Zed-King

GROUP OF INSTITUTIONS

ISO 9001 : 2015 Certified

M2-R5.1

CHAPTER-8

Web Publishing & Browsing

WEB DESIGNING & PUBLISHING

" Create • Upload • Publish "

Topics Covered

- Overview
- Web Hosting
- Types of web hosting
- World Wide Web (WWW
- Web Browsing Software
- Search Engine
- Publishing Tools
- HTTP
- Web Publishing



Web Designing Instructor

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Presented By

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"If content is the heart, publishing is the pulse."

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Chapter 8 – Web Publishing and Browsing

8.1 Overview

Meaning

Web Publishing means **creating, designing, developing, and uploading** a website or webpage so that it is available on the **Internet** for public use.

Main Steps:

1. Create the web pages using HTML/CSS/JS.
2. Test the website on different browsers.
3. Choose a domain name and web hosting.
4. Upload the website files to a web server.

Example:

When you upload your project on GitHub Pages or 000Webhost, it becomes publicly available → that is **Web Publishing**.



8.2 SGML (Standard Generalized Markup Language)

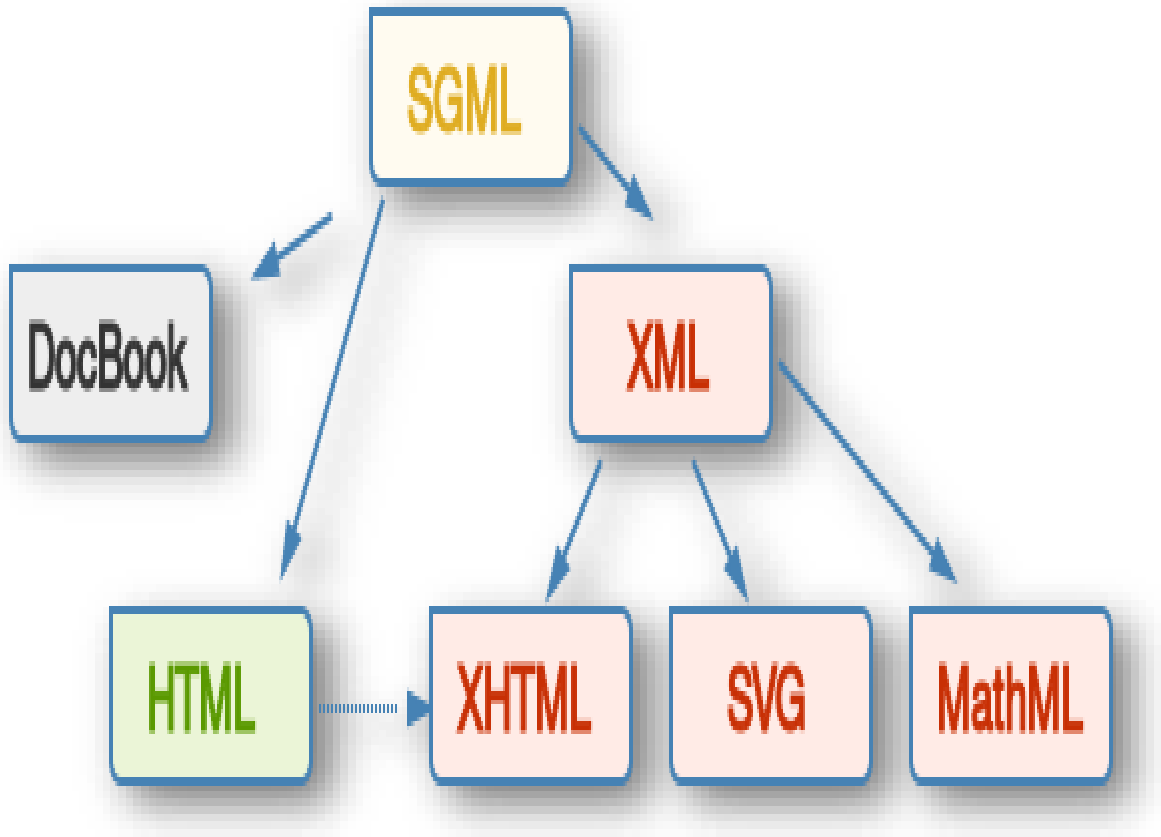
- SGML is a **standard language** used to define the structure of documents.
- It is the **parent language** of HTML and XML.
- It defines how tags and elements describe document data.

Example:

HTML = an application of SGML.

```
<html>
  <body><h1>Hello SGML!</h1></body>
</html>
```

Remember: SGML → HTML → Web Pages



8.3 Web Hosting Basics

Definition:

Web Hosting is a **service that stores your website files** on a server connected to the Internet, so users can access it anytime.

