

Module 1

Overview of the Web



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Agenda



■ **Part 1:** Webpages vs. Websites

■ **Part 2:** Types of Websites

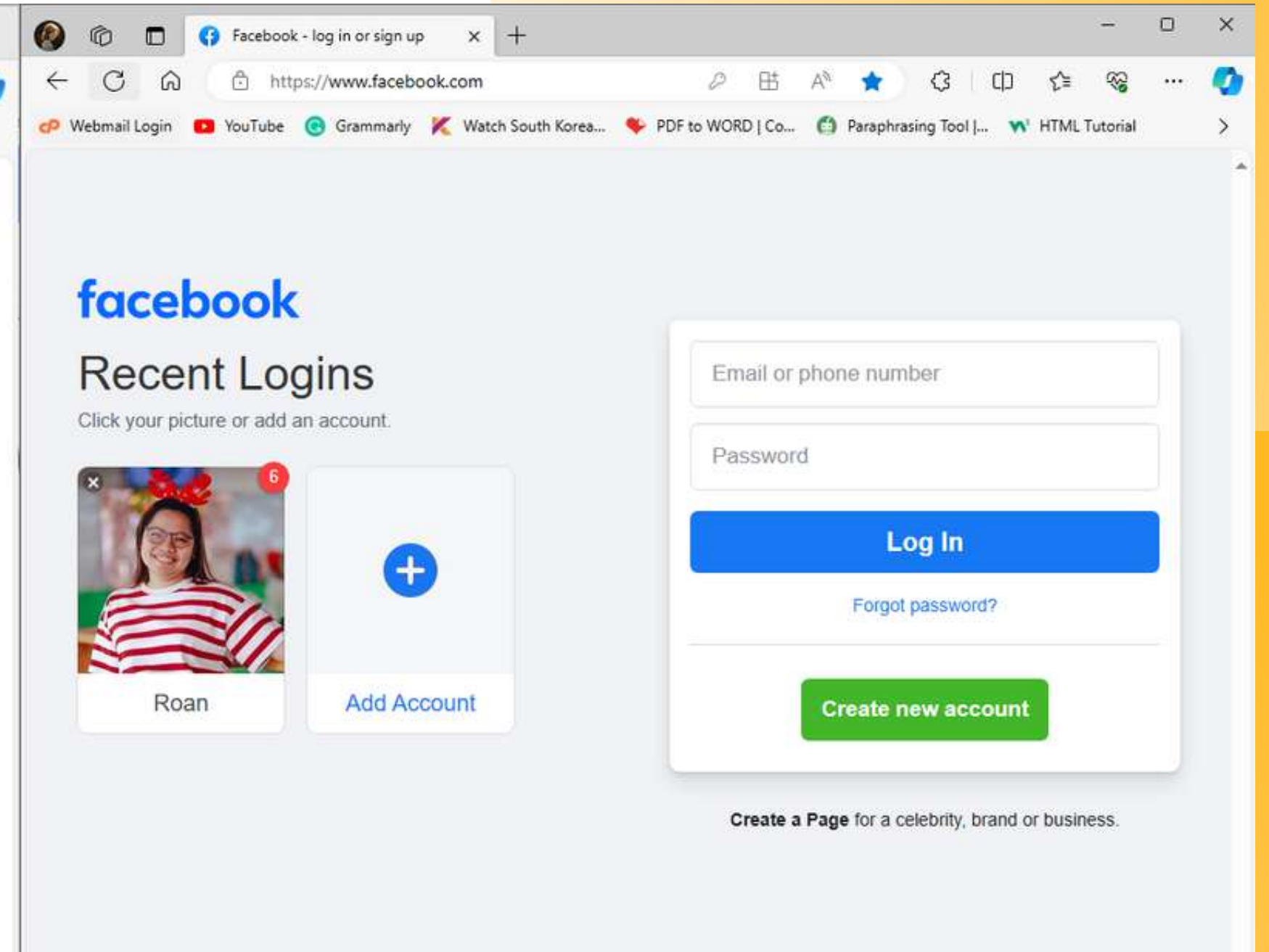
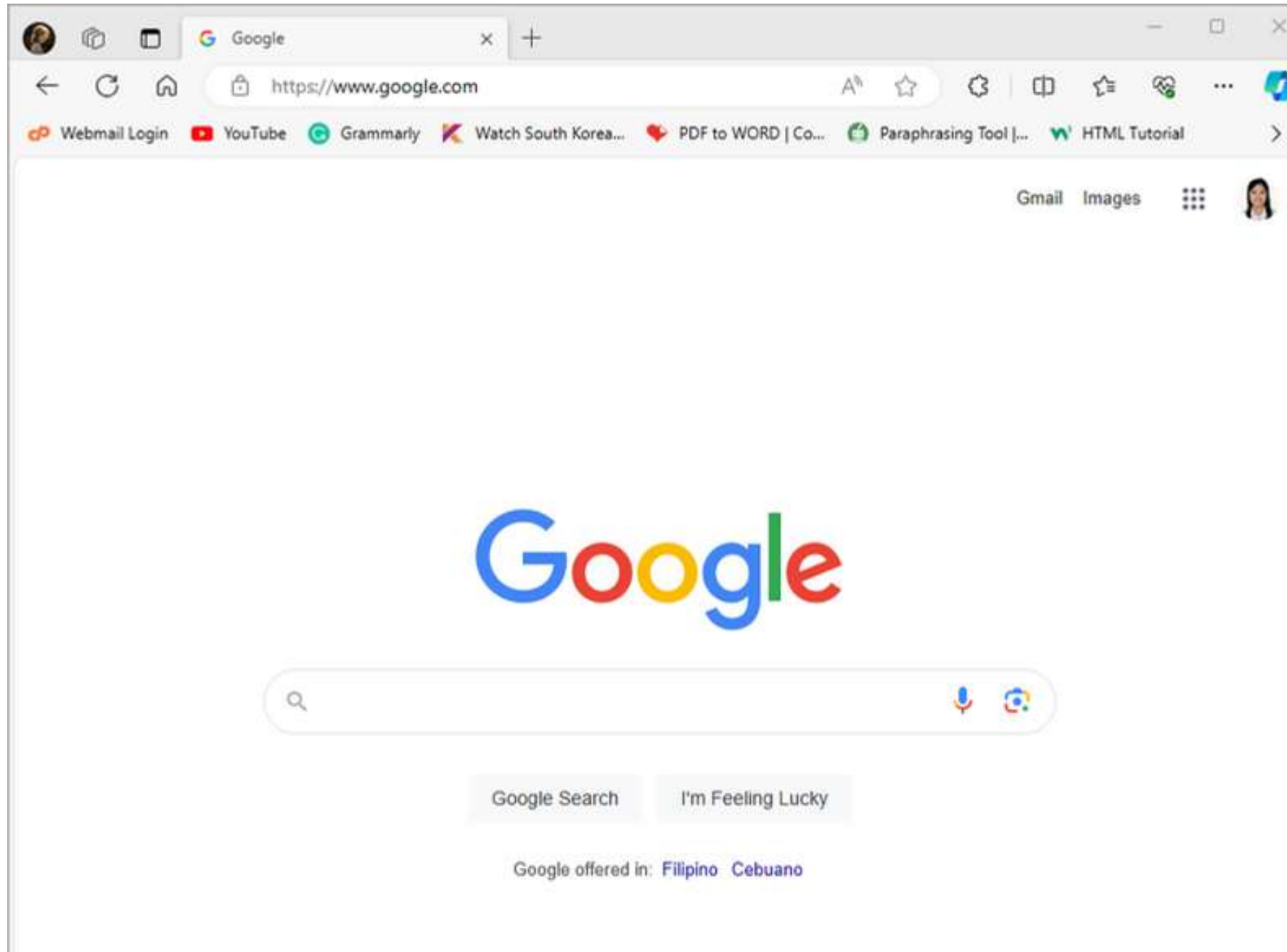
■ **Part 3:** The Internet and the World Wide Web

