rhythm Game

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Project Proposal

# Project Synopsis

This is a rhythm game that will be targeted for people that have good hand-eye coordination, as the player will need to click a note at a specific time in the song. The game name will be decided later, along with a slogan. This will be currently be known as Beat x until a proper name has been decided. This game is for the people that like J-pop and enjoy playing rhythm games.

There are many games similar to this, especially in the Japanese gaming industry. This game is meant to reference games like LLSIF or Bandori. However, the game is meant to only focus on the rhythm game aspect. Both games that were listed are also gacha games (lottery focused game, as these games require players to roll in a raffle lottery to improve teams to have a better score), something this game is not meant to have.

# Project Description

The game requires players to use 4 keys, which will be d, f, j, and k. The player will be able to navigate between different screens by using the mouse. They are to use the p or esc button when playing a song in order to pause and either exit, restart or resume based on what they want. The player will have a certain amount of lives and the lives bar will increase with perfects while it will decrease if they get a fast, slow, or fail. The score will be will be displayed in the corner and will be shown in an end result screen along with a letter grade. If the player has run out of lives, they will be sent to a fail screen and they will navigate with the mouse.

The song screen will display every single song in the game and will show the number of notes each song beat map has.

In the program, there will be at least two songs. The two that will be guaranteed will be ツノルキモチby Chico with HoneyWorks and 再来 by Shinichi Kobayashi. The songs were picked because 再来 has been featured two other rhythm games, which are called Deemo and Cytus 2. This song is meant to serve as a test and can be easily compared to the other games to determine whether or not this game can be successful or not. In addition to this, the song has a change in timing, which can be interesting for players.

ツノルキモチby Chico with HoneyWorks was picked because of the tempo and how it can provide a simpler beat map in comparison to the other song.

This game is to reference many different Japanese rhythm games. The actual game structure is meant to look like a game called Voez, but significant changes were made to make it not look like a direct copy. Some elements like the note bars are similar, but the shapes are different and how the screen is divided is different.

# IPO chart

The input, processing and output for the program

|  |  |  |
| --- | --- | --- |
| Input | Processing | Output |
| The player presses the corresponding key on the keyboard when the note comes down. | The program will check the timing of the note and whether or not the player deserves a perfect, great, fast, slow, or fail. | Based on how well the player pressed the note, they will get a timing score displayed and they will either lose or gain lives along with the score. A different sound will play based on how well the person pressed the note. |

# Concept Diagrams

Sketch / show the important screens of your program. Show the components that will appear on the screen. Show or explain how the screens change as the program runs.

Detail the flow of the program.

On paper hand drawn

# Programming Topics Covered

* Graphics
* Loops
* Decisions
* GUI
* Math
* Arrays

# TimeLine

|  |  |
| --- | --- |
| Date | Events that will occur |
| June 3 (Will be worked on after school) | Along with that, the game UI will be worked on when playing a song. |
| June 4 & 5 | The collision detection of the game will be implemented along some rudimentary work on the beat map for the song再来. The array list for each of the lanes will be made so that future work on the beat maps will be significantly easier. |
| June 6 | The beat map for 再来will be fully functional. |
| June 7 | The score screen will be made. |
| June 8 & 9 | All previous work will be assessed and all errors will be fixed |
| June 10 | The song menu screen will be made along with the home screen. |
| June 11 & 12 | ツノルキモチ will be implemented into the game. |
| June 13 | A fail screen will be made |
| June 14 | The health bar will be implemented into both ツノルキモチ and再来. |
| June 15 & 16 | The game will be tested and will edited accordingly. All assets like logo will be made and implemented. |