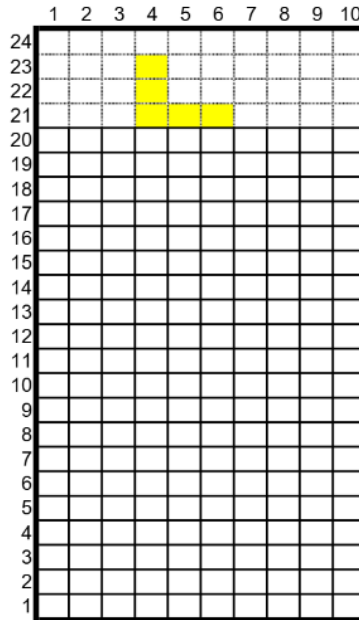


Design Rationale – ‘V’ Piece



GitHub Repository URL: <https://github.com/MichaelG-design/Systems-Development---Tetris.git>

YouTube Video URL: <https://www.youtube.com/watch?v=jMvhfhxGe0M>

1. The reasoning behind the design of this piece is that I wanted to create opportunities to clear multiple rows using its size but also increase the difficulty of the game in general, setting up a risk and reward dynamic. It's simple in design but forces players to plan ahead in the case it were to spawn, potentially setting up the board to clear out more lines in a row, like using the 'O' piece alongside my 'V' piece; Or it could really mess up the player's flow.
2. In the base game, my piece adds more disadvantages than advantages because of its length so I wanted to give the player more of a reason to setting up the grid in the chance that the 'V' piece will spawn. So, I made it so that if they manage to clear 2 or more rows simultaneously on placing it, the player is rewarded with "Big Bonus!", which essentially gives the player an extra 1000 points. This pushes the player to place

other pieces in preparation for the 'V', adding more difficulty and tension, but rewarding satisfaction if used successfully.

3. The main struggles I encountered while designing and implementing my piece only reinforced my above answers. Playing the game normally proved to be a bit of a struggle when my piece would appear, it seemed that it didn't connect well with other pieces, not all of them though. It forced me to predict and set up the pieces that *could* work with the 'V' in a specific way, although it was an interesting challenge that posed new strategies, I believe it added a lot of tension. Making it so that there is a strong reward like "Big Bonus!" for using said strategies helped relieve that tension when moving the pieces around. I also was trying to determine how much of a reward the player should get. The bonus should be high enough to make the gameplay surrounding my piece worth it, but not so high to the point that it completely decreases the challenge the piece brings and diminishes the core gameplay loop of Tetris. I just had to keep playtesting, until I felt that '1000' was the correct number for a bonus.