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

COURSE MODULE	COURSE UNIT	WEEK
1	5	7
JavaScript (Properties)		

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. Identify JavaScript Properties.
2. Prepare properties based on objects.
3. Construct programs using JavaScript Properties.

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

JavaScript Tutorial. (n.d.). https://www.w3schools.com/js/default.asp

STUDY GUIDE

JavaScript
  ➢ was initially created to "make web pages alive".
The programs in this language are called scripts. They can be written right in a web page's HTML and run automatically as the page loads. Scripts are provided and executed as plain text. They don't need special preparation or compilation to run.
  ➢ is a programming language initially designed to interact with elements of web pages.
In web browsers, JavaScript consists of three main parts:
1. ECMAScript provides the core functionality.
2. The Document Object Model (DOM) provides interfaces for interacting with elements on web pages
3. The Browser Object Model (BOM) provides the browser API (Application Programming Interfaces) for interacting with the web browser.
  ➢ was originally developed as LiveScript by Netscape in the mid 1990s.
It was later renamed to JavaScript in 1995, and became an ECMA standard in 1997. Now JavaScript is the standard client-side scripting language for web-based applications, and it is supported by virtually all web browsers available today. JavaScript is officially maintained by ECMA (European Computer Manufacturers Association) as ECMAScript. ECMAScript 6 (or ES6) is the latest major version of the ECMAScript standard.

JavaScript is one of the 3 languages all web developers must learn:
 1. HTML to define the content of web pages
 2. CSS to specify the layout of web pages
 3. JavaScript to program the behavior of web pages

Applications of JavaScript Programming
  ➢ Client side validation
  ➢ Manipulating HTML Pages
  ➢ User Notifications
  ➢ Back-end Data Loading
  ➢ Presentations

➢ Server Applications

JavaScript Properties
Properties are the values associated with a JavaScript object.
A JavaScript object is a collection of unordered properties.
Properties can usually be changed, added, and deleted, but some are read only.

Accessing JavaScript Properties
The syntax for accessing the property of an object is:
1. using the dot(.) notation

```
objectName.property        // person.age
```

2. using square brackets

```
objectName["property"]    // person["age"]
```

3. store a property name, in the form of a string, in a variable and then use that variable to access the associated property

```
objectName[expression]    // x = "age"; person[x]
```

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

JavaScript Tutorial. (n.d.). https://www.w3schools.com/js/default.asp

UNIT TASK

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

REFERENCES

An Introduction to JavaScript. (2021). https://javascript.info/intro

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    US/docs/Learn/Getting_started_with_the_web/JavaScript_basics

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