**Tetris**

**Overview –** Tetris is a tile-matching puzzle video game (Wikipedia). I will be developing a single player Tetris game where the player has to rotate, move, and drop a (essentially four-block) shape (using keyboard controls) that falls into a rectangular main screen. The player has to try and clear as many lines as possible by completing horizontal rows of blocks without empty space, but if the shapes cross the topmost line of the main screen, the game is over (source: <https://tetris.com/about-us>). I will be implementing the game process which includes the user interface, game screen, keyboard controls for moving the shapes, animations in moving the shapes down from the top to the bottom of the main screen, determining the score of the user as they complete each horizontal line, determining when the bottom of a shape touches the base of the main screen or lines made by other shapes.

**Features –** The game screen where the shapes will be moving down, the shapes will be randomly generated for game play, I will be showing the next shape that will be generated to the user, remove the complete horizontal lines as per game rule

**First check point –** I will cover the basic game design and basic game play with no shape rotation and no removal of the complete, non-empty horizontal rows. I will only use single block shapes to drop in the game play (instead of proper four block ones).

**Libraries –** I will potentially use the Pygame and Random libraries.

**Why do you think this should be an 'A' project? Indicate the unique features that add a "wow" factor to your project. –** I think this should be an ‘A’ project considering that it will be difficult to determine where the shape lands, whether or not it has actually landed and where it can/should land. Another factor that I think should be considered would be the animations used to make the progress of the shape smooth from the top to the bottom of the main screen. I will also be checking collision of the blocks with the wall and with other blocks runtime and also which rows to remove runtime.