How it Works:

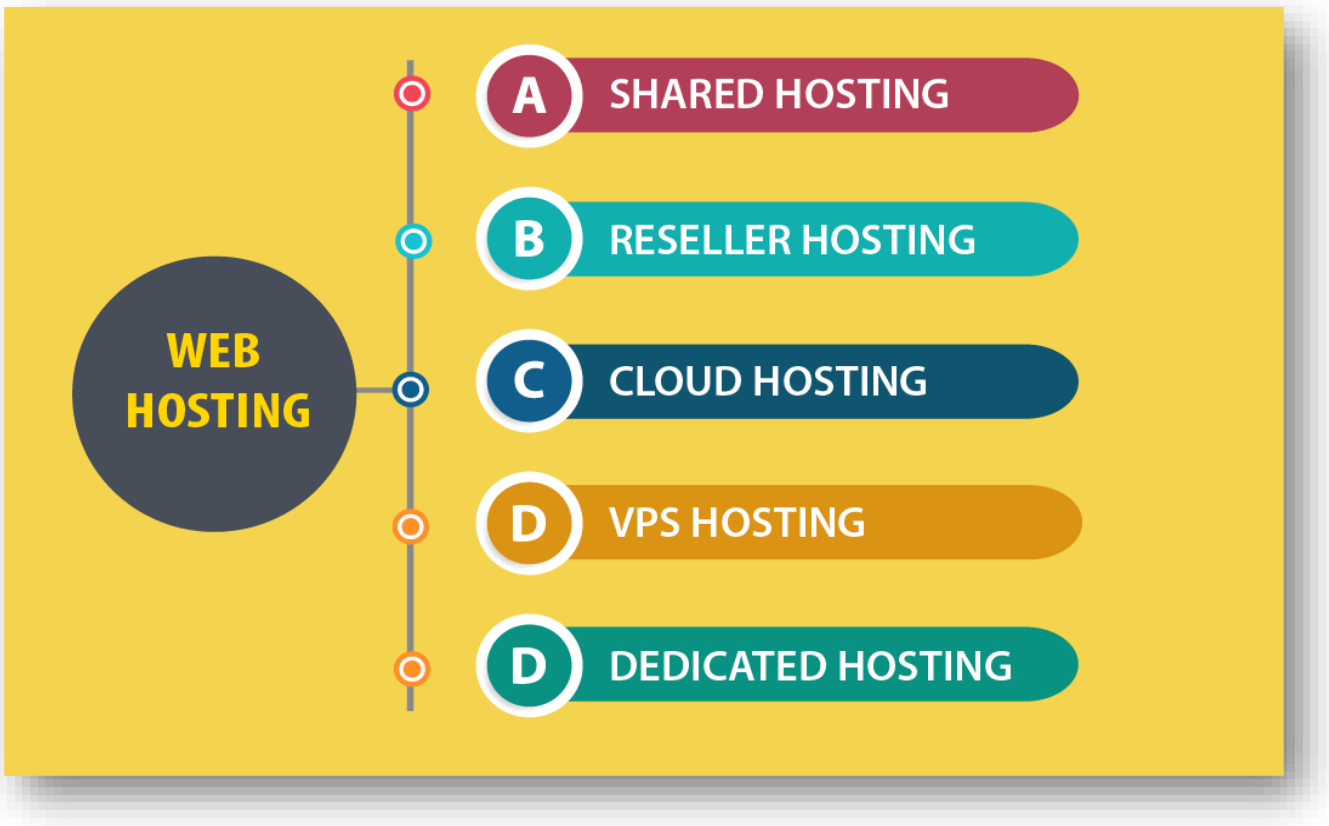
1. You upload your website to a hosting server.
2. A domain (like www.mysite.com) is linked to that server.
3. Browser sends a request → server responds → page appears.

Examples of Hosting Companies:

Hostinger, GoDaddy, Bluehost, InfinityFree.

8.3.1 Types of Hosting

Type	Description	Example
Shared Hosting	Many websites share one server. Cheap but slow.	Student or small business sites
Dedicated Hosting	One website = one server. High speed and security.	Large e-commerce sites
Cloud Hosting	Uses multiple servers together for better performance.	Big companies, apps
Free Hosting	Limited space and ads shown.	Practice websites, learning



8.4 Document Interchange Standards

Meaning:

Rules that allow **electronic documents** to be shared and displayed correctly across different systems.

Common Standards:

- HTML (HyperText Markup Language)
- XML (Extensible Markup Language)
- PDF (Portable Document Format)
- SGML

Example:

A web page written in HTML can open on any browser or device.

