Web Development involves creating websites and web applications for the internet or intranet. It includes both front-end development (user interface) and back-end development (server-side logic).

Front-end Development focuses on the client-side of web applications. It involves HTML for structure, CSS for styling, and JavaScript for interactivity. Modern frameworks like React, Vue.js, and Angular make front-end development more efficient.

Back-end Development handles server-side logic, databases, and application architecture. Popular back-end technologies include Node.js, Python (Django/Flask), Java (Spring), PHP, and Ruby on Rails.

HTTP (HyperText Transfer Protocol) is the foundation of data communication on the web. It defines how messages are formatted and transmitted between web browsers and servers. HTTPS adds security through encryption.

Databases store and manage data for web applications. Relational databases like MySQL and PostgreSQL use structured data and SQL queries. NoSQL databases like MongoDB and Cassandra handle unstructured data and scale horizontally.

RESTful APIs (Application Programming Interfaces) allow different software applications to communicate with each other. They use HTTP methods (GET, POST, PUT, DELETE) to perform operations on resources.

Web Security is crucial for protecting websites and users. Common security measures include input validation, authentication, authorization, HTTPS encryption, and protection against attacks like SQL injection and cross-site scripting (XSS).