***DAY 1 Html, CSS, Javascript***

**HTML (Describes the structure of the web page)**

**Key Concepts:**

* Document structure with <!DOCTYPE>, <html>, <head>, and <body> tags
* Semantic elements like headings (<h1> to <h6>)
* Text formatting with paragraph tags (<p>)
* Interactive elements like buttons
* Form creation with various input types

**Code Example:**

<!DOCTYPE html>

<html lang="en">

<head>

<meta charset="UTF-8">

<meta name="viewport" content="width=device-width, initial-scale=1.0">

<title>My First Page</title>

<link rel="stylesheet" href="styles.css">

<script src="script.js"></script>

</head>

<body>

<div>

<h1>Main Heading</h1>

<p id="content">This is a paragraph.</p>

<button id="myButton" onclick="handleClick()">Click Me</button>

</div>

</body>

</html>

**CSS (Styling of the web page)**

**Key Concepts:**

* Selectors (element, class, ID)
* Box model (margin, border, padding)
* Color and typography properties

**Code Example:**

body {

font-family: sans-serif;

background-color: #eaeaea;

margin: 0;

display: flex;

justify-content: center;

align-items: center;

height: 100vh;

}

.container {

background-color: white;

padding: 20px;

border-radius: 6px;

width: 280px;

box-shadow: 0 0 5px rgba(0, 0, 0, 0.1);

}

#content {

font-style: italic;

}

**JavaScript (Behaviour of the web page)**

**Key Concepts:**

* Variables and data types
* Control structures (conditionals, loops)
* Functions
* Array manipulation methods
* Local storage for data persistence
* DOM manipulation

**Code Examples:**

**Variables and Basic Operations:**

// Variable declarations

let username = "Abden";

let age = 25;

const isLoggedIn = true;

// Array operations

let names = ["Aaryan", "Abden", "Alex"];

names.forEach(name => console.log(name));

names.push("New Name");

**Local Storage:**

// Store user details

function storeUserDetails() {

const userDetails = {

fullName: document.getElementById('fullname').value,

username: document.getElementById('username').value,

email: document.getElementById('email').value

};

localStorage.setItem('userDetails', JSON.stringify(userDetails));

}

// Retrieve user details

function displayUserDetails() {

const userDetails = localStorage.getItem('userDetails');

if (userDetails) {

const data = JSON.parse(userDetails);

document.getElementById('userDetails').innerHTML = `

<p><strong>Name:</strong> ${data.fullName}</p>

<p><strong>Username:</strong> ${data.username}</p>

`;

}

}

**Git Version Control**

Git provides tools for tracking changes and collaborating on code.

**Key Git Commands:**

git init

git add index.html

git add .

git commit -m "Add login functionality"

git remote add origin https://github.com/abden/repo.git

git push -u origin main

git pull origin main