■ **Part 4:** Web Development Life Cycle

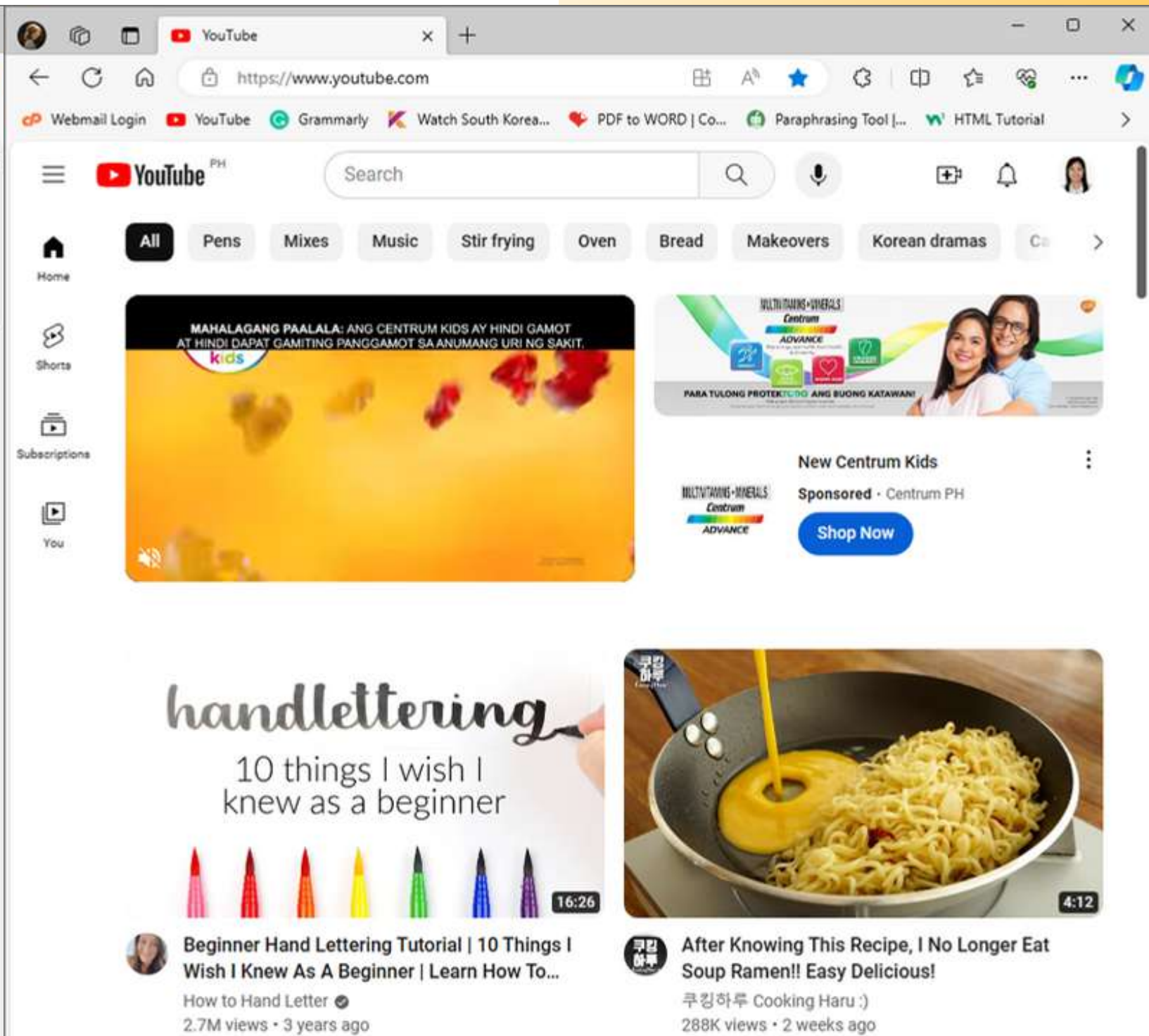
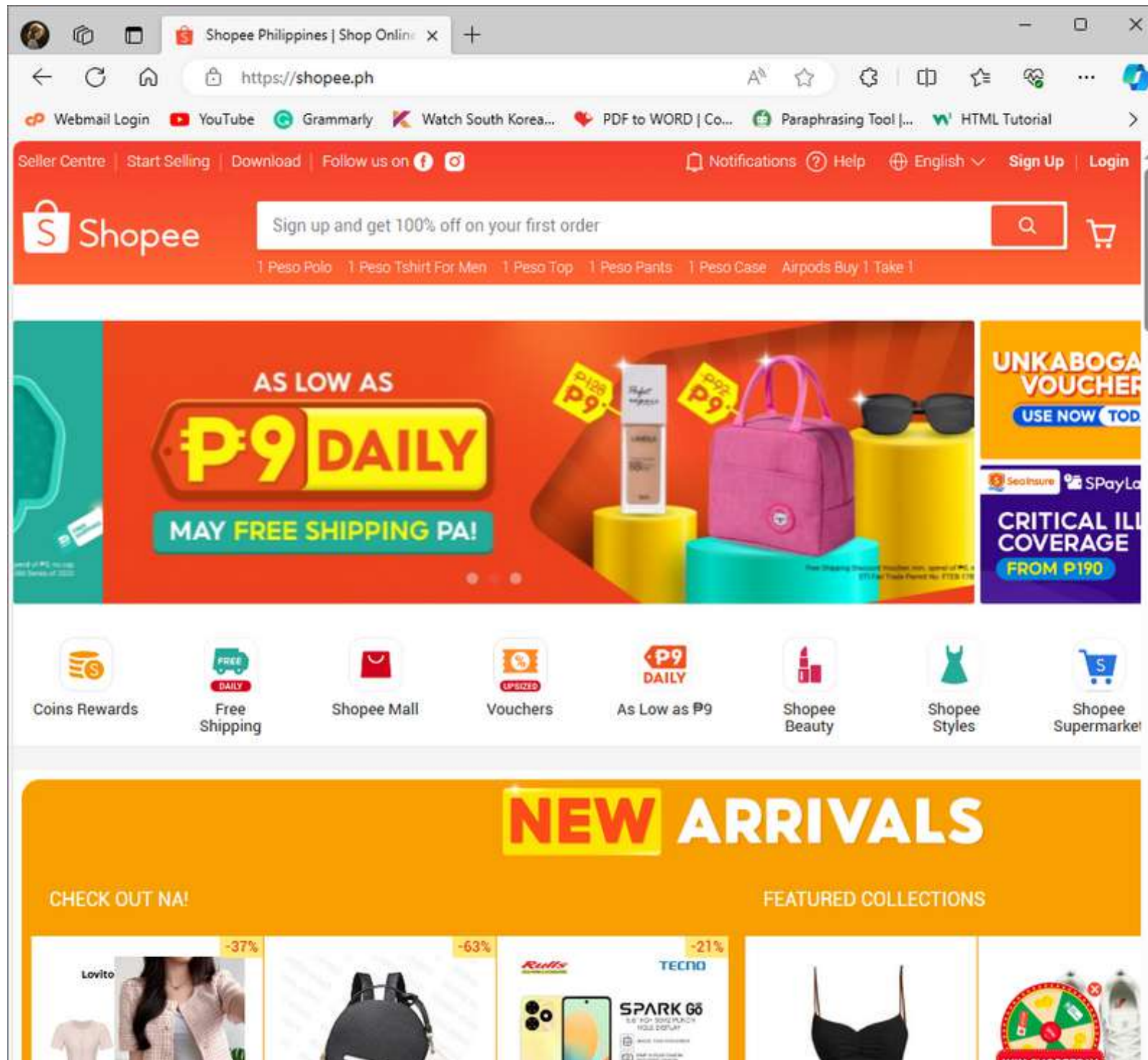
■ **Part 5:** Web Development Languages

■ **Part 6:** Tools Needed for Creating Web Pages

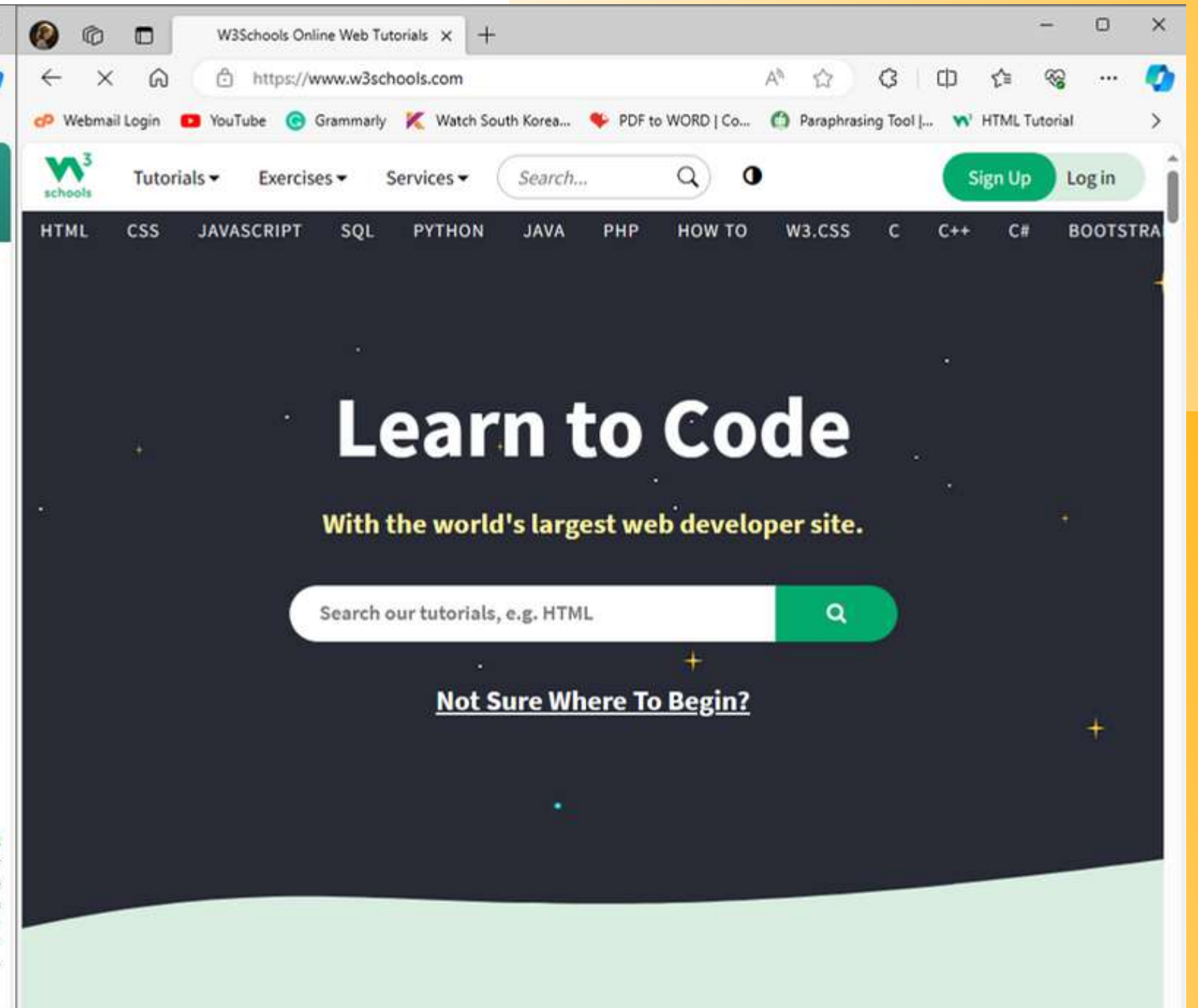
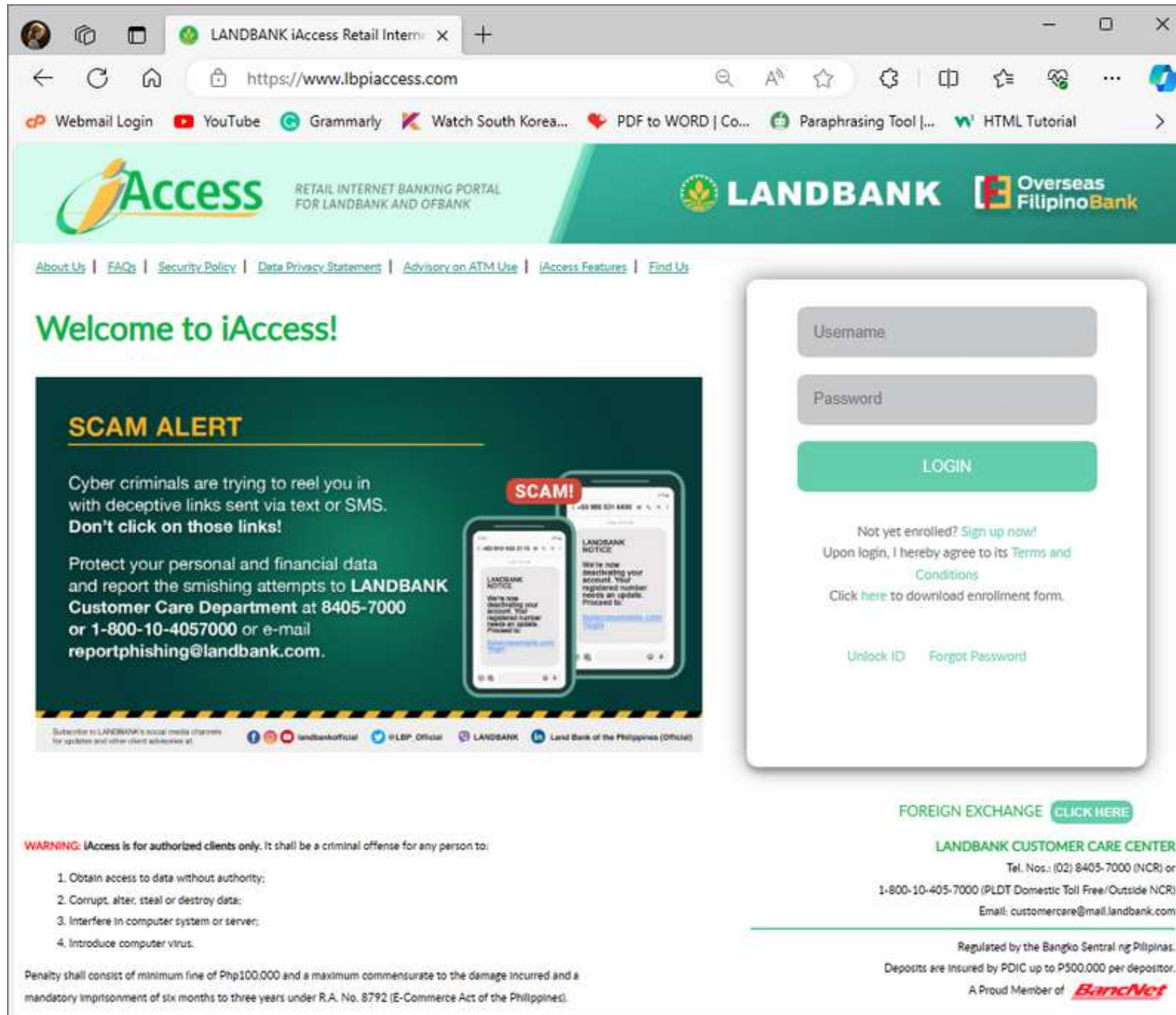
WEB PAGES VS. WEBSITES



