Introduction

In this project you'll be learning JavaScript, one of the world most popular programming languages. You Probably use things built with JavaScript every day, because it is used in every major website, including
YouTube, Instagram, Google, and Facebook. JavaScript also part of many mobile apps and Games.

You will make this colour guessing game! In the game , the player gets to see different colours in circle and guessing odd colour in this circle and select it. Color game is an entertaining mind game which consists of circles with different colors arranged randomly on it. We need to click on the odd color which has been mentioned and the statement immediately keeps changing.

Hardware and Software Requirements

System Requirements:

Language: Html,Css,Javascript
Technology: JavaScript Technology
Operating System: Windows 7, XP and any other windows version.

Hardware Requirements:

HARD DISK: 50 GB

RAM: 420 MB (Approximately)

The theme of the Game:

    Basically, the color game is an application which is applicable to identified the different colour.

    In this game, we get a circle which mentions the color to be identified odd colour, and we're supposed to click on them in the circle. We have circles with same colors and one of this is odd colour, we click on odd colour. We also have one or more than one circles of the mentioned, we should make sure that we click on Odd colour.

Program Code:

```
<!DOCTYPE html>
<html>
<head>
        <title>Colour Game</title>
</head>
<body>
<p>Colour Game</p>

<div class='odd'>
  <h3>Click on odd color</h3>
</div>


        <style >
                @import
url('https://fonts.googleapis.com/css?family=Black+And+White+Picture');


p{
text-align:center;
font-size:40px;
color: #fff;
 border-style: solid;
 background-image: linear-gradient(to left, violet, indigo, blue, green, yellow, orange, red);
}

.odd{
text-align : center;
font-size:30px;
}

#game {
  display: grid;
  place-content: center;
  height: 80vh;
  overflow: hidden;
}
#game div {
  white-space: nowrap
}
#game b {
  display: inline-block;
  width: 10vmin;
  height: 10vmin;
```

```css
  border-radius: 50%;
  cursor: pointer;
  margin: 1vmin 1.5vmin;
