Task4 - Design & evaluate a game informed by psychological concepts.

My role in developing this game was to code the game over screen and the coding the start screen, meaning the story line before starting the game. First, Paul designed the story with the font and the scenery and then I coded the functionality of it. So, when the player presses the next button, it will show the next scenery. After the third scene of the story, there is the instructions scene, giving a basic concept of what the player should do in order to win or lose the game and which keys the player should press to collect the colour drops. I linked the functionality, meaning the scripts, with the scenes for the story in order for the buttons to work. In order for the bear to jump and collect the colour drops, the user has to press either the left mouse click or the space bar. After pressing play, in the instructions screen, the game will start.

I also, worked on the spawning of the drops. Hence, while the story was in play, duplicate drops at the same time where already spawning, which we didn't want this bug to happen. Therefore, we arranged the Spawn Script, to change the void Start function to public void StartSpawning and link the script to the object. The game over screen was also one of my tasks which I had to do. Therefore, when the player grabs an enemy drop, the game over screen will show up displaying a restart button and a quit button. When the player clicks on the restart button, the game will restart and if the player clicks on the quit button, the game window will close.

The strengths of the game are that the game gives a challenge to the user as, as soon as the player collects 10 drops, the screen size will decrease and keeps the player immersed in the game. For every 10 drops the player collects, the screen size decreases and it will be more difficult to see and calculate at what point the enemy drops are coming to the bear. Also, the fact that when pressing the space bar or either the left mouse click button, the bear will go up and walk upside down which keeps the player much more immersed and feels as if he/she is in space. Then it up to the user to know how to control the movement of the bar and at what time the user jumps to collect the colour drops. This is a challenge for the player because he/she has to focus on not only to avoid the enemy drops but also the screen size to keep the player immersed throughout the game.

The limitations found in the game are that Me and Melvin didn't know how to code the part that when the player grabs a colour drop, two colours from the screen will be included. Therefore, we included a new canvas and added a variable for the colour so that when a colour drop is grabbed, the colour will increase by a stated percentage. This could have been much better if we knew how to code the part that when the user grabs a colour drop, two colours from the screen will be added. Even for the enemy drop, when the player grabs

a black drop, the two colours from the screen will be removed. Instead, how we implemented it was, we included a new canvas and added a variable for the colour so that when a colour drop is grabbed, the colour will decrease by a stated percentage. This could have been much better if we knew how to code the part that when the player grabs a colour drop, two colours from the screen will be removed.

Another problem we have encountered during our game process was that we needed to increase the speed of the enemy drop for every ten colour drops grabbed by the player. However due to limited amount of time, to make it more challenging, we added two bars for the left and right sides so that for every ten colour drops collected, these bars will widen to make the screen smaller. This could have been better that instead of adding these bars, we could have coded it to make the screen smaller. Also, we wanted the game over screen to show after the colours in the screen are all white but considering that we didn't know how to code that part, instead, I did it that after the player collects an enemy drop, he/she loses the game and the game over screen will show up. In the game over screen we added the restart button to play again or the quit button so that when the user clicks it, the game window will close.

With regards to playtesting, I asked 2 players to play the game to test it out. Whilst he was testing the game out, the player told me that he liked the fact that the character is moving automatically, by code and not having to focus on how to move the character. He also told me that if the speed of the enemy drops will increase for every 10 drops collected, it would make the game more challenging, the fact that screen size increases by 100 pixels, the player didn't like the fact that it increases by that much. If the screen size is set to 50 pixels for every 10 drops collected, it would be much better. The other player told me that if when he collects a colour drop, if the saturation of the hue is less it would have been better as, as the ninth drop is collected, the player can barely see in order to collect the tenth drop.