

# Assignment 5: Lottery Sim

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## URL

<http://comp20.great-site.net/Assignment5/lottery.html>

## Layout

When the user won the price, there would be an alert saying "Congratulation!", and then the layout of the page will be changed to

Enter the lucky ball number from 1 to 10:

**Congratulations!**

Match	Price
5 + Lucky Ball	\$7,000 a WEEK for LIFE
5	\$25,000 a YEAR for LIFE
4 + Lucky Ball	\$5,000
4	\$200
3 + Lucky Ball	\$150
3	\$20
2 + Lucky Ball	\$25
2	\$3
1 + Lucky Ball	\$6
0 + Lucky Ball	\$4

Today's Lucky: 4 18 23 27 47 1

Your balls: 1 2 3 4 5 1

## HTML Code

```
<!doctype html>
<html>
<head>
<meta charset="utf-8">
<title>Lottery Sim</title>
<link rel="stylesheet" href="style.css">
</head>

<body>
  <h1>Lottery Sim</h1>
  <div id = "structure">
```

```

<div class="row">
  <div class="column">
    <h3 id = "price">Here are our prices:<br></h3>
  </div>
  <div class="column">
    <ul>
      <li>Enter 5 winning ball numbers from 1 to 48.</li>
      <li>Enter the lucky ball number from 1 to 12.</li>
    </ul>
  </div>
</div>

<table id = "rule">
  <tr>
    <th>Match</th>
    <th>Price</th>
  </tr>
  <tr>
    <td class = "block">5 + Lucky Ball</td>
    <td class = "block">$7,000 a WEEK for LIFE</td>
  </tr>
  <tr>
    <td class = "block">5</td>
    <td class = "block">$25,000 a YEAR for LIFE</td>
  </tr>
  <tr>
    <td class = "block">4 + Lucky Ball</td>
    <td class = "block">$5,000</td>
  </tr>
  <tr>
    <td class = "block">4</td>
    <td class = "block" id = "price4">$200</td>
  </tr>
  <tr>
    <td class = "block" id = "3L">3 + Lucky Ball</td>
    <td class = "block" id = "price3L">$150</td>
  </tr>
  <tr>
    <td class = "block" id = "3">3</td>
    <td class = "block" id = "price3">$20</td>
  </tr>
  <tr>
    <td class = "block" id = "2L">2 + Lucky Ball</td>
    <td class = "block" id = "price2L">$25</td>
  </tr>
  <tr>
    <td class = "block" id = "2">2</td>
    <td class = "block" id = "price2L">$3</td>
  </tr>
  <tr>
    <td class = "block" id = "1L">1 + Lucky Ball</td>
    <td class = "block" id = "price1L">$6</td>
  </tr>
  <tr>
    <td class = "block" id = "L">0 + Lucky Ball</td>
    <td class = "block" id = "priceL">$4</td>
  </tr>

```



```

        clearUp();
    }

    function setColor(){
        for(i = 0; i < 19; i ++ ){
            document.querySelectorAll(".block")[i].style.backgroundColor =
"#ffffff";
        }

        for(i = 0; i < 11; i ++){
            document.querySelectorAll(".ball")[i].style.backgroundColor =
"#ffffff";
        }

    }

    // function for set the 5 numbers
    function setNumbers(){
        for (i = 0; i < 5; i++){
            n = Math.random()*47 + 1;
            number = parseInt(n);
            numbers[i] = number;
        }
        numbers.sort(function(a, b) {
            return a - b;
        });

        console.log(numbers);

        document.querySelector("#number1").innerHTML = numbers[0];
        document.querySelector("#number2").innerHTML = numbers[1];
        document.querySelector("#number3").innerHTML = numbers[2];
        document.querySelector("#number4").innerHTML = numbers[3];
        document.querySelector("#number5").innerHTML = numbers[4];
    }

    // fuction for set the lucky ball
    function setLucky(){
        n = Math.random()*17 + 1;
        lucky = parseInt(n);
        document.querySelector("#luckyBall").innerHTML = lucky;
    }

    // get the numbers from the customer and make sure the format of input
    is correct
    function getNumbers(){
        isAccepted = false;
        while (!isAccepted){
            numbersString = prompt("Enter the first 5 winning numbers(from 1
to 48) - the numbers should be entered separated by a space. ", "");
            var numbersSplited = numbersString.split(" ");
            i = 0;
            while (i < 5){
                numberCustomer.push(parseInt(numbersSplited[i]));

                if (numberCustomer[i] < 1 || numberCustomer[i] > 48 ||
!Number.isInteger(numberCustomer[i])){

