

THE WORLD WIDE WEB (WWW)



- It is also called the **Web**
- It consists of a worldwide collection of electronic documents.
- Each of these documents is called a **web page**.
- It emerged in the early 1990s but has grown rapidly to become the most widely used service on the internet.

Terms used:

i) A web page

- It is an electronic document or files of information stored on the web / website.
- It can contain text, animations, audio, and video (i.e. **multimedia elements**), as well as built – in connections (called **hyperlinks**) to other documents.

ii) A website

- It is a collection of web pages where information of a particular organization or company is stored.
- Or it is a group of files that are interconnected by **hyperlinks** that allow a user to jump from one page to another, usually by a mouse click.

Types of websites

- News websites
- Informational websites
- Business / marketing websites
- Wikis
- Online social networks[e.g. facebook, twitter, etc]
- Educational websites



iii) Home page

- It is the first page (starting page) of a web site.
- It is the table of contents for a website.
- It normally has a name “index.htm” or “index.html”

iv) A web browser

This is the software program used to access and view web pages.

Examples of web browsers

- Opera
- Google Chrome
- Mozilla Firefox
- Microsoft Internet Explorer
- Safari
- Netscape
- K-Meleon



- SeaMonkey
- Galeon
- Konqueror
- Camino
- iCab
- Mozilla Suite
- Sunrise

v) A web server

It is a computer that keeps and delivers web pages requested by users.

vi) A web master

Is the individual responsible for developing web pages and maintaining a website.

vii) A search engine

This is a software program that can be used to find websites, web pages and files on the internet and other information to a specific topic.

Examples of search engines

WEB DESIGNING

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iv) Hypertext

It is a text document containing links to other documents and pages

v) HTML (Hypertext Markup Language)

It is a language made up of text codes used to create web pages.

vi) Favorites or Bookmarks

These are features that are used to save addresses of your favorite web pages

vii) History

This is a feature that is used to find the recently visited sites

viii) HTML Editors

These are used to help in keeping the HTML tags or codes e.g. Microsoft FrontPage, Micro media Dreamweaver etc.

Qualities of a good web page

- ✓ Should have a feedback
- ✓ Should have good navigation buttons
- ✓ Should load quickly
- ✓ Should have fewer graphics. Too much graphics can make it to take too long to load, take up too much space and client computers may not support different colour depths.
- ✓ Should have a web page title and a summary about the page
- ✓ Should have dates of the latest updates
- ✓ Should have links to other pages or to sections within that page

Precautions a web designer should consider when designing a web page

Should use minimal graphics

Should use precious content

Avoid use of frames

Take into account different versions of client browsers

Should consider copyright

Should consider consumer requirements

COMPONENTS OF A WEB PAGE

a) **Page titles;**

These indicate the name of the website

b) **Buttons and icons**

These are tools used to navigate through the website

c) **Horizontal line separators**

These are parallel lines separating different sections of a web page

d) **Graphics (Images)**

These are pictures used during the designing of the website.

e) **Frames**

These are used to provide more flexibility to a website

f) **Sound buttons**

These are buttons used to provide access to sound clips, interviews, music extracts etc, in case a search engine is to produce sound.

g) **Animations**

These are components providing movement and actions in a web page.

They are used to make a web page more lively

h) **Hyperlinks**

These are colored and underlined text or graphics that one clicks and go to a file, a location in a file or an HTML page on the internet.

A hyperlink is a word, group of words or image that you can click on to jump to a new document or a new section within the current document.

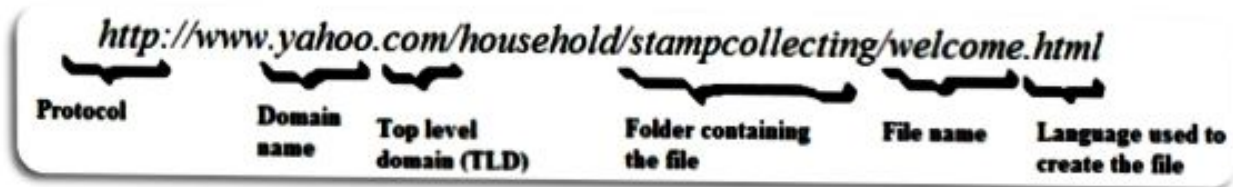
i) **URL (Uniform Resource Locator)**

This is an internet or web address describing the location of the server where the website is located.

Consider the URL below;

<http://www.yahoo.com/household/stampcollecting/welcome.html>

Parts of a URL



It consists of a Protocol, a domain name, Top Level Domain and the path to a specific document file.

✓ A protocol (**http** ://)

This stands for *hypertext transfer protocol*. It is the communications protocol used to transfer pages on the Web.

✓ The location of the site (**www which means that the site is on the World Wide Web**)

✓ The domain name

The name of the organization that maintains the site (**yahoo**)

✓ **Top Level Domain (TLD)**

A suffix that identifies the kind of organization (e.g. .com for commercial organizations, .com for commercial institutions, .mil for military organizations, .educ for educational institutions etc.)

