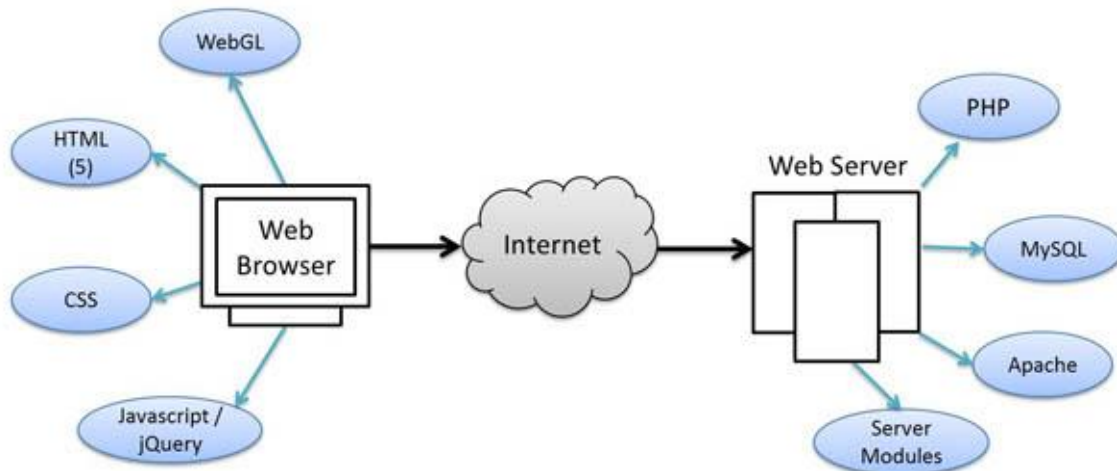


# Assignment: Web Technologies

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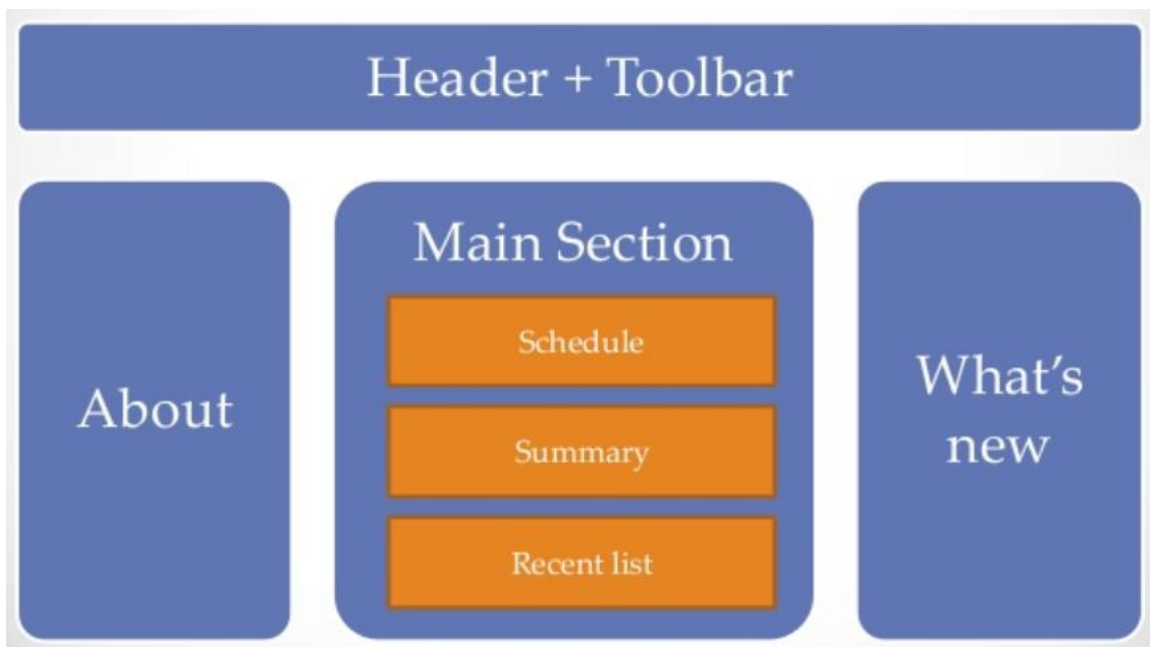


- **Introduction to Web Technologies**

Web technologies are the tools and techniques used in the development and functioning of websites and web applications. They enable the interaction between users and web platforms through browsers. With the rapid growth of the internet, web technologies have become essential in communication, business, education, and entertainment.

