Module 8 Assignment

I modified the code a little bit to make a simple game involving a moving brick and a color matching mechanic. In this game you control a white brick that you can only move horizontally at the bottom of the screen. The goal is to eliminate all bricks higher up on the screen. The only way to eliminate a brick is to shoot a circle with the same color as the brick. Starting from the top to bottom of the main code cpp, I will explain the changes made. The first method that I changed was the check collision method. Within the if statement that checks whether a collision has been made between the circle and the brick, I wrote an additional nested statement. This statement checks whether the r, g, and b values match each other by using the ‘and’ operator. So, if circle red matches brick red, etc. If they do end up matching then the brick’s onoff value turns to OFF, deactivating the brick. If they don’t match, then they will simply bounce off. In the main method, I just simply populated the screen with more bricks by declaring more brick objects and then drawing them with the drawbrick method. Next is the process input method. First, I declared new coordinates where the circles will spawn from. The spawn point will have to be right in front of the brick, so I captured the white brick’s current location and added an additional value to Y offset its location to the front of the brick. I added functionality to the R, G, and B keys. R will shoot red circles, G will shoot green circles, and B will shoot blue circles. Added additional if statements inside these to shoot additional colors based on their combination. For example, if you hold down the R and B key then purple circles will shoot out. Along with the R, G, and B keys I added another feature to the space bar key. The space bar will shoot a sort of super laser that will spawn balls from 3 spawn points side-by-side emanating random colors. The last functionality is an attempt to prevent a slowdown that occurs whenever too many objects are rendered on the screen at a time. An if statement will check whether there are more than 30 objects in the world vector, if there are then it’ll erase them starting from the front of the vector.