decided to implement our game in NetBeans and IntelliJ developing environment. This IDE is not only user friendly but it also has some features such as “Drag and Drop” that will help us implement our code in an easier and quicker way. We are using a MySQL database to hold our players and game data. After writing the code and make sure it works , we pushed it to our GitHub page. In first Iteration Servan worked on view classes and database architecture and connections. Emin had designed UI and Sound materiels. Alara had arranged schedules and meetings. Deniz and Can worked on the game classes of the game.

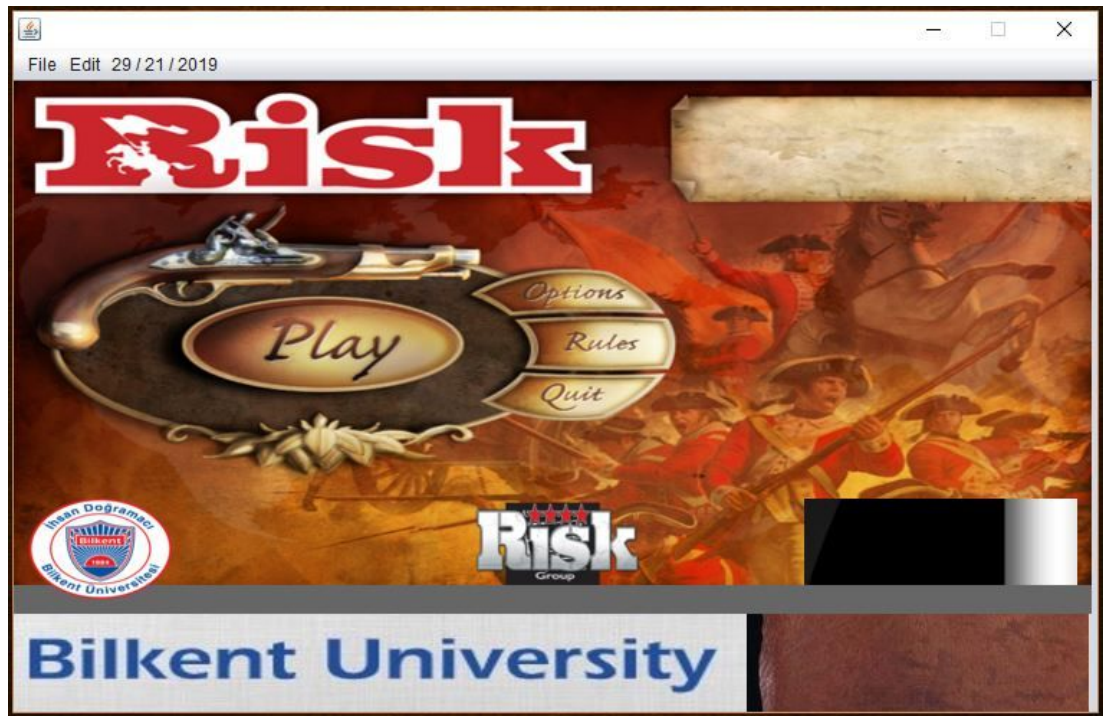
## 2.Design Changes

### 2.1 Login Menu View



We successfully implemented our database and connected it to our project. This is the first screen that users will see when they executed our game. They can create their account by selecting Sign-Up button or starting game by entering their existing account information. The data of the players will be stored on our database.

## 2.2 Main Menu View



We designed our MainMenuView and added necessary buttons and event handlers. By using this interface; users may start a new game, arrange the game options or they can learn the game rules. There are still some missing frames in this panel the black squares in the image are to allocate space for the future icons. After finishing our design we will modify this panel to look more pleasant.

## 2.3 Game Screen



The majority of our game will be played in this panel. Players can select any territory on the world map to recruit, attack and move their corresponding armies. In this first iteration, we designed only these core game mechanics and after some testing we will add other features and buttons to this panel for example a panel that shows the current player's information and statistics which called LeaderBoard. In UI we want to add troops as images to this panel and we want to add combat animations and sound effects but we are still trying to learn sound and visual libraries of Java.