```

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        alert("Please try again. The input should be five
integers from 1 to 48.");
        numberCustomer = [];
        break;
    }
    i++;
}
if (i == 5){
    isAccepted = true;
}
};
}

// get the lucky ball number from the user
function getLucky(){
    isAccepted = false;
    while(!isAccepted){
        luckyCustomer = parseInt(prompt("Enter lucky ball numbers(from 1
to 18): ", ""));
        if (luckyCustomer < 1 || luckyCustomer > 18 ||
!Number.isInteger(luckyCustomer)){
            alert("Please try again! The input should be an integer from
1 to 18.");
            luckyCustomer = {};
        } else {
            isAccepted = true;
        }
    }
}

// check how many matches in 5 numbers
function checkNumber(){
    matches = 0;
    for (i = 0; i < 5; i ++){
        for (j = 0; j < 5; j ++){
            if (numberCustomer[j] == numbers[i]){
                matches++;
                changeBallColor(i);
                changeAnswerColor(j);
                break;
            }
        }
    }
    document.querySelector("#Unumber1").innerHTML = numberCustomer[0];
    document.querySelector("#Unumber2").innerHTML = numberCustomer[1];
    document.querySelector("#Unumber3").innerHTML = numberCustomer[2];
    document.querySelector("#Unumber4").innerHTML = numberCustomer[3];
    document.querySelector("#Unumber5").innerHTML = numberCustomer[4];
}

// check if the lucky ball number is matched
function checkLucky(){
    if (luckyCustomer == lucky){
        luckyMatch = true;
        changeBallColor(5);
        changeAnswerColor(5);
    }
}

```

```

    } else {
        luckyMatch = false;
    }
    document.querySelector("#U1uckyBall").innerHTML = luckyCustomer;
}

// change the color of ball if it is matched
function changeBallColor(ball){
    if (ball == 0){
        document.querySelector("#number1").style.backgroundColor =
"#d0ffca";
    }
    if (ball == 1){
        document.querySelector("#number2").style.backgroundColor =
"#d0ffca";
    }
    if (ball == 2){
        document.querySelector("#number3").style.backgroundColor =
"#d0ffca";
    }
    if (ball == 3){
        document.querySelector("#number4").style.backgroundColor =
"#d0ffca";
    }
    if (ball == 4){
        document.querySelector("#number5").style.backgroundColor =
"#d0ffca";
    }
    if (ball == 5){
        document.querySelector("#luckyBall").style.backgroundColor =
"#d0ffca";
    }
}

// change the color of user's ball if it is matched
function changeAnswerColor(ball){
    if (ball == 0){
        document.querySelector("#Unumber1").style.backgroundColor =
"#d0ffca";
    }
    if (ball == 1){
        document.querySelector("#Unumber2").style.backgroundColor =
"#d0ffca";
    }
    if (ball == 2){
        document.querySelector("#Unumber3").style.backgroundColor =
"#d0ffca";
    }
    if (ball == 3){
        document.querySelector("#Unumber4").style.backgroundColor =
"#d0ffca";
    }
    if (ball == 4){
        document.querySelector("#Unumber5").style.backgroundColor =
"#d0ffca";
    }
    if (ball == 5){

```

