Color Picker Game

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Game Overview

- **Target color** : It will be mentioned at the top and will be the target that has to be picked from the remaining options
- **New Color button** : Click it will reset the game
- "**Try Again**" message should be printed when wrong color is clicked and "**Correct**" message should get printed, once the correct color is clicked.
- Once game is over, "**New Color**" button should change its name to "**Play Again?**"

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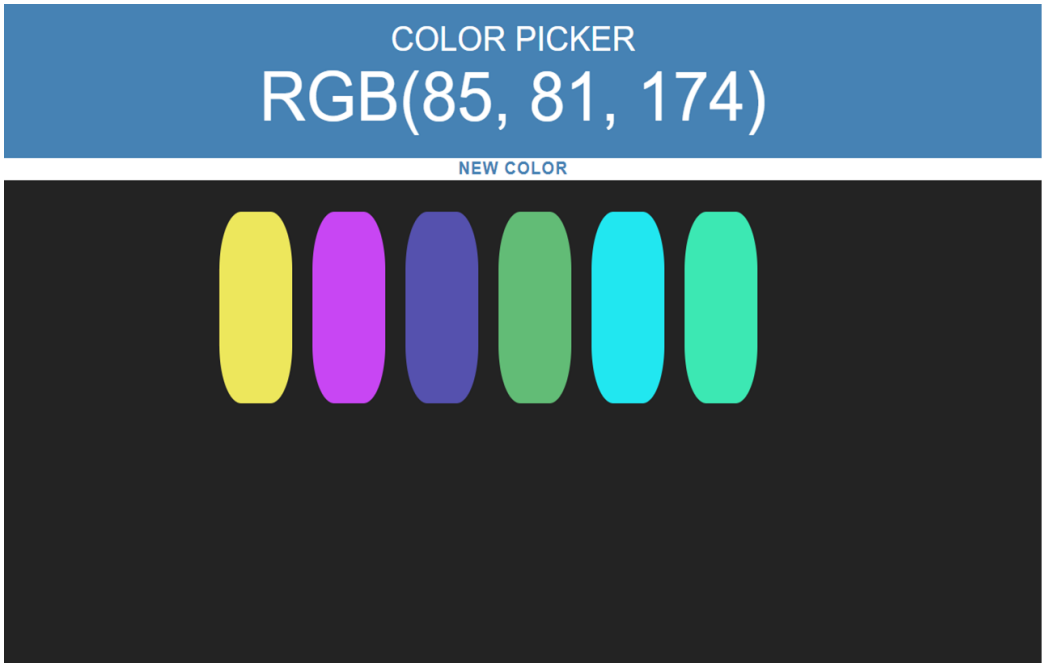
Game Start Page



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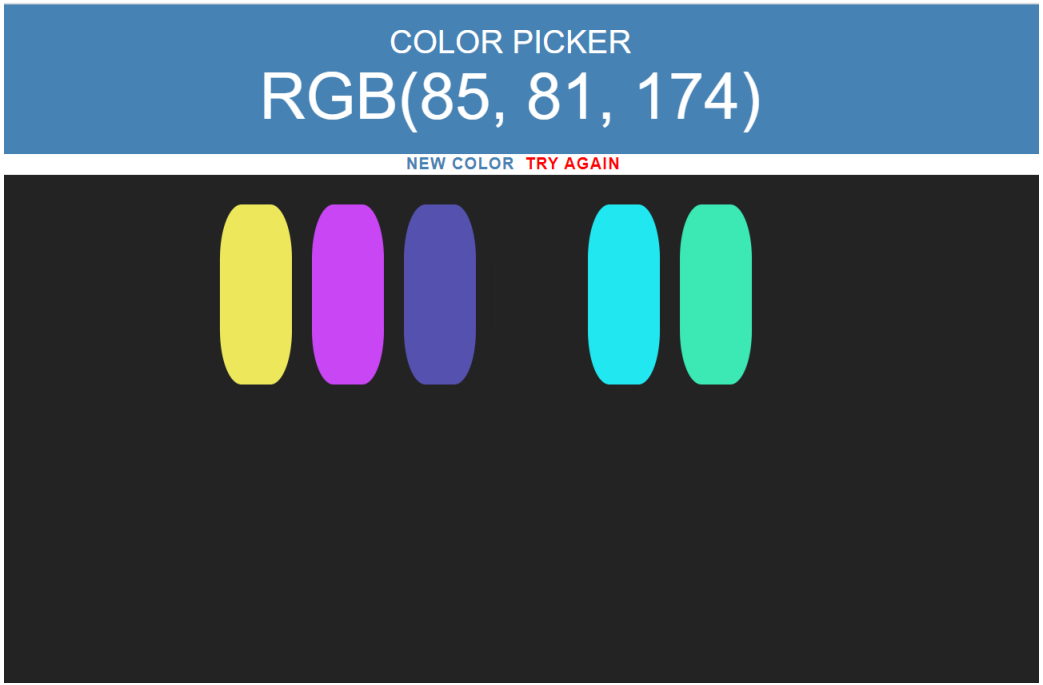
When Wrong Color Is Picked