NB; No spaces should be left in a URL

j) HTML lines

These are horizontal lines in an HTML page.

k) Comments

Comments can be inserted into the HTML code to make it more readable and understandable. They are not displayed by the web browsers.

l) Ordered lists

These are lists with items marked with numbers.

1. Coffee
2. Milk
3. Black tea

m) Unordered lists

These are lists with items marked with bullets (typically small black circles)
e.g.

- Coffee
- Milk
- Black tea

n) Definition lists

It is a list of items with a description of each item.

o) Forms

These are used to select different kinds of user input.

They are used to pass data to a server.

They can contain elements like text fields, checkboxes, radio buttons, submit buttons etc.

p) Text field

It is an input field that a user can enter text into;

e.g.

First name:
Last name:

q) Password field

Is an input field that a user can enter a password into

e.g.

Password:

r) Radio buttons

These are buttons in a web page that lets a user to select **only one** of a limited number of choices.

They look like;

☐ Female

☒ Male

s) **Check box**

This lets a user select **one** or **more** options of a limited number of choices. E.g.

I have ☒ a bike

I have ☐ a car

t) **Submit button**

This is a button used to send data to a server.

E.g.

Username:

u) **Drop down arrows**



These are used to open dropdown menus.

Type of Web Sites

There are a number of types of Web pages i.e:

- | | | |
|-------------------------|--------------------|-------------------------|
| i) Portal, | vi) Entertainment, | x) Online social |
| ii) News, | vii) Advocacy, | network, |
| iii) Informational, | viii) Blog, | xi) Content aggregator, |
| iv) Business/marketing, | ix) Wiki, | xii) Personal websites. |
| v) Educational, | | |

Many Web pages fall into more than one of these categories.

i) **Portal:**

A **portal** is a Web site that offers a variety of Internet services from a single, convenient location.

Most portals offer the following free services:

- | | |
|-------------------------|--|
| ➤ Search engine; | ➤ Free personal web pages; |
| ➤ E-mail; | ➤ Shopping malls and auctions; |
| ➤ Instant messaging and | ➤ Stock quotes, |
| ➤ Chat rooms; | ➤ Reference tools such as yellow pages |
| ➤ News; | and maps. |

Many portals have **online communities** that join a specific group of people with similar interests or relationships.

Popular portals include;

- | | | |
|-----------|--------------|-----------------|
| • Yahoo!, | • HotBot, | • LiikSmart, |
| • MSN, | • AltaVista, | • Netscape, and |
| • AOL, | • HotBot, | many others. |
| • Lycos, | • GO.com, | |
| • Excite, | • iGoogle, | |

A **wireless portal** is a portal designed for Internet-enabled mobile devices.

These portals offer services which may be required by mobile users such as search engines, news, stock quotes, weather, maps, email, calendar, instant messaging, and shopping.

ii) **News:**

A news Web page contains newsworthy material including stories, articles and videos relating to current events, life, money, sports, weather etc.

Many newspapers, magazines, television, and radio stations sponsor Web sites that providesummaries of printed articles, as well as articles not included in the printed versions.

They are normally maintained by Newspaper and television and radio stations.

iii) Informational:

An information Web page contains factual information.

These websites provide information such as census data, tax code and forms, governmentdocuments, public transportation schedules, government budget, and research reports.

iv) Business/Marketing:

A business/marketing Web page contains content that promotes or sells products or services.

Today,nearly every business has a business/marketing Web page. Many of these companies also allow you to purchase their productsand services online.

v) Educational:

An educational Web site offers exciting, challenging avenues for formal and information teaching and learning.

On the Web, you can learn how airplanes fly or how to cook a meal.

Some companiesprovide online training to employees and universities offer online classes and degrees.

Instructors often use the Web to enhance classroom teaching by publishing course materials, grades, and other pertinent class information.

vi) Entertainment:

An entertainment Web site offers an interactive and engaging environment.

Popular entertainment Web sites offer music, videos, sports, games, ongoing Web episodes, sweepstakes (Lottery), chats, and more.

vii) Advocacy:

An advocacy Web page contains content that describes a cause, opinion, or idea.

Their purpose is to convince the reader of the validity of the cause, opinion, or idea.

These Web pages usually present views of a particular group or association, such as the Democratic Party, the Republican Party, the Society to Protect Human Rights, the Royal Society for the Prevention of Cruelty to Animals etc.

viii) Blog:

A blog, (short for **Weblog**), is a Web site consisting of time-stamped articles, or posts, in a diary or journal format, usually listed in reverse chronological order.

They reflect the interests, opinions, and personalities of the author, called the blogger or vlogger, and sometimes site visitors.

Businesses create blogs to communicate with employees, customers, and vendors.