  transition: all 0.2s;
  box-shadow: 0 0 0 0.6vmin white;
  position: relative;
}

#game b:hover {
  box-shadow: 0 0 0 1.2vmin black;

}
#game b[data-pick="1"]:hover {
  animation: kick 1s infinite
    cubic-bezier(0.31, 0.44, 0.44, 1.65);
}
#game b.fall {
  width: 6vmin;
  height: 6vmin;
  position: absolute;
  animation: falling 2.8s
    cubic-bezier(0.31, 0.44, 0.44, 1.65);
}
#game p {
  color: white;
  display: none;
  font-family: 'Black And White Picture';
  width: 100vw;
  text-align: center;
  font-size: 16vmin;
  animation: twist 1s infinite
    cubic-bezier(0.31, 0.44, 0.44, 1.65);
  text-shadow: 1vmin  1vmin 0 #e33,
          1vmin -1vmin 0 #93e,
         -1vmin -1vmin 0 #ed3,
         -2vmin  1vmin 0 #3b9,
          2vmin  1vmin 0 #e39;
}
@keyframes falling {
 0% {top: -10vh;}
 100% {top: 110vh;}
}
@keyframes twist {
 0%,100% {transform: rotate(0);}
 25%,75% {transform: rotate(-10deg);}
 50% {transform: rotate(10deg);}
}
@keyframes kick {
 0%, 100% { top: 0; transform: scaleY(1); }
 10% { top: 0; transform: scaleY(0.85); }
```

```
  50% { top: -1vmin; transform: scaleY(1); }
}

        </style>



<div id='game'>
 <p>You Win!!</p>
</div>




<script >const $ = (selector, startNode = document) =>
[...startNode.querySelectorAll(selector)];
const game = {
 el: document.querySelector('#game'),
 p: document.querySelector('#game p'),
 start: function () {
  game.build();
  game.oscillator = game.audio.createOscillator();
  game.oscillator.connect( game.audio.destination );
  game.oscillator.frequency.value = 0;
  game.oscillator.start();
 },
 build: function () {
  for (var i=0; i<5; i++) {
    var div = document.createElement('div');
    game.el.appendChild(div);
    for (var j=0; j<5; j++) {
     var b = document.createElement('b');
     b.addEventListener('click', game.click);
     div.appendChild(b);
    }
  }
  game.paint();
 },
 colors: ['e33','e93','ed3','3b9','39e','93e','e39','e32'],
 random: function (array) {
  return parseInt(Math.random() * array.length);
 },
 r: 0,
 paint: function () {
  var balls = $('b', game.el);
  var r;
  do {
   r = game.random(game.colors);
  } while (r == game.r);
  const ro = 2 + parseInt(Math.random()*2);