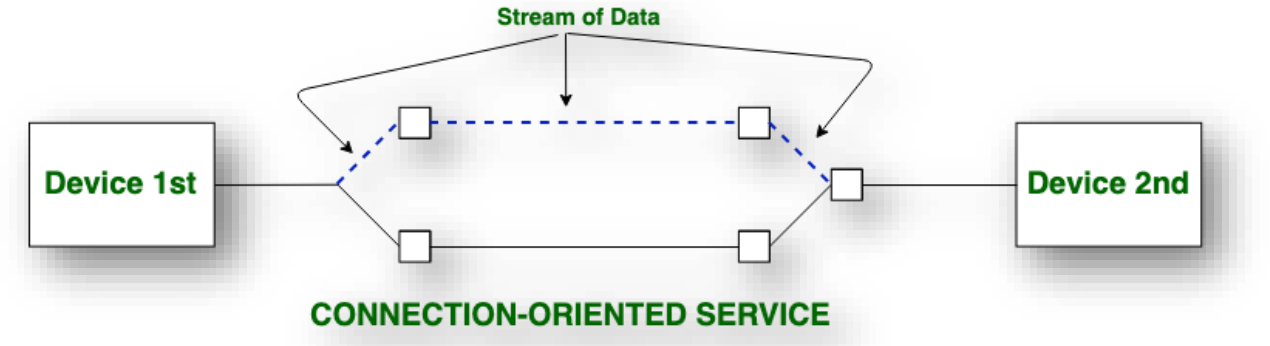


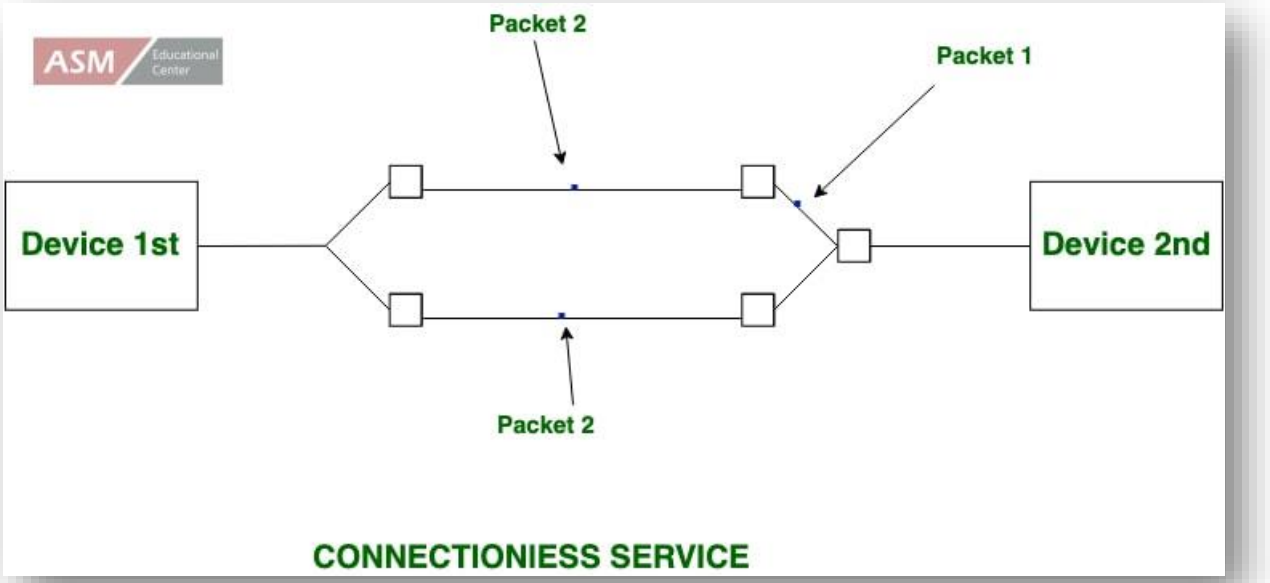
8.4.1 Connectionless and Connection-Oriented Protocols

Type	Protocol Example	Explanation
Connection-Oriented	**TCP (Transmission Control Protocol)**	Connection is made first, then data is sent. Reliable and accurate.
Connectionless	**UDP (User Datagram Protocol)**	No fixed connection. Fast but not reliable.

Example:

- Watching YouTube → TCP
- Online gaming or video calls → UDP



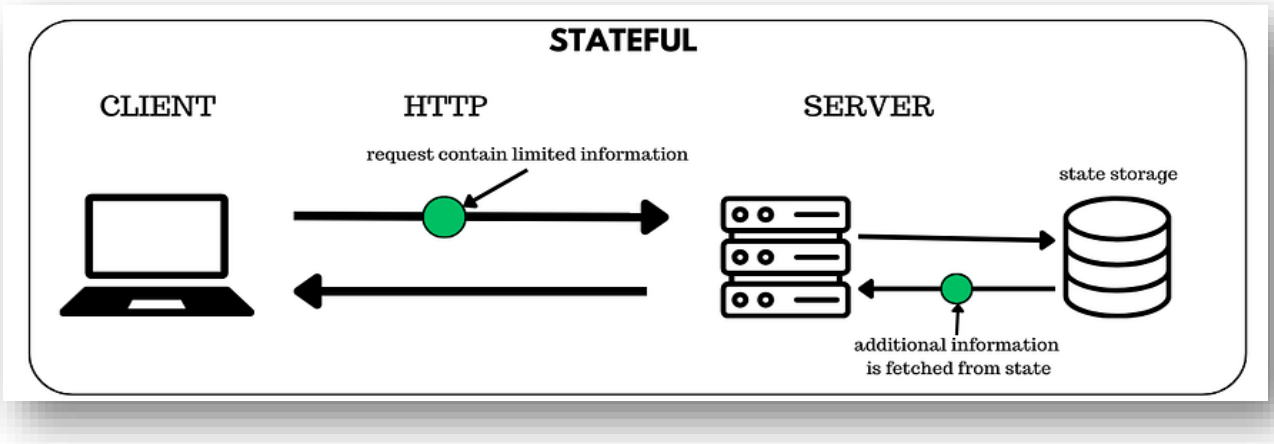


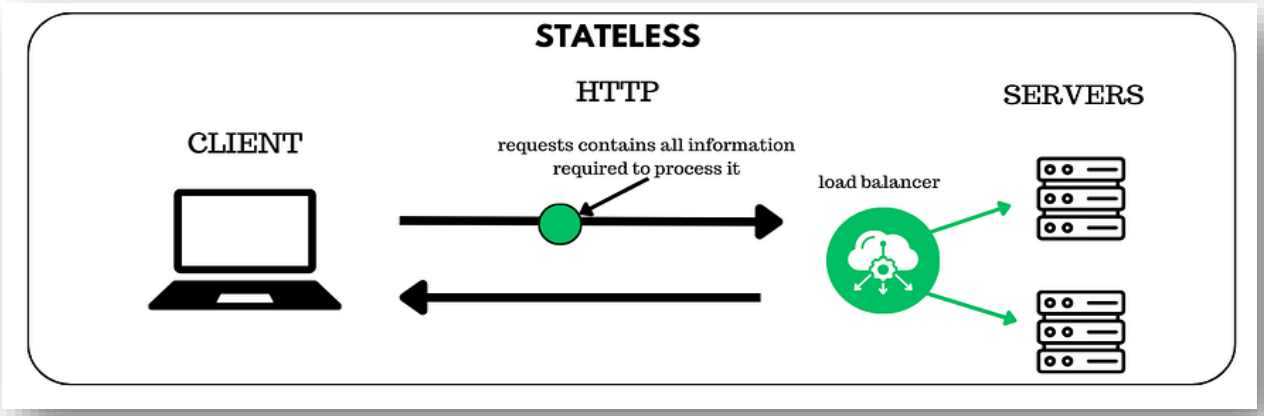
8.4.2 Stateless and Stateful Protocols

Type	Protocol Example	Explanation
Stateless Protocol	**HTTP**	Server doesn't remember previous requests.
Stateful Protocol	**FTP, Telnet**	Server keeps session information of users.

Example:

When you refresh a webpage, HTTP does not remember the previous page state.





8.5 Components of Web Publishing

1. **Web Content** – Text, images, videos, audio.
2. **Web Server** – Computer that stores and serves web pages.
3. **Web Browser** – Software used to view web pages (Chrome, Edge).
4. **Web Hosting Service** – Provides storage space on server.
5. **Domain Name** – Website address (www.example.com).
6. **Internet Connection** – Used for access and upload.



8.6 Document Management

- Managing all website documents, files, and resources.
- Helps in easy updating, backup, and security.

Tools: Google Drive, Dropbox, WordPress Dashboard.

8.7 Web Page Design Considerations and Principles

- Simple and attractive layout.
- Consistent color and fonts.
- Easy navigation (menu links).
- Fast loading pages.
- Responsive design (mobile friendly).

Example:

Google's homepage = simple design with focus on main content.

8.7.1 Website Planning Steps



8.7.1.1 Define Your Target Audience

Identify who will visit the site.
(Students, Teachers, Customers, etc.)



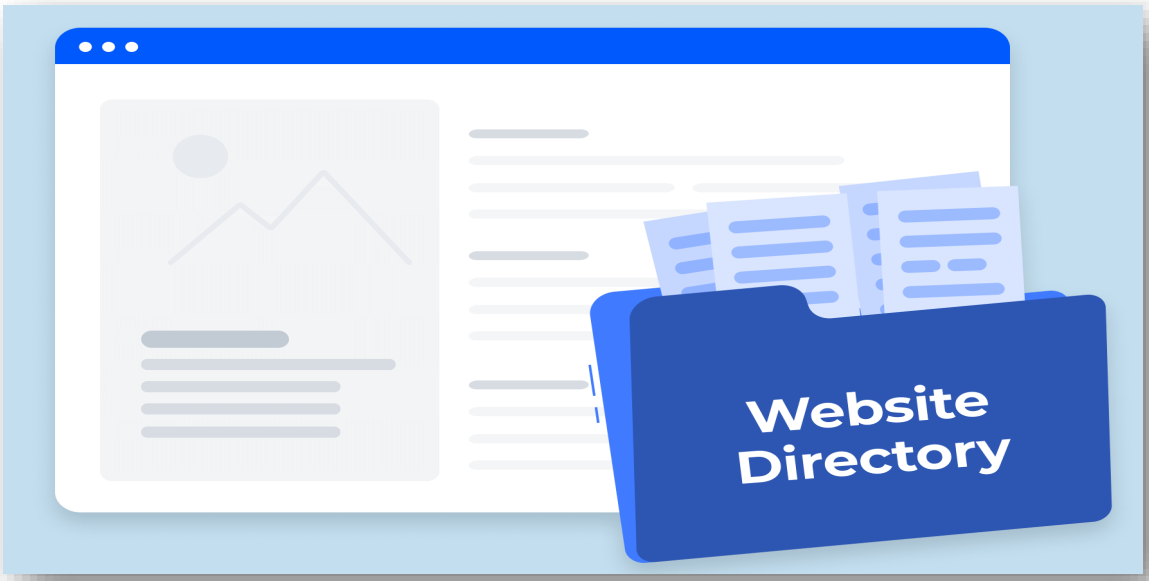
8.7.1.2 Organize Your Concepts and Materials

Collect text, images, and decide page topics (Home, About, Contact).

8.7.1.3 Create Directory Structure or Sitemap

Organize files in folders:

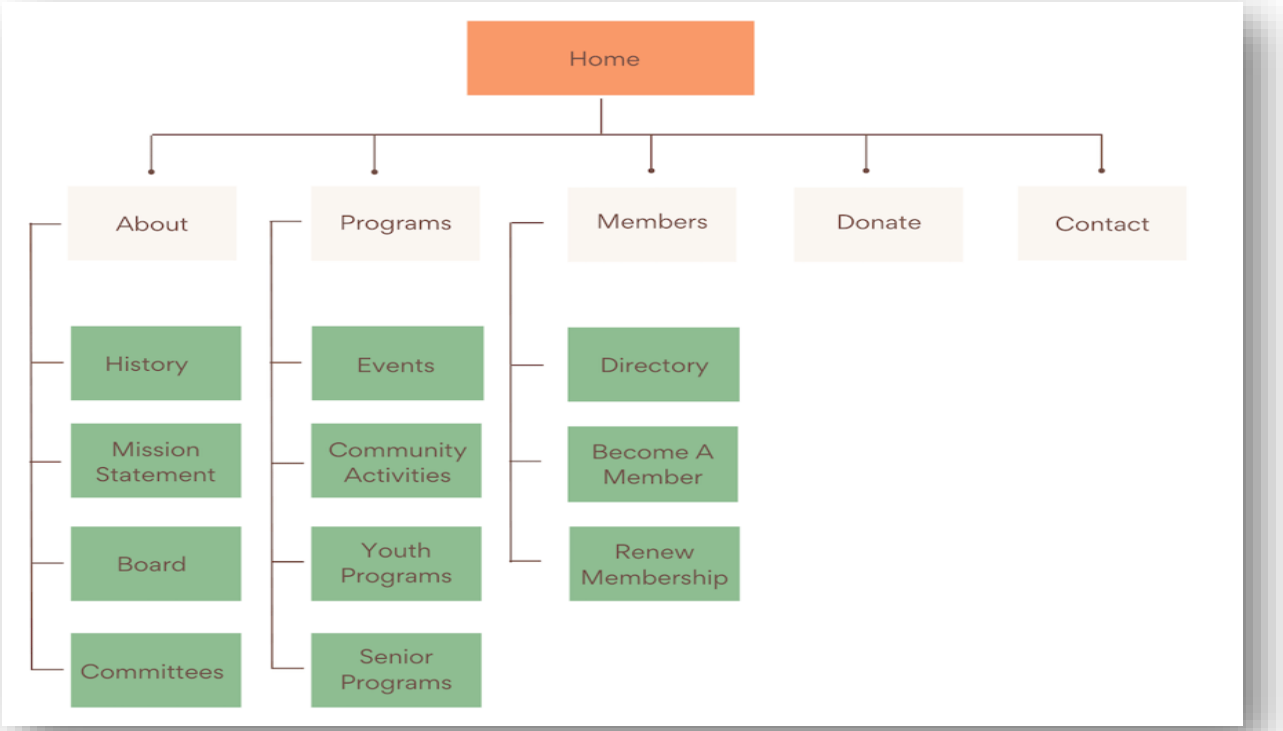
/index.html
/images/
/css/
/js/



8.7.1.4 How to Draw a Site Map

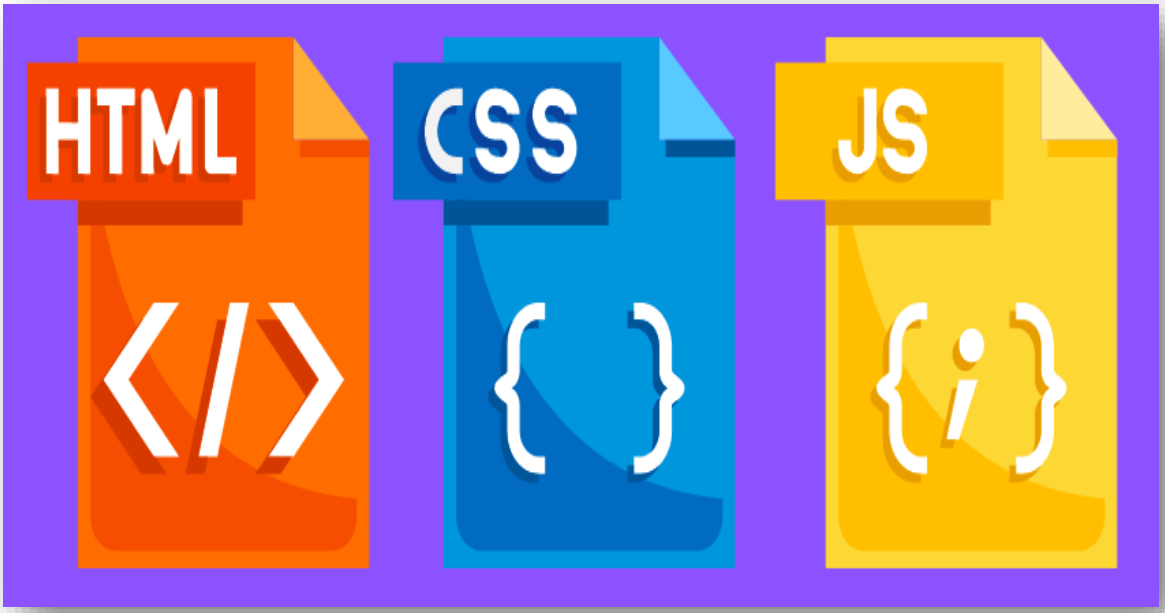
A diagram showing page connections.

