



COURSE UNIT



Bachelor of Technical-Vocational Teacher Education MAJOR IN COMPUTER PROGRAMMING: WEB DEVELOPMENT 1

COURSE MODULE	COURSE UNIT	WEEK
1	1	2
HTML (Elements, Attributes and Global Attributes)		

CHECKLIST

- ✓ Read course and unit objectives
- ✓ Read study guide prior to class attendance
- ✓ Read required learning resources; refer to unit terminologies for jargons
- ✓ Proactively participate in classroom discussions
- ✓ Participate in weekly discussion
- ✓ Answer and submit course unit tasks



UNIT EXPECTED OUTCOMES (UEOs)

At the end of this unit, the students are expected to:

Cognitive:

1. Discuss web development.
2. Categorize HTML Elements, Attributes and Global Attributes.
3. Create a simple webpage or website using HTML.

Affective:

1. Listen attentively during class discussions
2. Demonstrate tact and respect when challenging other people's opinions and ideas
3. Accept comments and reactions of classmates on one's opinions openly and graciously.

Psychomotor:

1. Participate actively during class discussions and group activities
2. Express opinion and thoughts in front of the class

REQUIRED READINGS

Decker, A. *The Beginner's Guide to Website Development*. (2021).
<https://blog.hubspot.com/website/website-development>

HTML Tutorial. (n.d.). https://www.w3schools.com/html/html_intro.asp

STUDY GUIDE

Web development refers in general to the tasks associated with developing websites for hosting via intranet or internet. The web development process includes web design, web content development, client-side/server-side scripting and network security configuration, among other tasks.

Types of Web Development

1. Front-end Development
2. Back-end Development
3. Full Stack Development
4. Website Development
5. Desktop Development
6. Mobile Development
7. Game Development
8. Embedded Development
9. Security Development

Website Development Process

1. Form a plan
 2. Create a wireframe
 3. Write your website code
 4. Build the back-end of your website
 5. Build the front-end of your website
 6. (Optional) Work with a CMS
 7. Acquire a domain name
 8. Launch your site
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HTML is the standard markup language for creating Web pages.

- HTML stands for Hyper Text Markup Language
- HTML is the standard markup language for creating Web pages
- HTML describes the structure of a Web page
- HTML consists of a series of elements
- HTML elements tell the browser how to display the content
- HTML elements label pieces of content such as "this is a heading", "this is a paragraph", "this is a link", etc.

A Simple HTML Document

```
<!DOCTYPE html>
<html>
<head>
<title>Page Title</title>
</head>
<body>

<h1>My First Heading</h1>
<p>My first paragraph.</p>

</body>
</html>
```

- The `<!DOCTYPE html>` declaration defines that this document is an HTML5 document
- The `<html>` element is the root element of an HTML page
- The `<head>` element contains meta information about the HTML page
- The `<title>` element specifies a title for the HTML page (which is shown in the browser's title bar or in the page's tab)
- The `<body>` element defines the document's body, and is a container for all the visible contents, such as headings, paragraphs, images, hyperlinks, tables, lists, etc.
- The `<h1>` element defines a large heading
- The `<p>` element defines a paragraph

HTML Element

HTML element is defined by a start tag, some content, and an end tag:

`<tagname> Content goes here... </tagname>`

The HTML element is everything from the start tag to the end tag:

```
<h1>My First Heading</h1>
<p>My first paragraph.</p>
```

Note: Some HTML elements have no content (like the `
` element). These elements are called empty elements. Empty elements do not have an end tag!

HTML Page Structure



Note: The content inside the `<body>` section (the white area above) will be displayed in a browser. The content inside the `<title>` element will be shown in the browser's title bar or in the page's tab.

HTML History

Year	Version
1989	Tim Berners-Lee invented www
1991	Tim Berners-Lee invented HTML
1993	Dave Raggett drafted HTML+
1995	HTML Working Group defined HTML 2.0
1997	W3C Recommendation: HTML 3.2
1999	W3C Recommendation: HTML 4.01
2000	W3C Recommendation: XHTML 1.0
2008	WHATWG HTML5 First Public Draft
2012	WHATWG HTML5 Living Standard
2014	W3C Recommendation: HTML5
2016	W3C Candidate Recommendation: HTML 5.1
2017	W3C Recommendation: HTML5.1 2nd Edition
2017	W3C Recommendation: HTML5.2

HTML Basic

➤ HTML Documents

All HTML documents must start with a document type declaration: `<!DOCTYPE html>`.

