

Technical Vocational Livelihood

11

QUARTER

1

Computer Programming



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TECHNICAL VOCATIONAL LIVELIHOOD

Computer Programming (ICT) – Grade 11
Quarter 1 – Module 1: Interaction of the Objects and Interaction Diagrams
First Edition, 2020

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Computer Programming

11

QUARTER 1

MODULE

1



Introductory Message

For the facilitator:

Welcome to the Computer Programming for the ICT Module on Interaction of the Objects and Interaction Diagrams!

This module was collaboratively designed, developed and reviewed by educators from Schools Division Office of Pasig City headed by its Officer-In-Charge Schools Division Superintendent, Ma. Evalou Concepcion A. Agustin in partnership with the Local Government of Pasig through its mayor, Honorable Victor Ma. Regis N. Sotto. The writers utilized the standards set by the K to 12 Curriculum using the Most Essential Learning Competencies (MELC) while overcoming their personal, social, and economic constraints in schooling.

This learning material hopes to engage the learners into guided and independent learning activities at their own pace and time. Further, this also aims to help learners acquire the needed 21st century skills especially the 5 Cs namely: Communication, Collaboration, Creativity, Critical Thinking and Character while taking into consideration their needs and circumstances.

In addition to the material in the main text, you will also see this box in the body of the module:



Notes to the Teacher

This contains helpful tips or strategies that will help you in guiding the learners.

As a facilitator you are expected to orient the learners on how to use this module. You also need to keep track of the learners' progress while allowing them to manage their own learning. Moreover, you are expected to encourage and assist the learners as they do the tasks included in the module.



For the learner:

Welcome to the Computer Programming for the ICT Module on Introduction of Html!

The hand is one of the most symbolized parts of the human body. It is often used to depict skill, action and purpose. Through our hands we may learn, create and accomplish. Hence, the hand in this learning resource signifies that you as a learner is capable and empowered to successfully achieve the relevant competencies and skills at your own pace and time. Your academic success lies in your own hands!

This module was designed to provide you with fun and meaningful opportunities for guided and independent learning at your own pace and time. You will be enabled to process the contents of the learning material while being an active learner.

This module has the following parts and corresponding icons:



Expectations - These are what you will be able to know after completing the lessons in the module



Pretest - This will measure your prior knowledge and the concepts to be mastered throughout the lesson.



Recap - This section will measure what learnings and skills that you understand from the previous lesson.



Lesson- This section will discuss the topic for this module.



Activities - This is a set of activities you will perform.



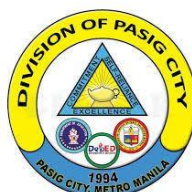
Wrap-Up- This section summarizes the concepts and applications of the lessons.



Valuing-this part will check the integration of values in the learning competency.



Posttest - This will measure how much you have learned from the entire module. Ito po ang parts ng module.





EXPECTATIONS

At the end of this module you will understand the following:

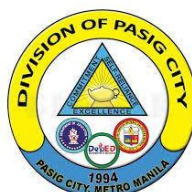
1. understand html;
2. familiarize different basic tags and elements of html5; and
3. familiarize html structure.

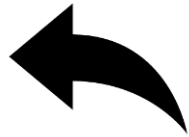


PRETEST

Directions: Select the letter that corresponds to the correct answer.

1. What does HTML stand for?
A. Hyper Text Markup Language
B. Hyper Text Markdown Language
C. Hyper Technology Markup Language
D. Hyper Technology Markdown Language
2. Which of the following tags defines that the document is an HTML5 document?
A. <html> B. <title> C. <body> D. <!DOCTYPE html>
3. The first version of HTML was published in what year?
A. 1990 B. 1991 C. 1992 D. 1993
4. HTML 5 was published in what year?
A. 2013 B. 2014 C. 2015 D. 2016
5. It is a HTML root element.
A. <html> B. <title> C. <body> D. <!DOCTYPE html>





RECAP

Computer is an electronic programmable device that can store, retrieve and process data. It has five basic parts: Monitor, keyboard, mouse, system unit and AVR. It performs four major operations. First, it accepts instructions or data as input, second, the data will process as per instructions, third, it gives result in the form of output and it stores and data.