WEB PAGES VS. WEBSITES



WEB PAGES VS. WEBSITES





WEB PAGE

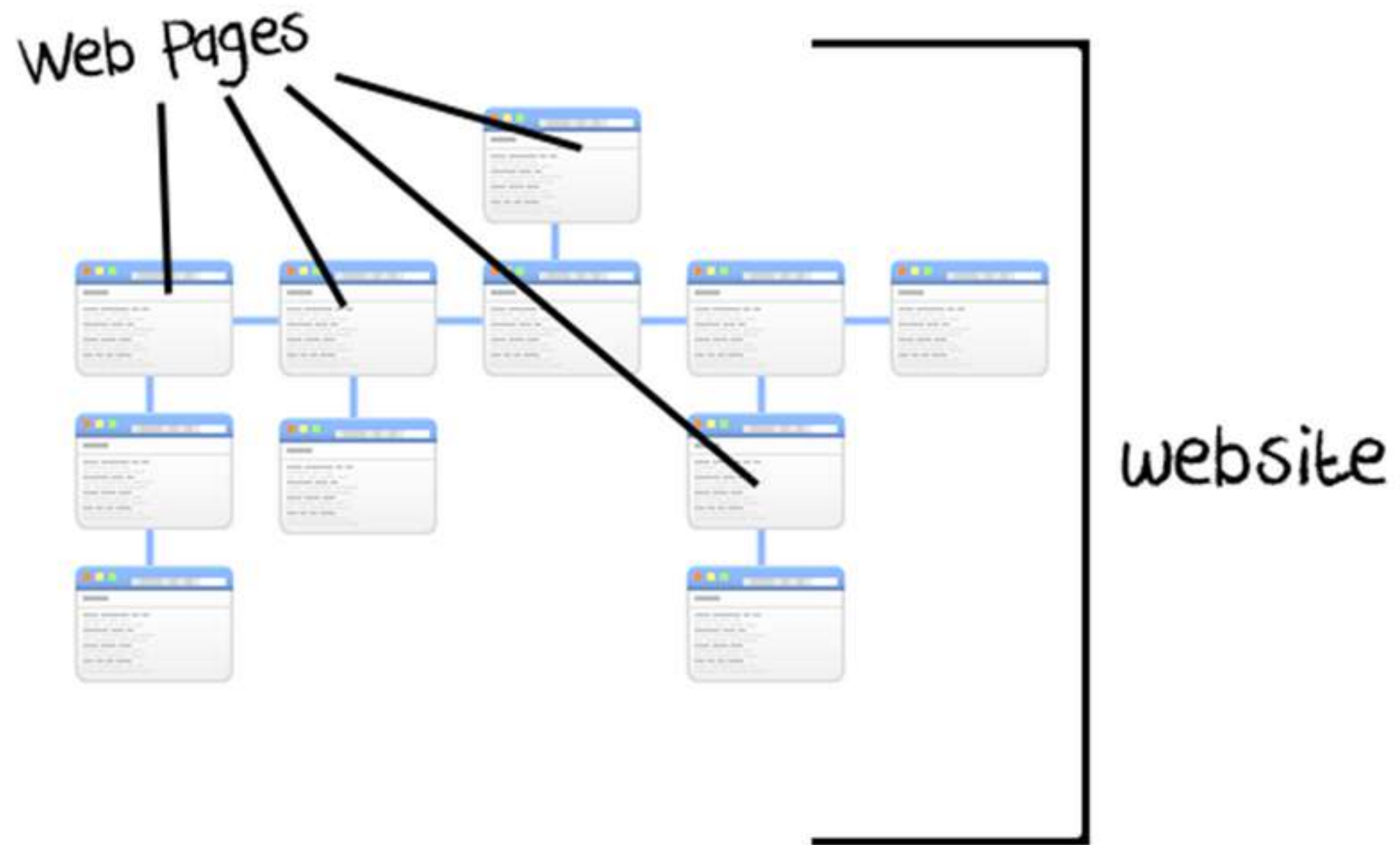
- Web page is a document commonly written in HTML that is accessible through the internet or other network using a web browser.



WEBSITE

- **Website** is a collection of related web pages, including multimedia content, typically identified with a common domain name, and published on at least one web server.

WEB PAGES VS. WEBSITES



Types of Websites

According to Category and Purpose

TYPES OF WEBSITES



Intranet Website



Internet Website



Extranet Website



INTERNET WEBSITE

- Internet websites are publicly available to anyone with internet connection.
- They target general public or a specific global audience.
- They are primarily used for marketing, information dissemination, e-commerce and interaction within each other.
- Some examples are news websites, social media platforms, e-commerce sites, and information blogs.



INTRANET WEBSITE

- Intranet websites are limited to an organization's internal network.
- Intended for employees and internal stakeholders of a specific organization.
- Facilitates internal communication, collaboration, document sharing, and access to company-specific resources.
- Some examples are employee portals and document management systems.



EXTRANET WEBSITE

- Extranet websites are websites that extend beyond the internal network but involves restricted access.
- Intended for both internal and external users, such as partners, clients, or suppliers.
- Enables secure collaboration and information sharing between an organization, and its stakeholders.
- Some examples are client portals, supplier collaboration platforms, joint project management sites shared between different organizations.

