Assembly Project: Tetris

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1 Instruction and Summary

1. Which milestones were implemented?
   - Milestones 1, 2, 3 has been completed!

   For the snapshot of progress take a look at our Github page. Please contact yehyun.lee@mail.utoronto.ca for access to private repo. https://github.com/YehyunLee/AssemblyTetris

2. How to view the game:

   (a) Run the tetris.asm file in a MIPS IDE such as Saturn or Mars

Figure 1: caption

3. Game Summary:

   - Pressing 'W" would rotate the tetrominoes 90 degrees clockwise
   - Pressing 'S" would decrease the position of incoming tetrominoes by 1 until it collides
   - If it collides, a new tetromino is loaded into the screen.
   - For this game version, the program is design to go on until program stops
   - Program can be stop by pausing the run or clicking "Q" on the keyboard
   - For now, only a specific tetormino, specified will get dropped. However, in the next update, we will implement the random function to randomize tetrominoes being created.

```
# Major variables:
# lw $s0 for paint (sw)
# li $s1 for paint counter (need this for general use)
# li $s2 for what TETRO, ex) O, J, T, using int; refer to image.
# li $s3 for what ANGLE ex) 0 is default, 1 is one 90 roration upto 3.
# li $s4 OTetrominoX
# li $s5 OTetrominoY
# lw $s6, ADDR_DSPL
# lw $s7, ADDR_KBRD
# a3 for collision
```

2 Attribution Table

Yehyun Lee (1008992217)	Aung Zwe Maw (1008604949)
[MEDIUM] Coded the background: grid and 3 walls	[HARD] Implemented Original tetromino drawings
[HARD] Designed and Coded Collision Logic	[HARD] Also created every possible rotated tetromino drawing
[HARD] Movement W, A, S, D	←Hisham helped me debugging with CodeTogether until 2AM.
[EASY] Coded Keyboard Input	[MEDIUM] Rotation is consisten at a consistent point of origin
[HARD] General Game Loop Logic Flow: Saving Tetrominoes Information, Loading and Handles All Game States	[HARD] Rotation code so screen reloads with rotated Tetromino

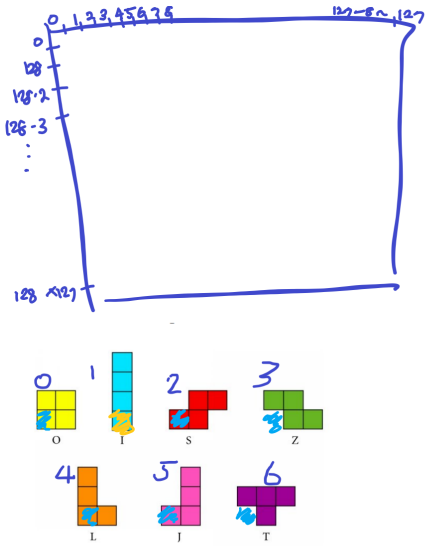

Figure 2: Draft Diagram by Yehyun

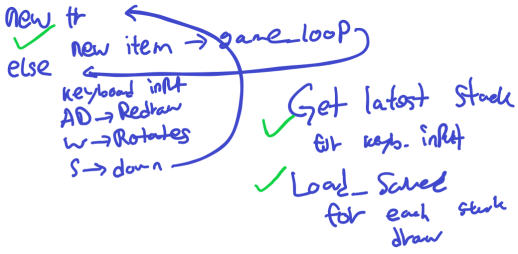

Figure 3: Draft Diagram by Yehyun: Outdated Game Logic

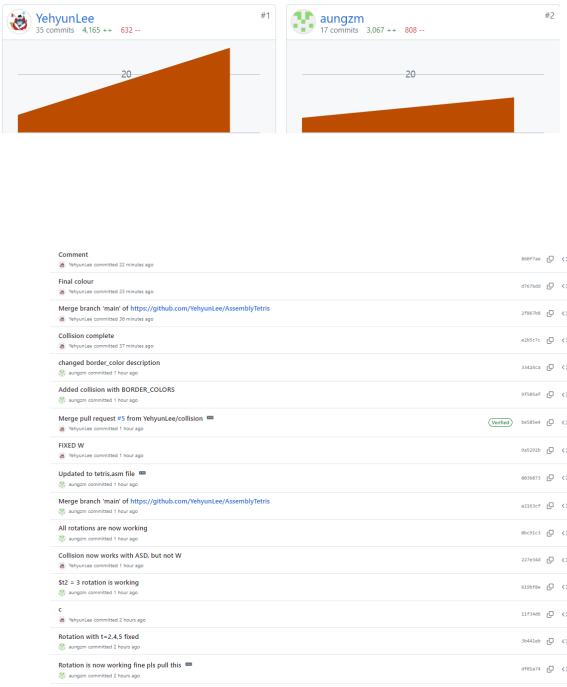

Figure 4: Snapshot of Progress