Programming is a process that leads from an original formulation of a computing problem to executable programs. There are two ways in programming. Procedural and OOP (Object-Oriented Programming).

Process/Steps in programming are Analyzing the problem or the program, developing an algorithm, Coding, Testing and debugging, Documentation and maintenance.

Algorithm is a step-by-step procedure or a set of rules in resolving problem or creating programs.

Pseudocode is a shorter description of an algorithm. It is a combination of English and code method to illustrate the algorithm.

Flowchart is also a description of an algorithm like pseudo code. The difference is that the flowchart is a graphical representation of it.



LESSON

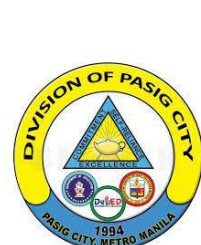
Introduction to HTML

History of HTML



https://www.google.com/search?q=tim+berners+lee&source=lnms&tbm=isch&sa=X&ved=2ahUKewjGjlaP0o_qAhUDUd4KHYQ8AeAQ_AUoAXoECB0QAaw#imgrc=IWELxpCG9YqnM

HTML was created by Tim Berners-Lee also known as the father of the web. The first version of HTML was HTML 1.0 published in 1991 and latest version was HTML 5 which was published in 2014. HTML 1.0 it consists of 18 HTML tags and each new version came with new tags and to the markup.



HTML VERSION	YEAR
HTML 1.0	1991
HTML 2.0	1995
HTML 3.2	1997
HTML 4.01	1999
XHTML	2000
HTML 5	2014

What is HTML?

HTML stands for Hyper Text Markup Language. HTML is not a programming language it only describes the structure of a Web page that gives meaning by defining that content as, for example, headings, paragraphs and images or simply HTML is the content of a webpage.

Notepad, notepad++, sublime or TextEdit are all application can be use in writing your HTML documents.

HTML documents are files that end with a .html or .htm extension. You can view the output using any web browser like Google Chrome, Safari and Mozilla Firefox. The browser is not displaying the HTML tags, but it is use to determine how to display the document.

HTML basic elements and tags

An element is a set of opening and closing tags therefor tags are element names that surrounded by angle brackets. Tags tags usually come in pairs the start tag or also known as beginning tag and the end tag also called as closing tag. The end tag is written like the start tag, but with a forward slash inserted before the tag name.

Example: <tag> </tag>

HTML structure


<Tag attribute = "value">.....</end>

Attributes is an additional characteristics or properties of the element. It consists of name/value pairs like AttributeName="AttributeValue". Values should always be enclosed in quotation marks.

HTML Document Structure

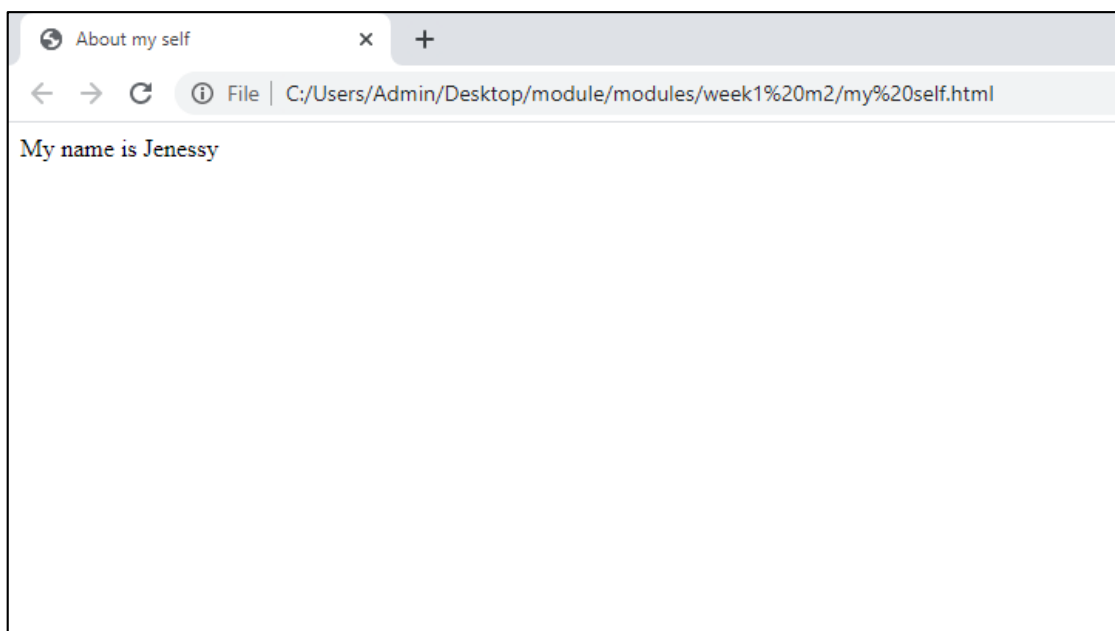
(This sample is using Sublime application)





```
1 <!DOCTYPE html>
2 <html>
3 <head>
4   <title>About my self</title>
5 </head>
6 <body>
7
8   My name is Jenessy
9
10 </body>
11 </html>
```