Types of Internet Websites



PERSONAL WEBSITES

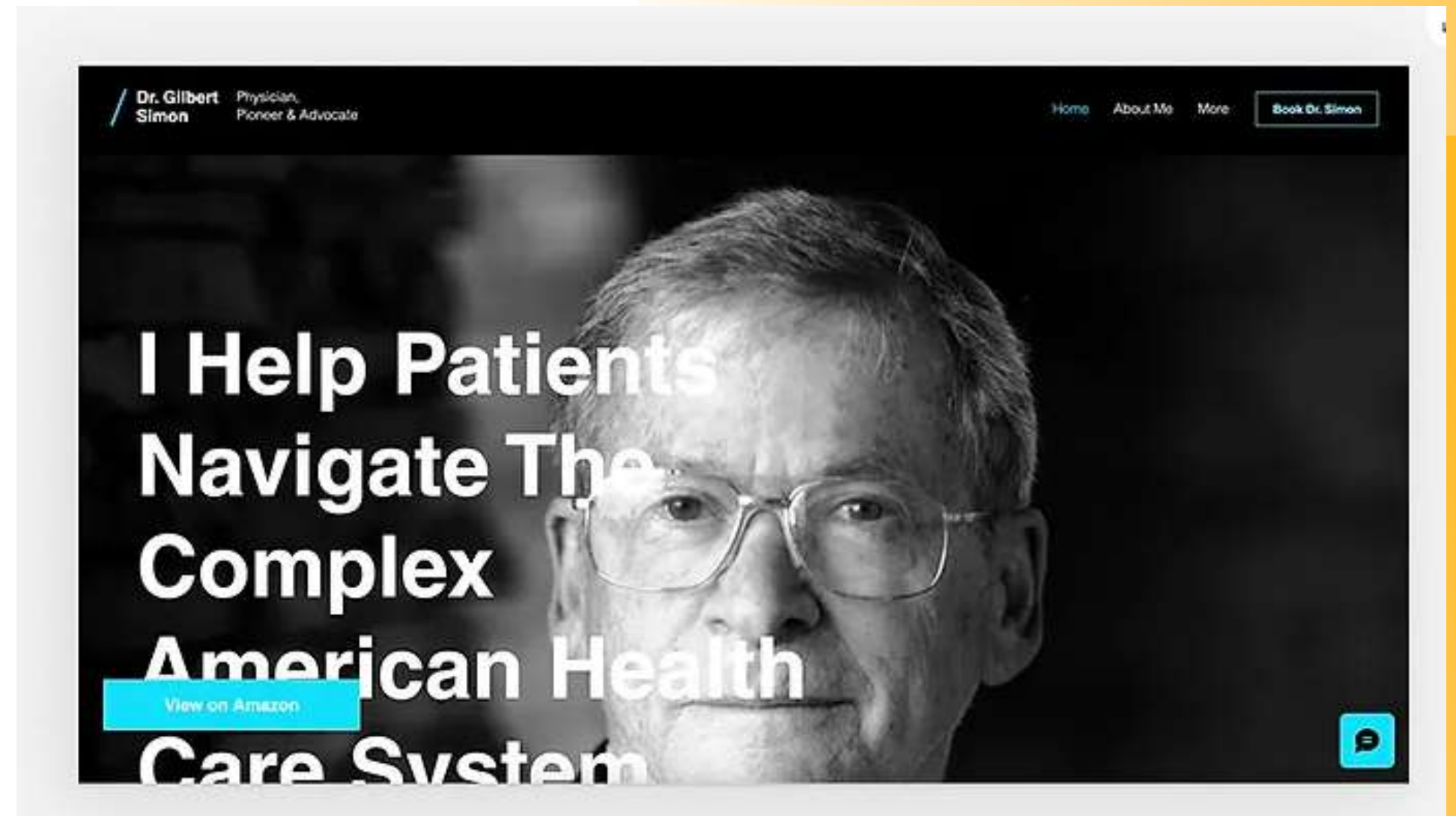
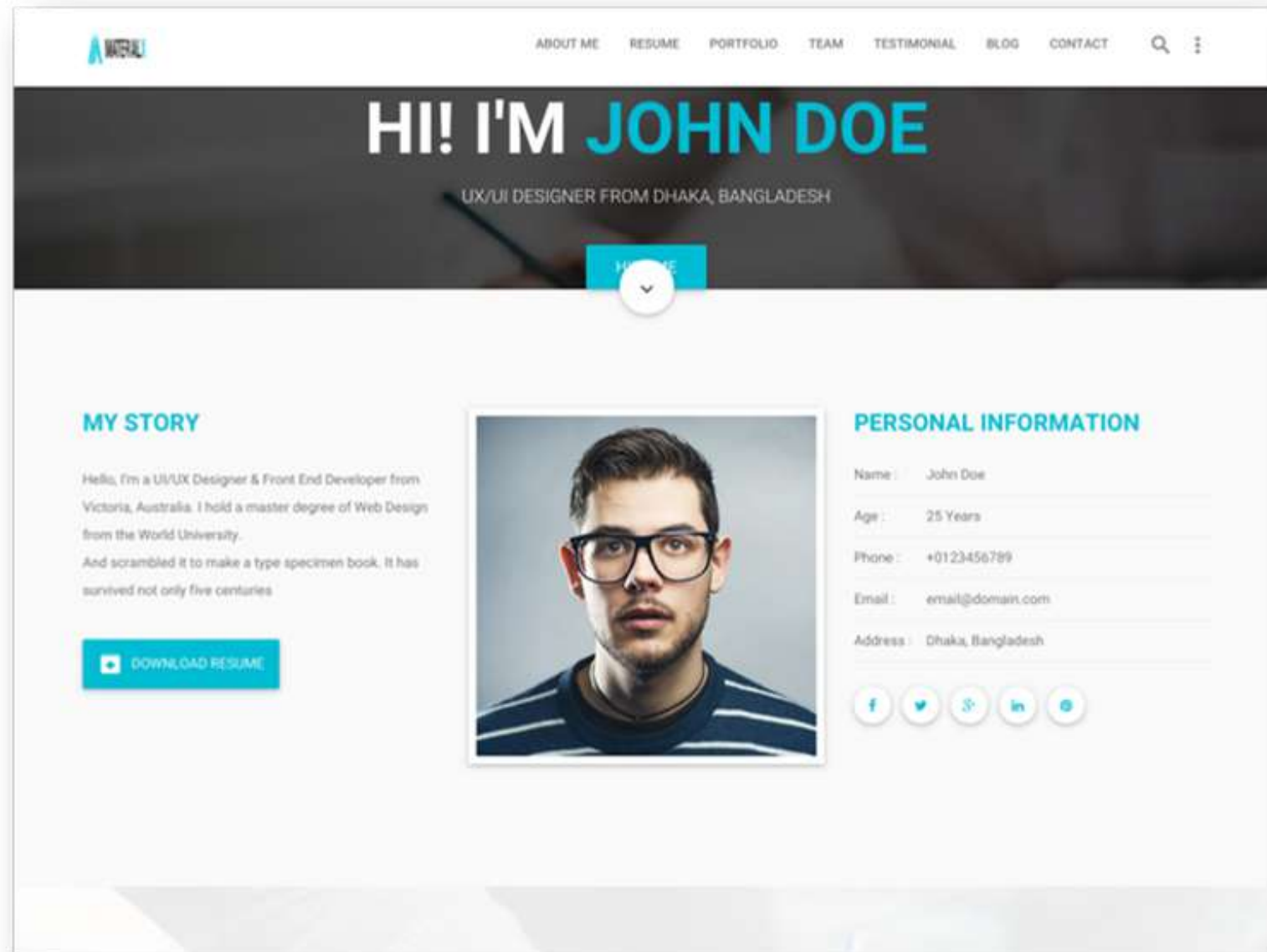
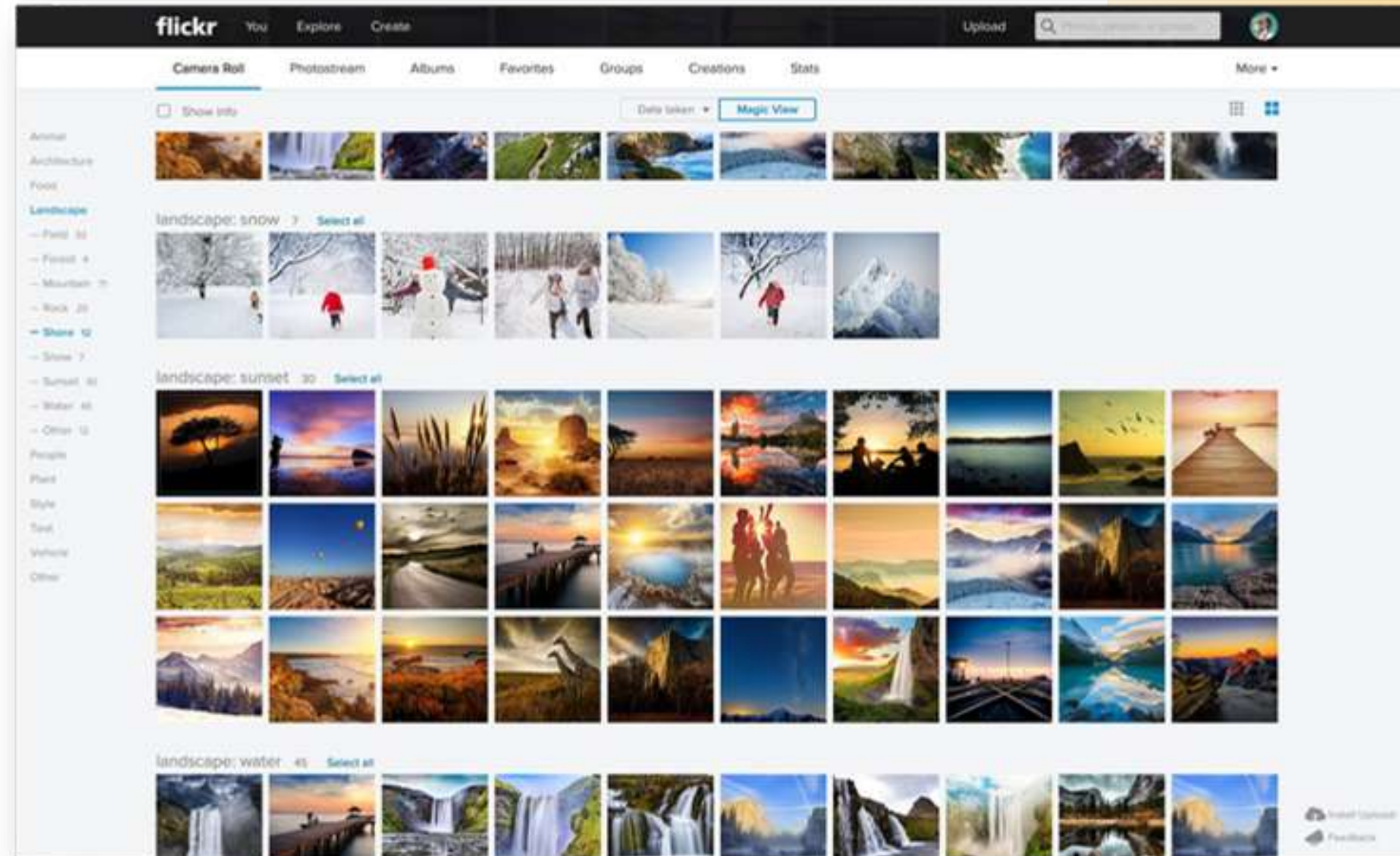