Home users create blogs to share aspects oftheir personal life with family, friends, and others.

Blogs have aninformal style that consists of s single individual's ideas (similar to a diary) or a collection of ideas and thoughts among visitors.

A blog that contains video clips is called a video blog, or vlog.

NB:

Blogosphere

Refers to the worldwide collection of blogs,

Vlogosphere refers to all vlogs worldwide.

ix) Wiki:

A wiki is a collaborative Web site that allows users to create, add to, modify, or delete the Web site content via their Web browser.

Most wikis are open for modification by the general public.

Wikis usually collect recent edits on Web pages so that someone can review them for accuracy.

The difference between a wiki and a blog is that users cannot modify original posts made by the blogger.

A popular wiki is Wikipedia, a free Web encyclopedia.

x) Online Social Network:

An online social network, (also called a *social networking Web site*), is a Web site that encourages members in its online community to share their interests, ideas, stories, photos, music, and videos with other registered users.

Most include chat rooms, newsgroups, and other communication services.

They include **Facebook, Twitter, MySpace, Second Life** and very many others.

NB:

Media sharing Web site

A *mediasharing Web site* is a specific type of online social network that enables members to share media such as photos, music, and videos.

Photo sharing communities include;

- Flickr
- Fotki
- Webshots etc.

Video sharing communities

- Eyespot
- Google Video
- YouTube etc.

xi) Content Aggregator:

A content aggregator is a business website that gathers and organizes Web content and then distributes, or feeds the content to subscribers for free or a fee.

Examples of distributed content include **news, music, video, and pictures**.

Subscribers select content in which they are interested.

Whenever the selected content changes, it is downloaded automatically (pushed) to the subscriber's computer or mobile device.

xii) Personal:

A personal Web page is maintained by a private individual who normally is not associated with any organization.

People publish their personal Web pages for a variety of reasons, for instance, hunting job or sharing life experiences with the world.

NB:

Do not assume that information presented on the Web is correct or accurate. Any person, company, or organization can publish a Web page on the Internet. No one oversees the content of these Web pages. Therefore, a lot of caution should be taken when acquiring information from the web.

Questions

1. The internet has given rise to a number of developments, including blogs and wikis.
 - a. Give two features of a blog.

b. Give two features of a wiki.

2. Describe three ways to evaluate the reliability of information found on a website.

Guidelines for evaluating the value of a Web site

Evaluation Criteria	Reliable Web Sites
Affiliation	A reputable institution should support the Web site without bias in the information.
Audience	The Web site should be written at an appropriate level.
Authority	The Web site should list the author and the appropriate credentials.
Content	The Web site should be well organized and the links should work.
Currency	The information on the Web page should be current.
Design	The pages at the Web site should download quickly and be visually pleasing and easy to navigate.
Objectivity	The Web site should contain little advertising and be free of preconceptions.

GENERAL FUNCTIONS OF A WEBSITE

- It acts as a source of information. It can be used in research to get information on the internet about advertisements, entertainment, etc.
- It helps users or a particular organization to share knowledge and information over the internet
- It provides motivations to the users of an organization
- It encourages pride of ownership
- It enhances communication and collaboration
- It helps in storing important information for an organization.
- It helps organizations in easy and quick advertisement of their products.
- It enables organizations to upload and download information to and from the internet respectively.
- It helps organizations to easily maintain and update the information about them quickly.

Importances of a website to a school

1. Making of a website **quickens the publishing of information** to the community such as abrupt announcements, circulars, results, etc. Once uploaded, it will be already accessible to the targeted readers
2. Through a website, the school can **getfeedbacks** from the community through online user comments and questions.
3. If students are involved in the Website development process, this **enhances skill building** such as writing, editing, layout and design.
4. A school website provides **motivation and pride of ownership**. This can be evidenced through use of customized email. E.g. username@jinjacol.sc.ug instead of username@yahoo.com

5. Information listed on a school website **removes doubt**. Information such as school fees, and everything presented at the site appears in a positive light, as compared to information from other sites about the school which may be false.
6. If a school has a website, they can use the **web mail service** to send parents and other stake holders items such as newsletters, remainders etc.
7. A website **increases ways of contact**. Once you have a website you can list your website address on your business cards, report cards, and even the school signpost.
8. Internet today **is being used 24 / 7** and is accessible from every house. People are becoming highly dependent on the internet. By having a web presence, the market of the school expands significantly.
9. A school website helps students and parents to make a **wise academic choice** after using the vast quantities of information about a given college or university.

LIMITATIONS OF A WEBSITE

- Websites are expensive to be constructed. Therefore, some institutions may not be in position to come up with one.
- They require a lot of maintenance and update hence becoming expensive and time consuming.
- They limit customers from directly interfacing with the business men. This makes customers to sometimes be cheated.
- Very many people and organizations are creating websites with a lot of information which is not legitimate and some organizations lie the public through the websites.