Home
- **About Us**
- **Services**
- **Contact Us**



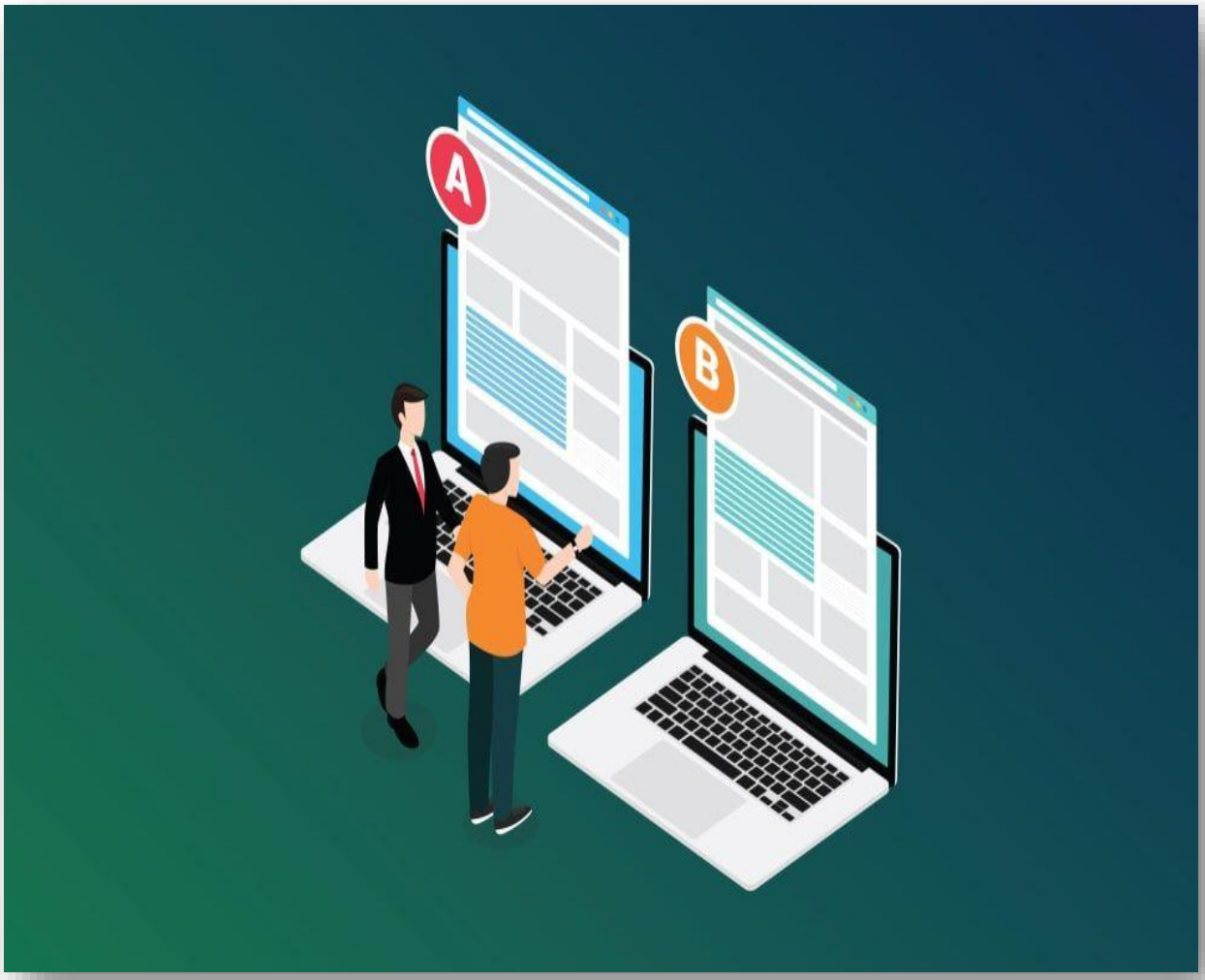
8.7.1.5 Development

Create website pages using HTML, CSS, JavaScript.



