Hours Worked

17/03 - 4 Hours - Initial research & planning, asset gathering, project setup, some development

18/03 - 1.5 hours - Core game loop completion, small fixes

19/03 - 1.5 hours - On-screen controls, scoring & multiplier system, system improvements

20/03 - 1 hour - EndGame screen & persistant scoring

21/03 - 3 hours - Background Music, Rework of control system, Testing/Fixes & validation for android builds

22/03 - 20 minutes - Placeholder sub-menus

Difficulties

No substantial code issues.

Did run into some minor issues initially when testing due to both Unity's device simulator not entirely interfacing with the input system & on-screen buttons, and the manufacturer of my phone having not defined a screen safe area and thus having critical game elements fall off the side of the screen.

Areas of Note

- Used a MonoSingleton to both control the linking of generated elements (The blocks) with core elements (On screen controls) and to provide a singular access point to player scoring (which had built-in saving)
- Made use of at-generation randomised colours in order to provide variety of blocks at runtime without extra asset use. Basic sprite element used in all the blocks can also be swapped out once to change the entire appearance of the game.
- Made use of both Unity's new input system (allowing for easy porting to other target platforms in the future) and the device simulator(for verification and validation of appearance on a number of popular devices)

Hypercausal Elements

By removing the lines/rows counter and simplifying the provided information to a simple score & high-score display the micro game loop is shortened to simply be "Complete Rows -> Get Points".

And as such, the introduction of a score multiplier – where the more rows they clear at once the higher the rewarded points are – encourages them to continuously think ahead and try to rack up lots of nearly complete rows.

And then a looping, upbeat background music selection helps keep more of their attention on the game.

Instructions

Click or tap on play button to start

- A or Left Arrow to move piece left

- D or Right Arrow to move piece right
- S or Down Arrow to move piece down faster
- W or Up Arrow to rotate

Alternatively, on screen controls can be used instead (And have to be on mobile)

Assets Used

- "Mega Hyper Ultrastorm" Kevin MacLeod (incompetech.com) Licensed under Creative Commons: By Attribution 4.0 License http://creativecommons.org/licenses/by/4.0/
- "Laserpack" Kevin MacLeod (incompetech.com) Licensed under Creative Commons: By Attribution 4.0 License http://creativecommons.org/licenses/by/4.0/
- "Blippy Trance" Kevin MacLeod (incompetech.com) Licensed under Creative Commons: By Attribution 4.0 License http://creativecommons.org/licenses/by/4.0/
- "Voxel Revolution" Kevin MacLeod (incompetech.com) Licensed under Creative Commons: By Attribution 4.0 License http://creativecommons.org/licenses/by/4.0/
- GUI Pro Kit - Casual Game https://assetstore.unity.com/packages/2d/gui/gui-pro-kit-casual-game-176695
- DOTween http://dotween.demigiant.com/
- Also used some of the samples from Unity's input system package to provide input icons