# Introduction to Web Development

#### What is Web Development?

Process of creating and maintaining websites/web apps. Includes Frontend (client-side) and Backend (server-side).

#### Importance of Web Development

Connects businesses, services, and people globally. Powers e-commerce, social media, education, and entertainment.

## Components of Web Development

Frontend  $\to$  What users see | Backend  $\to$  Server logic, databases | Full-Stack  $\to$  Both combined

## Frontend Technologies

HTML → Structure | CSS → Styling | JavaScript → Interactivity

#### **HTML Basics**

HyperText Markup Language. Provides structure (headings, paragraphs, links, images, forms). Example: Hello World

#### **CSS Basics**

Cascading Style Sheets. Responsible for design, layout, and responsiveness. Example: h1 { color: blue; }

#### **JavaScript Basics**

Makes websites interactive and dynamic. Runs inside the browser. Example: alert('Welcome!');

#### Comparison

HTML = Structure | CSS = Style | JavaScript = Interactivity

## **Applications**

 $\mathsf{HTML} \to \mathsf{Content}$  publishing, forms |  $\mathsf{CSS} \to \mathsf{Responsive}$  design, branding |  $\mathsf{JavaScript} \to \mathsf{Games}$ , apps,  $\mathsf{APIs}$ 

#### Real-World Examples

HTML: Blog articles | CSS: Portfolio design | JavaScript: Interactive maps, chat apps

## **Tools & Editors**

Popular editors: VS Code, Sublime, Atom | Browsers: Chrome, Firefox | Developer tools for debugging

## Career Scope

Roles: Frontend, Backend, Full-Stack Developer | High demand in IT industry | Skills: coding + creativity

## Future of Web Development

Trends: Progressive Web Apps, AI, Web3, Responsive Design | Mobile-first approach | Cloud integration

## Conclusion

Web development = foundation of digital world HTML = Skeleton | CSS = Beauty | JavaScript = Brain "Learn to build, shape the future of the web!"