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Application Requirements

Option #2: Super Groovy Pong

Use Cases:

<u>1 Player Controls Movement of the Paddle:</u>
–the player moves their paddle to defend their goal
–the player presses arrow keys to move their paddle around ½ of the screen

<u>2 Player Hits Puck:</u>
–the player hits the puck with their paddle
–the paddle intercepts the puck to send it in the right direction
–the puck's speed increases with each successful hit
–a basic line render controls the paddle speed
–we start with a cold color and increment to hotter colors
–AI responds to the puck by hitting it back to also defend its goal.

<u>3 Pause/Resume:</u>
–the player wants to pause the game
–pressing the "Pause" button, or the P key will temporarily halt the game
–press the same button to continue the game

<u>4 Scoring:</u>
–the player scores one point per round
–when the puck passes the opponent's paddle & enters the opponent's goal, they score a point.
–score is updated on the screen

<u>5 Game Over:</u>
–the game ends when the player reaches best of 5 (first to 3).
–the "Game Over" screen is displayed (Player or AI wins).
–players can return to the main menu, or restart the game

<u>6 Game Restart:</u>
–the player clicks "Restart" to begin a new game, for convenience.
–after the game ends, they can click the "Restart" button or use the key (R key) to initiate a new game

<u>7 Game Exit:</u>
–the player decides to exit the game

–the player can click the "Exit Game" button or use the (Esc) key to close the game.
–the game closes and players are returned to their desktop screen

8 Game Instructions:
–the player must understand how to play
–the player can access a "Instructions" screen providing information on controlling paddles, scoring points, or special game rules