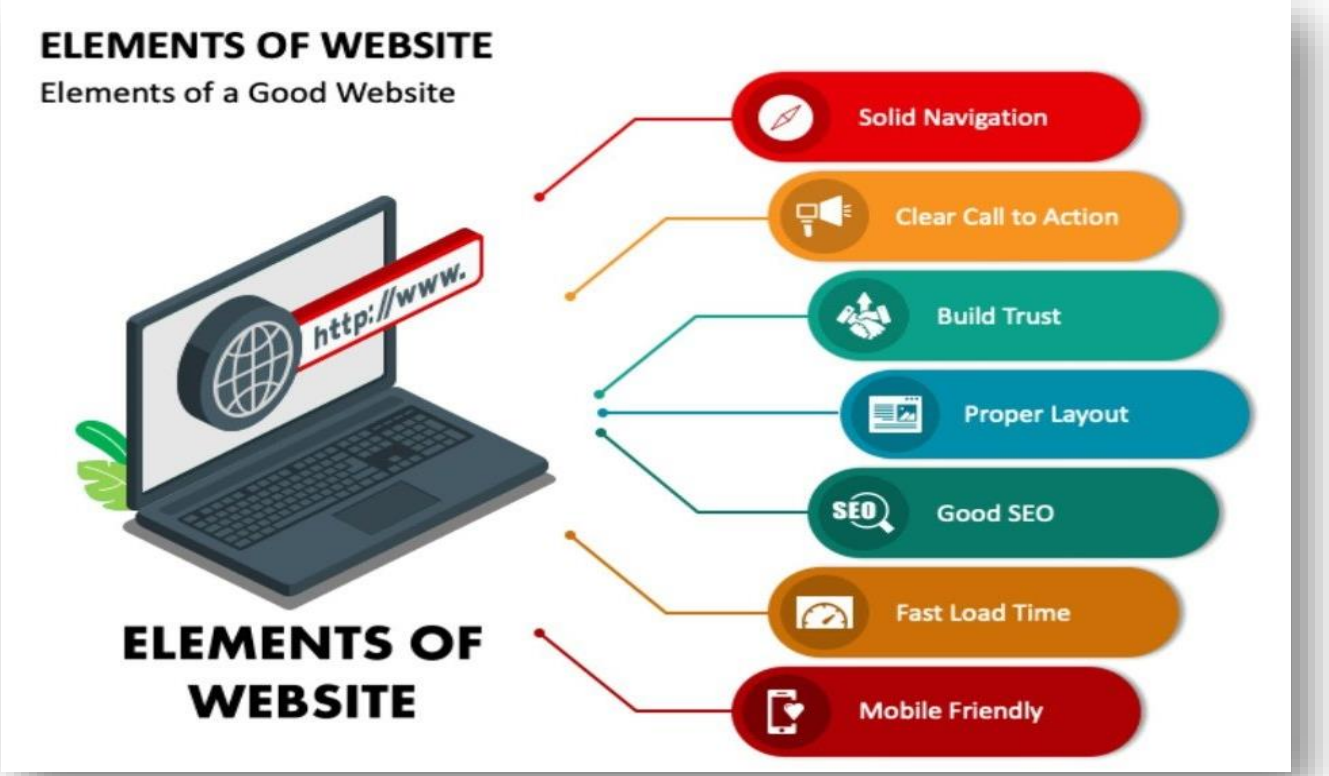
8.7.1.6 Testing and Delivery

Check your website on different browsers, fix errors, and upload to server.



8.7.2 Some Important Points

- Use clear titles and headings.
- Keep page size small.
- Add meta tags for SEO.
- Make website secure (HTTPS).

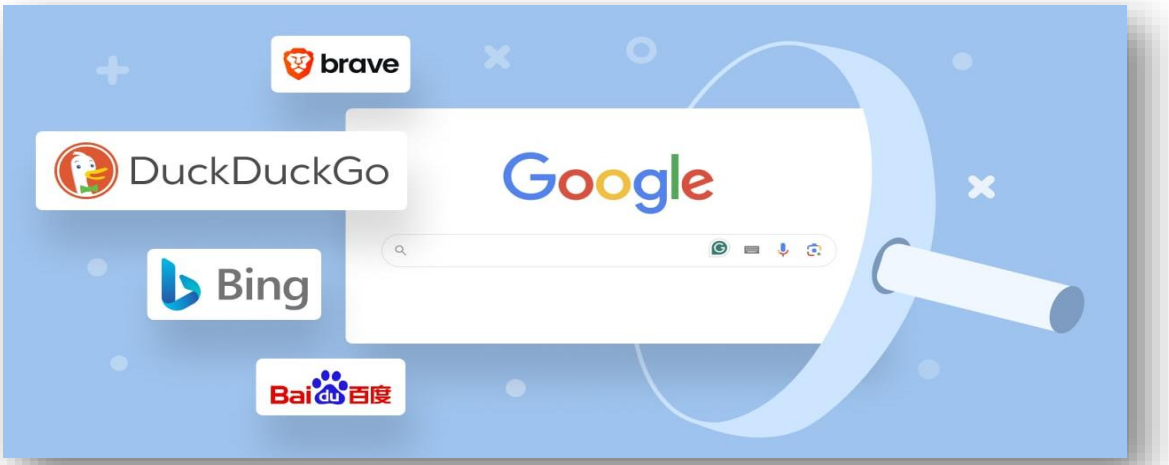


8.8 Search and Meta Search Engines

8.8.1 Search Engine

A program that searches for information on the Internet based on keywords.

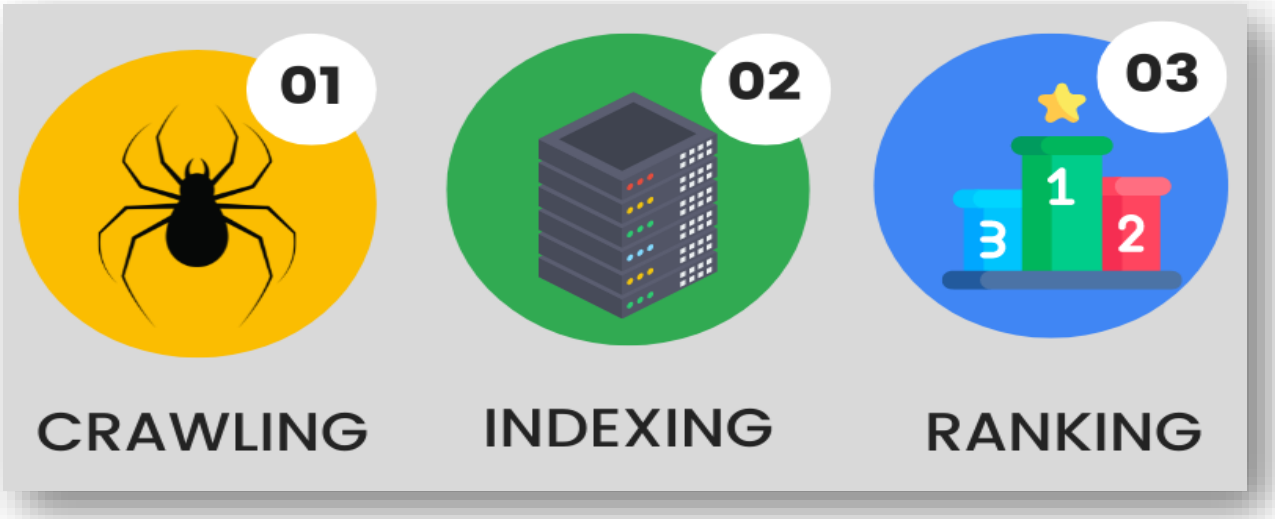
Examples: Google, Yahoo, Bing.





