



# UNIT I.

## AN OVERVIEW OF THE WEB

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# UNIT TOPICS

TOOL IS NEEDED FOR  
WEB DEVELOPMENT  
TYPES OF WEBSITES  
LANGUAGES  
PAGES

# UNIT TOPICS

01

THE INTERNET AND  
THE WORLD WIDE  
WEB

02

TYPES OF WEBSITES

03

WEB DEVELOPMENT  
LIFE CYCLE

04

WEB DEVELOPMENT  
LANGUAGES

05

TOOLS NEEDED FOR  
CREATING WEB  
PAGES

# Intended Learning Outcomes



**1.**

define the websites and explain the purpose and characteristics of each type of website;



**2.**

list and define key terms such as Internet, World Wide Web, Web Browsers, URLs, Web Servers, and Internet Service Providers;



**3**

enumerate the phases of the Web Development Life Cycle (WDLC);



**4**

explain the role of HTML in Structuring content and CSS in styling web pages; and



**5**

list common tools used for web development (e.g., code editors, browsers, and validation tools)



# **The Internet and the World Wide Web (www)**



# What is the Internet?

- The **Internet** is a massive network of networks, a networking infrastructure. It connects millions of computers together globally, forming a network in which any computer can communicate with other computers as long as they are both connected to the Internet. Information can travel via the internet via a variety of languages called **Protocols**.





# The Internet

- The **Internet** is a global network that connects billions of devices and allows for the seamless exchange of information.
- In 1969, the first message was transmitted over **ARPANET**, a landmark moment that laid the foundation for today's global network.



# The Role of Internet Service Providers (ISP)

**Internet Service Providers (ISPs)** are critical entities that provide users access to the Internet. They maintain a permanent connection to the Internet backbone—a central, high-capacity network infrastructure that connects various regional networks.

**Here are several major ISPs offer diverse broadband solutions:**





# The Role of Internet Service Providers (ISP)

**Internet Service Providers (ISPs)** are critical entities that provide users access to the Internet. They maintain a permanent connection to the Internet backbone—a central, high-capacity network infrastructure that connects various regional networks.

**Here are several major ISPs offer diverse broadband solutions:**

- > **PLDT**
- > **GLOBE**
- > **SKY BROADBAND**
- > **EASTERN TELECOM**
- > **CONVERGE ICT**



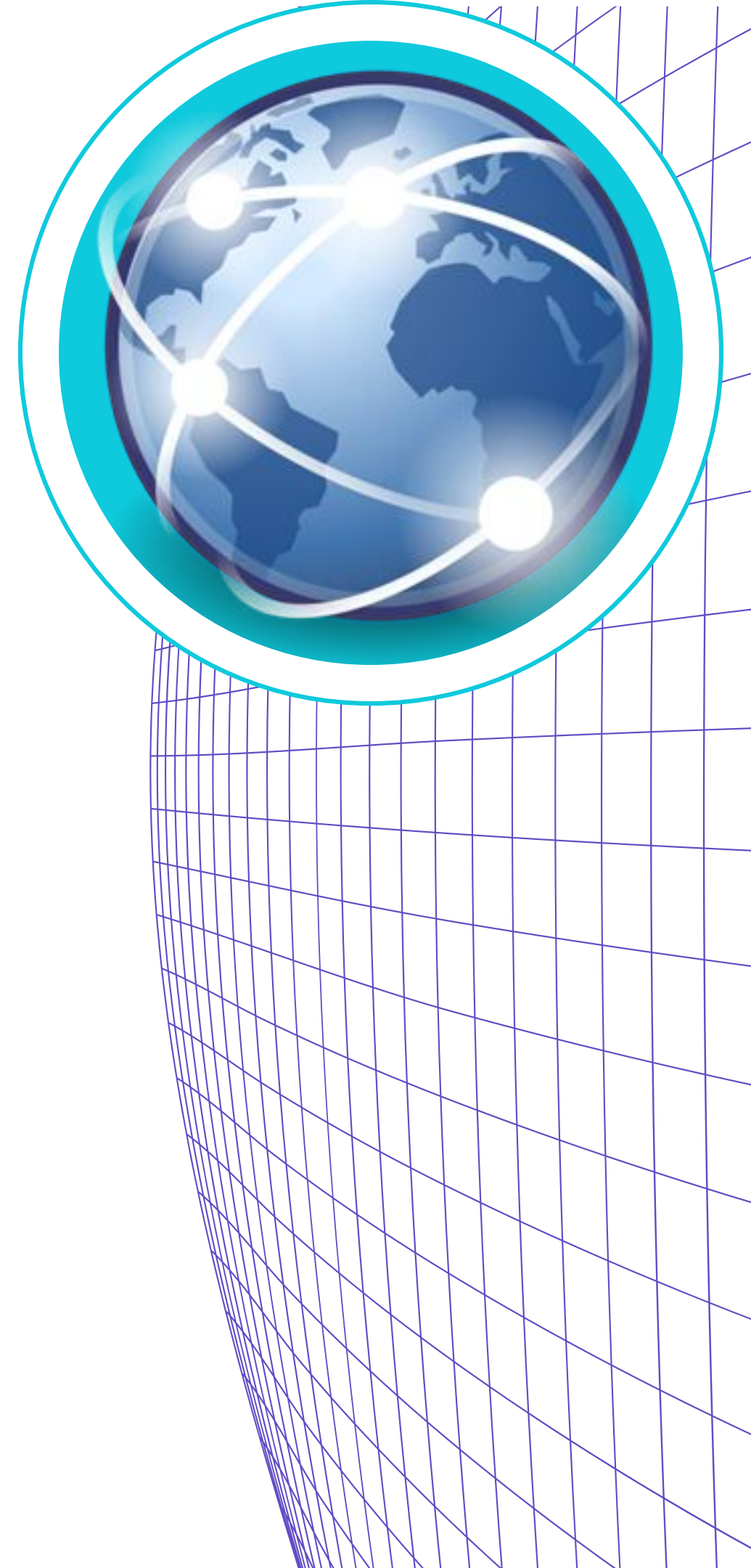
# What is the World Wide Web?

- The **World Wide Web** or simply **Web**, is a way of accessing information over the medium of the internet. It is an information-sharing model that is built on top of the internet. The Web uses the **HTTP protocol**, only one of the languages spoken over the internet, to transmit data.
- Web services, which use HTTP allow applications to communicate in order to exchange business logic and use the web to share information.



# The Internet and the World Wide Web

- Many people use the terms **Internet** and **World Wide Web** interchangeably, but in fact, the two terms are not synonymous.
- The Internet and the Web are two separated but related things.







