INITIAL PROJECT SPECS

NAME: Cosine Line by Churant Games(John and Ethan)

PROGRAM OVERVIEW:

The main sprite travels through an endless top down scroller. The sprite will always be moving left or right but when the the user chooses it will move up. If you hold the space button the path of the sprite will resemble a cosine wave. Points are awarded for the distance as well as streaks and near misses. Streaks are when the space key is held done for x amount of time. The longer the key is held the more points are reward.

DESCRIPTION OF USER INPUT:

* Space to move the main sprite up through the level
* Mouse clicks to navigate the menus
* Key presses(keys to be determined) to control various power ups that are to be determined

DESCRIPTION OF PROGRAM OUTPUT:

* Player constantly moves left to right, moves up through the level in a cosine wave.
* The player has to avoid different obstacle types.
* UI shows player’s current score and the amount of combos (called streaks) the player has obtained.
* When a player gains a streak it says that they have.
* Powerups to temporarily improve the player randomly appear on the map.

**Initial release schedule**

|  |  |
| --- | --- |
| **Release Name** | **New incremental features of this release** |
| **0.1** | **Multi-Screen** |
| **0.2** | **Menus** |
| **0.3** | **Player** |
| **0.4** | **Obstacles** |
| **0.5** | **Hit detection** |
| **0.6** | **Streaks + near misses** |
| **0.8** | **Power ups** |
| **1** | **Final release** |

**Updated release schedule**

|  |  |
| --- | --- |
| **Release Name** | **New incremental features of this release** |
| **0.1** | **Multi-Screen** |
| **0.2** | **Menus** |
| **0.3** | **Player** |
| **0.4** | **Obstacles** |
| **0.5** | **Hit detection** |
| **0.6** | **Streaks** |
| **0.8** | **Music** |
| **1** | **Final release** |

**Work in Progress Report**

**Github:** https://github.com/OfficialExedo/CosineLine

Major developments/breakthroughs(reference specific code please):

* Multiple Screens
* Buttons
* Player movement

Major Challenges/setbacks( reference specific code please):

* Getting an accurate wave pattern for the player movement.

Any modifications to your specifications/release schedule:

-Swapped the order of player and menu now menu is release 0.2 and player is released 0.3

**Description of your scratch/test program:**

Describe the generic concept you needed to test out:

* Menu buttons

Source any web site/book that helped you with that concept:

<https://stackoverflow.com>

<https://github.com/libgdx/libgdx/wiki/>

<https://libgdx.badlogicgames.com/nightlies/docs/api/>

Describe the code and the lesson that you learned from it:

It creates a sprite for the button on screen, in the input handler it checks if the mouse click overlaps the button’s hitbox and it runs the appropriate code (such as a method) if so.

I learned how to check for input handling and how to map the coordinates of a click to the camera’s coordinates.

Describe any challenges that you enjoyed in integrating this scratch code into your major project:

The button code crashed on the instructions screen because it was calling a screen that did not exist. This was something we missed for some time but was an easy fix once we found it.

**Peer Assessment:**

Ethan - 100

John - 100