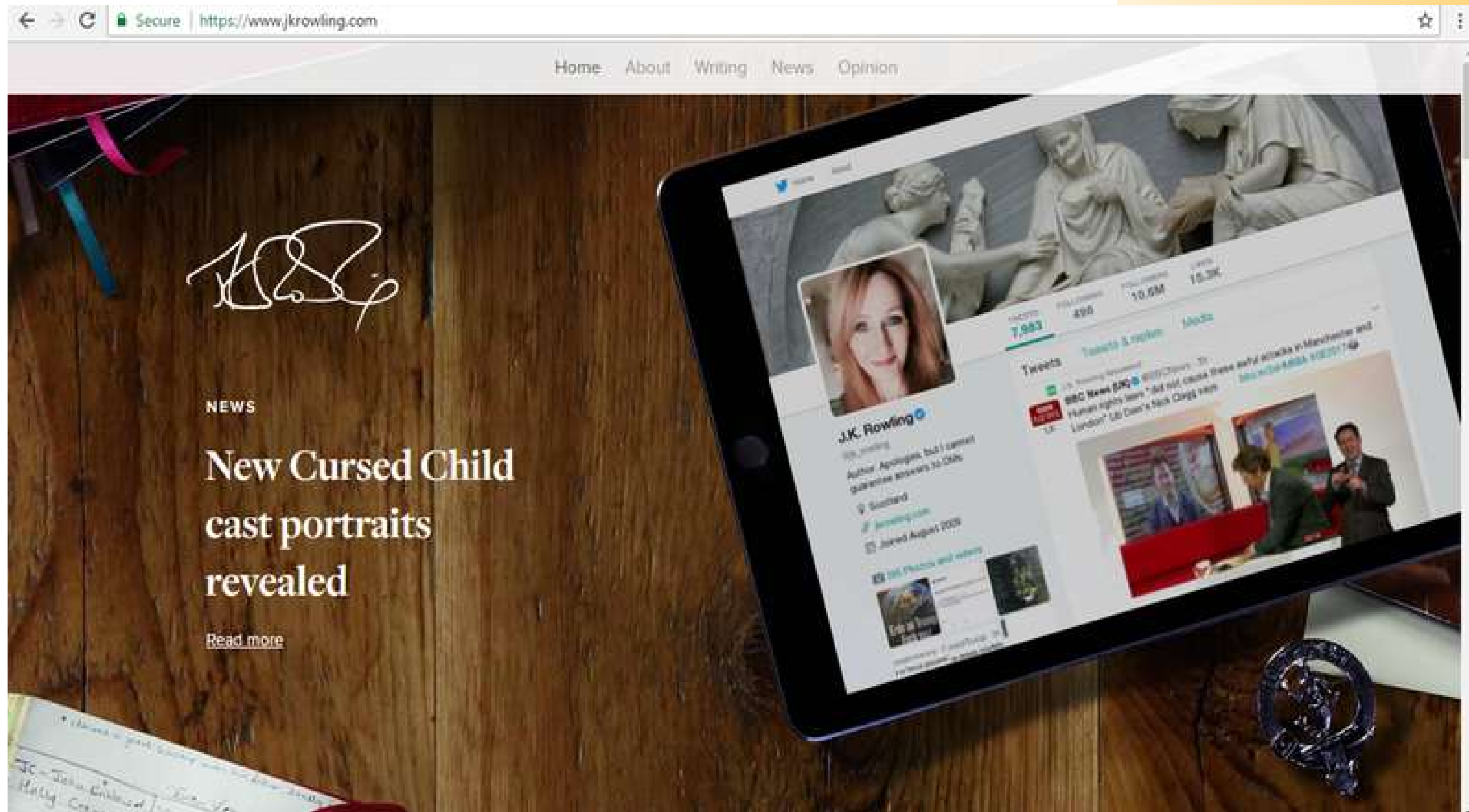
PHOTO SHARING WEBSITES



Google Photos



WRITERS OR AUTHORS WEBSITES



COMMUNITY BUILDING WEBSITES

facebook

Email or Phone

Password

☐ Keep me logged in

Log in

Forgotten your password?

Facebook helps you connect and share with the people in your life.



Create an account

It's free and always will be.

First name

Surname

Email or mobile number

Re-enter email or mobile number

New password

Birthday

Day ▼

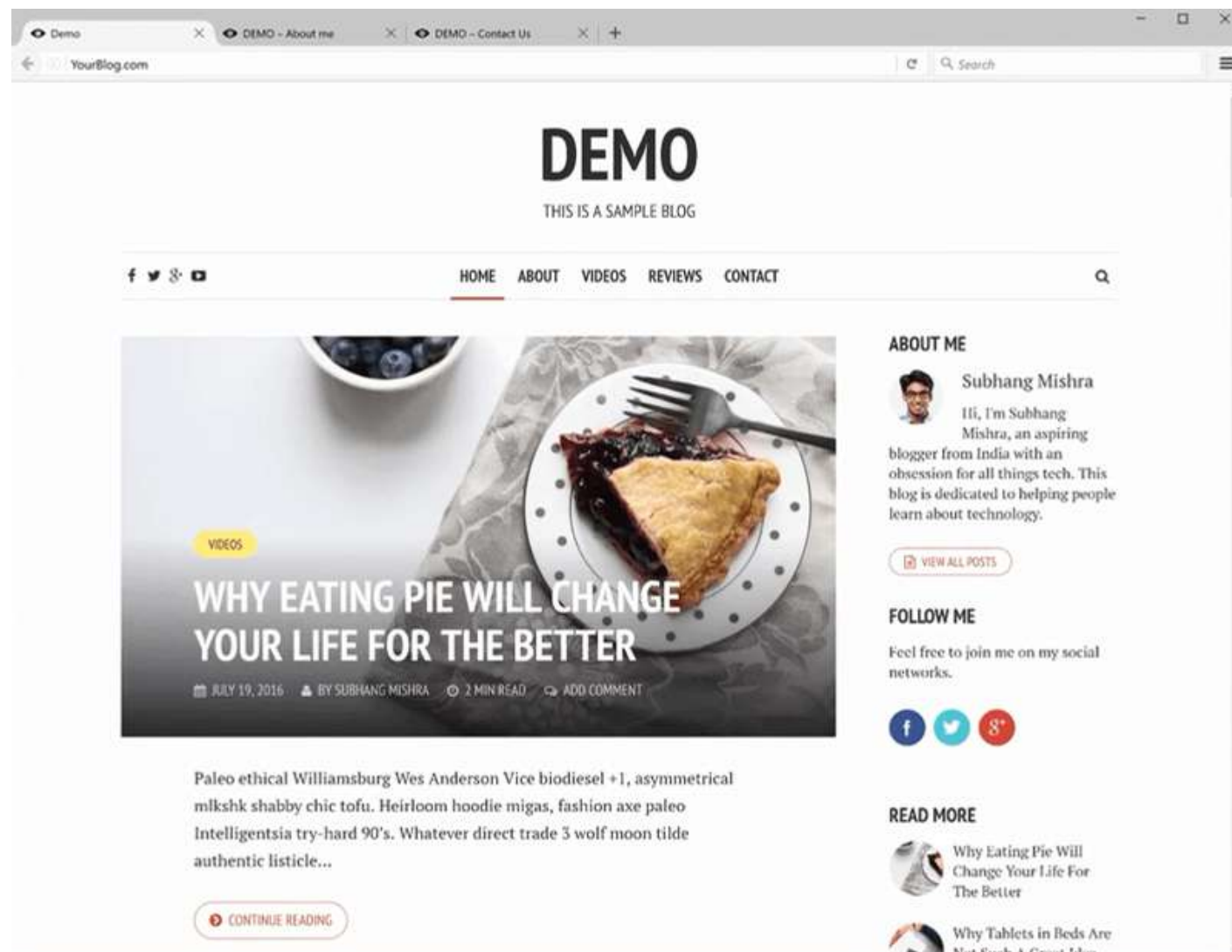
Month ▼

Year ▼

Why do I need to provide my date of birth?



BLOGGING WEBSITES



INFORMATIONAL WEBSITES



Search Wikipedia	Search
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[Create account](#) [Log in](#) [...](#)[Main Page](#) [Index](#)

Read View source View history Tools ▾

Welcome to [Wikipedia](#).

the free encyclopedia that anyone can edit.
6,768,306 articles in English

From today's featured article



Status of two most important:

Communication is usually understood to be the transmission of **information**. Many **models of communication** describe it in terms of a source using a **coding system** to express ideas in the form of a message. The message is sent through a **channel** to a receiver who decodes it to understand it. For verbal communication, the message is articulated in **linguistic** form, including regular speech and writing. **Non-verbal communication**, including **body language**, touch, and facial expression, is also based on a linguistic system. The **history of human communication** is marked by the development of technologies such as writing, printing, and the Internet. Communication also happens **among animals**, such as when birds **sing** to attract mates, **interspecies communication** between distinct species, such as flowers using color and scent to attract bees where **nectar** is located. The main discipline that studies communication is called **communication studies**. (Full article...)

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Did you know ...

In the news

- United Launch Alliance's **Vulcan Centaur** (pictured) rocket debuts with the launch of the **Peregrine** lunar lander, the first mission on NASA's **Commercial Lunar Payload Services** program.
- In darts, Luke Humphries wins the **PDC World Championship**.
- In Kerman, Iran, at least 91 people are killed by **Islamic State bombings** during a ceremony commemorating the **assassination of Qasem Soleimani**.
- Japan Airlines Flight 516 collides** with a **Japan Coast Guard** airplane at Tokyo's **Haneda Airport**, killing five aboard the latter aircraft.