```

        document.querySelector("#U1uckyBall").style.backgroundColor =
"#d0ffca";
    }
}

function makeMatch(){
    if (matches > 1 || luckyMatch == true){
        document.querySelector("#congrats").style.display = "block";
        alert("Congratulations!");
        makePrice();
    }
}

function makePrice(){
    if (matches == 5 && luckyMatch == true){
        document.querySelectorAll(".block")[0].style.backgroundColor =
"#d0ffca";
        document.querySelectorAll(".block")[1].style.backgroundColor =
"#d0ffca";
    } else if (matches == 5){
        document.querySelectorAll(".block")[2].style.backgroundColor =
"#d0ffca";
        document.querySelectorAll(".block")[3].style.backgroundColor =
"#d0ffca";
    } else if (matches == 4 && luckyMatch == true){
        document.querySelectorAll(".block")[4].style.backgroundColor =
"#d0ffca";
        document.querySelectorAll(".block")[5].style.backgroundColor =
"#d0ffca";
    } else if (matches == 4){
        document.querySelectorAll(".block")[6].style.backgroundColor =
"#d0ffca";
        document.querySelectorAll(".block")[7].style.backgroundColor =
"#d0ffca";
    } else if (matches == 3 && luckyMatch == true){
        document.querySelectorAll(".block")[8].style.backgroundColor =
"#d0ffca";
        document.querySelectorAll(".block")[9].style.backgroundColor =
"#d0ffca";
    } else if (matches == 3){
        document.querySelectorAll(".block")[10].style.backgroundColor =
"#d0ffca";
        document.querySelectorAll(".block")[11].style.backgroundColor =
"#d0ffca";
    } else if (matches == 2 && luckyMatch == true){
        document.querySelectorAll(".block")[12].style.backgroundColor =
"#d0ffca";
        document.querySelectorAll(".block")[13].style.backgroundColor =
"#d0ffca";
    } else if (matches == 2){
        document.querySelectorAll(".block")[14].style.backgroundColor =
"#d0ffca";
        document.querySelectorAll(".block")[15].style.backgroundColor =
"#d0ffca";
    } else if (matches == 1 && luckyMatch == true){
        document.querySelectorAll(".block")[16].style.backgroundColor =
"#d0ffca";
    }
}

```

```

        document.querySelectorAll(".block")[17].style.backgroundColor =
"#d0ffca";
    } else if (matches == 0 && luckyMatch == true){
        document.querySelectorAll(".block")[18].style.backgroundColor =
"#d0ffca";
        document.querySelectorAll(".block")[19].style.backgroundColor =
"#d0ffca";
    }
}

function clearUp(){
    numberCustomer = [];
    numbers = [];
    lucky = {};
    luckyCustomer = {};
    matches = {};
    luckyMatch = false;
}
</script>
</body>
</html>

```

## CSS Code

```

@charset "utf-8";
/* CSS Document */

*{
    text-align: center;
    font-family: Gotham, "Helvetica Neue", Helvetica, Arial, "sans-serif";
    box-sizing: border-box;
}

body{
    background-color: #a3a3a3 ;
}

#structure {
    border: 8px solid;
    width:60%;
    margin:auto;
    background-color: #ffffff;
}

h1 {
    font-size: 50px;
}

#congrats {
    font-size: 30px;
    margin-left:auto;
    margin-right:auto;
    margin-bottom:20px;
    margin-top:20px;
}

```



```

border: 8px solid;
padding: 10px;
background-color: #d0ffc4;
width:80%;
font-weight: bold;
display: none;
}

li {
margin: auto;
text-align: left;
margin-left: 5%;
}

#rule {
width:90%;
margin:auto;
border: 5px solid;
padding: 1%;
background-color: #d6d6d6;
}

.ball {
border-radius: 50%;
display: inline-block;
border: 5px solid;
height: 40px;
width: 40px;
margin: 10px;
background-color: #ffffff;
}

#balls {
margin:auto;
}

#rule th {
border: 4px solid #000;
background-color: #a3a3a3;
padding:0.5% 1%;
}

.block{
border: 4px solid #000;
padding:0.5% 1%;
background-color: #ffffff;
}

button{
padding: 5px 30px;
margin-top:10px;
box-sizing:border-box;
border: 5px solid #000;
background-color: #ffffff;
font-weight: bold;
font-size: 30px;
}

```

```
button:hover {
    border: 5px solid #333;
    color: #DFDDDD;
    background-color: #000;
}

/* Create two equal columns that floats next to each other */
.column {
    float: left;
    width: 44%;
    height:auto;
}

/* Clear floats after the columns */
.row:after {
    content: "";
    display: table;
    clear: both;
}

#price {
    text-align: left;
    margin-left: 12%;
    font-size: larger;
    text-decoration: underline;
}
```