ANIMATION AND SOUND

What is our GOAL for this MODULE?
We added sound effects and animation to convert the pong game to a Soccer game.

**What did we ACHIEVE in the class TODAY?**
- Added sound effects in the game:
  - When the ball hits the paddles or the ball
  - When a player scores
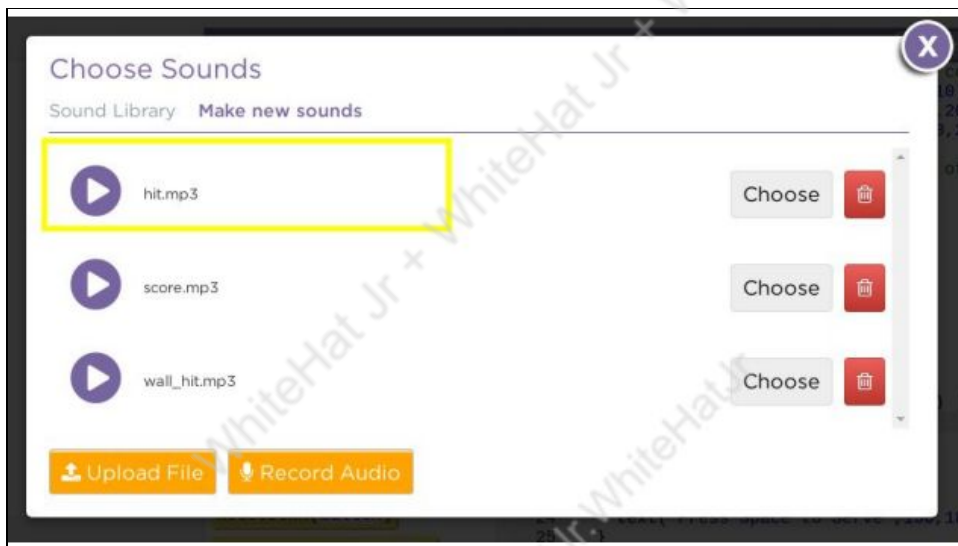- Added animation to convert the game of Pong into a Soccer practice game
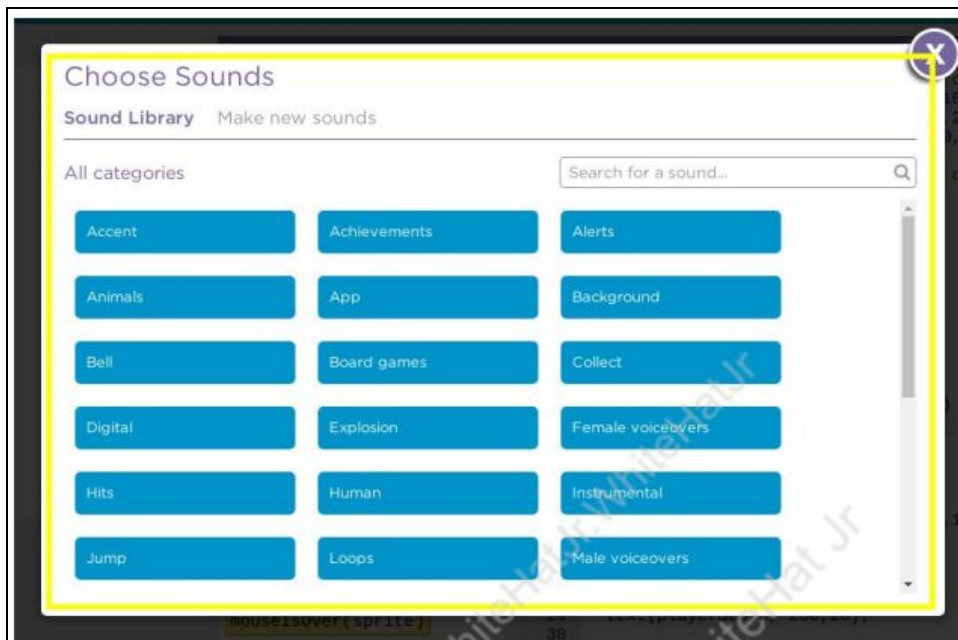
Which CONCEPTS/ CODING BLOCKS did we cover today?
- Sound effects
- Animation
- Using typora editor to create markdown notes

How did we DO the activities?