# Types of Websites

# Categories of Websites



Internet Website



Intranet Website



Extranet Website

# Categories of Websites

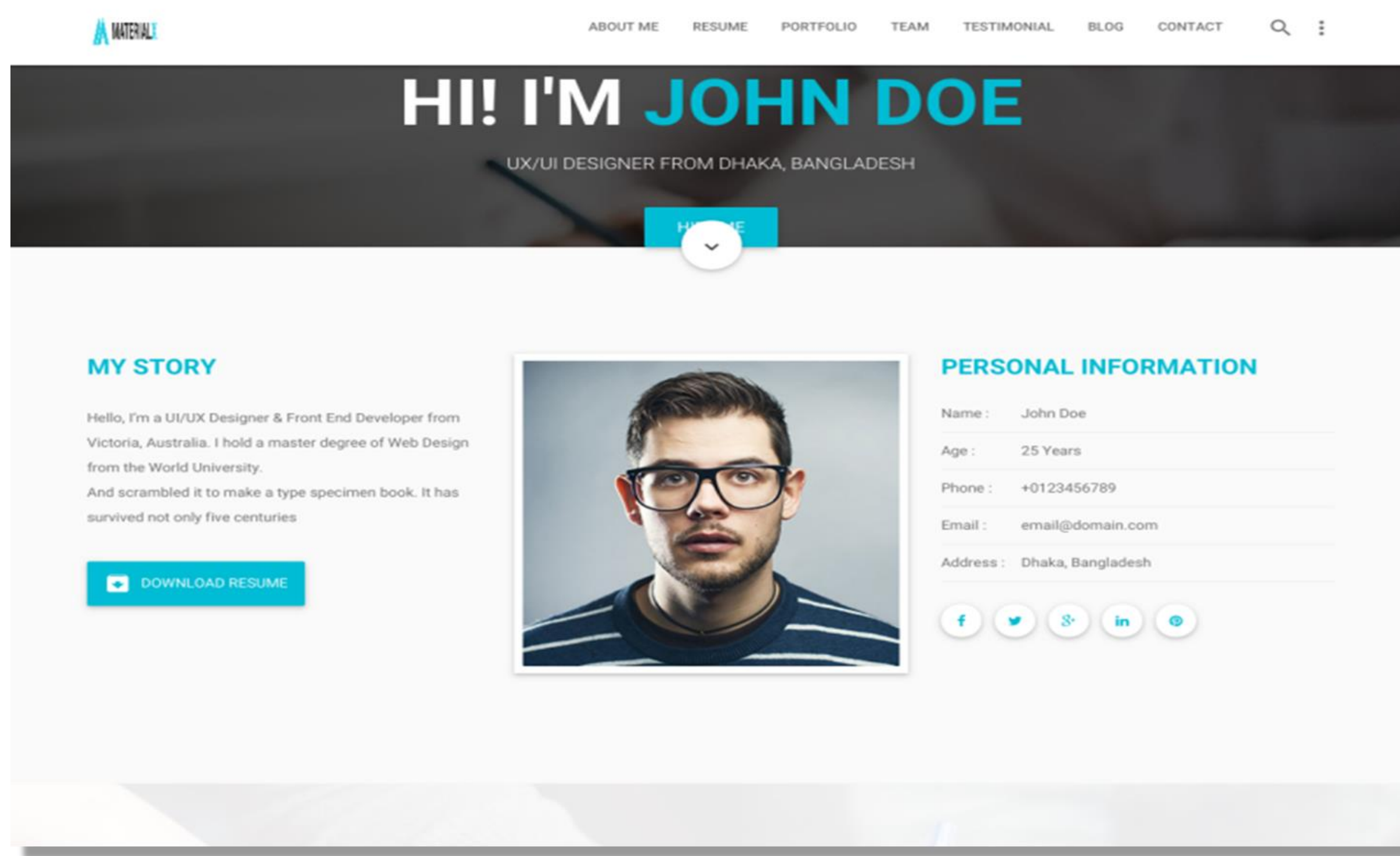
Category	Description	Purpose	Access Level
Internet	A global network accessible to anyone worldwide using an internet connection.	Publicly share information, services, or resources.	Open to everyone with an internet connection.
Intranet	A private network designed for internal use within an organization.	Facilitate communication, collaboration, and data sharing.	Restricted to authorized members of the organization (employees, members).
Extranet	A private network that extends limited access to external users (partners, vendors, etc.).	Enable collaboration with external stakeholders securely.	Restricted to specific external and internal users with proper credentials.





**HERE ARE SOME COMMON TYPES OF  
WEBSITES**

# Personal Websites



# Business Websites

similarweb

Products ▾ Customers ▾ Our Data Pricing Resources ▾

Contact salesGet startedLogin

shopify.com VS. + Compare this site to

November 2024 All traffic

Home > Website Traffic Checker > shopify.com

shopify.com Website Analysis for November 2024

try shopify free and start a business or grow an existing one. get more than ecommerce software with tools [Show more](#)

[Business and Consumer Services > Business Services](#)

Company	Year Founded	Employees	Annual Revenue
<a href="#">Shopify, Inc.</a>	2004	> 10001	> \$1B

Keep track of your competitors

See their traffic and performance metrics

Try it now

Global Rank ⓘ

#154 ▲ 8

Country Rank ⓘ

#117 ▲ 6

[United States](#)

Category Rank ⓘ

#1

[Business and Consumer Services > Business Services \(In United States\)](#)

Overview

Ranking

Audience

Competitors

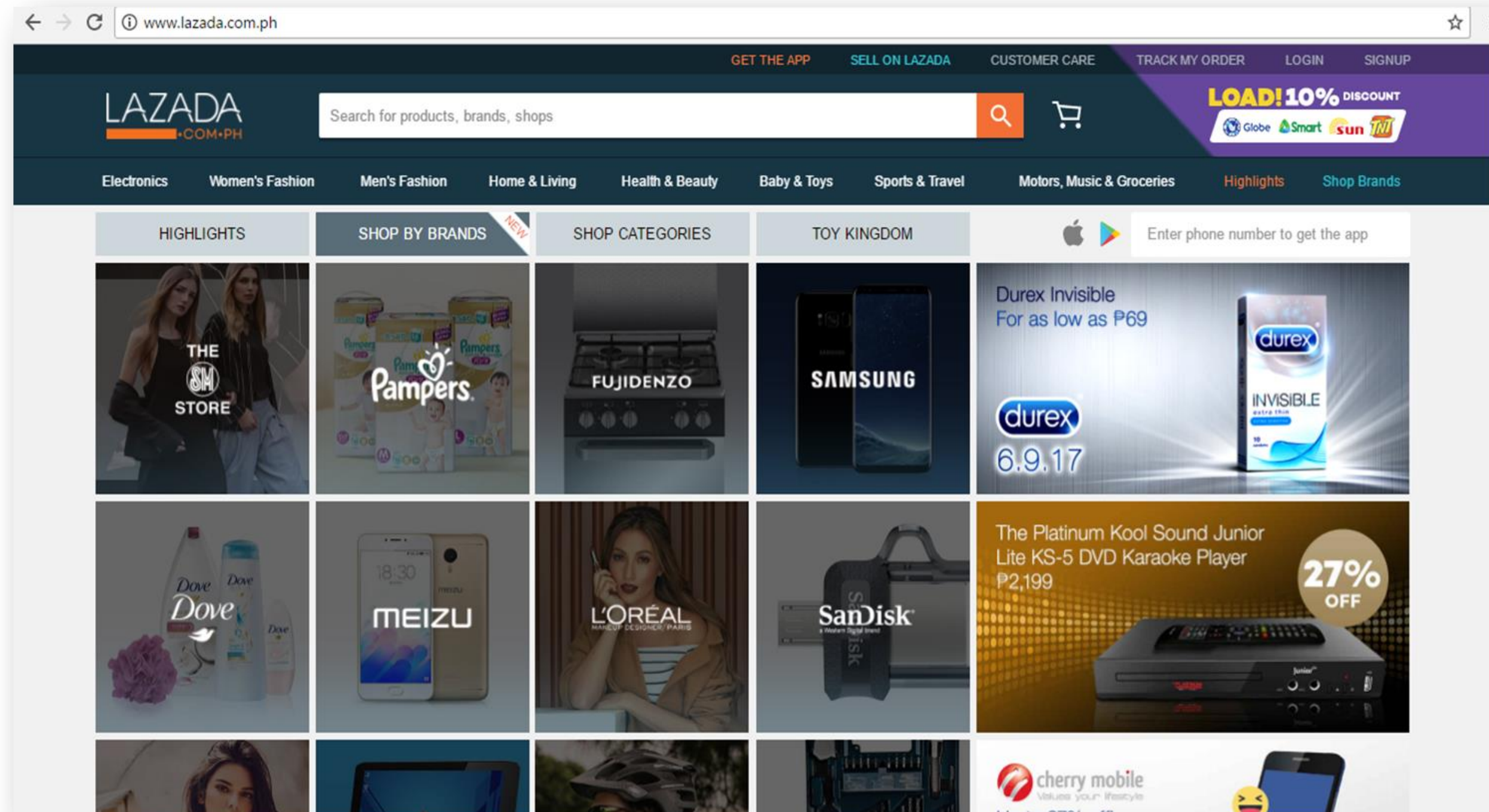
Marketing channels

Outgoing links

Technologies



# E-commerce Websites



# Educational Websites

The screenshot displays the Studocu website interface. At the top, the Studocu logo is on the left, and navigation links for 'Universities', 'Books', and 'AI Questions' are in the center. On the right, there are links for 'Upgrade', a notification bell, a chat icon, and a user profile icon.

The left sidebar features a user profile for 'Joana marie Tolentino' from 'Nueva Ecija University of...'. Below the profile, statistics show 0 Followers, 1 Uploads, and 0 Upvotes. A blue '+ New' button is present. The sidebar menu includes 'Home', 'My Library', 'AI Notes' (marked as 'New'), 'Ask AI', 'Chats', and 'Recent'.

