

GAD405-2 Radical Conversion Documentation

When we were given our assignment to radically convert the code of one of three games to make our own from it my project started out with various different concepts which changed throughout my development process due to certain limitations I experienced. I started out by choosing to convert the endless runner Flappy Bird game and my original idea focused on giving the player the ability to shift colours in order to score points when they passed through pipes. My inspiration for this came from various games with colour-based mechanics in them, such as 'Hue', a puzzle-platformer in which the player alters the world by changing its background colour. However after some time working on this concept I came to a couple conclusions: I was unsure how to make this colour shifting mechanic work at all in Phaser and on top of that, this idea of mine was more of an adaptation of the traditional Flappy Bird genre of games than a radical conversion, as the only major change I was making was the addition of a new mechanic.

And so, I decided to attempt more conversion into the original Flappy Bird game by changing my idea. This new concept was about jumping from platform to platform without falling out of the map and ultimately losing, like a jumping puzzle and just as difficult as some may be in certain games. I began coding this by altering the original pipe mechanic in the code to randomly deploy small platforms instead. Of course, in the original code touching platforms killed the player rather than preserving their life so I had to alter the code to add collision between the player and the platforms so that they could be used to land on and jump between instead. I then played around with the gravity and jump-power of the game to tweak it until I felt it was at a level that kept the difficulty reasonably hard yet not impossible when some platforms spawn too high up for the player to have a chance. Once this was done I created and added assets to the game using PhotoShop and GIMP, which led me to decide on the theme and story of the game, of which I liked the idea of the player being a slime science experiment within a small vial and the camera is the viewpoint of the scientist that created it, the name of the slime being bird as it kept coding easier and seemed quite fitting in an inside joke way. Sound on the other hand I created entirely using a software call PixiMaker, which allowed me to create 8-bit sounds which fitted with the pixel art of Bird and the platforms.

As for problems and insights I had, the major problem I had was my coding skill not being as strong as I would have hoped so I would have to alter my ideas and decisions to work around this fact, whilst also dealing with certain debugging errors that needed fixing with solutions that were hard to find, like with the high-score not displaying correctly and my jump count code becoming too complex to work within the time I had left by this point, leaving the game to be very simple and easy.

In the future, my game could have several upgrades applied to it such as the addition of my original jump limit idea to add more challenge to the game. More obvious upgrades being a menu screen or a better movement/jumping mechanic to aid the players more.

Github Repo: <https://github.com/StealthySloth/GAD405-2-Slime-Bounce>