

■ Web Development Syntax Essentials

1. HTML (Structure)

```
<!DOCTYPE html>
<html>
<head>
  <title>My First Page</title>
</head>
<body>
  <h1>Hello, World!</h1>
  <p>This is a paragraph.</p>
  <a href="https://example.com">Click Here</a>
  

  <!-- Form Example -->
  <form action="submit.php" method="POST">
    <input type="text" name="username" placeholder="Enter name">
    <input type="submit" value="Submit">
  </form>
</body>
</html>
```

2. CSS (Styling)

```
/* External CSS file: style.css */
body {
  background-color: #f4f4f4;
  font-family: Arial, sans-serif;
}

h1 {
  color: blue;
  text-align: center;
}

a {
  color: red;
  text-decoration: none;
}
```

3. JavaScript (Interactivity)

```
// Alert message
alert("Welcome to my website!");

// Change HTML content
document.getElementById("demo").innerHTML = "Hello JavaScript!";

// Simple function
function greet(name) {
  console.log("Hello, " + name);
}
```

```
}  
greet("Tilak");
```

4. PHP (Backend + MySQL Connection)

```
<?php  
// Database connection  
$servername = "localhost";  
$username = "root";  
$password = "";  
$dbname = "online_learning_hub";  
  
// Create connection  
$conn = new mysqli($servername, $username, $password, $dbname);  
  
// Check  
if ($conn->connect_error) {  
    die("Connection failed: " . $conn->connect_error);  
}  
echo "Connected successfully";  
  
// Example: Insert data  
$sql = "INSERT INTO users (username, email) VALUES ('John', 'john@example.com')";  
if ($conn->query($sql) === TRUE) {  
    echo "New record created";  
} else {  
    echo "Error: " . $conn->error;  
}  
  
$conn->close();  
?>
```

5. Putting It All Together

```
<!DOCTYPE html>  
<html>  
<head>  
    <title>Full Example</title>  
    <link rel="stylesheet" href="style.css">  
    <script src="script.js"></script>  
</head>  
<body>  
    <h1 id="demo">Welcome</h1>  
    <button onclick="changeText()">Click Me</button>  
  
    <?php  
        $name = "Tilak";  
        echo "<p>Hello, $name! PHP is running.</p>";  
    ?>  
</body>  
</html>  
  
// JavaScript File (script.js)  
function changeText() {  
    document.getElementById("demo").innerHTML = "Text Changed!";
```

```
}
```

```
/* CSS File (style.css) */
```

```
h1 { color: green; }
```

```
button { padding: 10px; background: orange; color: white; }
```