The main content area has a search bar with the placeholder text 'Search for courses, books or documents'. Below the search bar are three action buttons: 'Back to Favorites', 'Ask a Question', and 'Summarize your notes'. The 'Continue reading' section displays a horizontal carousel of document thumbnails. The visible titles and page counts are:

- Strategic Cost Management by Feylone Prelim by... (19 pages)
- Final LABS - Application Development... (15 pages)
- IS Strategy Management and acquisitio... (55 pages)
- IS6204 IS Strategy, Management... (30 pages)
- Definition of strategic management/T... (3 pages)



# Portfolio Websites

CHRISTINA VANESSA  
GREIFENSTEIN

Explore

About



## Key Services

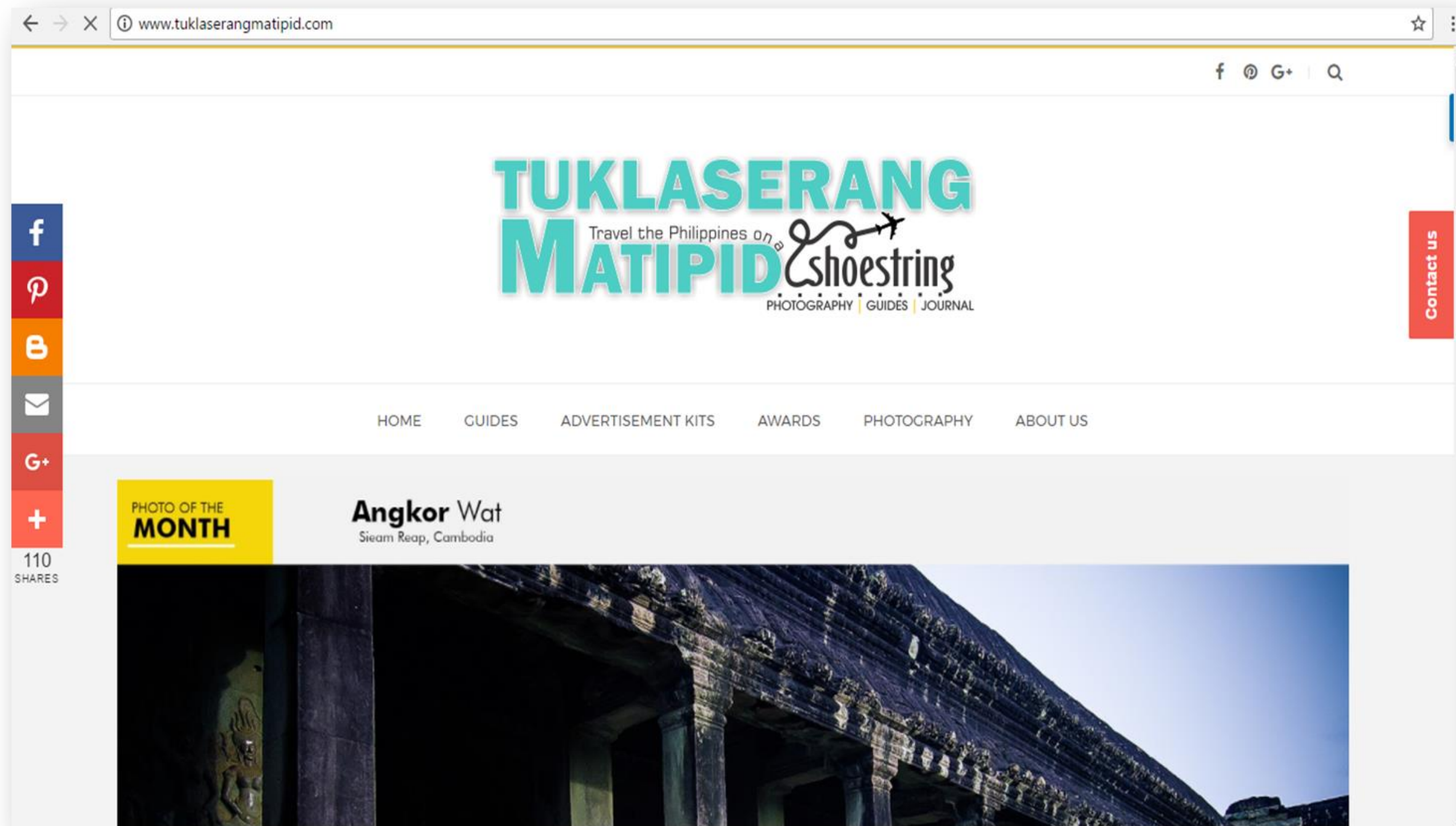
Research // Concept // Location Scouting // Art and  
Creative Direction // Production // Photography // Editing



Widget



# Blog Websites



# News and Media Websites

CNN

US

World

Politics

Business

Health

Entertainment

More

Watch

Listen


Live TV

Sign In

Advertisement

Ad Feedback


MORE TOP STORIES



X suspends journalist after debunking theory Elon Musk fan account was Musk himself

Occupied West Bank rocked by day of violence as gunmen kill three Israeli settlers and reprisal attacks reported

FEATURED



Dimitrios Kambouris/Getty Images

What happens to celebrities' outfits after a red carpet event?

CNN x Kindred for Business


Never miss a deal again!

Get notified on the best deals available when you shop with the CNN Connected Shopper


ADD NOW

Advertisement

Ad Feedback



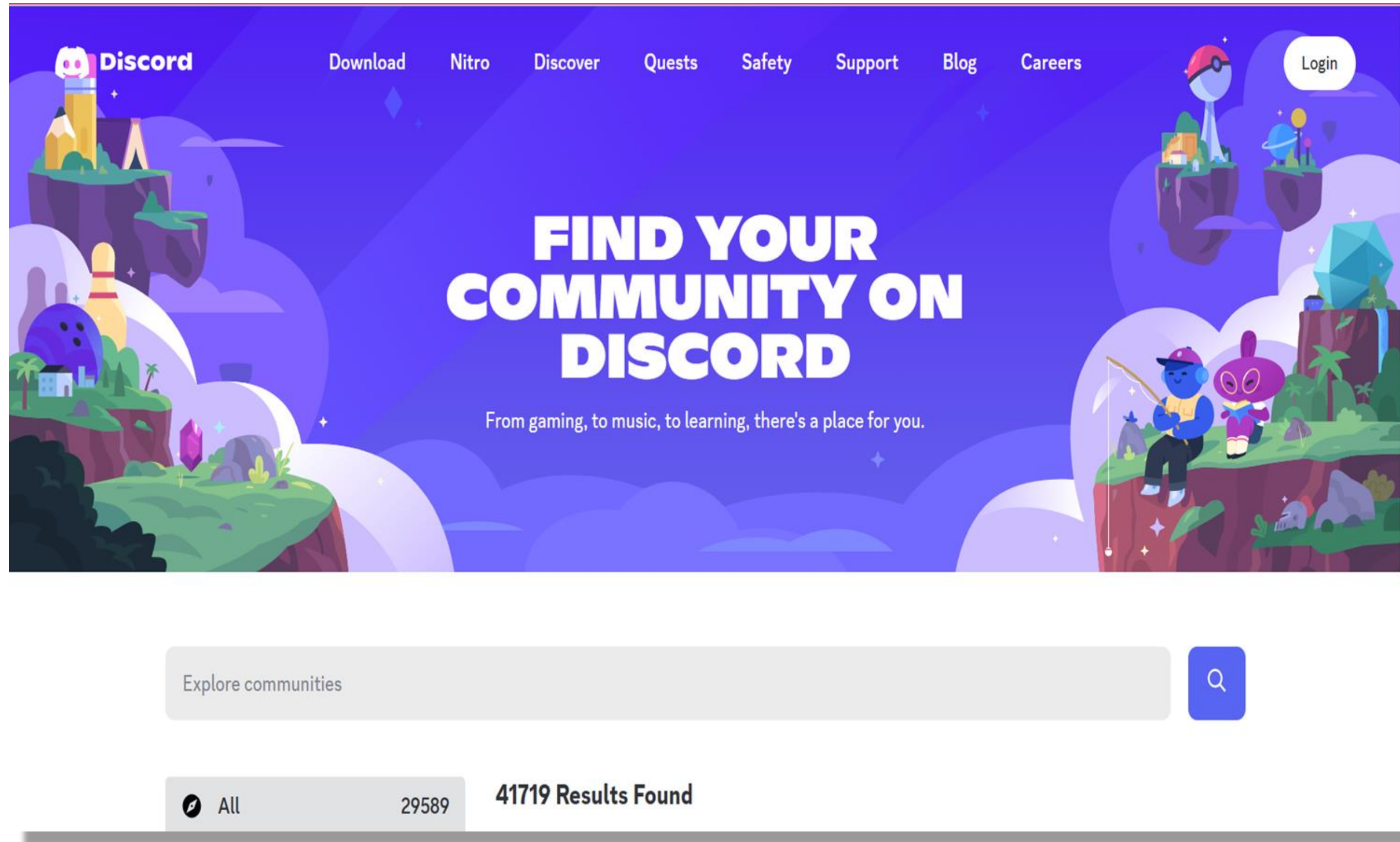
Relative arrested following death of 3 women in Christmas cake poisoning