  const color = '#'+game.colors[r];
```
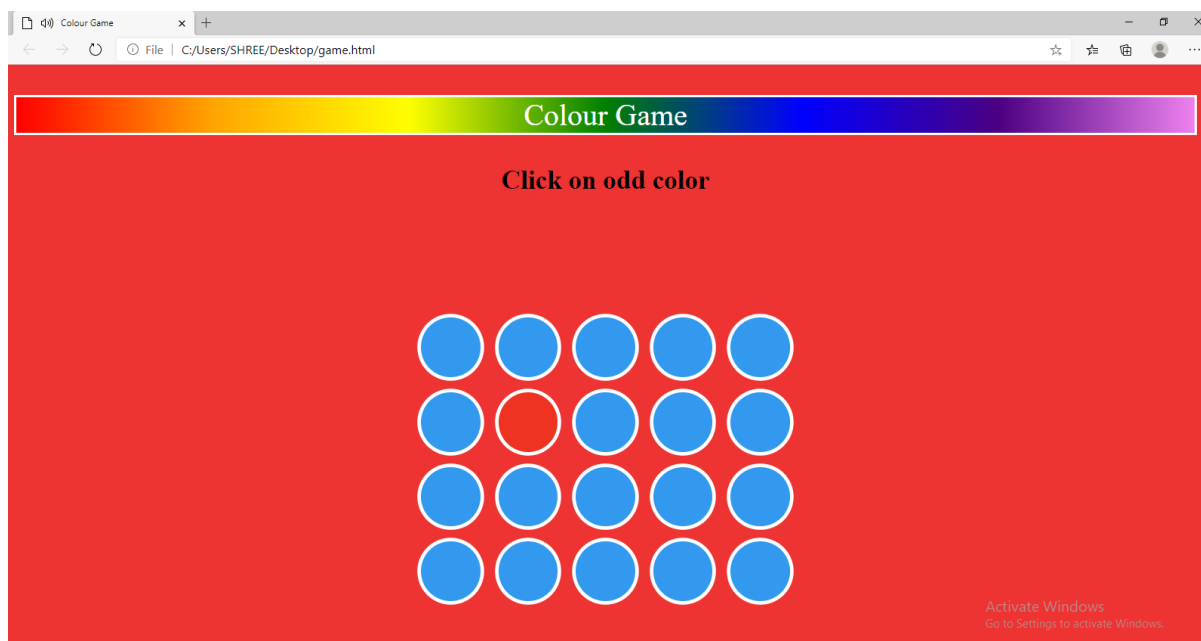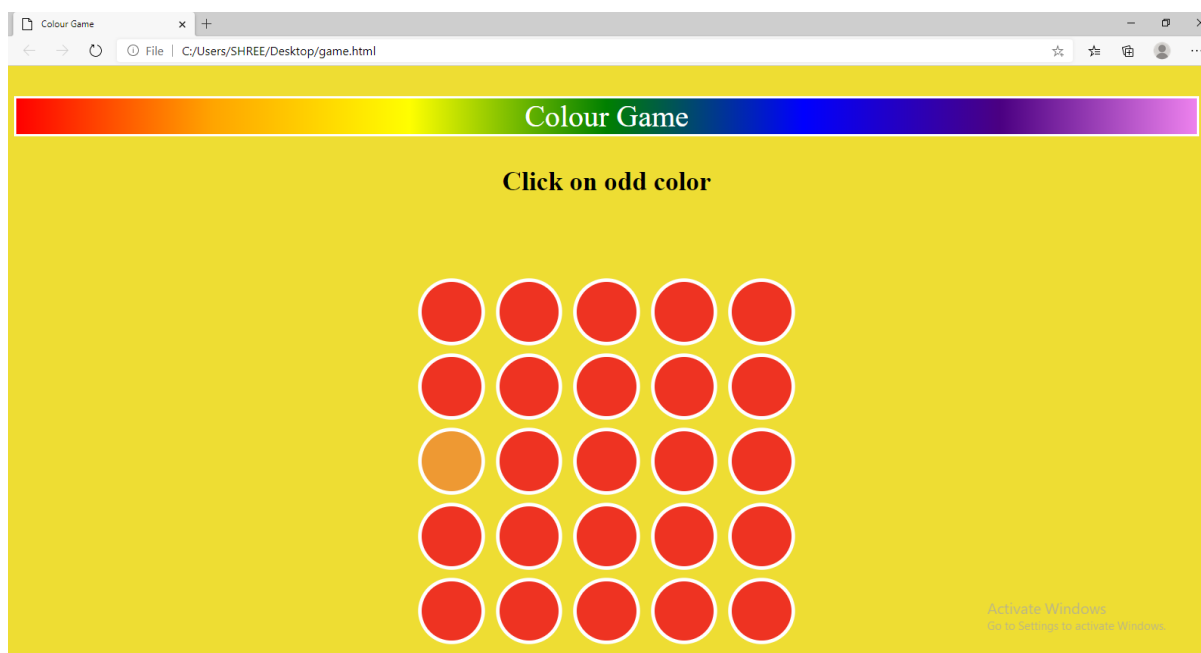
```
  balls.forEach(function (el, i) {
   el.dataset.pick = 0;
   el.style.background = color;
  });
  const pick = game.random(balls);
  const r2 = (r+ro)%game.colors.length;
  balls[pick].style.background = '#'+game.colors[r2];
  balls[pick].dataset.pick = 1;
  const r3 = (r+ro+1)%game.colors.length;
  document.body.style.background = '#'+game.colors[r3];
  game.r = r;
 },
 click: function (event) {
  if (Number(event.target.dataset.pick)) {
   game.sound();
   var divs = $('div', game.el);
   if (divs.length !== 1) {
    divs[0].remove();
    game.paint();
   } else {
    divs[0].remove();
    game.end();
   }
  }
 },
 audio: new AudioContext(),
 sound: function () {
  var f = 440 + (Math.random()*440);
  game.oscillator.frequency.value = f;
  setTimeout(function () {
   game.oscillator.frequency.value = 0;
  }, 60);
 },
 music: function () {
  for (var i=0; i<12; i++) {
   setTimeout(function () {
    game.sound();
   }, i * 160)
  }
 },
 fall: function () {
  var b = document.createElement('b');
  b.className = 'fall';
  var x = (Math.random() * innerWidth*0.9);
  b.style.left = x + 'px';
  var r = game.random(game.colors);
  var color = game.colors[r];
  b.style.background = '#'+color;
  game.el.appendChild(b);
 },
```

```
  end: function () {
   game.p.style.display='block';
   for (var i=0; i<100; i++) {
    setTimeout(game.fall, i*12);
   }
   game.music();
   setTimeout(function () {
    $('b', game.el).forEach(function (el) {
     el.remove();
    });
   game.p.style.display='none';
    game.build();
   }, 2500);
  }
};
game.start();
</script>

</body>
</html>
```

Advantages

- It helps makes it incredibly easy for Children to identify color object.
- It influence our children's reactions to colors psychology.
- It increases children's colour sensivity.

Conclusion:

Basically, Color game is just like a Brain Activity. It is one of the Mind games which works on speeding up your Thought Process. It is also a Fun game!.

References

- https://codepen.io/search/pens?q=color+game.

- https://www.geeksforgeeks.org/javascript-tutorial/