

XNA Game Program Assessment – PONG

Background:

Now that you know how to use rectangles to display images and detect collisions, you can use your skills to build a basic paddle ball game--Pong! You may work with a partner, but you each must build your own game.

Directions:

1. Load the image of the court as background, the box (white box as a .png) as paddles, and the ball. ([download assets from the class website or the shared drive...sounds and additional assets are on the shared drive](#))
2. Create rectangles to frame the images and size the objects.
3. Set the edges of the screen as the 4 walls of the court the ball will bounce off.
4. The ball should move from one side of the screen without stopping to the other side and from the top to the bottom changing 1 direction when hitting off a wall.
5. Use the keyboard to control the paddle or paddles.
6. When the ball collides with a paddle, change the horizontal direction of the ball.
7. Set a counter to change the size of the paddle, the size of the ball, and the speed of the ball at various intervals or when so many successful hits or misses occur.
8. Set the opacity of the paddle to function as a health meter and disappear when misses occur.
9. Develop an original means to end the game.

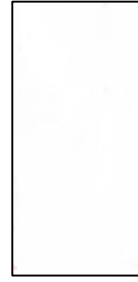
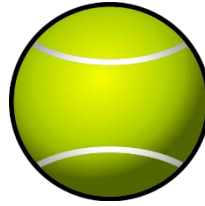
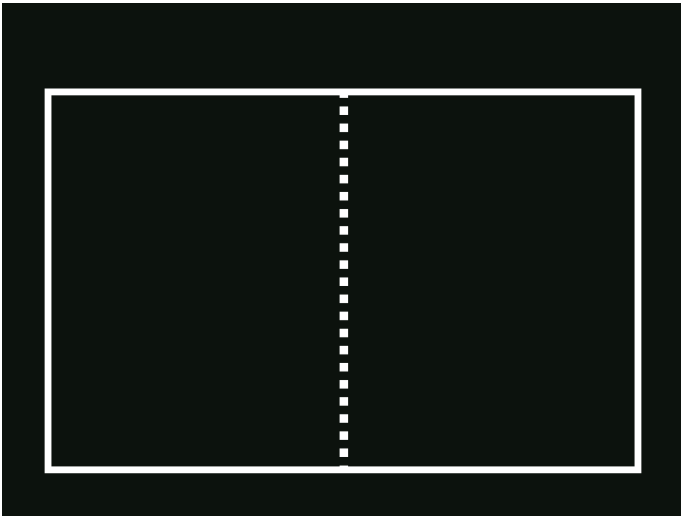
Helpful Code:

```
// Add variables to create the Keyboard and GamePad objects
KeyboardState myKeys;
GamePadState myPad;

// TODO: Add your UPDATE logic here
myKeys = Keyboard.GetState(); // Get the Keyboard to work
myPad = GamePad.GetState(PlayerIndex.One); // Get the GamePad to work

// Keyboard movement example
if (myKeys.IsKeyDown(Keys.W))
    asteroidRec.Y--;
if (myKeys.IsKeyDown(Keys.A))
    asteroidRec.X--;
```

Assets:



box.png -- plain white box as a .jpg or .png
to be used as a paddle(s)

Extensions & Extras:

- Add any other features you desire:
 - Multiple Players (add a 2nd Game Pad)
 - Multiple Balls
 - Paddle Movement to the 'Net'
 - Change the color of the paddles (white box image) when 5 balls are missed (change to red); when 10 balls are hit (change to green),
 - Change the Paddles from a Box images to an image of your choosing (like hot dogs)
 - Add Sound