

## INSTRUCTIONS:

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### Goal of the Project:

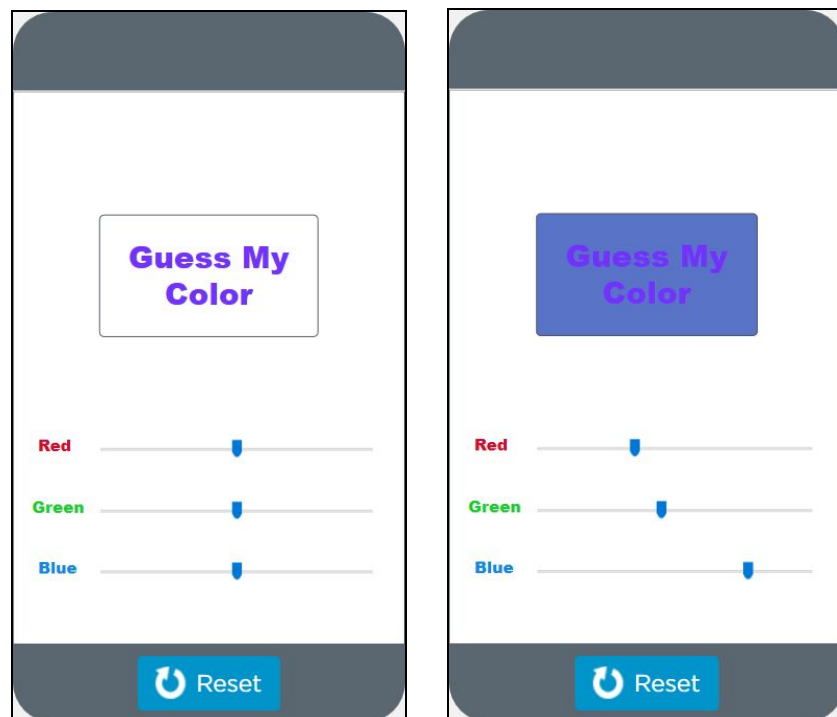
In Class 31, you learned how to use sliders and change the background color of the label.

In this project, you will have to practice and apply what you have learned in the class. You are making a color matching game which teaches the user how to adjust the Red Green and Blue values to match a color.

### Story:

Neena wants to be a Graphics designer when she grows up. She wishes to start on her passion as early as possible, and has asked you to create a game for her. She would like to practice matching colors.

Make a game which shows a button with a random background color. Neena (user) will have to change the color of a label to match the color of the button.



**\*This is just for your reference. We expect you to apply your own creativity in the project.**

### Getting Started:

1. Login to code.org.
2. Click on the following link: [Project Template](#).
3. Click on "View Code".
4. Click on "Remix".
5. Rename the project to **Project 31** and click on **Save**.

### Specific Tasks to complete the Project:

1. Basic user interface is already created for you. You need to add code.
2. When the user clicks on the button:
  - Set its **background** color to **white**.
  - Set the **color of the text** on the button to a **random color**.
3. When any of the three sliders are changed/moved, the background color of the button should change based on the values of the Red, Green and Blue Sliders.
  - When the background color matches the color of the text, the text will almost disappear.
4. Click on "**Run**" once to check if it is working.

\*Refer to the images given above for reference.

### Submitting the Project:

1. SAVE all the changes made to the project.
2. Click the "**SHARE**" button to generate a shareable link.
3. Copy this link and submit it in the Student Dashboard Projects panel against the correct class number.

**Hints:**

- Each of the Red, Green and Blue colors will **range between 0 and 255**, both of the numbers being included. Set these values for each of the sliders in **Design**.

Click on an element or choose it from the dropdown below to edit its properties.

| PROPERTIES             | EVENTS                            |
|------------------------|-----------------------------------|
| <b>id</b>              |                                   |
| redslider              |                                   |
| <b>width (px)</b>      |                                   |
| 225                    |                                   |
| <b>height (px)</b>     |                                   |
| 24                     |                                   |
| <b>x position (px)</b> |                                   |
| 70                     |                                   |
| <b>y position (px)</b> |                                   |
| 280                    |                                   |
| <b>value</b>           |                                   |
| 128                    | ← Value of Slider on Start        |
| <b>minimum value</b>   |                                   |
| 0                      | ← Minimum Slider Value set to 0   |
| <b>maximum value</b>   |                                   |
| 255                    | ← Maximum Slider Value set to 255 |

- To set a random color for the text, use the random block. The first value will be 0, the second value will be 255, which generates a random number between 0 and 255.

|             |             |
|-------------|-------------|
| UI controls | Canvas      |
| Data        | Turtle      |
| Control     | <b>Math</b> |
| Variables   | Functions   |

```

when green flag clicked
  say Hello! for 2 secs
  randomNumber(1, 10)
  Math.round( )
  
```

## ADVANCED

### MATCH THE COLOR



3. You can set the color of the text on the button to a random color by using the code below:

```
setProperty( ▼"button1", ▼"text-color", rgb( randomNumber( 0, 255), randomNumber( 0, 255), randomNumber( 0, 255) ) );
```

**REMEMBER...** Try your best, that's more important than being correct.

After submitting your project your teacher will send you feedback on your work.

————— **xxx** ————— **xxx** ————— **xxx** ————— **xxx** ————— **xxx** —————