(This sample is using google chrome browser)



<!DOCTYPE html> ----- This is to declare that your document is an HTML5.

<html> ----- HTML root element.

<head> ----- Contains meta information.

<title>About my self </title> ----- Specifies title of document.

</head> ----- End tag. Contains meta information.

<body> ----- Holds the content of document.

My name is Jenessy

</body> ----- End tag. Holds the content of document.

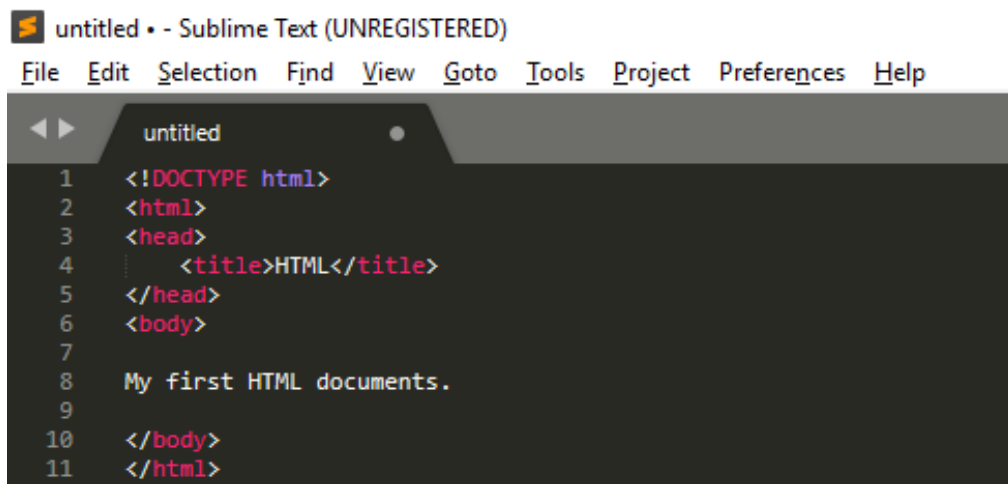
</html> ----- End tag. HTML root element.



The <!DOCTYPE> declaration represents the document type, and helps browsers to display web pages correctly. It must only appear once, at the top of the page or before any HTML tags. The <!DOCTYPE> declaration is not case sensitive.

All HTML documents must start with a document type declaration. The HTML document itself begins with <html> and ends with </html>. The visible part of the HTML document is between <body> and </body>. The title of the document appears in tab bar of the browser. Below are the following steps in creating, saving and browsing html documents.

