

## Lab #7 Checklist

The board is properly displayed and the board has all required elements. This includes the border, two paddles, the ball, score for each player, and the time.
<del>Paddle and ball colors are random and do NOT match one another.</del>
A penalty is assessed when a player tries to move their paddle as the ball is moving away from them, and that player loses one point, while the other player gains a point.
When a penalty occurs, the round ends and the RGB LED illuminates in the color of the player who benefitted from the penalty. When the round ends, the elapsed time must pause and the players should no longer be able to move their paddles.
A powerup can be picked up by a player, and when this happens the paddle size doubles.
Only one powerup can occur at a time.
Powerup times are random, ranging from between 2 and 15 seconds after a powerup ends.
When a powerup is spawned, its location is random.
<del>The score for each player advances properly, incrementing by one each time a player gets the ball beyond their opponent.</del>
<del>Each player can move their paddle up and down.</del>
<del>The paddles cannot move past the top or bottom of the board.</del>
<del>The ball bounces off top or bottom of the board at an angle of 45 degrees.</del>
<del>When the ball bounces off the top or bottom of the paddle, it bounces off the paddle at a 45 degree angle.</del>
<del>When the ball bounces off the center of the paddle, it bounces off the paddle horizontally.</del>
<del>Game is paused when the push button SW1 is hit.</del>
When the game is paused, the player is notified the game is paused.
When the game is paused, the player cannot move.
When the game is paused, the ball does not move.
When the game is paused, the powerup time does not decrease.
<del>When the game is paused, the elapsed time should not change.</del>
When the game is paused, instructions are displayed indicating how to continue the game.
<del>Pressing the pushbutton SW1 continues the paused game, NOT resetting the game, but continuing where the game was when it was paused.</del>
<del>When the game is paused, the user can successfully continue the game when they are ready.</del>
When the game is paused, the user can restart the game.
The LEDs indicate the amount of time remaining on a powerup.
The LEDs dance when the game has been won.
The switches can properly select the score at which the game ends.
<del>The game properly recognizes when the game is over and game play stops.</del>
<del>When the game ends, the user can restart the game.</del>
The RGB LED indicates the color of the player's paddle who won the last round.
<del>The RGB LED should be off if the game is in the first round and no one has won yet.</del>
<del>The initial game speed is correct. This includes animation and smooth, fluid motion.</del>
As the game progresses, the ball speed increases by 5 frames per second, maxing out at 60 frames per second.
<del>The game's animation is smooth and fluid.</del>