Vulcan Content:

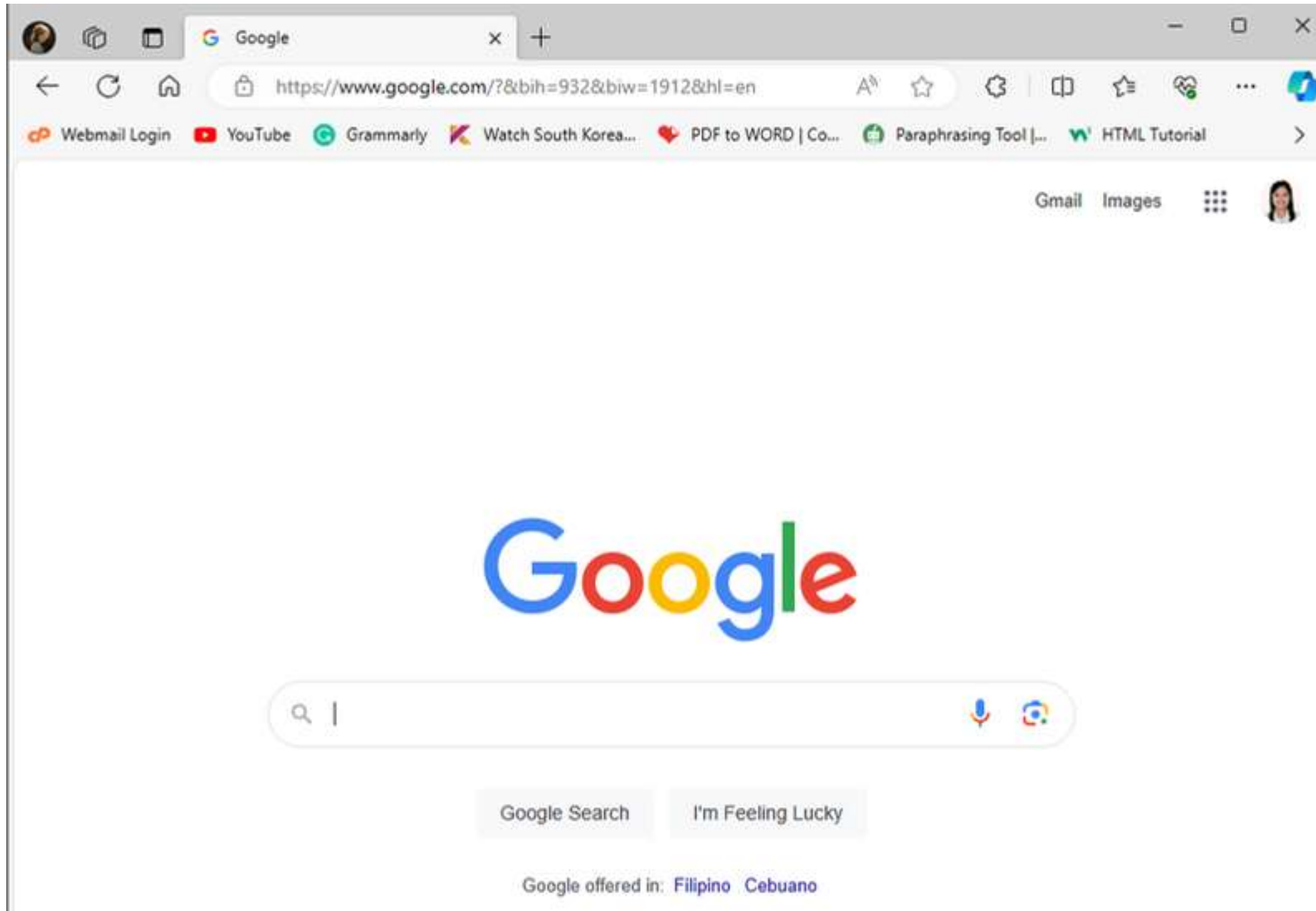
Ongoing: Israel–Hamas war • Myanmar civil war • Russian invasion of Ukraine (timelines) • War in Sudan

Recent deaths: Sidney M. Wolfe • Glynn Johns • Matshyahu Salomon • Netaua With • Gil de Foran • Les McCann

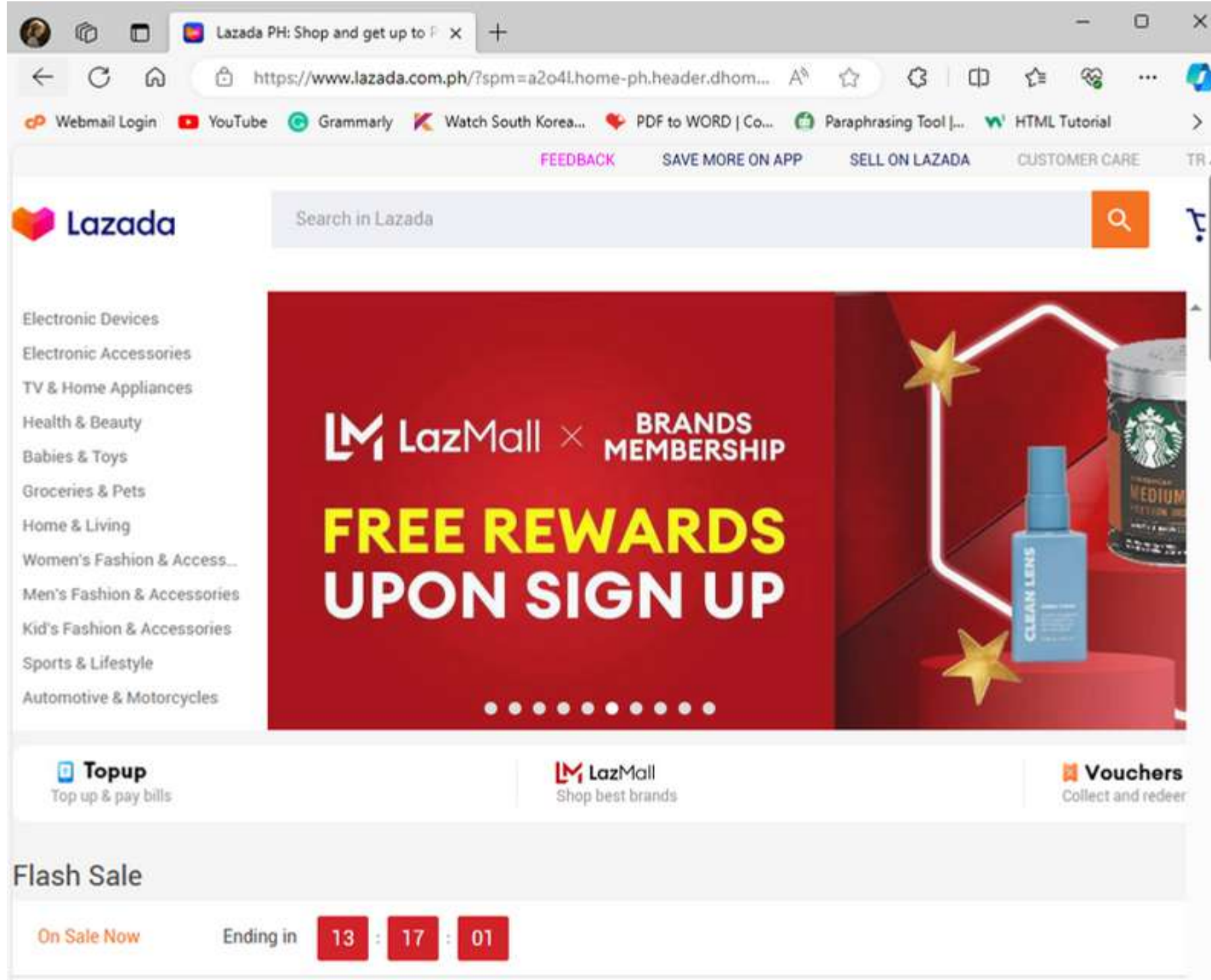
[Nominate an article](#)