- **Basic Components of Web Technologies**

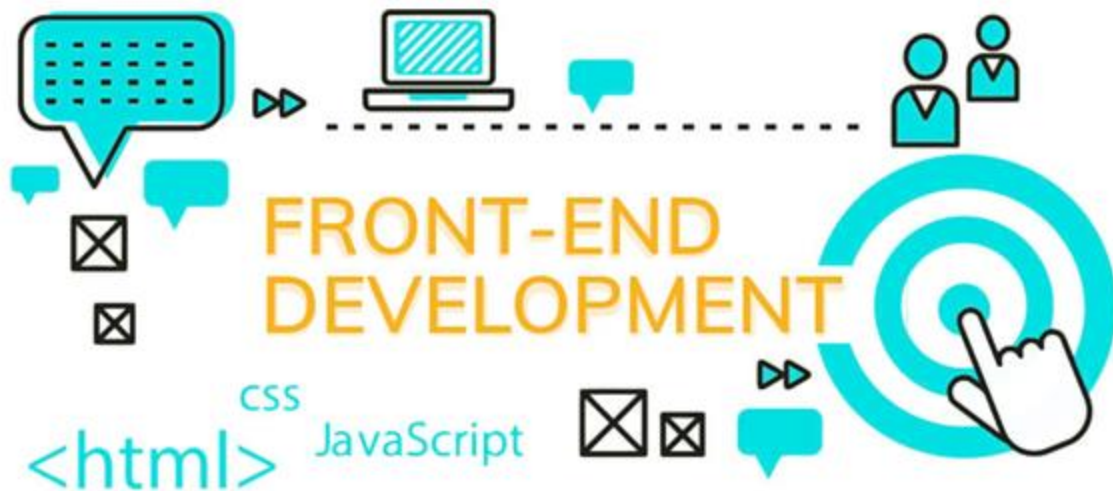
1. Web Browser – Software to access websites (e.g., Chrome, Firefox).
2. Web Server – Hosts websites and delivers content.
3. HTTP/HTTPS – Protocols for data transfer on the web.
4. URL – Uniform Resource Locator to access resources.
5. HTML – Structure of web pages.



- **Front-End Technologies**

Front-end development is the part of web development that deals with the user interface.

1. HTML (HyperText Markup Language) – Provides structure.
2. CSS (Cascading Style Sheets) – Adds styling to HTML elements.
3. JavaScript – Adds interactivity and functionality.
4. Frameworks – React, Angular, Vue.js help in building complex UIs efficiently.



- **Back-End Technologies**

Back-end development refers to the server-side of web development.

1. Programming Languages – PHP, Python, Java, Node.js
2. Databases – MySQL, MongoDB, PostgreSQL
3. Server – Processes requests and manages database interactions
4. API – Application Programming Interface allows front-end and back-end to communicate.



- **Web Development Process**

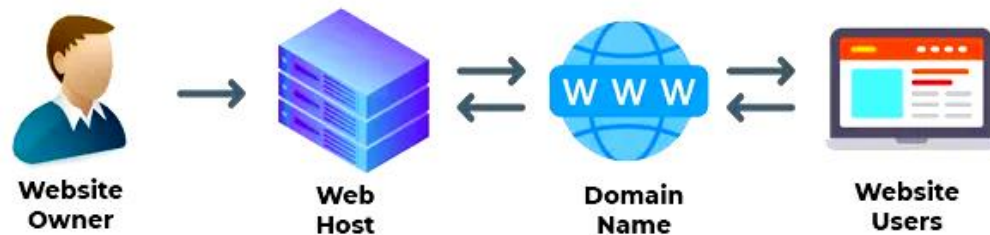
1. Planning – Define goals and target audience.
2. Design – Create wireframes and layouts.
3. Development – Write front-end and back-end code.
4. Testing – Check for bugs, responsiveness, and compatibility.
5. Deployment – Launch website on a live server.
6. Maintenance – Regular updates and improvements.



- **Web Hosting and Domain**

1. Domain Name – The website's address (e.g., [www.example.com](http://www.example.com)).
2. Web Hosting – Service that stores website files and makes them accessible on the internet.
3. Types of Hosting – Shared, VPS, Dedicated, Cloud Hosting.
4. DNS – Domain Name System that maps domain names to IP addresses.

## HOW DOES **WEB HOSTING WORK?**



- **Conclusion**

Web technologies have revolutionized the way we interact with information and services online. They are a combination of tools and programming practices that make the modern web dynamic, interactive, and responsive. Learning these technologies opens the door to web development, digital marketing, and e-commerce careers.

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## **Thank You**

Thank you for the opportunity to research and understand the topic of web technologies.

Submitted by:  
Ajeet Singh