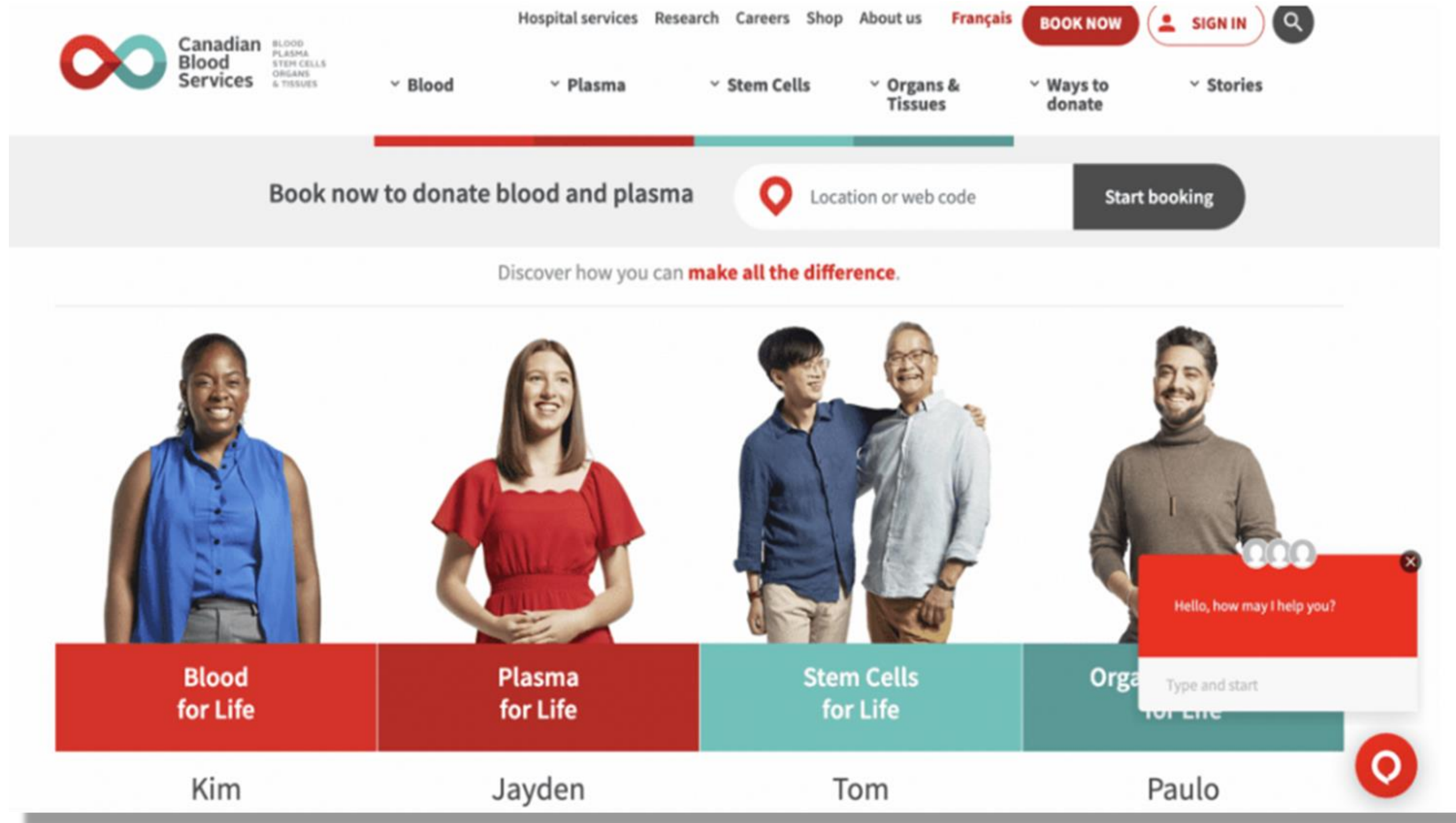
Boy, 7, found



# Community and Forum Websites

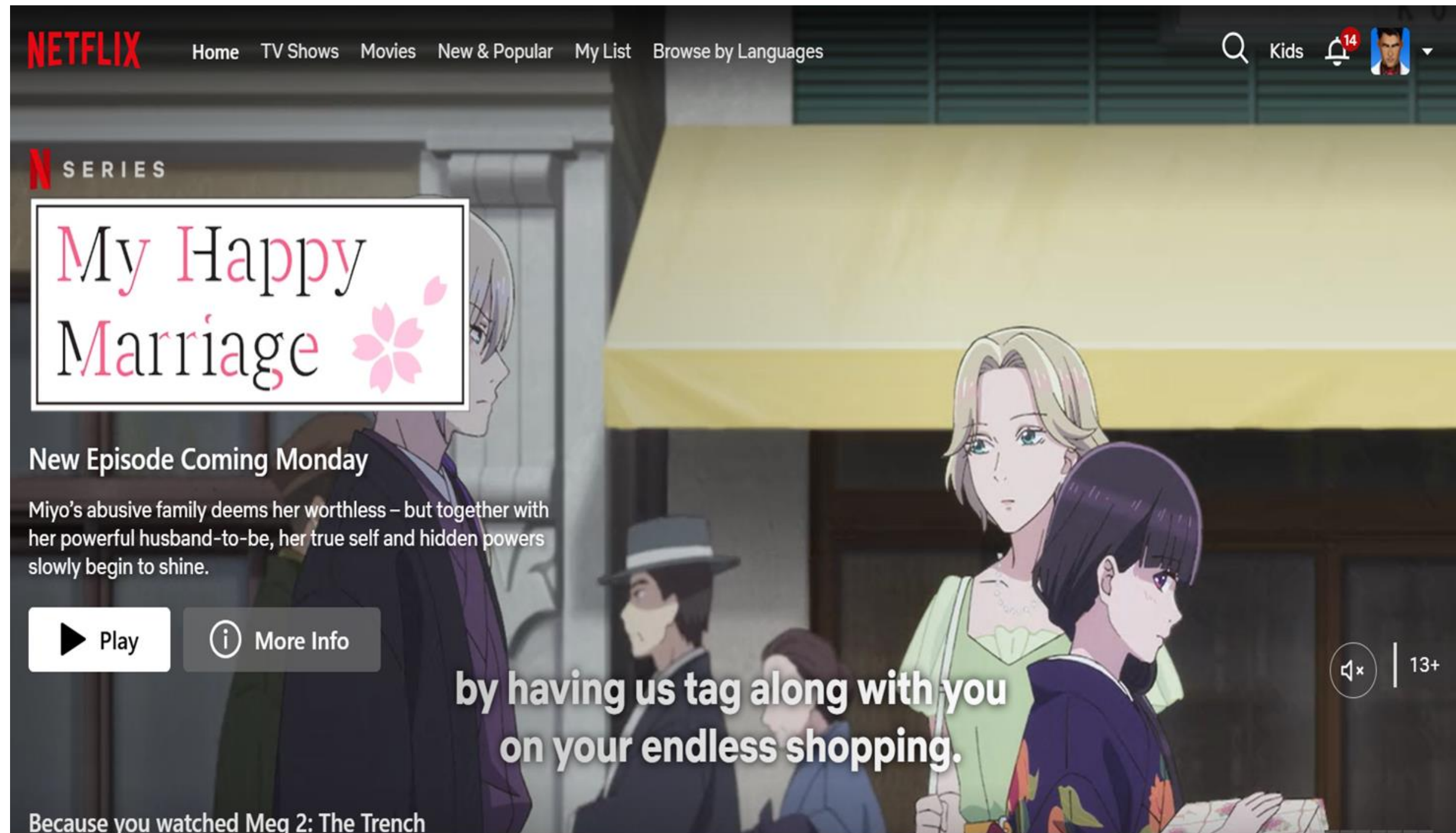


# Nonprofit Websites





# Entertainment Websites

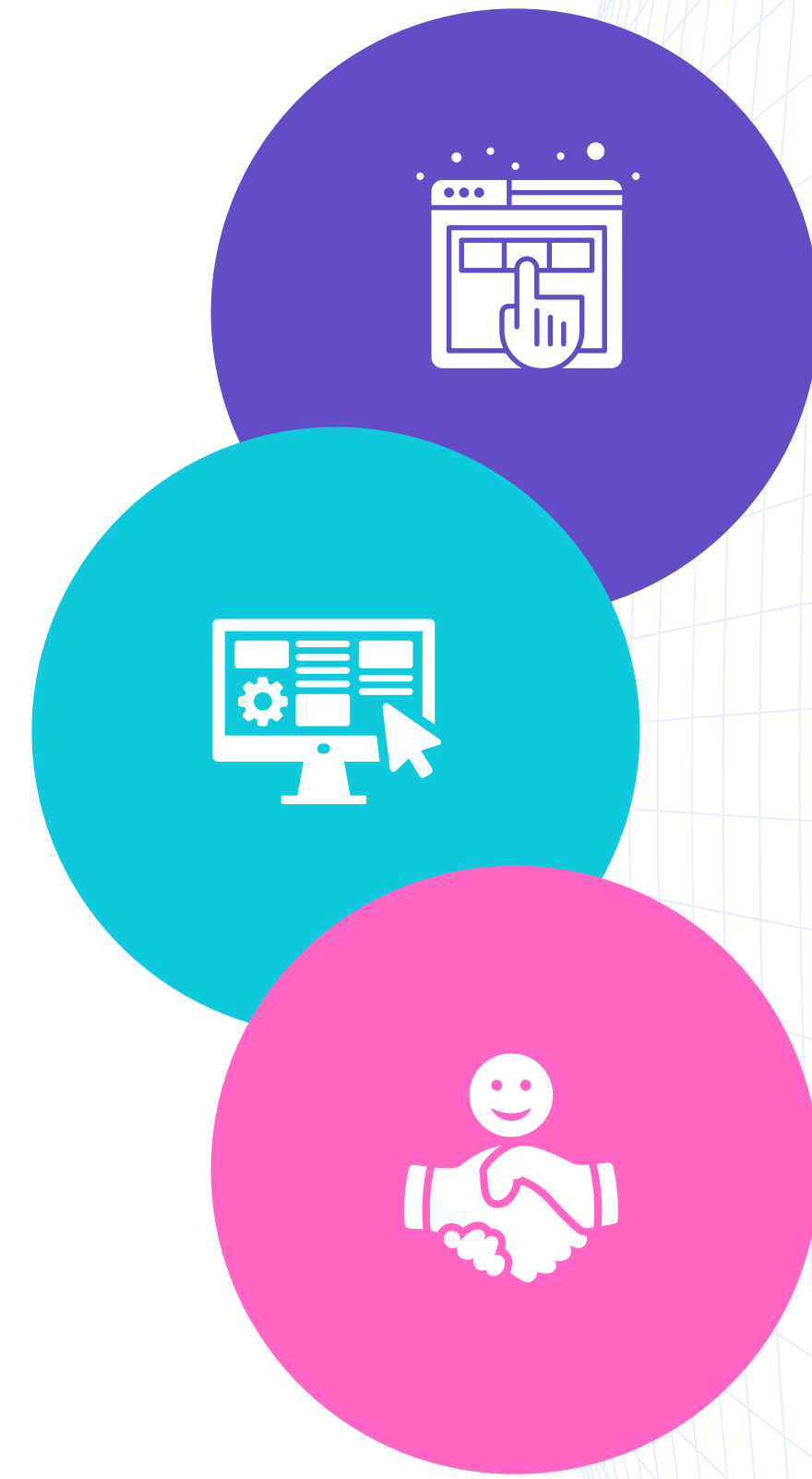




# **BUILDING A WEB PAGE**

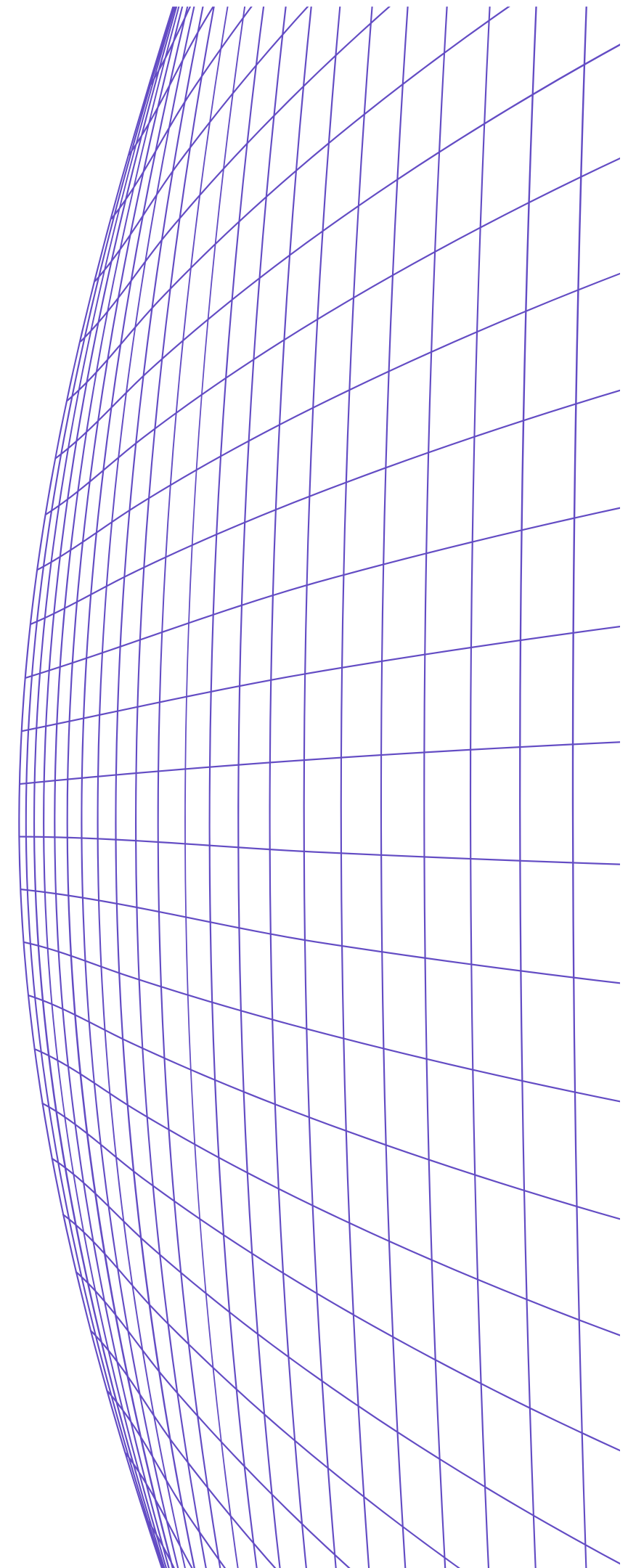
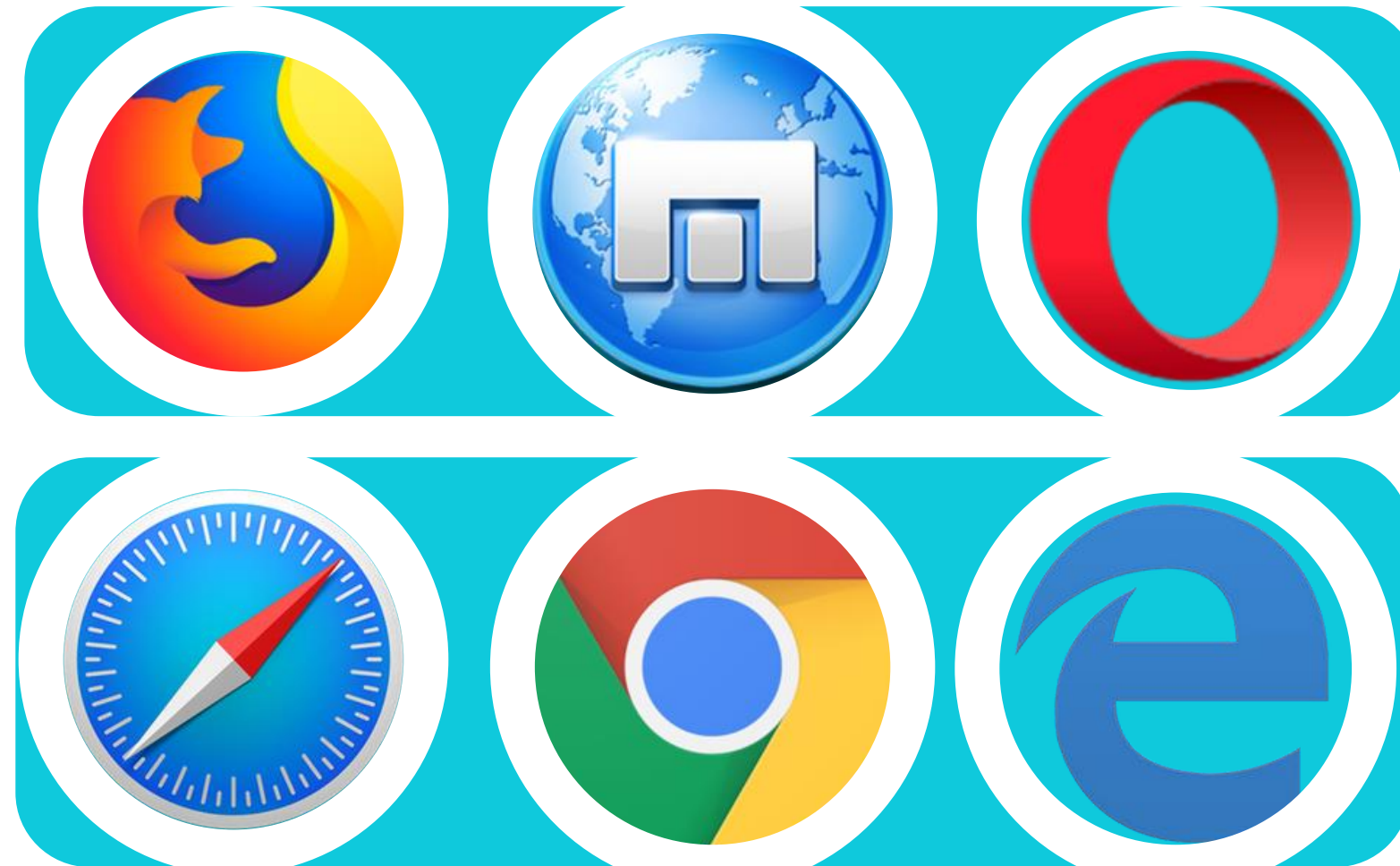
# Web Browsers

- A **Web Browser** or simply **Browser** is a software application used to **locate, retrieve and display content on the World Wide Web**, including web pages, images, videos and other files.
- As a **client/server model**, the **browser is the client** that runs on a computer and contacts the web server to **request for information. The web server sends the information back** to the browser which displays the results on the computer or other internet enabled device that supports a browser.