1. The instruction *playSound()* gives an option to choose the sounds. You can choose the sounds from the library or upload a file or a recording.
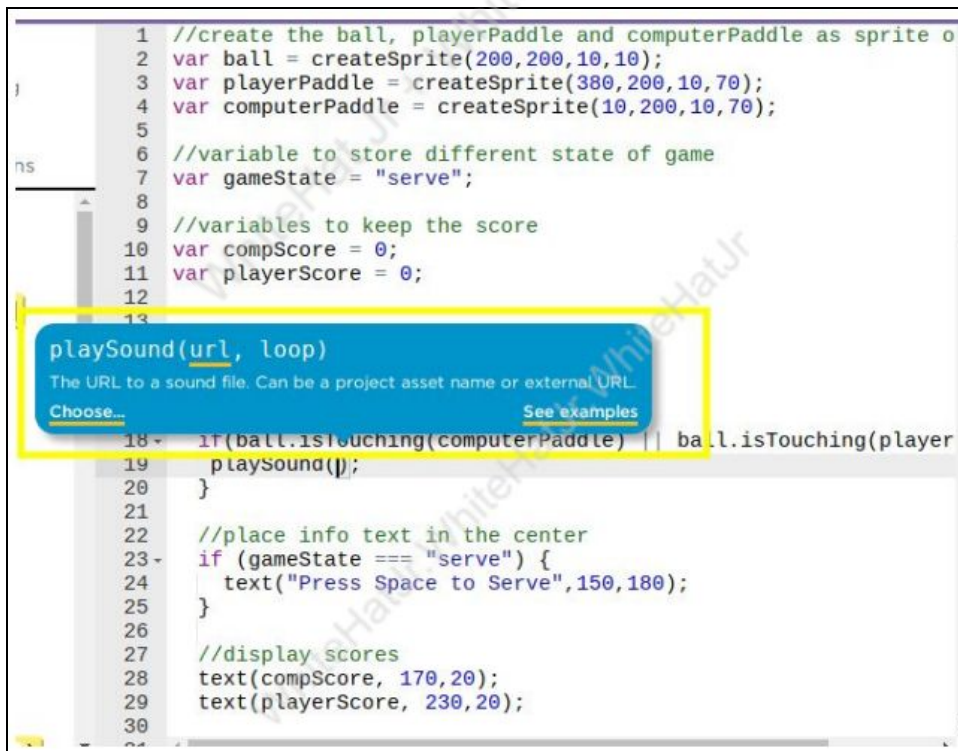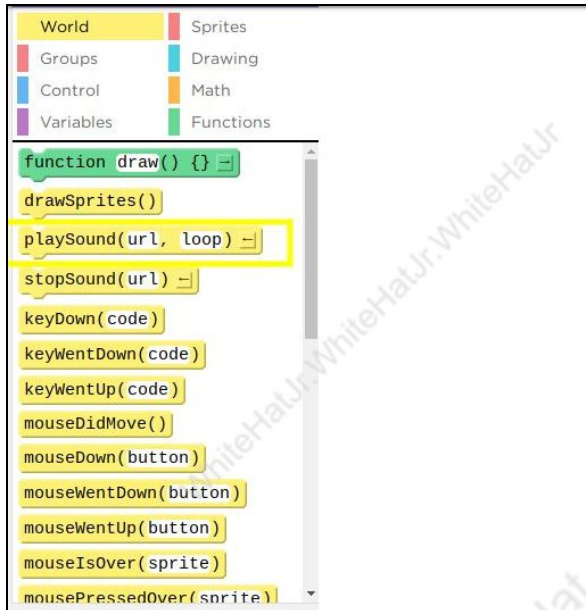
2. Add sound effects when the ball hits the *topEdge* and the *bottomEdge*.
   - Code:

```
45
46
47      //create edge boundaries
48      //make the ball bounce with the top and the bottom edges
49      createEdgeSprites();
50      ball.bounceOff(topEdge);
51      ball.bounceOff(bottomEdge);
52      ball.bounceOff(playerPaddle);
53      ball.bounceOff(computerPaddle);
54
55
56 ▾    if(ball.isTouching(topEdge) || ball.isTouching(bottomEdge))
57        playSound("wall_hit.mp3");
58      }
59
60      //serve the ball when space is pressed
61 ▾    if (keyDown("space") &&  gameState === "serve") {
62        serve();
63        gameState = "play";
64      }
65
66
67
```
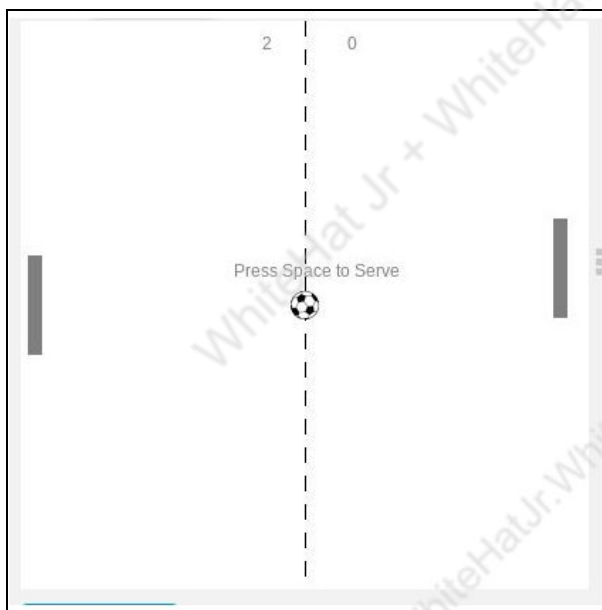
3. Add animation to the ball.

