

The background features abstract, overlapping geometric shapes in various shades of purple and blue, creating a modern, layered effect. The shapes are primarily triangular and polygonal, with some areas appearing more translucent than others.

# Course Module 1: Course Unit 5: JavaScript (Properties)

**Week 7**

# JavaScript (Properties)

## Objectives:

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

# Participation Task - W7

Answer the JavaScript Quiz:

[W3Schools JavaScript Quiz](#)

The background features abstract, overlapping geometric shapes in various shades of purple and blue, primarily concentrated on the right side of the image. The shapes include triangles and polygons of different sizes and orientations, creating a dynamic, layered effect. The colors range from light lavender to deep indigo and dark blue.

# JavaScript

# JavaScript

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

# 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.

```
<script> ; </script>
```

# JavaScript

- 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.

# JavaScript

- 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.



# *Applications of JavaScript*

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- Client side validation
- Manipulating HTML Pages
- User Notifications
- Back-end Data Loading
- Presentations
- Server Applications

# JavaScript Properties

# 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]
```

# Applications???

Any questions???

# REFERENCES:

- An Introduction to JavaScript. (2021). <https://javascript.info/intro>
- JavaScript basics. (2022). [https://developer.mozilla.org/en-US/docs/Learn/Getting started with the web/JavaScript basics](https://developer.mozilla.org/en-US/docs/Learn/Getting_started_with_the_web/JavaScript_basics)
- JavaScript Tutorial. (2022). <https://www.javascripttutorial.net/>
- JavaScript Tutorial. (n.d.). <https://www.javatpoint.com/javascript-tutorial>
- JavaScript Tutorial. (n.d.). <https://www.tutorialrepublic.com/javascript-tutorial/>
- JavaScript Tutorial. (n.d.). <https://www.tutorialspoint.com/javascript/index.htm>
- JavaScript Tutorial. (n.d.). <https://www.w3schools.com/js/default.asp>



