

## Week 1 - Day 1 Lecture: Course Orientation & Web Fundamentals

**Topic:** How the web works, client-server model, front-end vs back-end, developer tools, and first webpage demo

**Mode:** Lecture + Live Demo

### Learning Objectives (Tell students upfront)

By the end of this class, students should be able to:

- Explain **what happens when you visit a website**
- Describe **client vs server** and **front-end vs back-end**
- Identify what **HTML, CSS, and JavaScript** do
- Set up a basic dev environment
- Create and open their **first HTML page**

## 1) Course Orientation (10-15 min)

### Talk Track (Teacher Notes)

- Welcome students, introduce the course goals:
  - “By the end of this course you’ll build real web pages and understand how the internet works.”
- Explain how classes will run:
  - Lecture + demo + practice
- How grading/assignments will work (if applicable)

### Slide/Board Notes

- Course roadmap:
  - Week 1: Web foundations + HTML
  - Week 2: CSS
  - Week 3: JavaScript
  - Later: Git, hosting, mini project

## 2) How the Web Works (15 min)

### Explain the process in 4 steps:

1. User types a URL (like <https://google.com>)

2. Browser sends a request
3. Server responds with files (HTML/CSS/JS)
4. Browser renders the page

**Keywords to define:**

- **Browser**
- **URL**
- **DNS**
- **Request/Response**
- **Server**

**Use a simple drawing on board:**

You (Browser) → Request → Server  
Server → Response → Browser → Page loads

## 3) Client vs Server (10 min)

**Explain**

- **Client** = your browser
- **Server** = the computer that stores the website

**Real-life analogy:**

- Restaurant:
  - Client = customer
  - Server = waiter
  - Kitchen = server

## 4) Front-End vs Back-End (10 min)

**Front-End**

- What the user sees
- HTML + CSS + JS

**Back-End**

- Server logic, databases
- Languages: PHP, Python, Node.js, etc.

## 5) Developer Tools Setup (10 min)

### Tools for students:

- **Browser:** Chrome or Firefox
- **Text Editor:** VS Code (recommended)
- **Folder:** create a project folder on desktop

### Quick walkthrough:

- Install VS Code
- Create folder: `web-class`
- Create file: `index.html`

## 6) Live Demo: First Webpage (20-30 min)

### Step-by-step demo

#### 1. Create file

`index.html`

#### 2. Paste this code:

```
<!DOCTYPE html>
<html>
<head>
  <title>My First Webpage</title>
</head>
<body>
  <h1>Hello, Web!</h1>
  <p>This is my first webpage.</p>
</body>
</html>
```

#### 3. Save and open in browser

- Double click the file
- Show output

## Mini Student Exercise (10-15 min)

Task:

- Change the heading
- Add your name
- Add a second paragraph

Example challenge:

```
<h1>Welcome to my page</h1>
<p>My name is Ayesha.</p>
<p>I want to learn web development.</p>
```

## Wrap-Up (5 min)

**Quick recap questions:**

- What is the client?
- What does HTML do?
- What happens when you type a URL?

**Homework (optional):**

- Make a personal HTML page with:
  - Title
  - Heading
  - Two paragraphs
  - A list of hobbies

## Bonus: Short Speech You Can Use

"Today we learned how the web works and created our first HTML page. HTML is the structure of every website. Next class we will begin styling with CSS so your pages look good, not just work. Keep practicing by editing your page and exploring tags."

**Thank you**

Sohail Ahmed | Senior Blockchain & Web3 Engineer