

Web Application Development Lab

Assignment - 5

Event, Event Handling, DOM manipulation, Form Validation, RegExp

1. Write JavaScript in a heading tag. Change the text color when cursor is on the top of the text and change back to black once the mouse is moved out. Use inline JS to perform the operation.
2. Use heading tag and display some text in the HTML page. On mouse hover the text must be changed. When mouse is moved out from the text should go back to original text. Use internal JS and two separate function to perform the operation.
3. Create a circle of 100px and a button displaying “On”. Once click on the button the circle color must change to yellow and the button text must change to “Off”. If click again the background of the circle should become white again and button text must change to “On”.
4. Create a div with fixed height and width. Create three button with three different color names. Once any button is clicked show a confirmation message and if “Ok” is clicked the background color of the div must be changed to that specific color.
5. Write a paragraph on the html page and take button to show and hide the paragraph.
6. Design the following shopping cart counter using input box and buttons.
+ will increment the value by 1 and – will reduce the value by 1. If the value goes beyond 10 the count value should be displayed in red color. The count should never go below 1.

-	1	+
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7. Design a theme switcher application using HTML, CSS and JS. Add some headings and paragraph to the HTML page. Create a check box called “Dark” if checked the background of the page must change to black and all text color must change to white. Once unchecked page should get back to default style.
8. Design a BMR calculator with the fields Age, Gender, Height (CM), and Weight (KG). Use to following formula to calculate and display the BMR (Calories/day).
 - For men: $BMR = (10 \times \text{Weight}) + (6.25 \times \text{Height}) - (5 \times \text{Age}) + 5$
 - For women: $BMR = (10 \times \text{Weight}) + (6.25 \times \text{Height}) - (5 \times \text{Age}) - 161$
9. With the help of JS create a strong password generator application. Design a form to ask the user for the length of the password. If the length

is not between 8 and 16 display that “Password length must be between 8 and 16 characters. If length is in the range generate a password that contains at least one of each – Upper case letter, lower case letter, number and special character and the password length is what user wants.

10. Design an html page with different fields like name (text), gender (radio), dob (date), address (textarea), mobile (text), email (text), Country (dropdown), password and confirm password. Validate each of the fields using external JS. If all the data is valid then the form will be submitted to a thank you page, otherwise not. Use regular expression whenever required.