PREREQUISITE FOR THIS CLASS:

Laptop (Min. 4gb Ram) Text Editor (Sublime Text or Visual Code) Web Browser (Mozilla or Chrome Browser) Power Supply Internet.

AT THE END OF THIS COURSE:

You will be able to Build Client side Application on the web comfortably

You will be able to build Attractive and Colorful User Experience even without relying on a designer You will be able to store Datas / Information in a Database You will be able to consume API (Application Programming Interface)

You will be able to host / publish your projects to live Servers.

Happy Learning. CHEERS!



COURSE CURRICULUM

HTML5 ESSENTIALS

- Introduction to Basic HTML and HTML5
- The Evolution of HTML5
- HTML5 structure elements
- Validating HTML5 Code
- The <video> Element
- The <audio> Element
- The Element
- The Anchor tag
- Displaying HTML5 content on the Browser

INTRODUCTION TO BASIC CSS

- Introduction to Basic CSS
- Viewing styling from the perspective of a designer
- Types of styling and its advantages
- Basic Styling
 - Selectors
 - Colors
 - Background
 - Height and Width
 - Box Model (Margin, Padding, and Border)
 - Positioning
 - Float

TODO : Build a basic portfolio page(Your data)

DEVELOPING HTML5 TABLES

- Understanding where tables are applicable
- Advantages and Disadvantages of a Table
- Building a Responsive Table with basic CSS

TODO : Storing a static user data in a Table.

DEVELOPING HTML5 FORMS

- Introduction to HTML5 Forms
- Cross-Browser Compatible HTML5 Forms
- HTML5 Form Input Types

- New Form Elements in HTML5
- HTML5 Global Attributes for Form Elements

TODO: Build a simple Registration page (User must be able to enter their Bio-data).

INTRODUCTION TO JAVASCRIPT

An Evolution and Introduction to Javascript

Writing your first Application in Javascript

Developers Console

Variables

Data Types

Type conversions

Operators

Interactions: (Alert, Confirm, Prompt)

Conditional Operators: 'IF', '?'

Loops (While, For)

The Switch statement

Functions

Functions expressions

Arrow functions, The basics ES6

COMPLETING, SUBMITTING AND VALIDATING USER INPUT FORMS

Improving Forms with HTML5

HTML5 Attributes for the <form> Element

HTML5 Attributes for the <input> Element

Submitting Forms with the <button> Element

Concepts and Techniques for Validating User Input

Validating User Input with HTML5 Attributes

Validating User Input with JavaScript

HTML5 APIS

Introduction to HTML5 APIS

Document Object Model (DOM)

Common HTML5 APIs

The Canvas API

The Offline AppCache API

The Geolocation API

The Drag-and–Drop API

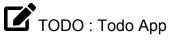
The File API
The History API

HTML5 STORAGE APIS

Session storage Local storage IndexedDB

Project to work on:

- Mini Blog
 - User story: The App must allow the Admin to be able to create, read, delete and update a Blog post.



■ **User story:** A user must be able to Perform CRUD operation i.e Add a new Todo list, Update it or delete it.

DIVING DEEP INTO CSS3

CSS Box Model

Position

Working With Text

Margin, Rounded Corners, Box Shadow and Z-Index



TODO: Creating a Nike Logo with pure CSS

Display

Element Visibility

Floating Elements

Color Gradients

Background Images

Object-fit

Borders

2D Transforms

3D Transforms

Flex

CSS Grid



TODO : Create a Lagos Bus using pure css Update your portfolio page with rich css3. Build a product Landing Page.

DIVING DEEP INTO JAVASCRIPT

Javascript specials

Objects: the basics

- Garbage collection
- Symbol type
- Object methods, "this"
- Object to primitive conversion
- Constructor, operator "new"

Data types

- Methods of primitives
- Numbers
- Strings
- Arrays
- JSON methods, toJSON
- Map and Set
- And so on...

Advanced Working with functions

- Recursion and stack
- Rest parameters and spread syntax
- Variable scope (Var, Let and Const)
- Global object
- The "new Function" syntax
- Scheduling: setTimeout and setInterval
- Function binding
- Arrow functions revisited

Classes

- Introduction to classes
- Different between classes and functions
- Class inheritance
- Static properties and methods
- Extending built-in classes
- Understanding 'this' in classes

Error handling

Network requests

Promises, async/await

- Introduction: callbacks
- Promise
- Promise API
- Promisification
- Async/await

Manipulating Document Object Model in Javascript

Project to work on:

- Mini Calculator
 - ❖ User story: The calculator must be able to do some basic mathematics such as (BODMAS) - It must as well respond to user clicks.
- Quiz App
 - ♦ **User story:** The user must be able to register, login and takes a quiz. The application must be able to keep track of the user score, Updates the leader board based on the user that has the highest.
 - ❖ DB: indexedDB

Popular Resources to check

https://www.freecodecamp.org/learn

https://developer.mozilla.org/en-US/docs/Web

https://css-tricks.com/

https://developers.google.com/web/fundamentals