On this day

DIRECTORY WEBSITES

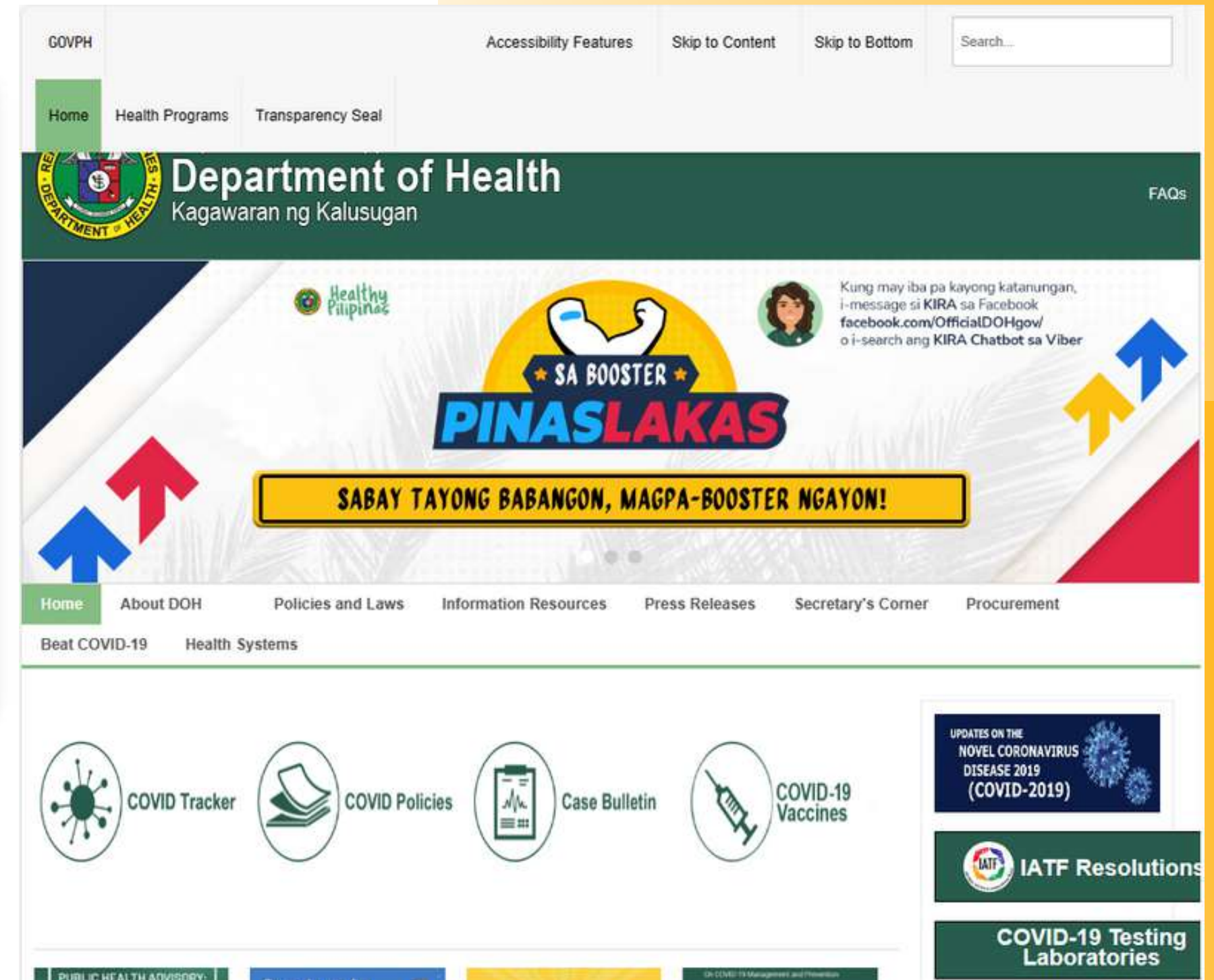
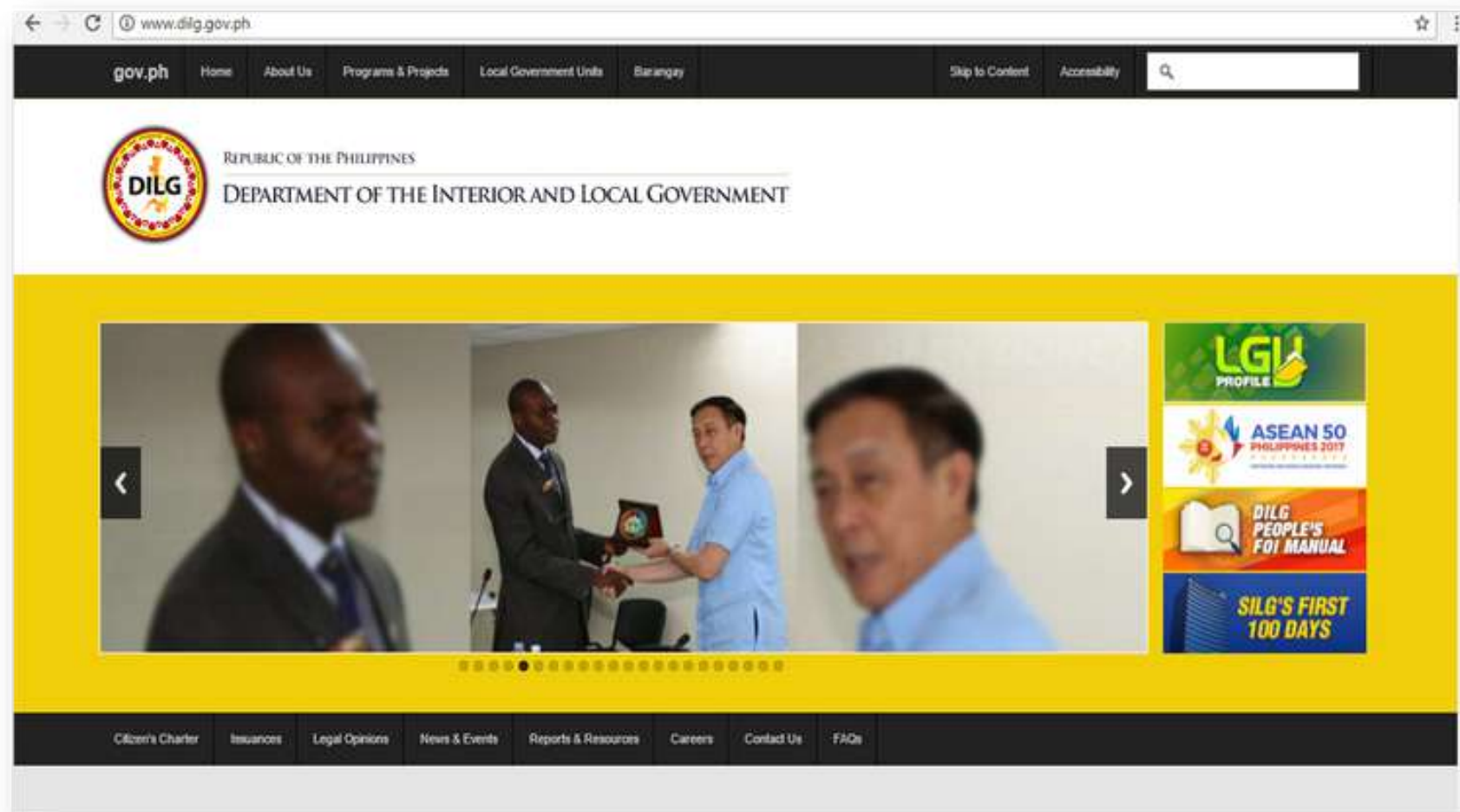


E-COMMERCE WEBSITES

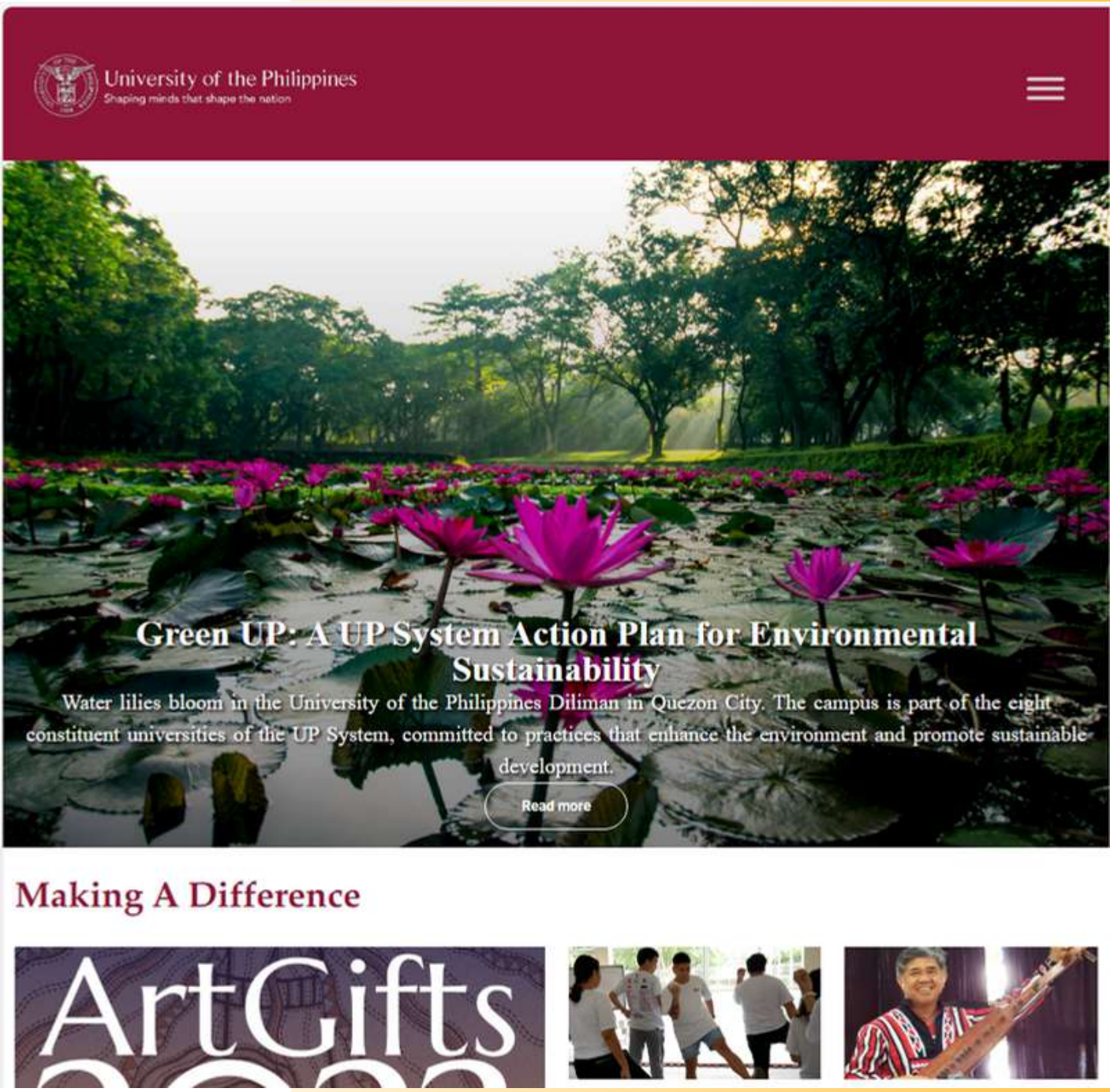
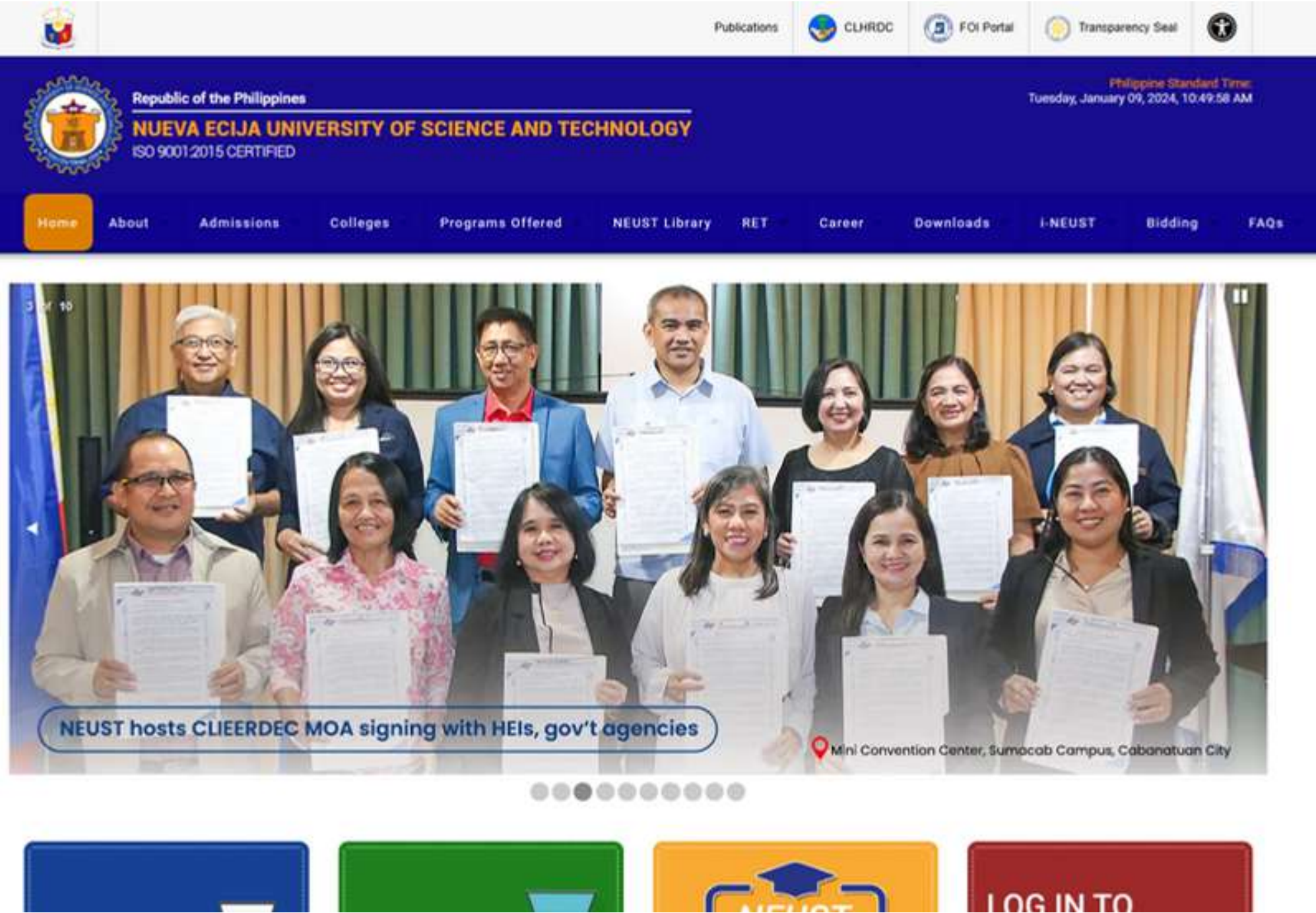