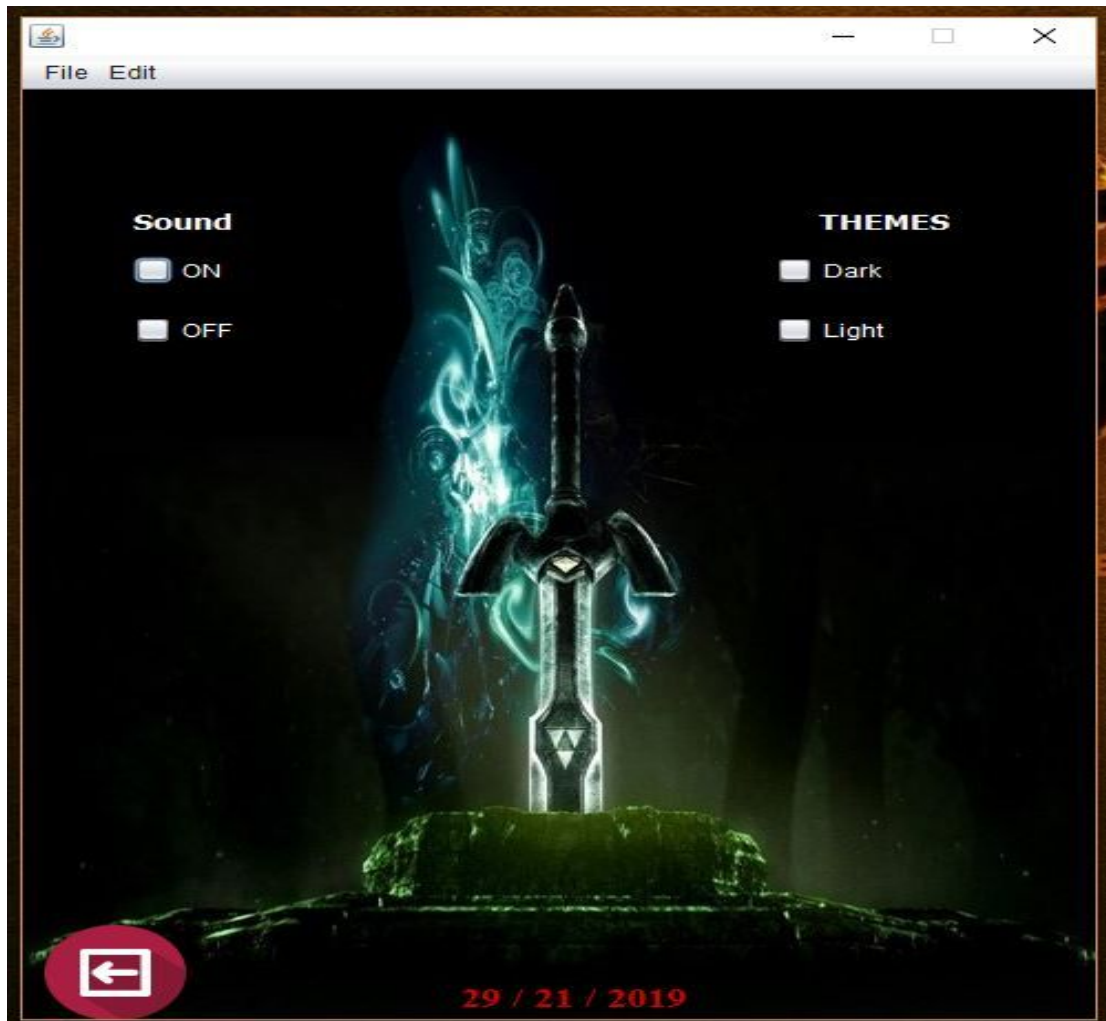


## 2.4 Rules View



Currently we added game's original manual to our game. Players can read this manual to learn the game rules. We implemented each page of the game manual as an image and players can read these manual easily by selecting related button.

## 2.5 Settings Screen



By selecting the settings button on MainMenu panel users can access this page to modify default game settings. Currently they can mute the background music and sound effects and they can choose the game's theme as dark and light. These theme options will generally change the brightness of the game view. We wish to modify the sound option to be more flexible like decreasing the volume rather than muting it.

### 3. Lessons Learnt

In this project, we have learned to work according to a schedule as a group and this was the most challenging part for all of us. The reason is that; most of us are taking many different courses so that we had to meet after the lectures. Other than that, merging different parts of the project caused many errors because we have implemented UI and game features separately and merged them after they have done. This process took more time than we expected.

The lesson we have learned from this process is that we should have learned the tools we were using in a more detailed way before starting implementation. Especially at designing UI and sound manager we faced many troubles according to our lack of knowledge on these domains.

### 4. User's Guide

#### 4.1 System Requirements & Installation

We divided our system requirements into two major categories; hardware requirements and software requirements.

Hardware requirements for RISK are; a screen(must), a mouse(must) and a basic sound system(recommended). A screen is needed because our game is designed for visual gameplay. A mouse is needed because in our game, all the choices are made via a mouse by clicking on the related button. A basic sound system is recommended because we have implemented a sound supported gameplay by adding related voices to related actions in the game. We also added a background music to our game.

Software requirements for RISK are; an operating system which can run an exe file because our game is an exe file.

#### 4.2 How to Use

After purchasing the game, the user must double click the game icon to start the game exe file. User should create an account in order to be able to enter to the main menu. We designed our game in this way to make it more secure by preventing unwanted access to the other user's saved games.

After creating an account, user can access to the main menu by entering her/his account name and password. In main menu, there are six options; "Create a New Game", "Load Game", "Settings", "Read Manual", "Display Credits" and "Close Game". If user has no saved game from before, she/he must create a new game but



if user has a saved game, he can choose any of these six options by clicking on the related button.

If the user chooses the option “Create New Game”, user is asked to enter the number of players. User can choose between three to six players. After user entered the number of the players, she/he asked to choose the game type whether every-man-for-himself or group playing. After this choice, a new game with the given choices is created by the game engine.

First, every player throw a dice on the screen which is generated randomly by the game engine and starting from the highest scored player every person on that player's left take a turn number in order. Then, until all the territories on the world map is claimed by a player, all players claims a territory with one of their soldier when their turn comes. After that, game starts. Every action of a player is done by clicking the related button and when that player's turn ends, other player takes the mouse and play her/his part. RISK can be played until a player claims all the world or she/he achieves success on all her/his mission cards.

During game play, if the user wants to see the scores,she/he can click the button “Leaderboard” and the score table of the players will be displayed on the screen. Also, if the user has achieved success on a mission card, she/he should click the “Complete Quest” button to make it announced. If the user decides to end the game or give a break, she/he can save the game by clicking the button “Save Game”. If the user decides to end the game she/he should click the button “Quit Game”.

If the user chooses the option “Load Game”, her/his latest saved game will be open on the screen. If the user chooses the option “Settings”, she/he can mute the sound or the music, also can arrange the background theme. If the user chooses the option “Display Credits”, credits of our team will be displayed on the screen. If the user chooses the option “Close Game” the menu screen will be closed and the exe file of our game will stop.