

Inner Window

Step 1: Initialize the game loop while the window is open. Create an empty window of 800x600. At this stage we do not want to update anything. When the x button is pressed or the stop button is pressed the window should close and stop running the app.

Step 2: Using SFML as a starting point and create the appropriate shapes to make the table, cushions and pockets. When the player clicks on their ball and drags the mouse back a line is drawn using the mouse. When the mouse clicked started where the ball was then the ball changed back to. As the balls move through the table friction physics should apply and gradually slows down the ball down. When the balls hit off the cushions they bounce off it. The direction and speed depends on the angle and velocity the ball is hit at.

Step 3: The red ball is now controlled by a player and only exists to score more points. Collisions are detected when the balls hit off one another, the cushions and the pocket. Depending on how the cue ball collides with other balls varies on velocity and angle.

Step 4: The ball is aimed when the mouse clicks the ball and drags the line back. This line is on the exact opposite side of where the ball is going to go. The ball is released when the player lets go of the left mouse button.