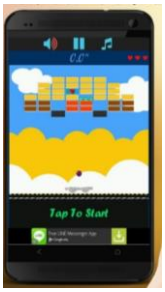
2. Prepare Workspace and Assets for Game

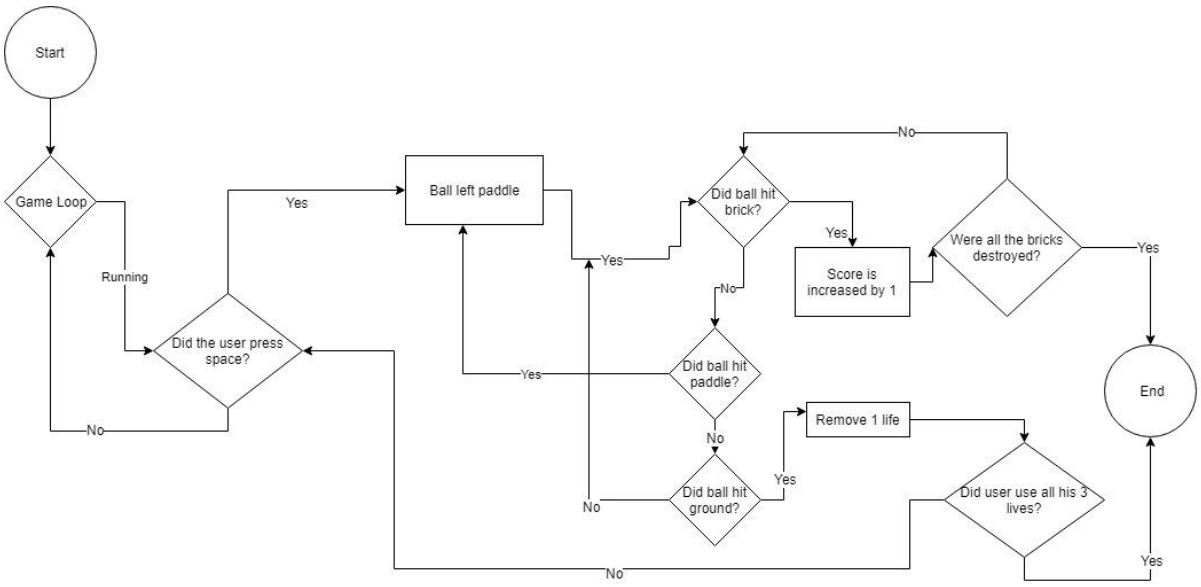


a)Target Device

Since I will be making a brick breaker game I decided that the game would be on a 12 X 16 screen as it has to be a bit wide which would be ideal on either a tablet or also on a mobile. For this project though I will develop a game for Windows and it would work the same way

b) Game Play Flowchart

The game flow chart that can be seen below consists of the start of the game which consists of a loop to check if the user pressed the space button to be able to play the game. If yes the ball would leave the paddle if not it would be a constant loop until the game starts. The flowchart would then check if the ball hit the brick, if it did the score would increase by 1 and would then go on to check if all the bricks were destroyed. On the other hand if the ball didn't hit the brick it would go on to check if the ball hit the paddle, if yes the ball would bounce on the paddle and continue playing. If no the flowchart would check if the ball hit the ground, if yes it would decrease a life and the ball would return to the initial place, if not it would continue to check if the ball hit the brick once again. If all the bricks get destroyed the game would end and it would also end if the user has used up all his 3 lives.



c)Game Mechanics and Objective

As for Game mechanics my game includes the paddle which moves from left to right so as not to let the ball fall and not to lose a life. Every time the player loses a life the paddle together with the ball would reset itself in the middle. The ball is also able to bounce off from the sides of the game, the

paddle and also after it hits the bricks. The bricks disappear once they come in contact with the ball and from here a point is added to the score. If all the bricks are destroyed a You Won title would appear on the screen and the user could re-play the game. If the user uses up all his 3 lives than he would lose the game and would be able to restart again as well with everything being reset. Obviously from the title the game's objective is for the player to try to break all the bricks without losing the game.

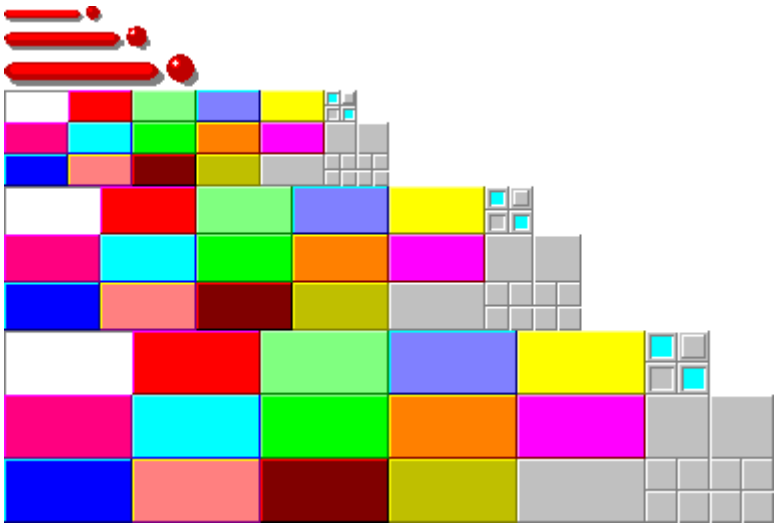
d) Visual Assets

I decided to do a simple 2D game of Brick Breaker. For the game I would need these sprites:

Background: I cropped it out to be able to fit my screen accordingly and used the part I thought was the most suitable for the game.

Ball: For the ball I tried to find a cute ball with a smiley on it so as to make it cuter and friendlier looking for the player.

Bricks: For the bricks I found a sprite that had several sizes and colours of bricks from which I will choose for the game. I wanted to find something colourful to be more attractive to the eye.



Paddle: From the same image above I chose the paddle as well as I liked the fact that it had a shadow and looked more realistic on the game.

Win/Loose/Start Game: For these I found different titles to be displayed according to what is needed.

e) UI Elements

To have a fully functional yet user-friendly game one must make it easy for them to play and enjoy the game at the same time. Since it's a brick breaker game the only thing a user has to do is move the paddle and to start/restart the game. I will try to make it easier for the user to be able to move the paddle easily with one hand from left to right. The screen will be spread out with a full background in the back. The bricks would be scattered around the screen to fill it out and use all of the screen rather than leaving parts empty. On the top I will do the score and lives which will be easy for the user to read and they won't be obstructed by the user's own hand.

References:

Gamedesigning.org. (2018). [online] Available at: https://www.gamedesigning.org/learn/basic-game-mechanics/ [Accessed 12 Apr. 2018].

Gamestudies.org. (2018). *Game Studies - Defining Game Mechanics*. [online] Available at: http://gamestudies.org/0802/articles/sicart [Accessed 12 Apr. 2018].

mechanic?, W. (2018). *What is a game mechanic?*. [online] Gamedev.stackexchange.com. Available at: https://gamedev.stackexchange.com/questions/103459/what-is-a-game-mechanic [Accessed 12 Apr. 2018].

En.wikipedia.org. (2018). *Game mechanics*. [online] Available at: https://en.wikipedia.org/wiki/Game_mechanics [Accessed 12 Apr. 2018].

Quintans, D. (2018). *Game UI By Example: A Crash Course in the Good and the Bad*. [online] Game Development Envato Tuts+. Available at: https://gamedevelopment.tutsplus.com/tutorials/game-ui-by-example-a-crash-course-in-the-good-and-the-bad--gamedev-3943 [Accessed 12 Apr. 2018].