Blake Kemp

Southern New Hampshire University

CS-330

8-3 Assignment

Throughout this project, I embarked on an exhilarating journey to develop a fully realized 2D animation using the popular game Brick Breaker as my canvas. My goal was to enhance the existing code by incorporating various features that would breathe new life into the game and deliver an immersive experience. Let me walk you through the changes I made and the tactics I employed to bring this animation to life.

To begin, I introduced the AddBricks function, which allowed me to generate a grid of bricks with distinct colors and patterns. By organizing the brick placement, I not only added visual complexity but also introduced strategic elements to the gameplay. The CheckCollision function was extended to ensure accurate detection of collisions between the circles and bricks. This feature provided immediate feedback by triggering color changes upon successful hits, elevating the game's engagement and rewarding the player's skill.

Next, I turned my attention to the Paddle class to enhance the user experience. By enabling user-controlled movement, I empowered players to navigate the paddle with ease, heightening their sense of control and immersion in the game. Additionally, I introduced the ChangeCircleColor function, which randomly altered the color of circles upon collision, injecting visual stimulation and excitement throughout the gameplay.

My coding approach revolved around a systematic and iterative process. I carefully analyzed the existing code, identified areas that required modification, and implemented the necessary changes. Each step was accompanied by thorough testing and refinement to ensure a seamless and enjoyable animation.

The culmination of these changes resulted in a fully realized 2D animation that transformed the Brick Breaker game into an immersive and captivating experience. The addition of extra bricks, organized placement, collision detection, paddle movement, and color changes elevated the game to new heights. This project not only deepened my understanding of game development principles but also allowed me to apply fundamental programming concepts. Through meticulous planning, continuous testing, and attention to detail, I successfully created an animation that showcases my creativity and highlights the power of coding to deliver engaging experiences.

In conclusion, this project emphasized the importance of iteration and user feedback in achieving the desired outcome. It showcased the immense potential for creativity and engagement through coding, underscoring the significance of user experience in game development. By approaching the project with a human touch and a passion for creating captivating animations, I was able to achieve a fully realized 2D animation that brings joy and excitement to players.