**Title**: Pattern Survival

**Description**

The main idea of the game is drawing patterns under enemies that approach your character. Enemies will approach in waves, where in each of the three stages of the game, the patterns drawn under the enemies get progressively more difficult and longer. Enemies will have algorithmically defined patterns under them to ensure that when multiple enemies are approaching, it is possible to combo them in a way that kills multiple simultaneously. The player will gain more points towards their overall score if they successfully combo multiple enemies. If an enemy gets too close to the character, it will temporarily stun their character, and they’ll lose a heart. If too many hearts are lost, you lose. There will be a special enemy that gives back hearts. Furthermore, at the end of each round, a final boss will enter the scene with a complicated chain of patterns underneath.

*Note: I haven’t determined if I want the character to be stationary.*

**Similar Projects**

<https://doodles.google/doodle/halloween-2020/>

* Character lives
* Assigning colors to each of the patterns as they’re drawn
* Moving parts in the background
* Animations for when the character when drawing the shapes

<https://osu.ppy.sh/>

* Combo system
* Parallax backgrounds

**Version Control / Backup Plan**

I am storing my code in a Github repository:

A screenshot of a computer

Description automatically generated

**Tech List**

None

**Storyboard (**[**LINK**](https://miro.com/app/board/uXjVLCbV4v4=/?share_link_id=637591158844)**)**

Starting Screen/Basic Game HUD

**A screenshot of a computer screen

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Dynamic Time Warping Algorithm to Detect User-Drawn Shape/Accuracy

**A screenshot of a computer

Description automatically generated**

Losing Hearts/Combo Creation Algorithm

A screenshot of a game

Description automatically generated

Final Boss

**A screenshot of a video game

Description automatically generated**