DAY 1 Html, CSS, Javascript

HTML (structure of the page)

Key Concepts:

- Document structure with <!DOCTYPE>, <html>, <head>, and <body> tags
- Semantic elements like headings (<h1> to <h6>)
- Text formatting with paragraph tags ()
- 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>
   This is a paragraph.
   <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
 };
```

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
```