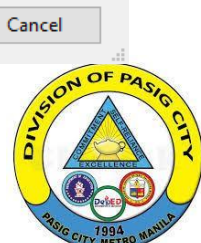
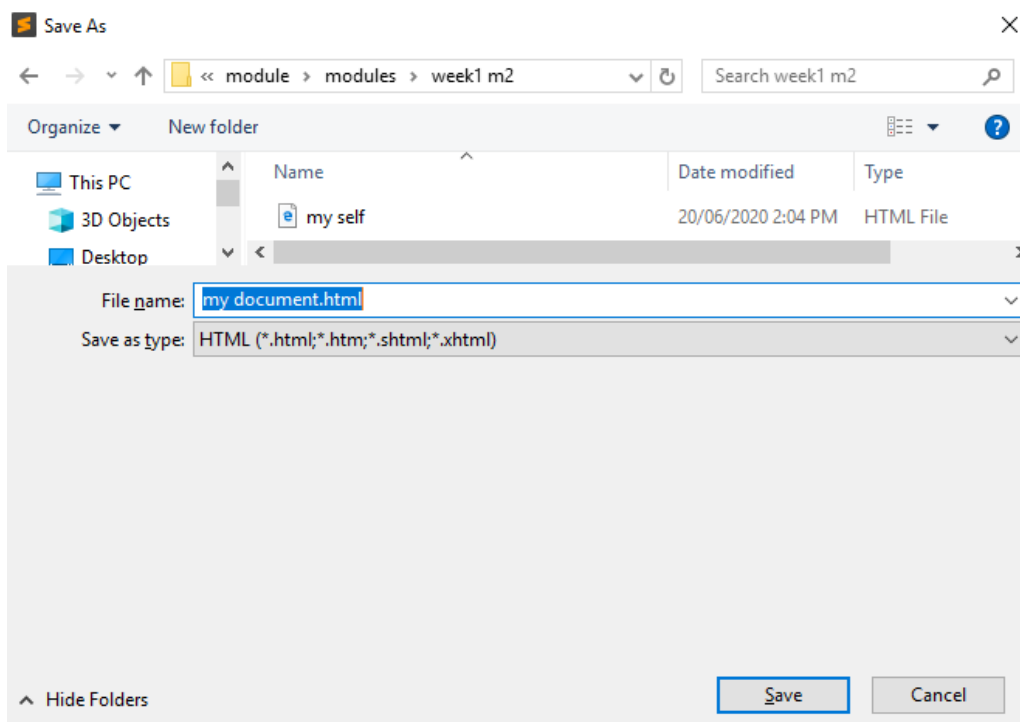
1. Open sublime or other html editor application.
2. Writing html.



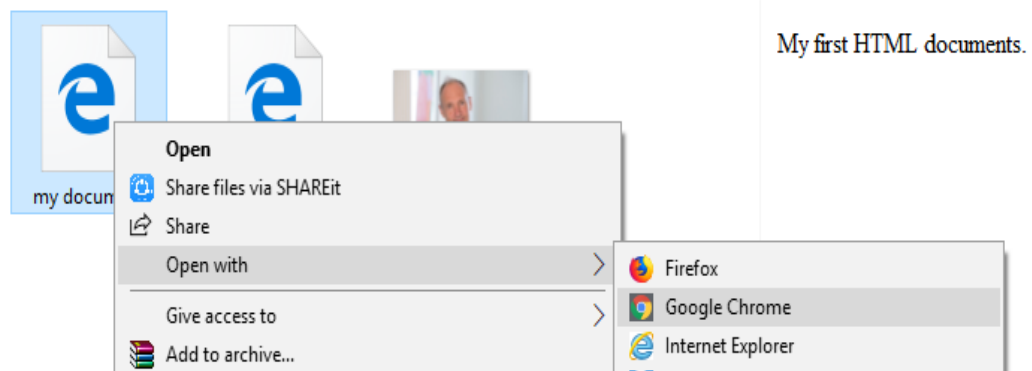
The screenshot shows the Sublime Text (UNREGISTERED) editor with a file named 'untitled'. The code in the editor is as follows:

```
1 <!DOCTYPE html>
2 <html>
3 <head>
4   <title>HTML</title>
5 </head>
6 <body>
7
8   My first HTML documents.
9
10 </body>
11 </html>
```

3. Save the file on your computer. Click File tab and click save or click Ctrl and S on your keyboard. Name the file as “my document.html” then click save.

