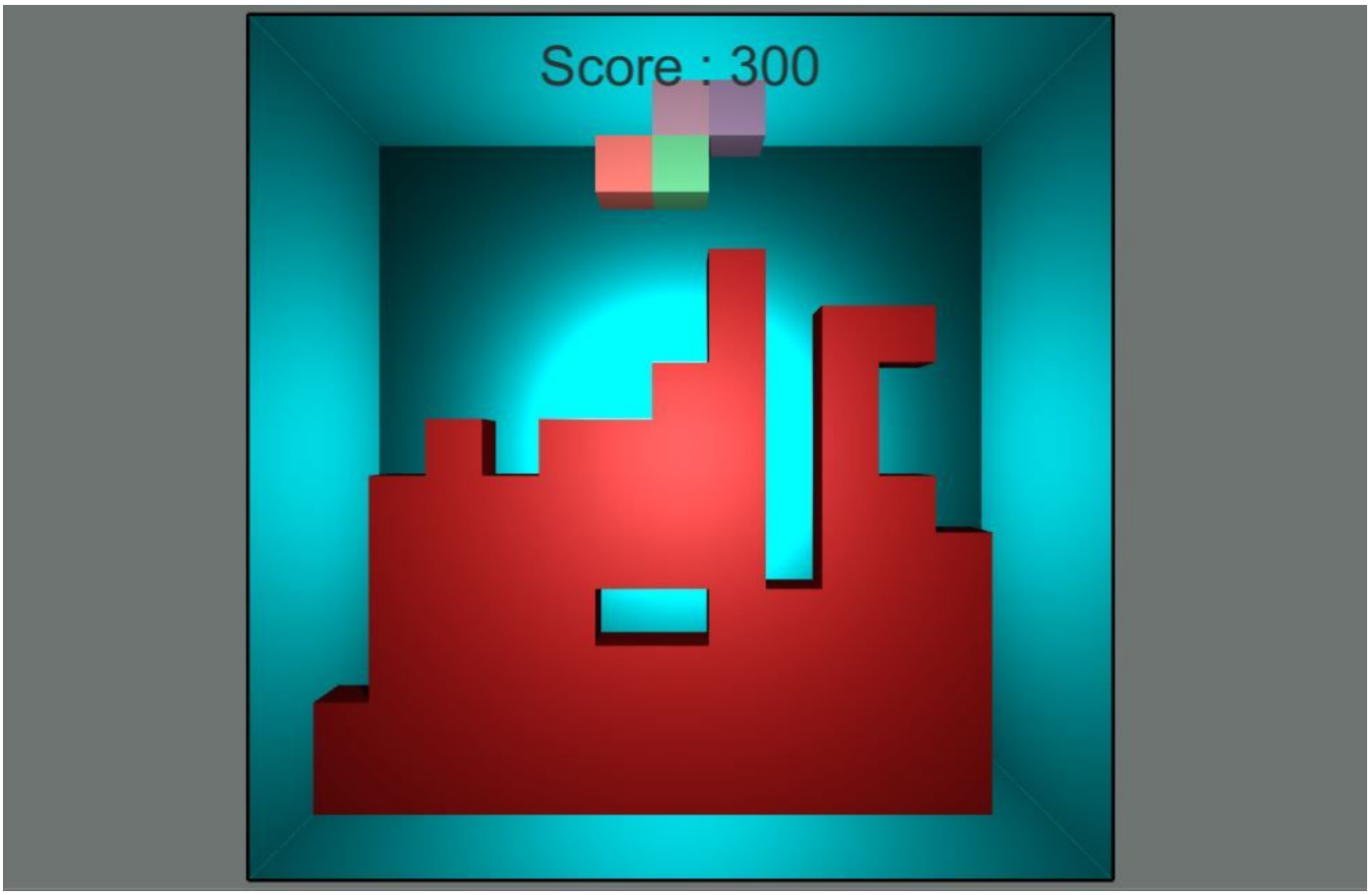
Tetris | Sirtet

it’s tetris, but when you think you win, you get a Sirtet!



Made By:
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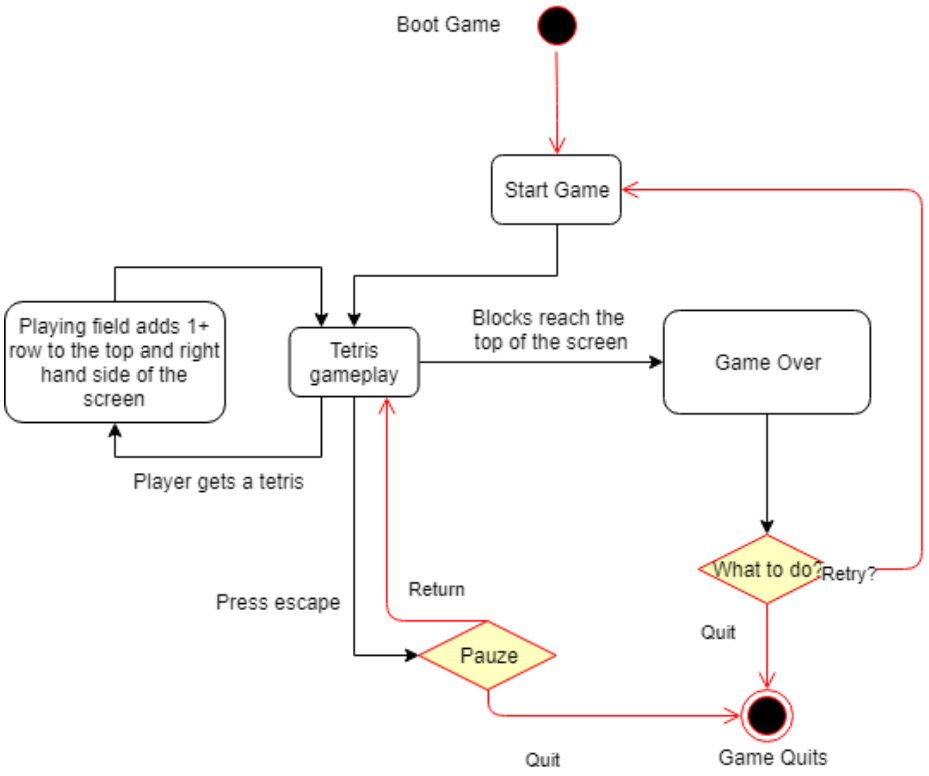
Main Mechanics:

Sirtat will be played just like tetris. every round you gain a block of a random shape which will fall down the screen. you can either rotate the block or change the place of the block on a horizontal axis. Once a block has reached the floor or another block, it will be placed there an will not be able to move (just like tetris!). Your goal is to fill up a horizontal line of blocks to get a **Sirtet!** once you get a sirtet, the line of blocks don't disappear, but a empty line at the right and top will be added to the screen. This means that the more sirtets you get, the smaller the screen becomes and the harder it is to see.
your overall goal is to get the highest score possible.

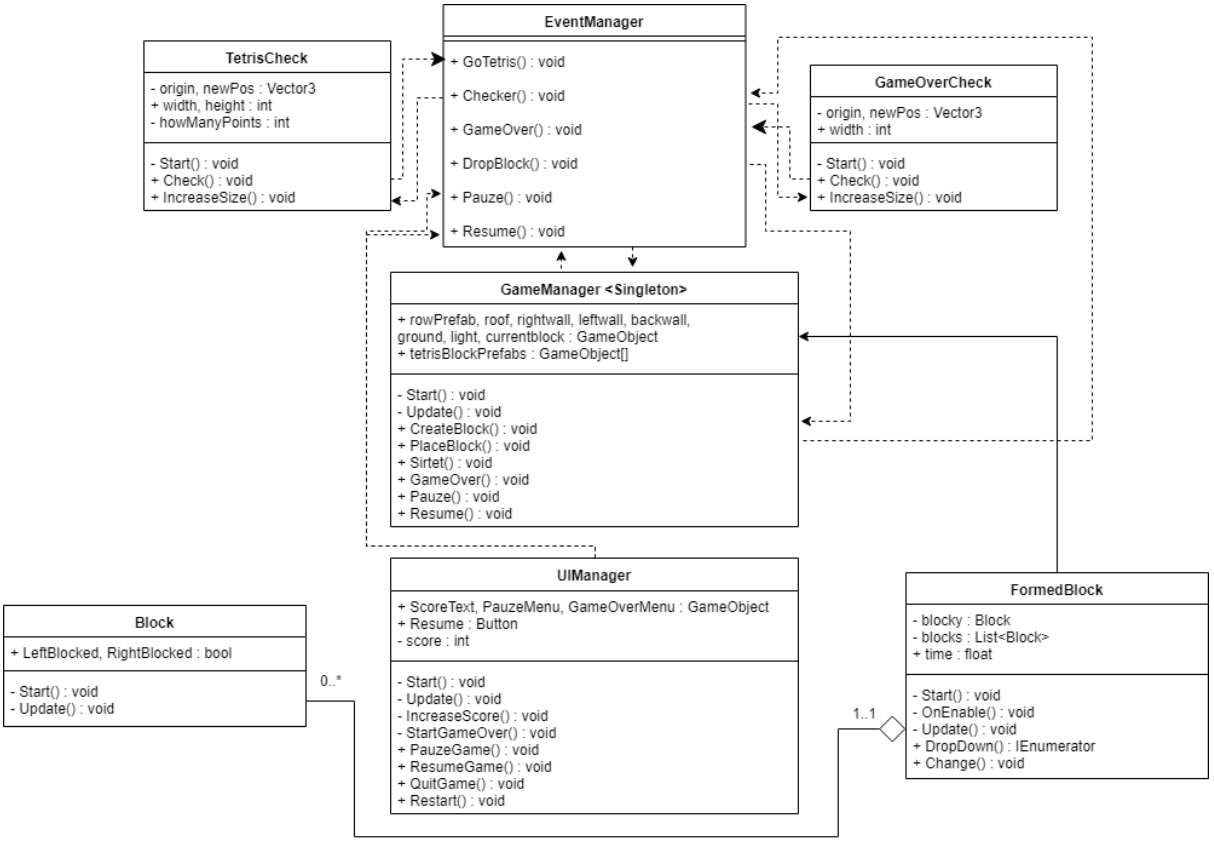
Activity Diagram:



Sirtet will be made in Unity 2018.2.9f1 in a 3d environment. it'll use a simple system where the shaped blocks will exist out of multiple 2 by 2 blocks with each their own "Block" script which will do raycasts to the left and right to check if any blocks are blocking their paths. once a

shaped block hits the ground it will turn into solid and will not be able to move. The whole gameplay will be controlled using a **Singleton** game manager, and a **EventManager** is used to control every event in the game. There will also be a UIManager which will control the pauze and the game over menu. furthermore the game will have a tetris and game over checker wich will do what their title says.

Class diagram:



Why this Design:

With making the game i thought of using a static vent manager to handle all the actions in the game. This was very useful because i could check for tetris if the block hit the ground, and if there was a tetris, then the UI could update the score and the GameManager could update the screen simultaneously without any complications. The FormedBlock script will control the blocks drop speed and will allow the player to control the block, While the Block script will check for walls and ground so the tetris and gameover check could begin. Furthermore, i thought of making it 3d because that increases the difference between sirtet and tetris. At first i didn't think of using the event manager, but it became difficult to connect and reference all the scripts so they would work together.