● Code:

```
1   //create the ball, playerPaddle and computerPaddle as sprite objects
2   var ball = createSprite(200,200,10,10);
3   ball.setAnimation("ball");
4
5   var playerPaddle = createSprite(380,200,10,70);
6   var computerPaddle = createSprite(10,200,10,70);
7
8   //variable to store different state of game
9   var gameState = "serve";
10
11  //variables to keep the score
12  var compScore = 0;
13  var playerScore = 0;
14
15
16▾ function draw() {
17    //clear the screen
18    background("white");
19
20▾   if(ball.isTouching(computerPaddle) || ball.isTouching(playerPaddle)) {
21      playSound("hit.mp3");
22    }
23
24    //place info text in the center
25▾   if (gameState === "serve") {
26      text("Press Space to Serve",150,180);
27    }
28
```

● Output:

4. Add the animation for the *playerPaddle* and the *computerPaddle.*

```
1  //create the ball, playerPaddle and computerPaddle as sprite objects
2  var ball = createSprite(200,200,10,10);
3  ball.setAnimation("ball");
4
5  var playerPaddle = createSprite(370,200,10,70);
6  playerPaddle.setAnimation("player");
7
8  var computerPaddle = createSprite(35,200,10,70);
9  computerPaddle.setAnimation("robot");
10
11  //variable to store different state of game
12  var gameState = "serve";
13
14  //variables to keep the score
15  var compScore = 0;
16  var playerScore = 0;
17
18
19  function draw() {
20      //clear the screen
21      background("white");
22
23      if(ball.isTouching(computerPaddle) || ball.isTouching(playerPaddle)) {
24          playSound("hit.mp3");
25      }
26
27
28      //place info text in the center
```

What's next?

We will build another more complex game where you will be writing the code on your own!

Extend Your Knowledge

Refer to the following link to get more information about adding animations and graphics to the game.

1. [Game Tutorial](#)