Breakout!

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ware

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1. Introduction

1.1 Project Name: Break Out!

This is a System Requirements Document (SRD) for the class CSC340-01

The requirements covered in this documentation explains how you the user can experience our game with full content

1.1.2 Team Name

The Team Name that was constructed is the "Fresh Prince of Software**"**

1.1.3 Date

The Date that this Project was Established is February 2, 2020

1.1.4 Team Members

The Team members in the "Fresh Prince of Software" are Marquis Killett, Tyler Roux, Dymond Deans, and Jerid Mei

1.1.5 Honor Code / Stakeholders

The *Academic Integrity Policy* was created by faculty based on the core values and ideals of practice as recommended by the Center for Academic Integrity. The UNCG Faculty Senate reviewed and approved the Academic Integrity Policy. The policy, in its entirety, is available online at Student Policy Handbook: Academic Integrity. The Office of Student Rights and Responsibilities, which handles all student conduct and academic integrity functions, has made it easier to report an incident of academic misconduct to our office. Click on "Report an Academic Integrity Violation", which will direct you to more detailed information about reporting a violation. You will be able to upload all materials including the Academic Integrity Violation Report Form in one convenient location which will automatically be sent to the Office of Student Rights and Responsibilities for review and action.

1.3 Purpose

This is a System Requirements document (SRD) for the Software engineering project for CSC 340-01.

The requirements over the work corresponding to the specific java classes along with technical attributes that will help the user

1.4 Documentation Conventions

JDK-Java development Kit

JRE-Java runtime Environment

Twiter4j- java Library for Twitter Post/Connection

1.5 Intended Audience

To have access to this SRD Please contact anyone from the “Fresh prince of Software” group. You should use this product to pass the time and have a good time with your friends without the hassle of having complex controls and technical difficulties.

1.6 Definitions

Tick()	Runs each part of the game simultaneously.
.sleep()	Manipulates the speed of the game/frame rate.
BufferStrategy()	Positions the canvas/frame of the game.
.addkeyListener	Registers the controls for the game, like the arrow buttons for movement.
run	Runs the game.
.setfont	Registers the text font.
.setColor	Registers the color of the paddle and bricks.
paddlePlacementWidth()	Sets the paddle width size.
PaddlePlacementHeight: int	Sets the paddle height size.
gameSizeWidth	Sets the width size of the game screen.

gameSizeHeigh	Sets the height size of the game screen.

1.7 Project Scope

This document is produced as part of the Technical Specification that shall be reviewed by Prof. IKE Quigley. Therefore, making it applicable for the submission of the project

1.8 Technical Challenges

Getting the game to move to the next level, importing sprites into the game, connecting our api, and running the game with our menu.

1.9 References

For this Application what inspired us is the retrogamer called Pong. We received help and advice from multiple tutorials on YouTube.

2. Overall Description

2.1 Product Features

Within this product you will have a Starting game menu and within the game play itself you will have a high score along with some power ups that will help you get the highest high score

2.2 Operating Environment

Netbeans/Intellij

2.3 User Characteristics

Individuals who want to occupy their minds, and want to pass the time with a little challenge

2.4 Design Implementation and Constraints

Some of the constraints that we had during creation of this game is both the "Twitter Api" along with the game menu. With the Twitter Api it was hard for us to be able to get what we have, which is the score that you get from the game by letting the ball pass your paddle at the bottom of the screen, or by breaking all the bricks on the screen.

2.5 Assumptions and Dependencies

Using the Facebook api would have destabilized the program, so we had to use the Twitter Api instead.

3. System Features and Requirements

3.1 Primary

The main menu of the game appears as the game runs, then proceeds the game itself. After the game is completed the “Congratulations you won ” text will appear followed by the score the user has gotten. If the user loses the game the text “You lose”, followed by the score will appear. The score the user achieves will be recorded and uploaded to Twitter through the Twitter api.

3.2 Secondary

The user is able to interact with the GUI, being able to start the game from the menu, and being able to close the game after either winning the game or losing it.

4.Technical Requirements

4.1 Operating Systems/Compatibility

This game is compatible with the modern-day operating systems. These include Microsoft Windows 10, MacOS X, etc. There is a possibility however that the game will have different running speeds on some operating systems compared to others.

4.2 Interface Requirements

4.2.1User Interface

The mouse and Keyboard is the main form of interaction for the game from the user. The user interacts with the game through GUI frames that run during the game's runtime.

4.2.2 Hardware Interface

The game requires the typical computer utilities such as a working screen, mouse and keyboard, and Internet connection.

4.2.3 Software Interface

Installation of Java 8 is a requirement for this product. OpenJDK 8, or Amazon Cornetto's JDK 8 are a few recommendations.

4.2.4 Communications Interface

Dialog box notification about game over and high score indication.

5. Nonfunctional Requirements

5.1 Performance Requirements

OS: Windows 7, 8/8.1, 10; MacOS X; Linux Mint Processor: Dual Core 3.0 Ghz or Greater

Memory: 4GB or Greater Hard Disk Space: 10 GB Video Card: 256mb Video Memory, capable

of Shader Model 2.0+ JRE: 8.0 Release; OpenJDK 8, or Amazon Corretto's JDK 8.

5.2 Safety/Recovery Requirements

If the game does not run properly on the system of the user, a recommended solution would be to restart the computer.

5.3 Security Requirements

Security consists of the founders/owners of this application on GitHub account with ownership of the repository.

Application requires no personal data/documents

5.4 Policy Requirements

Private project owned by UNCG© (University of Greensboro North Carolina)

5.5 Software quality Attributes

5.5.1 Availability

People of UNCG can access the information and rights of this Program Due to the Owners of this application with a GitHub account

5.5.2 Correctness

In this SRD all requirements are met in the fullest in what is contributed within this documentation.

5.5.3 Maintainability

Tests will be designed and implemented to the program to test for each and every single component that has problems and/or has interactions that are present.

5.5.4 Reusability

Easy to use you need to run the application to boot it up.

5.5.5 Portability

The portability System requirements comprise of the user having access to a GitHub account.

5.6 Process Requirements

5.6.1 Development Process Used

During the Development process of this Application we used the “Agile” process which includes us meeting up to establish a plan to implement or work on a specific process along with developing a section of included code ending with us testing the application and evaluating what needs to be improved or to be taken out.

5.6.2 Time Constrains

The time given for us Started from february 3rd to May 1st Giving us time to be able to set a foundation for our project along with following the Honor code as seen in the URL:https://osrr.uncg.edu/academic-integrity/the-pledge/

5.6.3 Cost and Delivery Date

There is no cost to play this game and the expected delivery date is 5/1/20.