The HTML document itself begins with `<html>` and ends with `</html>`.

The visible part of the HTML document is between `<body>` and `</body>`.

➤ HTML Headings

HTML headings are defined with the `<h1>` to `<h6>` tags.

`<h1>` defines the most important heading. `<h6>` defines the least important heading

➤ HTML Paragraphs

HTML paragraphs are defined with the `<p>` tag

➤ HTML Links

HTML links are defined with the `<a>` tag

The link's destination is specified in the `href` attribute.

Attributes are used to provide additional information about HTML elements.

➤ HTML Images

HTML images are defined with the `` tag.

The source file (`src`), alternative text (`alt`), `width`, and `height` are provided as attributes

HTML Attributes

- All HTML elements can have **attributes**
 - Attributes provide **additional information** about elements
 - Attributes are always specified in **the start tag**
 - Attributes usually come in name/value pairs like: **name="value"**
-
- The `href` attribute of `<a>` specifies the URL of the page the link goes to
 - The `src` attribute of `` specifies the path to the image to be displayed
 - The `width` and `height` attributes of `` provide size information for images
 - The `alt` attribute of `` provides an alternate text for an image
 - The `style` attribute is used to add styles to an element, such as color, font, size, and more
 - The `lang` attribute of the `<html>` tag declares the language of the Web page
 - The `title` attribute defines some extra information about an element

HTML Global Attributes

The global attributes are attributes that can be used with all HTML elements.

TERMINOLOGIES

BACK-END - the server side of an application and everything that communicates between the database.

BROWSER - a computer program with a graphical user interface for displaying and navigating between web pages.

CLIENT - a program, person or things that are capable of obtaining services provided by another program.

CODING - sometimes called computer programming, is how we communicate with computers.

CONTENT MANAGEMENT SYSTEM (CMS) - is an application that is used to manage content, allowing multiple contributors to create, edit and publish.

CYBERSECURITY - the state of being protected against the criminal or unauthorized use of electronic data, or the measures taken to achieve this.

DOMAIN NAME - refers to your website address. This is what users type in a browser's search bar to directly access your website.

FRAMEWORK - a layered structure indicating what kind of programs can or should be built and how they would interrelate.

FRONT-END - refers to the user interface / client-side, everything with which the user interacts.

HYPERTEXT - a word, phrase or chunk of text that can be linked to another document or text.

HYPERTEXT TRANSFER PROTOCOL (HTTP) - The communications protocol used to connect to Web servers on the Internet or on a local network (intranet).

INTERNET PROTOCOL - a set of rules governing the format of data sent over the internet or other network.

IP ADDRESS (INTERNET PROTOCOL ADDRESS) - a series of numbers that identifies any device on a network.

SEARCH ENGINE - a program that searches for and identifies items in a database that correspond to keywords or characters specified by the user, used especially for finding particular sites on the World Wide Web.

SERVER - a computer or system that provides resources, data, services, or programs to other computers, known as clients, over a network.

WEB PAGES - a hypertext document on the World Wide Web.

WEBSITE - a set of related web pages located under a single domain name, typically produced by a single person or organization.

WIREFRAME - a simplified visual guide that represents the skeletal framework of a website.

WORLD WIDE WEB - an information system on the internet which allows documents to be connected to other documents by hypertext links, enabling the user to search for information by moving from one document to another.

FURTHER READINGS

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UNIT TASK

- Proactively participate in classroom discussions
- Answer and submit course unit tasks

REFERENCES

Decker, A. *The Beginner's Guide to Website Development*. (2021).
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HTML Tutorial. (n.d.). <https://www.javatpoint.com/html-tutorial>

HTML Tutorial. (n.d.). <https://www.tutorialspoint.com/html/index.htm>

HTML Tutorial. (n.d.). https://www.w3schools.com/html/html_intro.asp
