

Rock paper scissors app from Code.org

// List of icons that can be used in the game

```
var icons = ["icon://fa-hand-rock-o", "icon://fa-hand-paper-o", "icon://fa-hand-scissors-o"];
```

// List of possible choices to play

```
var choices = ["Rock", "Paper", "Scissors"];
```

// User and computer scores, started at 0

```
var playerScore = 0;
```

```
var computerScore = 0;
```

// Button for player to play rock

```
onEvent("rockButton","click",function(){
```

```
  updateScreen("Rock");
```

```
  playSound("sound://category_bell/vibrant_game_bell_ding.mp3", false);
```

```
});
```

// Button for player to play paper

```
onEvent("paperButton","click",function(){
```

```
  updateScreen("Paper");
```

```
  playSound("sound://category_bell/vibrant_game_bell_twinkle_positive_touch_1.mp3", false);
```

```
});
```

// Button for player to play scissors

```
onEvent("scissorsButton","click",function(){
```

```
  updateScreen("Scissors");
```

```
  playSound("sound://category_bell/vibrant_game_correct_answer_1.mp3", false);
```

```
});
```

// When the user clicks any of the three buttons it runs a round

// of rock paper scissors. This function determines who won the

// game and updates the screen and scores for each player.

```
function updateScreen(playerChoice){
```

```
  // Randomly choose the computer's choice and decide who wins
```

```
  var computerChoice = randomChoose(choices);
```

```
  var winner = decideWinner(playerChoice, computerChoice);
```

```
  // Update the screen with the correct icon for each player
```

```
  setProperty("playerOutput","image",findIcon(playerChoice));
```

```
setProperty("computerOutput","image",findIcon(computerChoice));
```

```
// Update the screen with the text explaining who won.
```

```
if(winner == "Draw"){
    setProperty("gameText","text","Draw!");
} else if (winner == "Player") {
    setProperty("gameText","text","You win!");
    playerScore++;
    setProperty("playerScoreOutput","text",playerScore);
} else if (winner == "Computer") {
    setProperty("gameText","text","Computer wins!");
    computerScore++;
    setProperty("computerScoreOutput","text",computerScore);
}
}
```

```
//Assigns an icon name that corresponds with the icon image from the icons list.
```

```
// iconName {string} - either "Rock", "Paper", or "Scissors"
```

```
// return {string} - the icon associated with the string provided
```

```
function findIcon(iconName){
    var icon = " ";
    if (iconName=="Rock") {
        icon = icons[0];
    } else if ((iconName=="Paper")) {
        icon = icons[1];
    } else {
        icon = icons[2];
    }
    return icon;
}
```

```
// Randomly selects an item from the list provided and returns it
```

```
// list {list} - a list of items
```

```
// return {item} - a randomly chosen item from the list
```

```
function randomChoose(list){
    var randomItem = list[(randomNumber(0, list.length - 1))];
    return randomItem;
}
```

```

// Decides who wins a round of rock paper scissors by taking the two
// playerChoice {string} - either "Rock", "Paper", or "Scissors", the human player's choice
// computerChoice {string} - either "Rock", "Paper", or "Scissors", the computer player's choice
// return {string} - either "Draw", "Player", or "Computer", depending on who
function decideWinner(playerChoice, computerChoice){
    var outcome = "Draw";
    if (playerChoice == "Rock") {
        if (computerChoice == "Paper") {
            outcome = "Computer";
        } else if ((computerChoice == "Scissors")) {
            outcome = "Player";
        }
    } else if ((playerChoice == "Paper")) {
        if (computerChoice == "Rock") {
            outcome = "Player";
        } else if ((computerChoice == "Scissors")) {
            outcome = "Computer";
        }
    } else if ((playerChoice == "Scissors")) {
        if (computerChoice == "Rock") {
            outcome = "Computer";
        } else if ((computerChoice == "Paper")) {
            outcome = "Player";
        }
    }
    return outcome;
}

```