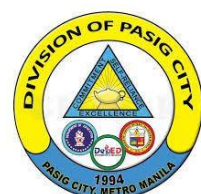
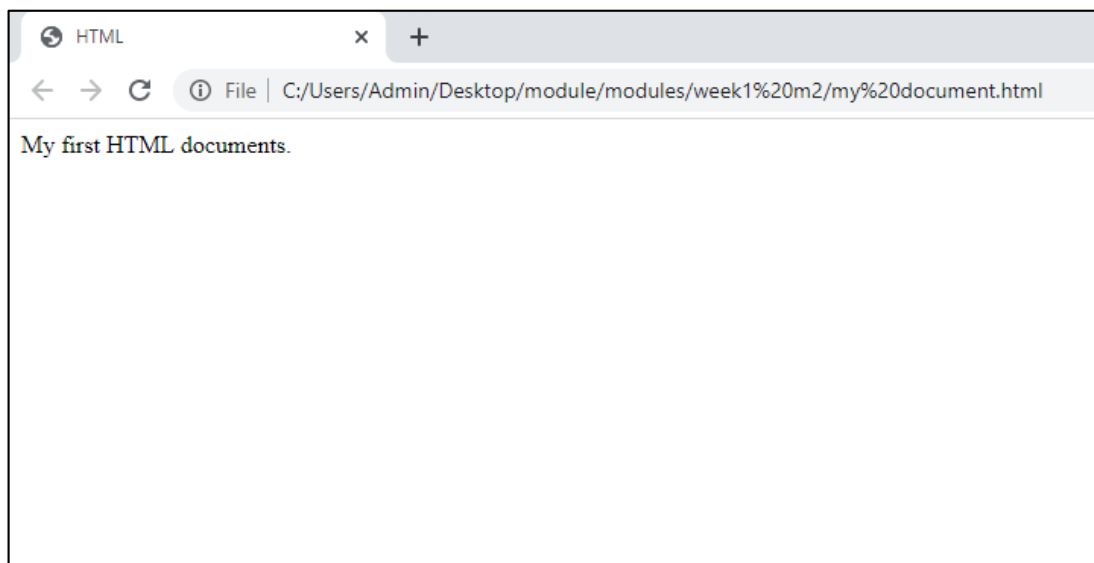


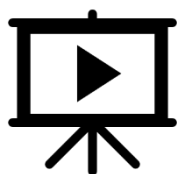
4. Locate your HTML file on your computer. Double click on the file, or right-click - and choose "Open with" then choose your favorite browser.



The result:

(This sample is using google chrome browser)





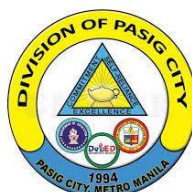
ACTIVITIES

Directions: Write the structure of html and html documents on the space provided below.

Html structure

Html Document structure

Submit a soft copy/hard copy of your completed activity to your subject teachers on the following meeting.





WRAP-UP

This module discussed what is Hyper Text Markup Language and how to create simple webpage. HTML documents are files that end with a .html or .htm extension. You can view the output using any web browser like Google Chrome, Safari and Mozilla Firefox. After reading this module you understand what is element and tag in html and also, we have syntax to follow in creating webpage. Now according to what you have learned from this module list down the steps in creating webpage on the space provided below;

First step:

Second step:

Third step:

Fourth step:

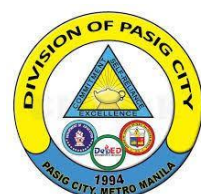


VALUING

Directions: Read and answer the following questions carefully in two to three sentences each number.

1. What do you think are the importance of knowing HTML?

2. How will you use the knowledge you acquired about HTML?

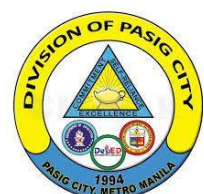




POSTTEST

Directions: Select the letter that corresponds to the correct answer.

1. It is an additional characteristics or properties of the element.
A. Attributes B. Tag C. Selector D. Value
2. The one who created HTML.
A. John Web
B. John Berners-Lee
C. Tim Berners-Lee
D. Tim Web
3. It is always be enclosed in quotation marks.
A. Body B. Attributes value C. Tag D. Title
4. Tags that holds the content of document.
A. <body>...</body>
B. <html>...</html>
C. <Title>...</Title>
D. <head>...</head>
5. Tags that contains meta information
A. <body>...</body>
B. <html>...</html>
C. <Title>...</Title>
D. <head>...</head>





KEY TO CORRECTION

Post-test:	1. A 2. C 3. B 4. A 5. D
Pre-test:	1. A 2. D 3. B 4. B 5. A

Activity 1

Html structure:
<Tag attribute = "value" > </end>

Html Document structure:
<!DOCTYPE html>
<html>
<head>
<title> </title>
</head>
<body>
</body>
</html>

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