

# JavaScript Assignment

#### How-To Guide

In this assignment, you will design, develop, and host a full web project from scratch, incorporating interactive aspects into its presentation. The goal is to showcase your comprehensive understanding of web development, with a focus on creating engaging user experiences through interactivity. Your project must utilize HTML, CSS, and JavaScript and must be hosted on GitHub Pages for accessibility and evaluation.

## **Project Details**

#### 1. Project Conceptualization and Planning

- Identify and define a project concept or theme that aligns with your interests and objectives.
- Plan the project's structure, outlining the key pages, sections, and navigation.
- Develop wireframes or mock-ups to visualize the layout, design, and interactive elements of your web project.

#### 2. HTML Structure and Content

- Create the necessary HTML files for each page or section of your web project, ensuring semantic markup and proper organization.
- A single-page-application is appropriate.
- Include HTML tags to structure content, headings, paragraphs, lists, images, and links.
- Implement a consistent navigation system that allows users to explore different sections of your web project.

#### 3. CSS Styling

- Apply CSS styles to enhance the visual appeal and aesthetic consistency of your web project.
- Use CSS properties to customize typography, colours, backgrounds, margins, and padding.
- Ensure responsiveness by using media queries to adapt the layout to different screen sizes.

#### 4. JavaScript Interactivity

 Identify interactive aspects you want to incorporate into your web project (e.g., interactive forms, image galleries, sliders, etc.).

- Implement JavaScript to add interactivity and functionality to your project, making it dynamic and engaging.
- Utilize event listeners and handlers to respond to user actions and create interactive features
- Validate user input and provide appropriate feedback using JavaScript.
- Manipulate the DOM dynamically to update content and create and modify elements.
  - The minimum number of interactive elements.
    - At least 1 form is processed by a JavaScript function.
    - At least 3 interactions involving DOM manipulation.
    - At least one graphical element such as a form, etc.

#### **5. GitHub Pages Hosting**

- Create a GitHub repository for your web project.
- Configure the repository to host your project using GitHub Pages.
- Ensure your project is accessible and functional when accessed via the provided GitHub Pages URL.

## **Preparing Your Submission**

- Submit the GitHub repository URL of your project.
- Include a README file in your repository, detailing the project's concept, features, and instructions for accessing the hosted project.
- Write a comprehensive documentation file explaining your design decisions, development process, challenges faced, and how you implemented interactivity using JavaScript.
- All files should also be uploaded to the LMS inside a zip folder.

Note: This assignment encourages creativity and freedom in choosing interactive aspects for your web project while ensuring the incorporation of HTML, CSS, and JavaScript. The project must be hosted on GitHub Pages for evaluation. Plagiarism or copying of existing websites will result in a penalty. Demonstrate your skills, showcase your creativity, and enjoy the process of building and hosting your web project.

## How You Will Be Assessed

The following rubric describes how the assignment will be assessed:

1. Demonstrate an understanding and apply key concepts and principles of Web Design using HTML, CSS and JavaScript.	2. Show a clear understanding of how JavaScript is used to add functionality to websites.	3. Show a clear understanding of key concepts of creating Project Conceptualization and Planning.	4. Demonstrate ability to add graphics and interactivity to web pages.	5. Show the concepts of version control and hosting.
Distinction Criteria				
Demonstrates strong ability to apply key concepts and principles of HTML, CSS and JavaScript.	Demonstrates a strong understanding of how JavaScript is used to add functionality to websites.	Demonstrates a strong understanding of Project Conceptualization and Planning	Demonstrates a strong ability to add graphics and interactivity to web pages.	Demonstrates strong ability showing the concepts of version control and hosting.
Merit Criteria				
Able to apply key concepts and principles of HTML, CSS and JavaScript.	Able to show how JavaScript is used to add functionality to websites.	Demonstrates a good understanding of creating Project Conceptualization and Planning	A very good level ability to add graphics and interactivity to web pages.	Demonstrates a good ability to show the concepts version control and hosting.
Pass Criteria				
Adequate use of the key concepts of HTML, CSS and JavaScript.	Makes an adequate use of JavaScript is to add functionality to websites.	Makes adequate use of the key concepts in creating Project Conceptualization and Planning	Adequate evidence for adding graphics and interactivity to web pages.	Adequate evidence showing the concepts of version control and hosting.
Unsatisfactory Criteria				
Response is partial or tangential. Requires greater depth, level of detail and discussion.	Inadequate application of course learning in JavaScript.	Inadequate application of course learning.	Inadequate use of graphics and interactivity within web pages.	Unsatisfactory evidence showing the concepts of version control and hosting.
Clear Fail Criteria				
Little evidence of applying HTML, CSS and JavaScript.	Little evidence of ability to apply key course concepts in how JavaScript is used to add functionality to websites.	Little evidence of ability to apply key course concepts in practice.	Very little evidence of graphics and interactivity added to web pages.	Little evidence showing the concepts of version control and hosting.
No Attempt Criteria				
No submission	No submission	No submission	No submission	No submission