# Popular Web Browsers

- MOZILLA FIREFOX
- GOOGLE CHROME
- OPERA BROWSER
- MICROSOFT EDGE
- SAFARI BROWSER
- MAXTHON BROWSER





# Uniform Resource Locator

- A **Uniform Resource Locator (URL)** is the address used to access a specific resource on the internet. It acts as a reference to a web page, file, or service, guiding users and web browsers to the desired location.

A URL is composed of several components:

**PROTOCOL**

**DOMAIN NAME**

**PATH**

**QUERY STRING**

**FRAGMENT IDENTIFIER**



# Protocol

Specifies the method used to **access the resource**.

Common protocols include **http://** and **https://** (for secure connections).

**For example,** https:// ensures data is encrypted for secure communication.

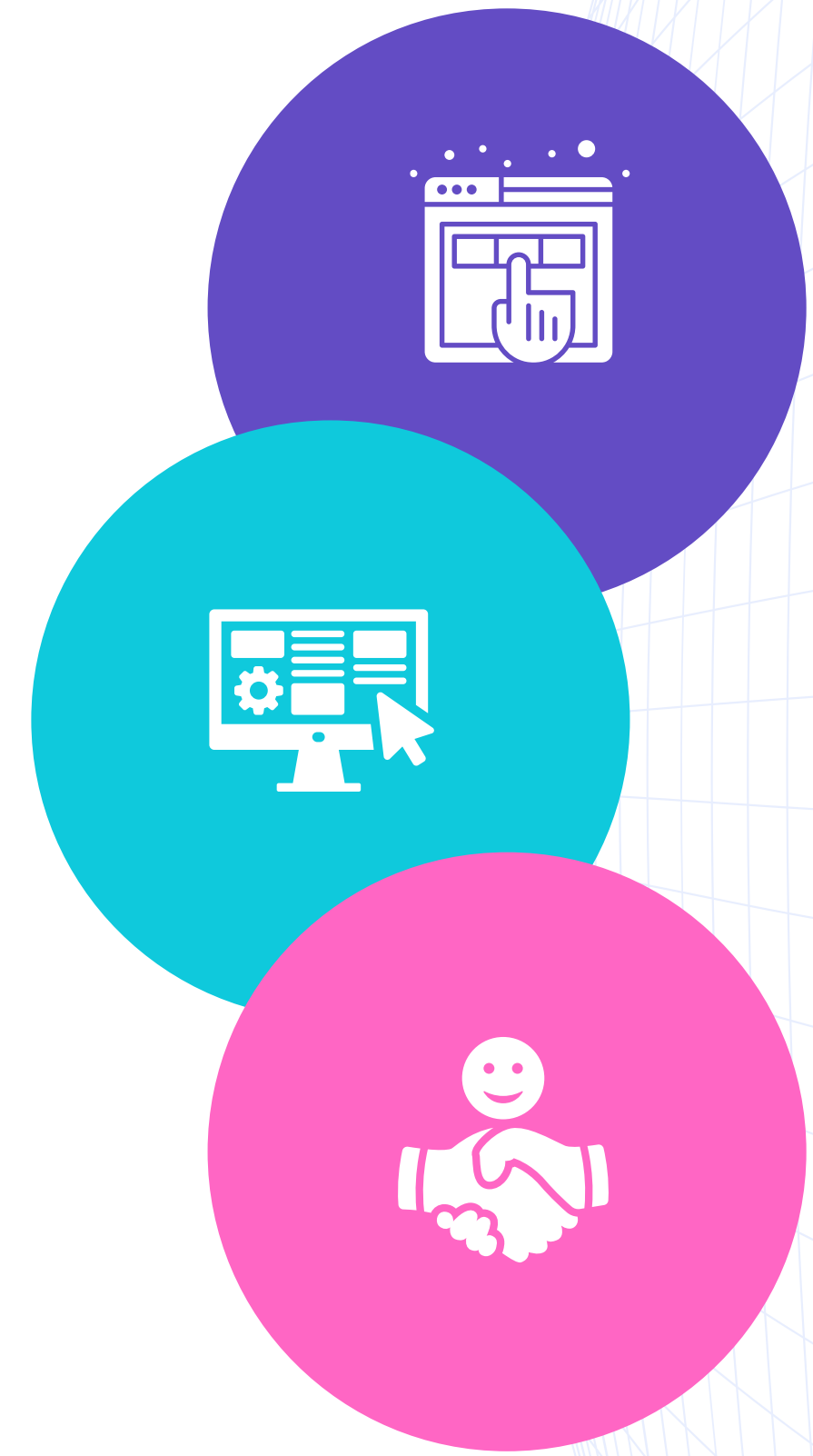
# Domain Name:

Indicates the server's address where the resource is hosted. It often includes the website's name and a domain suffix (e.g., .com, .org, .edu).

For instance, [www.google.com](http://www.google.com) is a **domain name**.

# Domain Extensions

- > **.com – Commercial Site**
- > **.gov – Government Site**
- > **.edu – Educational Institution Site**
- > **.net – Network Site**
- > **.org – Organizational Site**
- > **.biz – Business Site**
- > **.mil – Military Site**





# Path

Specifies the **exact location** of the resource within the server. It often includes directories and file names.

**For example,** /about-us points to a specific page on the website.



# Query String

Used to pass **additional information or parameters to the server**, often for search queries or dynamic content. It follows a **?** and consists of key-value pairs, like **?search=example.**

# Fragment Identifier

Refers to a **specific section within a web page**, usually indicated by a **#**.

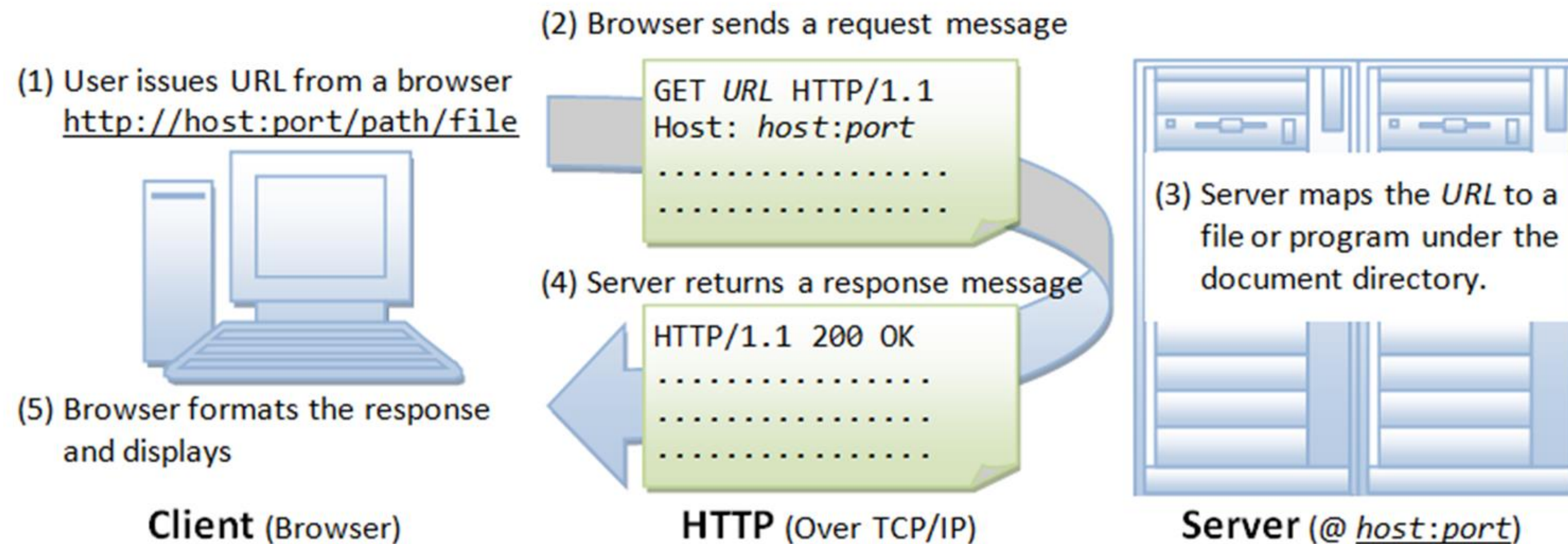
For example, **#section2** jumps to a particular part of the page.