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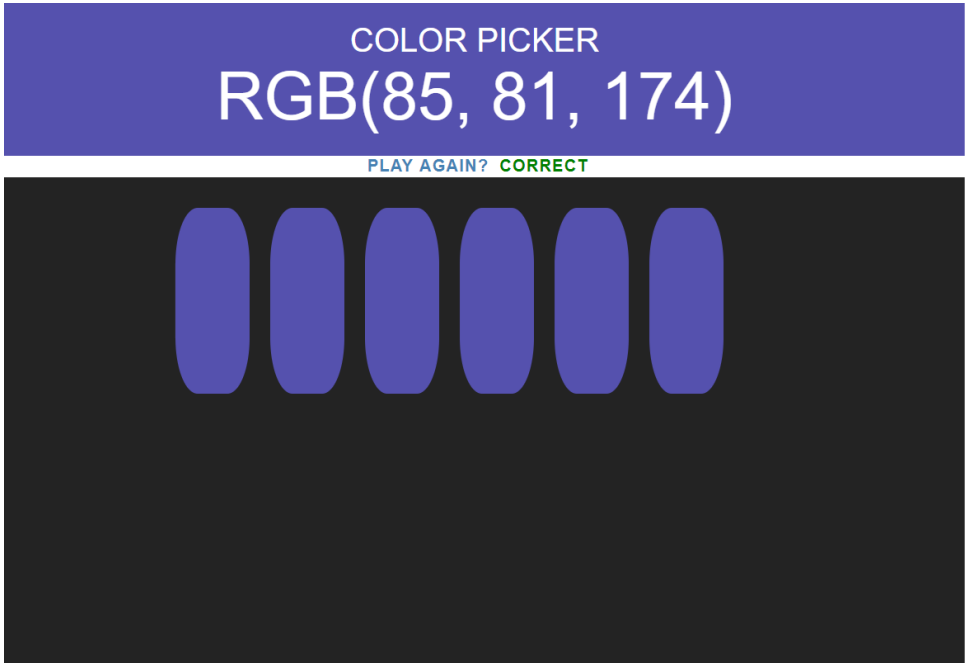
When Right Color Is Picked



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HTML CODE

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```
<!DOCTYPE html>
<html>
<head>
        <title>Color Game</title>
        <link rel="stylesheet" type="text/css" href="colorPicker.css"
</head>
<body>
        <h1>Color Picker
                <br>
                <span id="targetColor"></span>
                <br>
        </h1>

    <div id="stripe">
                <button id="NewColor">New Color</button>
                <span id="message"></span>

        </div>
```

CSS file linked

This will hold the RGB of target color

Stripe div will hold the button and message of the game

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```
        <div class="container">
                <div class="square"></div>
                <div class="square"></div>
                <div class="square"></div>
                <div class="square"></div>
                <div class="square"></div>
                <div class="square"></div>
        </div>
        <script type="text/javascript" src="colorPicker.js"></sc
</body>
</html>
```

Container will hold all the squares

Javascript file linked

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Just HTML

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CSS CODE

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Setting h1 color white with steelblue background color and 0 margin.
Setting padding of top and bottom to 20px

```
h1{
        color: white;
        background-color: steelblue;
        text-align: center;
        font-weight: normal;
        text-transform: uppercase;
        padding: 20px 0;

}
```

Setting body background color to black and font to arial

```
body{
        background: #232323;
        margin:0;
        font-family: "arial";
}
```

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Setting target color font size double to the rest of the text

```
#targetColor{
        font-size: 200%;
}
```

Setting button background color to white with bold text and some other styling

```
button{
        border:none;
        background-color: white;
        text-transform: uppercase;
        height: 100%;
        font-weight: 700;
        color: steelblue;
        letter-spacing: 1px;
        font-size: inherit;
        transition: all 0.3s;
}
```

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Hovering button should change text to white and background to steelblue

```
button:hover{
        color:white;
        background-color: steelblue;
}
```

Squares with default red color are of width 12% with little bit of margin for gaps between squares. Float is set to left that specifies that squares should come one after the other. Radius will make square 30% round

```
.square{
        background-color: red;
        width: 12%;
        margin:1.66%;
        float: left;
        padding-bottom: 30%;
        border-radius: 30%;
        transition: background 0.7s;
}
```

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Container that will contain all the squares should be of width 600px

```
.container{
        margin: 20px auto;
        max-width: 600px;

}
```

Stripe background color overwritten to white and all text should be aligned in center

```
#stripe{
        text-align: center;
        background-color: white;
        padding:auto 0;

}
```

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Message should be in arial and upper case with some other styling

```
#message{
        font-family: "arial";
        text-transform: uppercase;
        height: 100%;
        font-weight: 700;
        letter-spacing: 1px;
        font-size: inherit;
        transition: all 0.3s;

}
```

