Prog04: Javascript Events

50 Points Possible

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Attempt 1	~	1 /	In Progress



∨ Details

PURPOSE: to give the student an initial, hands-on exposure to the amazing world of event-driven programming.

Event-driven programming is a paradigm commonly used in web development that may be new to someone with a background in traditional desktop development. In event-driven programming, the flow of the program is determined by events such as user actions (like clicking a button or submitting a form), system events, or messages from other programs.

In a web context, when a user interacts with a webpage by clicking a button or entering data into a form, these actions trigger events. JavaScript, a key language for web development, is often used to handle these events and execute specific functions in response.

Compared to traditional desktop programming where the flow of the program is more linear, event-driven programming in web development is more responsive and interactive, allowing developers to create dynamic and engaging user experiences based on user interactions with the webpage.

Assignment: Event-Driven Programming Exploration

Purpose:

To provide students with hands-on exposure to event-driven programming in web development.

Introduction:

Event-driven programming is a key paradigm in web development, enabling dynamic and interactive user experiences based on user interactions with a webpage.

Instructions:

- 1. Set up your project environment and create an HTML file named `prog04.html`.
- 2. Utilize CSS, HTML, and JavaScript to implement the following features:
 - Place three black buttons labeled in white as RED, GREEN, and BLUE in the browser window.
 - Add an event to each button that changes the background color of the window to the corresponding color when clicked.
 - Display a counter for each color showing the number of times that color has been displayed (e.g., "RED count:").
- Implement a hover effect: When the mouse passes over a button, reverse the colors of the button and the label. Return to the original colors when the mouse leaves. Display a counter showing the number of times each button has changed colors.
- 3. Include a navigation bar for easy access to different sections of your assignment.
- 4. Write clean, well-structured code with comments explaining the purpose of each section.
- 5. Ensure accessibility by maintaining proper text and background color contrast.
- 6. Implement responsive design principles to ensure your application works well across various devices and screen sizes.
- 7. Validate your HTML, CSS, and JavaScript code to meet industry standards.
- 8. Thoroughly test your application to identify and fix any bugs or issues before submission.

Submission:

- 1. Submit a link to your code in your class GitHub repository for this assignment.
- 2. Submit a URL to your completed assignment.

∨ View Rubric

Prog04 Rubric

Criteria Ratings	Pts
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Prog04 Rubric

Criteria	Ratings		Pts
Project Setup and File Naming view longer description	5 pts Full Marks	0 pts No Marks	/ 5 pts
Button Implementation view longer description	10 pts Full Marks	0 pts No Marks	/ 10 pts
Counter Display	5 pts Full Marks	0 pts No Marks	/ 5 pts
Hover Effect view longer description	10 pts Full Marks	0 pts No Marks	/ 10 pts
Navigation Bar view longer description	5 pts Full Marks	0 pts No Marks	/ 5 pts
Code Quality view longer description	5 pts Full Marks	0 pts No Marks	/ 5 pts
Accessibility and Responsiveness view longer description	5 pts Full Marks	0 pts No Marks	/ 5 pts
Testing view longer description	5 pts Full Marks	0 pts No Marks	/ 5 pts
extra credit	0 pts Full Marks	0 pts No Marks	/ 0 pts
view longer description	Full Marks	No Marks	7 θ ρίδ Total Poin

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