**<https://www.example.com/products?category=books#bestsellers>**



# Web Servers

**Web Servers** are specialized computers that **store and serve web pages to users upon request**. Each server is identified by an IP address and often a domain name (e.g., Google.com).

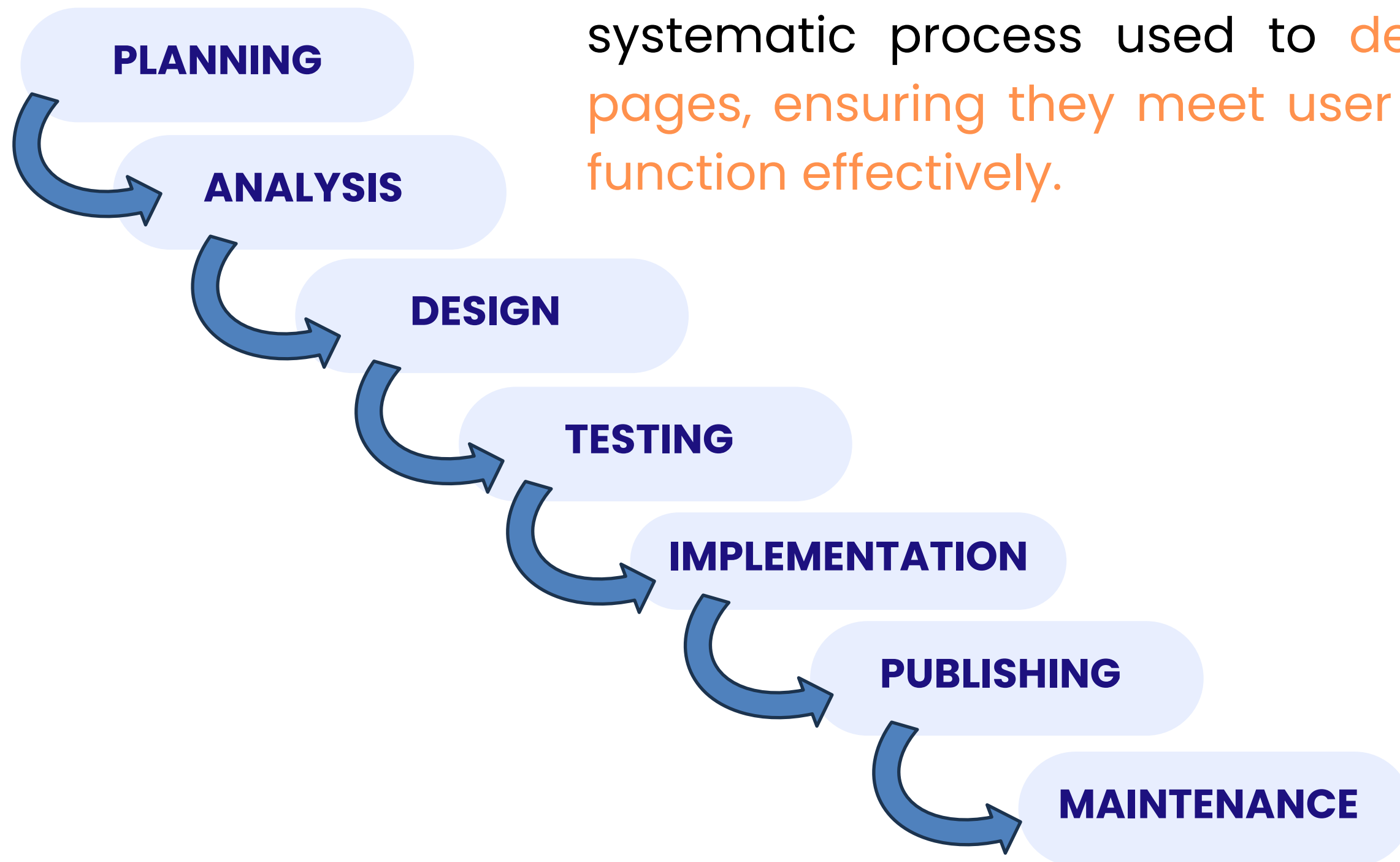




# Web Development Life Cycle

# Web Development Life Cycle

**The Web Development Life Cycle** is a systematic process used to **develop web pages, ensuring they meet user needs and function effectively.**





# Web Development Languages



# Hypertext Markup Language

**Hypertext Markup Language (HTML)** is the standard markup language for creating web pages and web applications.

HTML



# Cascading Style Sheets

**Cascading Style Sheets (CSS)** is a style sheet language used for describing the presentation of a document written in a markup language like HTML.



# How can we apply CSS to a Web Page?

- Inline CSS
- Internal CSS
- External CSS
- CSS Frameworks



# Inline CSS

- **Inline CSS** is used for applying style to a particular HTML Tag.
- The **style** attribute is used to style a particular HTML Tag.
- Least recommended styling method because of the difficulty it brings in managing larger websites.
- Useful for testing and previewing changes





# Internal CSS

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# **Tools Needed for Creating Web Pages**

# Text / Source Code Editor

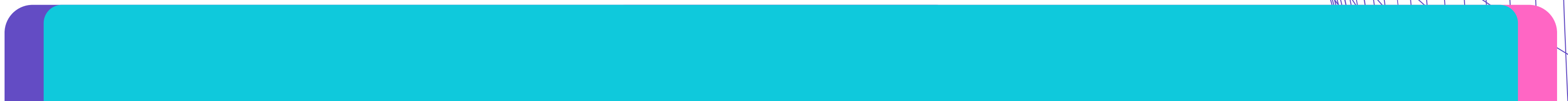
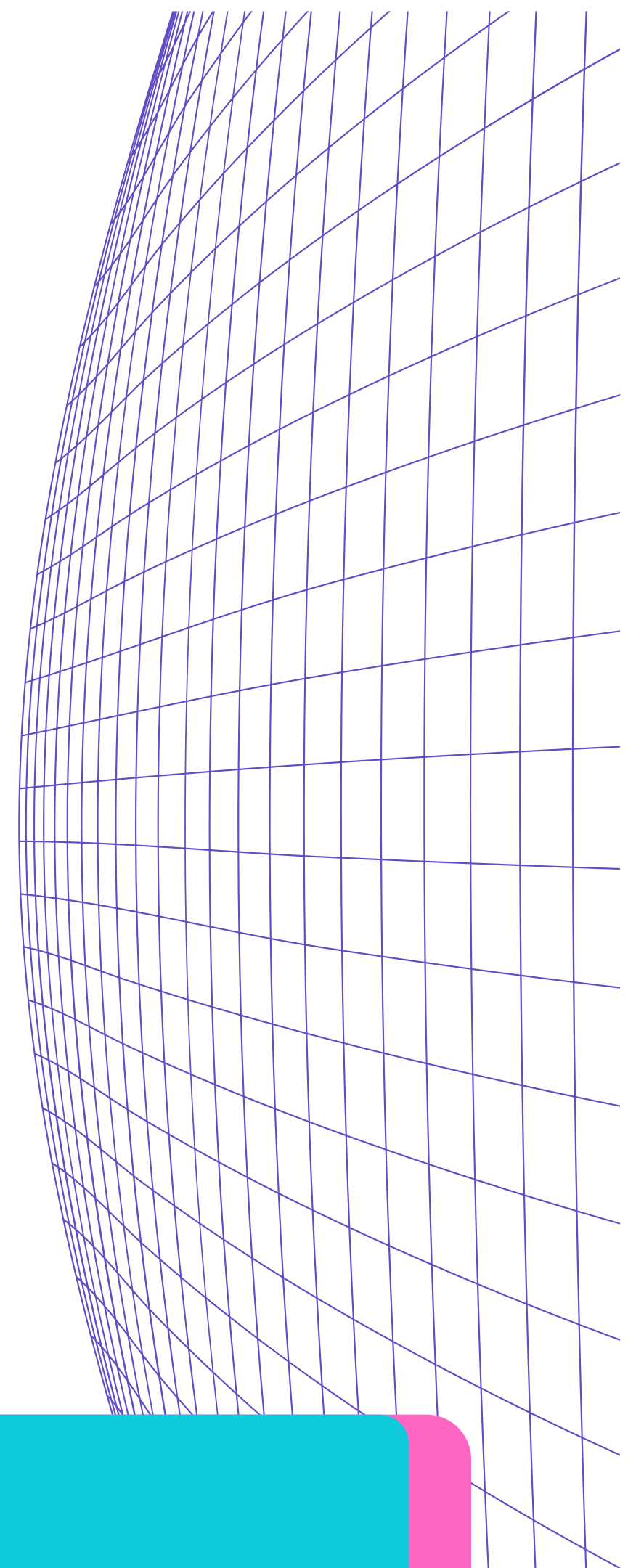
- A **Text Editor** is a type of computer program that edits plain text. **Microsoft Notepad** is readily available in all devices running Windows Operating Systems.
- A **Source Code Editor** is a text editor program designed specifically for editing source code of computer programs by programmers. **Sublime Text** and **Notepad++** are some of the top source code editors available for web development.