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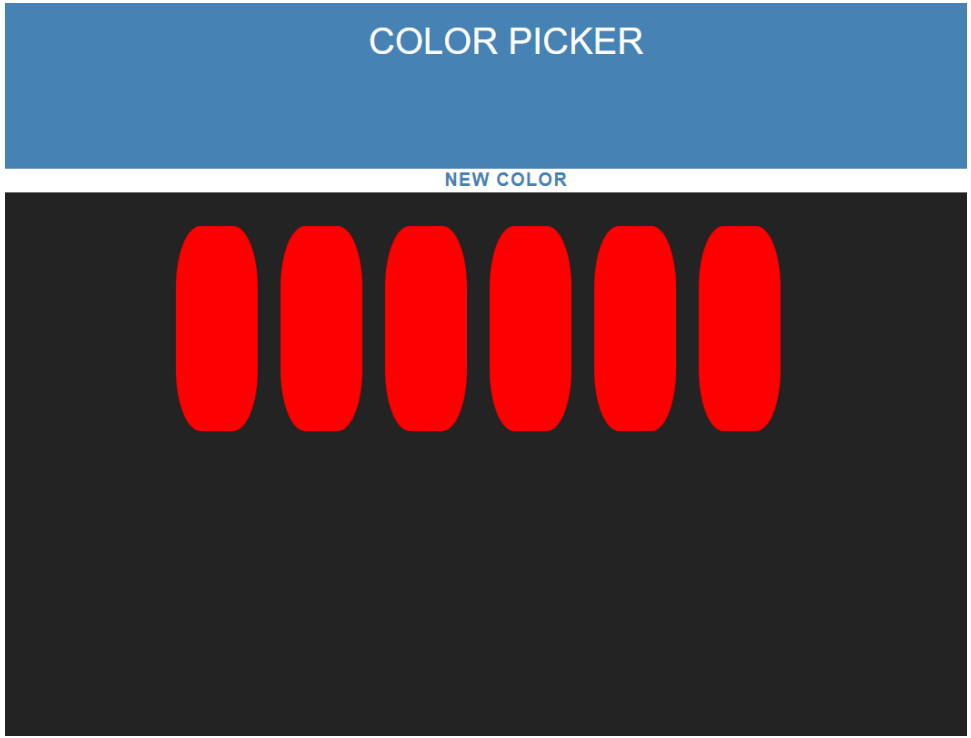
HTML + CSS



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JS CODE

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All the HTML elements are fetched and assigned to some JS variable

```
var noOfSquares=6;

//pallet
var arr= [];

//color picked for target
var picked;

//to get all the squares div
var squares = document.getElementsByClassName("square");

//to get the RGB display
var targetColor = document.getElementById("targetColor");

//message that can be empty, try again or correct
var message = document.getElementById("message");

//heading
var head = document.querySelector("h1");

//reset button
var reset = document.getElementById("NewColor");
```

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Calling init() as first statement will set the game

```
init();
```

Defining init()

```
function init()
{
        //generate random coloured palette
        arr= generateRandomColor(noOfSquares);

    //get target color randomly from the array size
        picked = arr[randomPickedColorIndex()];

    //updating target RGB display
        targetColor.textContent = picked;

        for(var i=0;i<squares.length;i++)
            {
                //setting square's color one by one to palette color
                squares[i].style.backgroundColor=arr[i];

                //adding eventListener to all squares
```

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```
for(var i=0;i<squares.length;i++)
                {
                        //setting square's color one by one to palette color
                        squares[i].style.backgroundColor=arr[i];

                        //adding eventListener to all squares
                        squares[i].addEventListener("click",function(){
                                if(picked===this.style.backgroundColor)
                                        {
                                                message.textContent="Correct";
                                                message.style.color="green";

                        //when correct, set everything to the target color and set newcolor to
                    playagain

changeColor(this.style.backgroundColor);
                                                reset.textContent="Play Again?";
                                        }
                                else
                                        {
                                                message.textContent="Try Again";
                                                message.style.color="red";

                        //to hide the wrong square, we will set it to background color
                                                this.style.backgroundColor ="#232323";
                                        }
                        });
```

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Setting eventlistener for reset button

```
reset.addEventListener("click", resetIn);
```

To get the random color from existing palette

```
function randomPickedColorIndex()
{
        return Math.floor(Math.random()*arr.length);
}
```

To get the random palette of colors

```
function generateRandomColor(limit)
{
        var color=[];
        for(var i=0;i<limit;i++)
                color.push(rgbGenerator());
        return color;

}
```

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To generate a single rgb

```
function rgbGenerator()
{
        var r= Math.floor(Math.random()*256);
        var g= Math.floor(Math.random()*256);
        var b= Math.floor(Math.random()*256);

        return "rgb("+r+", "+g+", "+b+")" ;
}
```

When correct, change everything to the correct color

```
function changeColor(color)
{
        for(var i=0;i<squares.length;i++)
                squares[i].style.backgroundColor=color;
        head.style.backgroundColor=color;
}
```

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Set things when player try to reset

```
function resetIn(){
        arr=generateRandomColor(noOfSquares);
        picked=arr[randomPickedColorIndex()];
        targetColor.textContent = picked;
        message.textContent="";
        head.style.backgroundColor= "steelblue";

        for(var i=0;i<squares.length;i++)
                squares[i].style.backgroundColor=arr[i];

}
```

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HTML + CSS + JS

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IT'S DONE!

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Thank You

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