ZALORA

GOVERNMENT WEBSITES



SCHOOL OR UNIVERSITY WEBSITES



The Internet and the World Wide Web (www)





INTERNET AND 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.**



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**.



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.



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)** sometimes termed a **Web Address**, is a reference to a web resource that specifies its location on a computer network or the internet.
- These URLs or URIs (Uniform Resource Identifiers) are transferred to web servers for requests to specific web documents or HTML pages.



DOMAIN EXTENSIONS

.com - Commercial Site

.gov - Government Site

.edu - Educational Institution Site

.net - Network Site

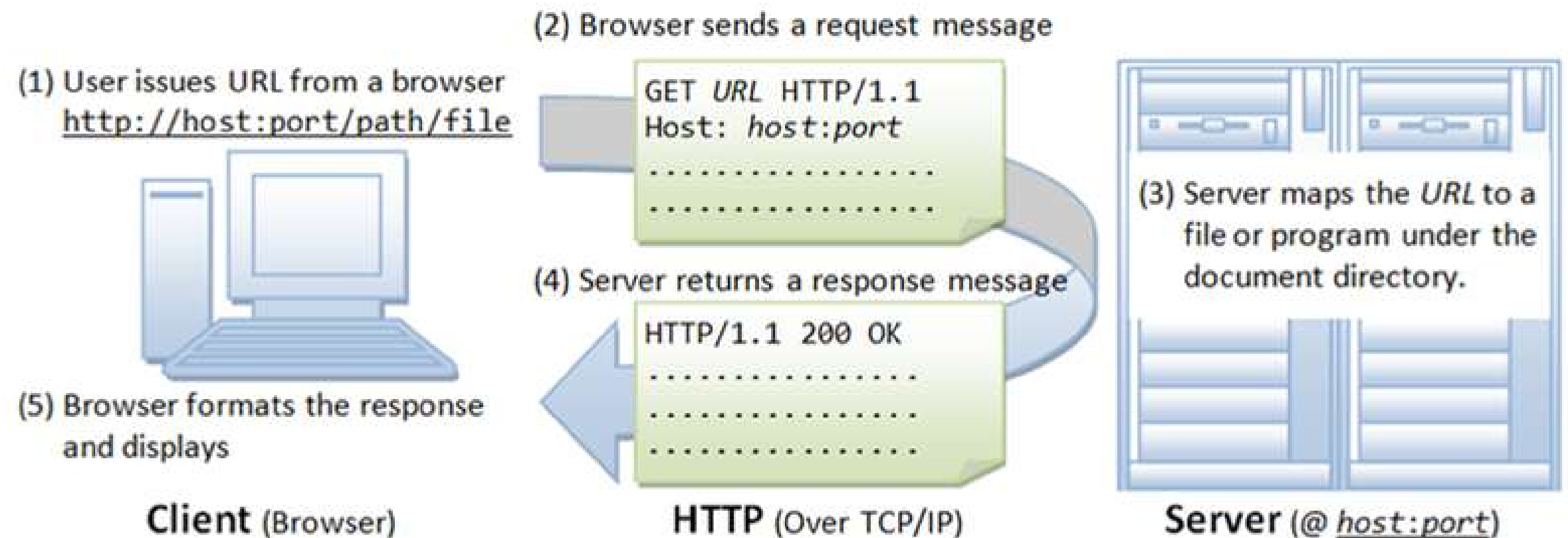
.org - Organizational Site

.biz - Business Site

.mil - Military Site

WEB SERVERS

- **Web Servers** are computers that delivers (serves up) web pages. Every web server has an IP address and possibly a domain name. Any computer can be turned into a web server by installing server software and connecting the machine to the internet.





INTERNET SERVICE PROVIDERS

- An **Internet Service Provider (ISP)** is a company that provides customers with internet access. Data may be transmitted using several technologies like DSL, cable modem, wireless, fiber optics or other dedicated high speed interconnects.

Web Development Life Cycle





WEB DEVELOPMENT LIFE CYCLE

- The **Web Development Life Cycle** is a systematic process that web developers follow to create a website or web application. It consists of several phases, each with its own set of activities and goals.
- The phases are as follows: Planning, Analysis, Design, Development, Testing, Implementation and Maintenance.



PLANNING

Objective: Define the purpose, goals, and scope of the project.

Activities:

- Identify project stakeholders and their requirements.
- Define project timelines and milestones.
- Develop a budget and allocate resources.
- Conduct a feasibility study.



ANALYSIS

Objective: Understand and document the detailed requirements of the project.

Activities:

- Gather information about user needs and expectations.
- Create user personas and use cases.
- Analyze the existing systems (if any) and determine the necessary features and functionalities for the new system.



DESIGN

Objective: Create a blueprint for the web application based on the gathered requirements.

Activities:

- Design the user interface (UI) and user experience (UX).
- Create wireframes and prototypes.
- Define the system architecture and database structure.
- Plan for security measures.



DEVELOPMENT

Objective: Transform the design into actual code and build a functional web application.

Activities:

- Write code using programming languages and frameworks.
- Develop the database and integrate it with the application.
- Implement the designed UI/UX.



TESTING

Objective: Ensure the quality and functionality

Activities:

- Perform unit testing to check individual components.
- Conduct integration testing to verify interactions between components.
- Carry out system testing to evaluate the entire application.
- Perform user acceptance testing (UAT) with stakeholders.



IMPLEMENTATION

Objective: Deploy the web application to the production environment

Activities:

- Set up hosting and configure servers.
- Transfer the codebase and database to the production environment.
- Monitor and address any issues during the deployment process.



MAINTENANCE

Objective: Sustain and improve the web application over time.

Activities:

- Provide ongoing support and troubleshooting.
- Make updates and enhancements based on user feedback.
- Monitor performance and security.
- Address bugs and apply patches as needed.

Web Development Languages





HYPERTEXT MARKUP LANGUAGE

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





CASCADING STYLE SHEET

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

- **Internal CSS** code is put in the `<head>` section of a particular web page.
- **Classes** and **IDs** can be used to refer to the CSS code
- Style will be effective for the whole web page.
- Internal CSS is put in between `<style>` `</style>` tags.



EXTERNAL CSS

- **External CSS** is the most convenient way to add CSS to a website.
- Only a single CSS file will be edited and all web pages will be updated.
- Provides smaller web page sizes and cleaner structure



CSS FRAMEWORKS

- A **CSS Framework** is a pre-prepared software framework that is meant to allow for easier, more standards-compliant web design using the Cascading Style Sheets Language.

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.

Thank you!