8.8.2 How a Search Engine Works

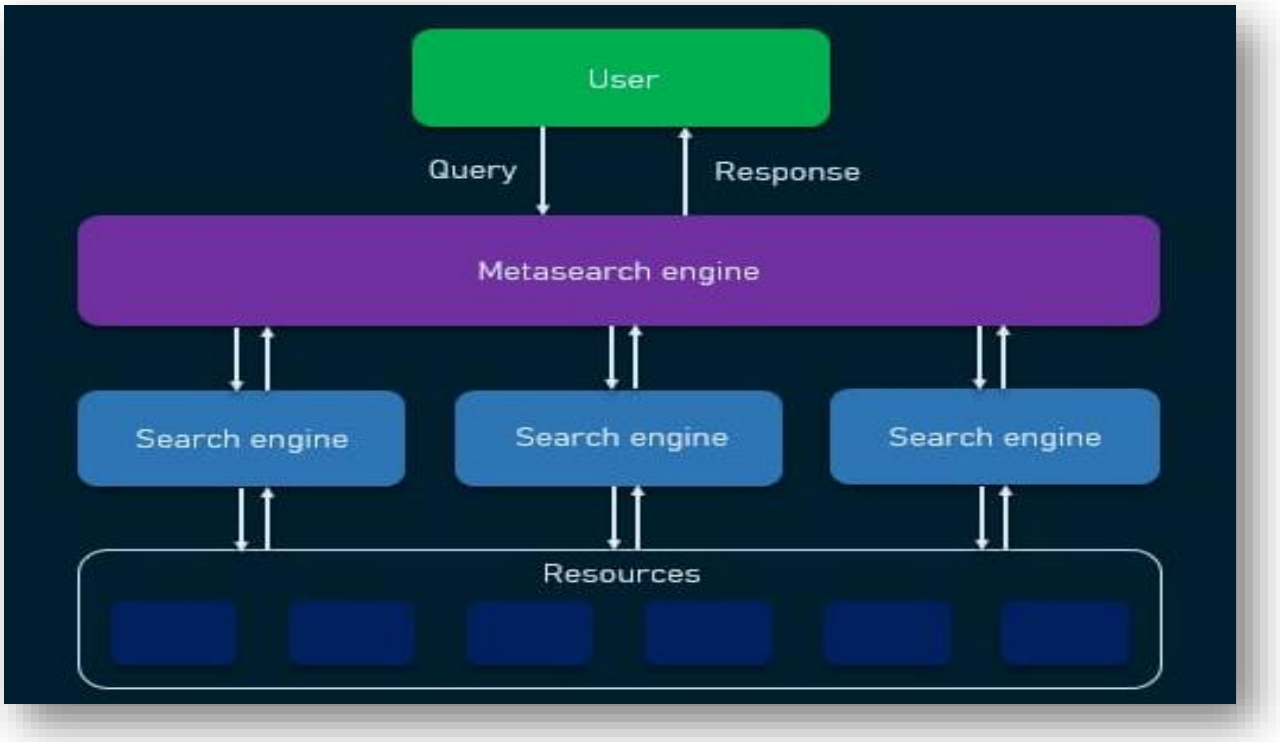
1. **Crawling:** Search engine robots (scan) web pages.
2. **Indexing:** Stores pages in its database.
3. **Searching:** When user types keywords, it shows best matches.



8.8.3 Meta Search Engines

- A Meta Search Engine does not have its own database.
- It sends the query to **many search engines** and combines the results.

Examples: Dogpile, Metacrawler.



8.8.3.1 Advantages

- Saves time.
- More comprehensive results.

8.8.3.2 Difference Between Search and Meta Search

Search Engine	Meta Search Engine
Has its own database.	Uses multiple search engines.
Example: Google	Example: Dogpile

8.9 WWW (World Wide Web)

Meaning:

A collection of interlinked web pages that can be accessed via the Internet.

Invented by: Sir Tim Berners-Lee (1989)

Features:

- Hyperlinks
- Multimedia (text, images, video)
- Easy navigation
- Accessible worldwide

8.10 Browser

Definition:

A browser is software used to view and interact with web pages.

Examples: Google Chrome, Mozilla Firefox, Microsoft Edge, Safari.

Functions:

- Request web pages from servers.
- Display HTML content.
- Manage bookmarks and history.

8.11 HTTP (Hyper Text Transfer Protocol)

- A communication protocol used between web browser and web server.
- It defines how messages are formatted and transmitted.
- **HTTPS** = Secure version of HTTP (using SSL encryption).

Example:

https://www.wikipedia.org

8.12 Publishing Tools



8.12.1 Different Types of Tools

Tool Name	Description
WordPress	CMS tool for creating websites without coding.
Blogger	Blog-publishing tool by Google.
Dreamweaver	Professional website design software (Adobe).
Google Sites	Free tool for simple web pages.

8.12.2 Macromedia's Backstage Desktop Studio

- An older software used to design and publish web pages.
- Provided ready-made templates and easy editing.

8.12.3 Other Web Publishing Tools

- **Wix** – Drag-and-drop site builder.
- **Canva Websites** – Design and publish directly.
- **Google Sites** – Simple and free.

Important Points for Examination

- SGML → Parent of HTML and XML.
- Web hosting types = Shared, Dedicated, Cloud, Free.
- WWW invented by Tim Berners-Lee in 1989.
- HTTP vs HTTPS.
- Search vs Meta Search Engine.
- Steps of Website Planning.
- Components of Web Publishing.

