

Team - Drew James (dtjames@wpi.edu) Skye Pritchard (stpritchard@wpi.edu)

Genre - casual puzzle

Game Description - a level based game where the player has to trace a line that fills every square in a grid without overlapping. The player plays as a train trying to fill a grid with tracks.

Technical Features - multiple levels, high score mechanic, timer (as a score multiplier), restarting from level and to title screen, undo system, save system

Artistic Assets - Sprites for squares on the board, and a sprite for the train (4 frames based on direction traveled), menus, tracks, minor visual additions

Implementation Plan - path was not handled as a linked list where connected squares are each nodes, we chose a 1d array for simplicity. However, the squares themselves in the board were handled in a sort of linked list where each node was connected. The train moves in 4 directions, and once the array length is equal to the number of squares, the level is complete. Score was calculated as $(\text{time} * 5 * (5/\text{level}))$

Distribution of Work - Skye handled main movement code, level selection, level transition, and art for the train and blocks, Drew implemented the backend Score, Save, Initial menu, some art/decorations, and music. Skye ended up creating most of the level designs because she was more familiar with the workflow.

Schedule -

Alpha due Sat

To be completed at this stage: The code for moving around the board and solving the puzzle was fully implemented. 2-3 levels will be designed to showcase this code, and a basic startup/shutdown and level transitions was implemented around it.

Beta - Monday

Save System was only major code to be implemented after this day

Final - Wednesday

All levels, music, art, and code implemented, finished compiled project exists.