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CS-330 8-2 Assignment Reflection

For this project, I transformed a static OpenGL program into a fully functioning 2D animation. I added a visually unique brick layout using nested loops and varied brick sizes and colors to enhance engagement. I introduced an interactive paddle at the bottom of the screen, allowing for real-time control via keyboard input, and programmed collision logic between the paddle, circles, and bricks.

I implemented circle spawning with randomized colors and motion using the SPACE key, creating a dynamic experience. Brick states were altered by implementing hit counters and fading colors to simulate damage. Additionally, circle-to-circle collisions now change visual states and movement behavior.

To maintain clean, modular code, I split behavior into logically grouped functions such as DrawCircle(), MoveOneStep(), and CheckCollision(). I followed best practices in formatting, using proper indentation, spacing, and inline comments for readability. The code executes cleanly without syntax errors and all features are directly reachable during runtime.

This project helped reinforce my understanding of real-time animation, collision detection, and interactive graphics programming.

Just press space bar and have fun!