3XA3 Project Approval (Group 16)

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January 27, 2021

1 Original Project

Original Project Name: Osu!
URL for Project: `https://github.com/ppy/osu`
Number of Lines of Code: Thousands
Can the Project be Compiled? Yes.
Programming Language: C#

- Is this programming language feasible for your team? Yes.

- Is the domain knowledge understandable within one term? Yes. We aim to get a better understanding throughout the course.

2 Project Purpose

Osu! is a rhythm game that essentially involves doing a combination of clicking circles, dragging sliders, and rotating spinners accurately based on various songs. It keeps track of how fast these actions are done and how accurately they are done.

3 Project Scope

Recreate the main functionality of the video game Osu! within the context of the 3XA3 course. The development process will be well-documented and will follow the conventions taught in class.

The priority is recreating the base gameplay experience. There is no plan at this time to implement additional features that Osu! incorporates, including, but not limited to:

1. Online high scores

2. Music/map import

3. Multi-platform support

Further information in the Planned Changes section.

4 Hardware Requirements

Processor: Intel Pentium III / AMD Duron 2.0 GHz
Graphics: AMD Radeon 7000 64MB / NVIDIA GeForce 6500
System Memory: 512 MB RAM

5 Programming Language

The original code is written in C#. We are also planning on using C# to recreate the game. Some of our team members have some basic experience in C#, and the other members are eager to learn C#.

6 Licenses

License Type: MIT License
Description: This license provides users permission to reuse code. The user must include the original copy of the MIT license in their distribution. In doing so, they are able to change and make modifications to the code to suit their needs.

7 More notes on original project

The original code can be compiled using the appropriate build scripts that is provided. Some test cases that can be used to test the application are playing the game, checking if game play score changes ranking, and lastly check the ability to import new beat maps(in-game songs).

8 Planned Changes

Since the original project is relatively complicated with hundreds of bitmaps; we are planning to simplify this game by choosing one song and developing a bitmap based on it. We aim to incorporate essential settings and have it run on various operating systems.