

Pong

In the “Bouncing Balls” lesson we built a simulation where balls bounce off every edge of the screen. In a lot of ways Pong is just like that. Using the Bouncing Balls lesson as a starting point, here are some of the steps you’ll need to follow:

1. Before you start, make sure you complete the “Coding for Two Players” lesson
2. Create a new project, and add classes for “Ball” and “Paddle” (you could call it “Player” or something like that if you prefer)
3. In the Ball class implement methods for “bounce()”, “move()” and “display()”, like you did for Bouncing Balls
 - a. Create a “run()” method which will call each of these, so that in your main code you only have to call “Ball.run()”
4. In the Paddle class you should declare a constructor which takes a number, “playerNumber”. This will tell it that you are creating player1 (left side of the screen), or player2 (right side of the screen)
 - a. BUG CHECK: What will happen if you accidentally create a paddle with playerNumber of 3 or 4?
5. The Paddle Class should also have some way of moving the paddles. You should probably pass your ArrayList from the main part of your program to the run() method in Paddle class, by declaring it as “void run(ArrayList<Character> keysIn)”
6. Once you have the balls bouncing and player paddles moving, why not add a cool background, and maybe some sound effect (ONLY IF YOU HAVE HEADPHONES!!)
7. You can also keep score, and add other features like a ball that speeds up as the game goes on for longer
8. What other neat features can you add?

