

COMPUTER

Chapter 8: Web Development –

1. What is Web Development?

Definition:

Web development is the process of creating websites or web pages for the internet (worldwide web).

Key Points:

- Involves designing, building, and maintaining websites.
 - Can include creating simple web pages to complex web applications.
 - Two main parts: **Front-End** and **Back-End** development.
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2. Types of Web Development

2.1 Front-End Development (Client-Side)

Definition:

This is the part of the website that users see and interact with.

Key Technologies Used:

- **HTML (HyperText Markup Language):** Creates the structure of web pages.
- **CSS (Cascading Style Sheets):** Adds colors, styles, and layouts.
- **JavaScript:** Adds interactive features (e.g., buttons, sliders).

2.2 Back-End Development (Server-Side)

Definition:

This is the part of the website that users don't see. It works in the background and handles data, servers, and databases.

Key Technologies Used:

- **PHP, Python, Java, Node.js**
 - **Databases** like MySQL or MongoDB
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3. Website vs Web Page

Term	Meaning
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Website	A group of linked web pages under one domain (like www.google.com).
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Web Page	A single document on the internet written in HTML.
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4. Domain Name and Web Hosting

4.1 Domain Name

- A domain name is the web address (e.g., www.example.com).
- It is how people find your website on the internet.

4.2 Web Hosting

- Web hosting is a service that stores your website files and makes them available online.
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5. HTML – The Foundation of Web Pages

Definition:

HTML stands for **HyperText Markup Language**. It is used to create the structure of web pages.

Important HTML Elements:

- `<html>` – defines the entire HTML document
 - `<head>` – contains meta info like title and links
 - `<body>` – contains the visible content
 - `<h1>` to `<h6>` – headings
 - `<p>` – paragraph
 - `<a>` – hyperlink
 - `` – image
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6. CSS – Styling Web Pages

Definition:

CSS stands for **Cascading Style Sheets**. It is used to style and format web pages.

Functions of CSS:

- Set colors, fonts, sizes, margins, and layouts.
 - Make websites attractive and easy to use.
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7. JavaScript – Making Web Pages Interactive

Definition:

JavaScript is a programming language used to make web pages dynamic and interactive.

Examples:

- Clicking buttons
 - Showing/hiding content
 - Creating pop-ups
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8. Web Browsers and Search Engines

Term

Meaning

Web Browser A software that helps you view websites (e.g., Chrome, Firefox, Safari).

Search Engine A tool to search information on the internet (e.g., Google, Bing).

9. Basic Structure of an HTML Page

```
<!DOCTYPE html>
<html>
  <head>
    <title>My First Web Page</title>
  </head>
  <body>
    <h1>Welcome!</h1>
    <p>This is my first website.</p>
  </body>
</html>
```

10. Importance of Web Development

- Helps businesses reach more people online.
 - Provides information and services to users globally.
 - Builds careers in tech (web designer, developer, etc.).
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