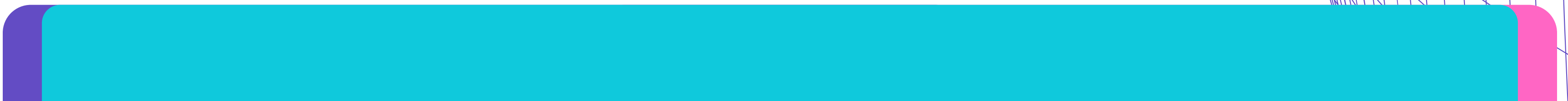
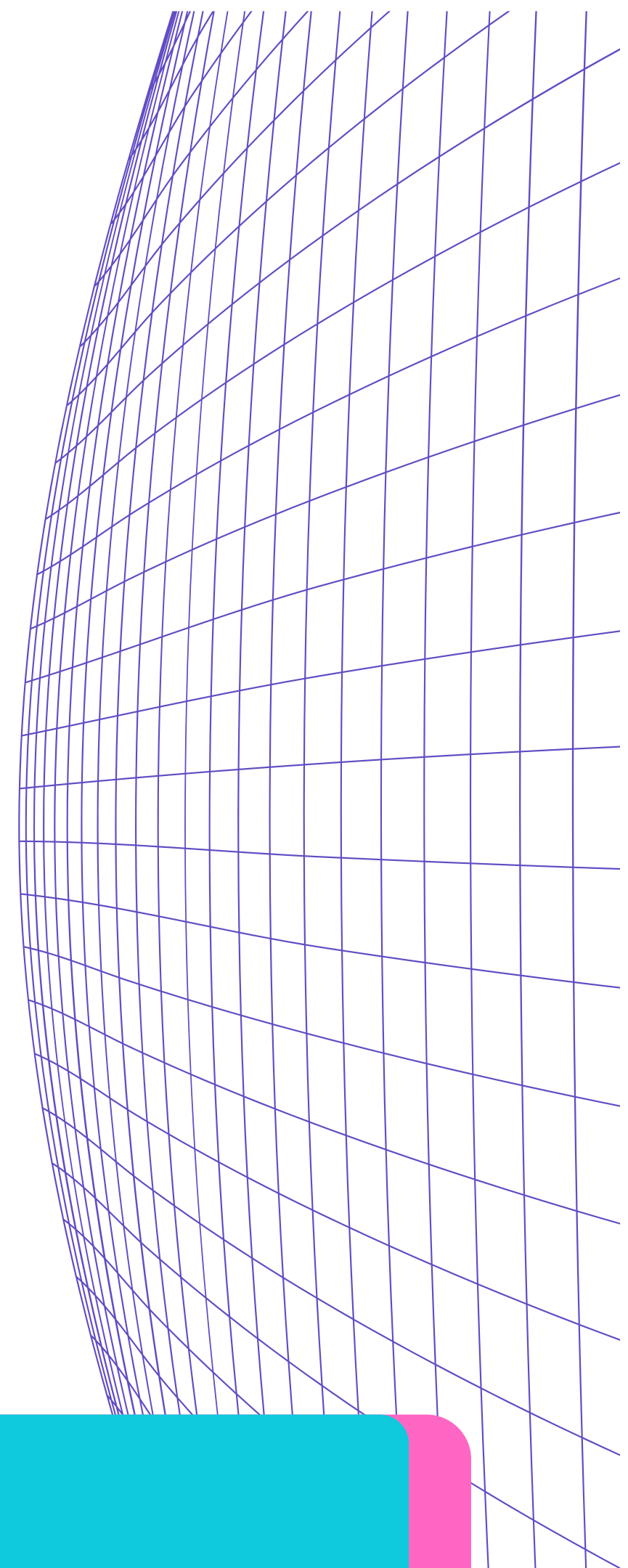
# Other tools

- **Code Editors:** Tools like Visual Studio Code, Sublime Text, or Atom provide environments for writing and editing code, often with features like syntax highlighting and code completion.
- **Web Browsers:** Essential for testing and viewing web pages during development. Tools like Chrome and Firefox also offer developer tools for debugging and analyzing web performance.



# Other tools

- **Version Control Systems (e.g., Git):** Track changes in code, manage versions, and collaborate on projects, ensuring smooth teamwork and project management.
- **Graphic Design Tools (e.g., Adobe Photoshop, Canva):** Help in creating visual elements like logos, images, and layouts for web pages.
- **Validation Tools (e.g., W3C Validator):** Check code for adherence to web standards, ensuring compatibility and accessibility.



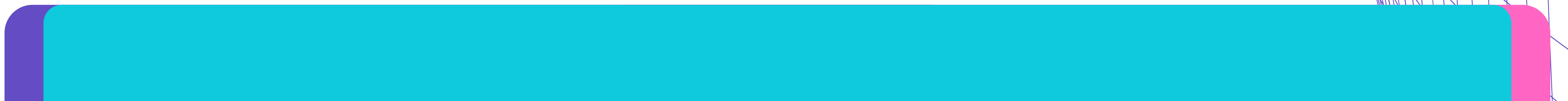
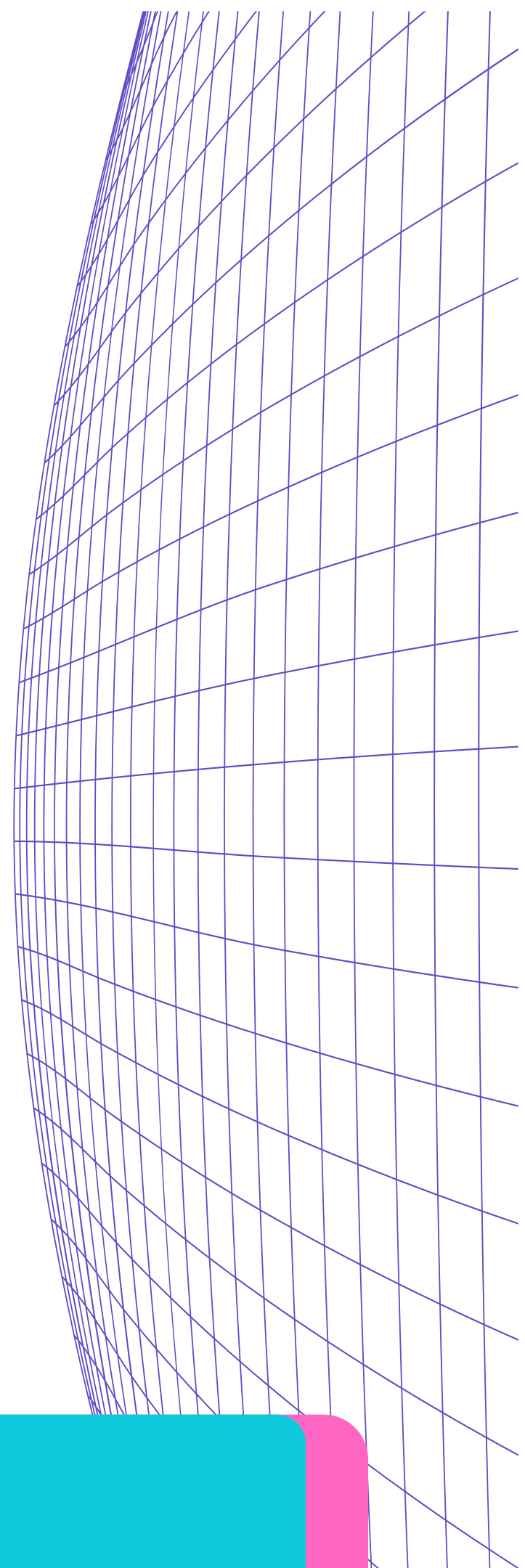
# Activity 1





# Directions

- Submit a single document that contains the screenshots of the tasks performed, along with the output you produced.
- Visit at least **six different websites**, selecting from the following categories: **informational, educational, e-commerce, social networking, portfolio, and blog.**
- Create a table that includes the **name of each website, its URL, its website types** and a **brief description** of its purpose and target audience.



**THANK  
YOU**

