



COURSE UNIT



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

COURSE MODULE	COURSE UNIT	WEEK
1	3	4
CSS (Properties, Selector, Functions, Animatable, Aural, Units)		

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 CSS Properties, Selector, Functions, Animatable, Aural, Units.
2. Practice CSS Properties, Selector, Functions, Animatable, Aural, Units.
3. Revise the simple webpage created using CSS.

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

CSS Tutorial. (n.d.). <https://www.w3schools.com/css/default.asp>

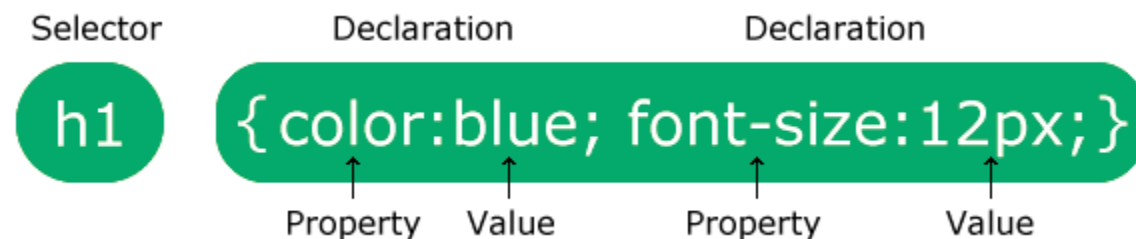
STUDY GUIDE

CSS

- CSS is the language we use to style a Web page.
- CSS stands for Cascading Style Sheets
- CSS describes how HTML elements are to be displayed on screen, paper, or in other media
- CSS saves a lot of work. It can control the layout of multiple web pages all at once
- External stylesheets are stored in CSS files

A CSS rule consists of a selector and a declaration block.

CSS Syntax



- The selector points to the HTML element you want to style.
- The declaration block contains one or more declarations separated by semicolons.
- Each declaration includes a CSS property name and a value, separated by a colon.
- Multiple CSS declarations are separated with semicolons, and declaration blocks are surrounded by curly braces.

CSS Properties

The list below presents the most frequently encountered CSS properties: (See additional material CSS Properties)

Property	Description	Values
color	Element color	
background-color	Background color	
background-image	Sets the background image	

Property	Description	Values
display	Display behavior	{block, inline-block, inline, none}
width	Element width	
height	Element height	
min-width	Minimum width	
min-height	Minimum height	
max-width	Maximum width	
max-height	Maximum height	
margin	Outer margins property	
padding	Inner margin property	
border	Border property	
border-color	Border color	
border-width	Border width	
border-style	Border style	{none, solid, dotted, inset, dashed, solid ...}
border-radius	Border radius	
font	Font properties	
font-family	Defines the font	
font-style	Font style	{normal, italic, oblique}
font-weight	Thickness of the font	{normal, bold, lighter, bolder}
position	Type of positioning used for an element	`{static, relative, absolute, fixed, sticky}`
z-index	Sets the order of overlapping elements	`{auto, -1, 0, 1, 2, 3 ...}`

CSS Selector

In CSS, selectors are patterns used to select the element(s) you want to style. (See additional material CSS Selectors)

CSS Functions

CSS functions are used as a value for various CSS properties. (See additional material CSS Functions)

CSS Animatable

- Some CSS properties are animatable, meaning that they can be used in animations and transitions. (See additional material CSS Animatable)

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- Animatable properties can change gradually from one value to another, like size, numbers, percentage and color.

CSS Aural

Aural style sheets use a combination of speech synthesis and sound effects to make the user listen to information, instead of reading information. (See additional material CSS Aural)

Aural presentation can be used:

- by blind people
- to help users learning to read
- to help users who have reading problems
- for home entertainment
- in the car
- by print-impaired communities

The aural presentation converts the document to plain text and feed this to a screen reader (a program that reads all the characters on the screen).

CSS Units

CSS has several different units for expressing a length.

Many CSS properties take "length" values, such as **width**, **margin**, **padding**, **font-size**, etc.

Length is a number followed by a length unit, such as **10px**, **2em**, etc.

Note: A whitespace cannot appear between the number and the unit. However, if the value is **0**, the unit can be omitted.

For some CSS properties, negative lengths are allowed.

There are two types of length units: absolute and relative. (See additional material CSS Units)

➤ Absolute Lengths

The absolute length units are fixed and a length expressed in any of these will appear as exactly that size.

Absolute length units are not recommended for use on screen, because screen sizes vary so much. However, they can be used if the output medium is known, such as for print layout.

* Pixels (px) are relative to the viewing device. For low-dpi devices, 1px is one device pixel (dot) of the display. For printers and high resolution screens 1px implies multiple device pixels.

➤ Relative Lengths

Relative length units specify a length relative to another length property. Relative length units scale better between different rendering medium.

Tip: The em and rem units are practical in creating perfectly scalable layout!

* Viewport = the browser window size. If the viewport is 50cm wide, 1vw = 0.5cm.

TERMINOLOGIES

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.

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

CSS Tutorial. (n.d.). <https://www.w3schools.com/css/default.asp>

UNIT TASK

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

REFERENCES

CSS Tutorial. (n.d.). <https://www.javatpoint.com/css-tutorial>

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

CSS Tutorial. (n.d.). <https://www.w3schools.com/css/default.asp>
