🎯 Assignment: Build an RGB Color Guessing Game

Subject: JavaScript DOM Manipulation & Random Number Generation

Skill Level: Beginner–Intermediate

Deadline: [Insert deadline date here]

# 📝 Objective:

Build a simple web-based game that helps you learn how to:  
- Generate random RGB colors  
- Display them dynamically using HTML/CSS/JavaScript  
- Interact with the DOM using JavaScript  
- Handle events like clicks  
- Implement game logic (correct/incorrect answers)

# 🔨 Requirements:

* Create the RGB Color Display:

The page should show an RGB color value in text format (e.g., rgb(123, 45, 67)). That RGB value should correspond to one of several colored squares on the screen.

* Generate Multiple Color Options:

Display 6 colored boxes (or more if you want a challenge). Randomly assign a different color to each box. One of the boxes should match the displayed RGB value.

* Game Logic:

When the user clicks a box:  
- If they clicked the correct color, display a “Correct!” message and change all boxes to that color.  
- If they clicked the wrong color, hide the box or change it to a neutral color (like #232323) and display a “Try Again” message.

* Reset/Play Again Button:

There should be a button that resets the game with new colors.

# 💡 Tips:

* Use Math.random() to generate RGB values.
* Use addEventListener() to handle clicks.
* You can store the colors in an array.
* Use document.querySelector() or document.getElementById() to manipulate elements.

# 📁 Project Structure:

rgb-color-game/  
│  
├── index.html → Your main HTML file  
├── styles.css → Styling for the game  
└── script.js → All your JavaScript code

# 🧪 Bonus Challenge (Optional):

* Add “Easy” and “Hard” modes that show 3 or 6 colors.
* Animate the boxes when guessed correctly.

# 📦 Submission:

Push your complete project to GitHub and share the link to your repository.  
Ensure your repository is public or shared properly.  
Your repository should be named in the format: RGB-Game-YourName