8-2 Assignment: Coding Collisions

CS 330 – 2025

Alex Kastigar

I wanted to turn the starter animation into a real brick-breaker game, so I split the code into three classes: Brick, Paddle, and Circle. That let me keep drawing, movement, and collision logic separate. I made every brick destructible by tracking hit counts and darkening the color each time it gets hit. When a level clears, it resets so you can keep playing and racking up points. I originally found it very disorienting so I capped the ball’s speed and I tweaked the bounce angle based on where it hits the paddle to avoid dead-horizontal shots. I slimmed the paddle and halved its speed for a fair challenge. I also wired up arrow keys and A/D for paddle control, plus Space to restart. Throughout, I used clear names and comments so the code stays easy to follow.

**References**  
GLFW. (2025). *GLFW: An OpenGL framework*. Retrieved June 29, 2025, from <https://www.glfw.org/>