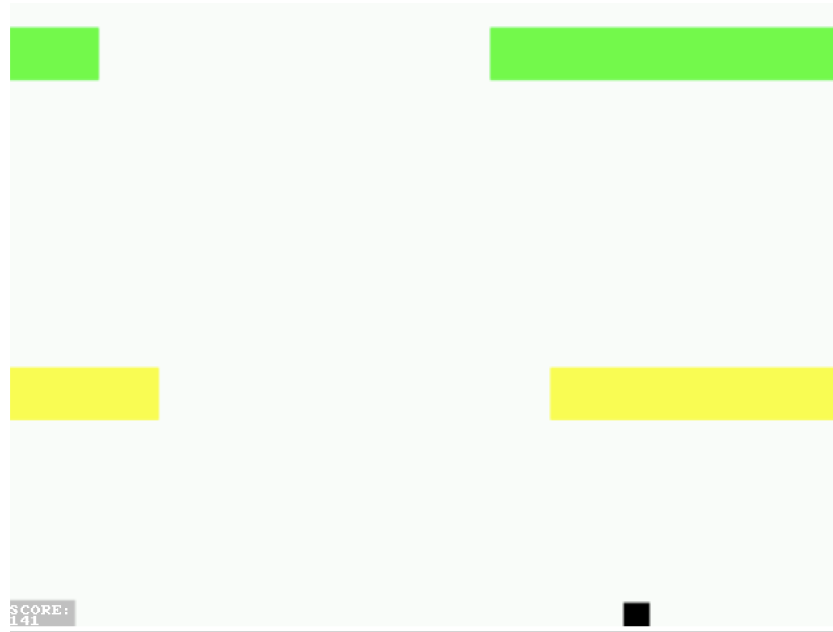# *Pixel Shift*

This game is based on the game called "Amazing Brick", available on the iOS App Store and Google Play Store. It uses a lot of the same fundamental mechanics of the game, and the objective is the same - survive as long as possible while dodging said obstacles.

You start the game with a black screen, and the game begins when any of the keys from KEY0 to KEY3 are pressed. During the game, each key has its own purpose:

- KEY0 or the RIGHT arrow key on the PS2 Keyboard will move the box right and a little forward, in order to evade the obstacle.
- KEY1 or the LEFT arrow key on the PS2 Keyboard moves the box to the left in the same manner KEY0 or the right arrow key do to the right.
- KEY2 or the UP arrow key ends the game immediately and shows the GAME OVER screen.
- KEY3 has no real functionality other than starting the game from the START screen.

As your spiked ball moves around, the obstacles fall at a fast pace. The score gets added for how long you survive; not how many obstacles you dodge. In this manner, it is quite similar to the famous Google Chrome Dinosaur game scoring

system. Using the keyboard will move the ball twice. This is our difficulty level two. Start this game mode by pressing KEY3 first.

START Screen

As you can see below, the start screen look as such. From here, any key can be pressed but beware of KEY2, which will end the game before it even begins!
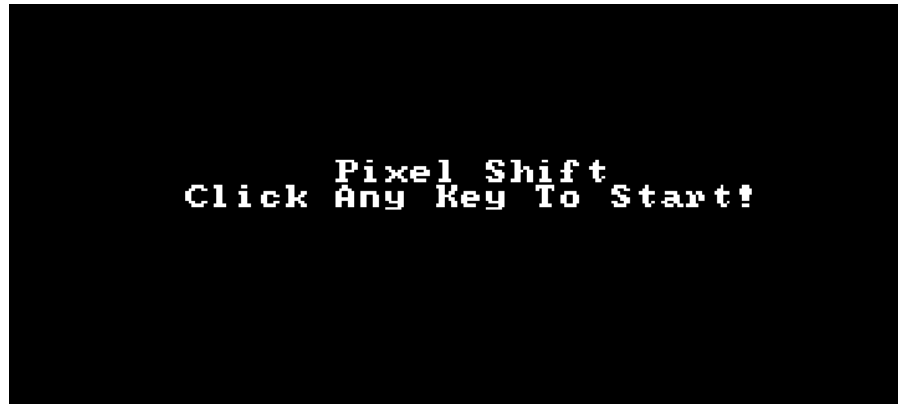
GAME OVER Screen

As seen below, the game over screen means that you have lost, and you can press any key to restart. Again, KEY2 will end the game as soon as it starts

You lose in the following scenarios:
- The ball hits the top of the screen
- The ball hits the bottom of the screen
- The ball hits any of the coloured obstacles on the screen.

Finally, you can wrap the ball around the screen if you hit the left or right sides of the screen, giving the chance for more evasive manoeuvres.

Attribution Table

Abhay created the UI Elements of the screen. That includes the interrupts for the keys and the keyboard, the smoothness of the animation and the starting and game over screens along with the text displayed in them. Also created the score keeping algorithm.
Abhimanyu created the game algorithm, the box movement as well and the obstacle placement, speed, colour randomization and smooth movement of them. Also helped with the score keeping algorithm and created the game over conditions.