Lesson 65 JavaScript Into

JavaScript is a rich and expressive language in its own right. This section covers the basic concepts of JavaScript, as well as some frequent pitfalls for people who have not used JavaScript before.

JavaScript is a scripting or programming language that allows you to implement complex features on web pages, every time a web page does more than just sit there and display static information for you to look at, displaying timely content updates, interactive maps, animated 2D/3D graphics, scrolling video jukeboxes, etc

You can use this online compiler to run your javascript's codes: Click Here!

How to Use JavaScript in HTML:

1. **Inline JavaScript:**

   For example, HTML tags have event attributes that allow you to execute some code inline when an event is triggered. Here's what I mean:

   ```
   <button onclick="alert('You just clicked a button')">Click me!</button>
   ```

2. **Internal JavaScript:**

The place where we'll be adding all our code is inside the <script> element at the bottom of the HTML:

```
<script>
// Your JavaScript goes here
    </script>
```

3. **External JavaScript:**

You may want to have your JavaScript code in a different file. External JavaScript allows this. For such uses-cases, here's how it's done:

```
<script src="./script.js"></script>
```

- In HTML, JavaScript programs are executed by the web browser.
- With traditional programming languages, like C++ each code statement has to end with a semicolon (;).
- With javascript, ending statements with semicolon is not required(optional), but highly recommended.
- However, semicolons are required if you want to put more than one statement on a single line.

JavaScript Variables:

With var :

- You do not need to specify the type of a variable at the declaration.
- var is used only once at the declaration

```
var name = "JavaScript";
name = "Language";
```

with let :

```
let name ;

name = "Language";
```

The **let** operator: this is also very similar to **var** – it declares and assigns values to variables that can be changed later in the code. The major difference between these operators is that **var** hoists such variables, while let does not hoist.

JavaScript Basic Examples :

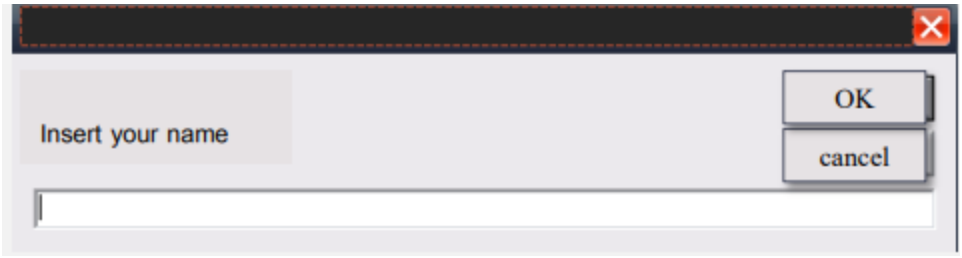
```
<script>
    x="Hello World!"
    document.write(x)
</script>
```

The document.write() method should only be used for testing.

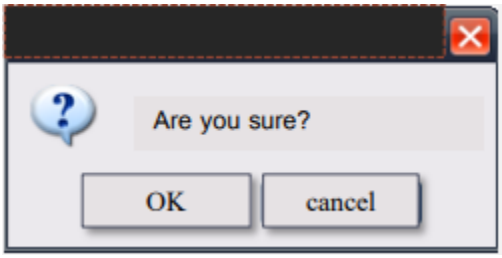
Dialog Boxes :

- window.alert("message");

- var nom=window.prompt("Insert your name:");



- var rep=window.confirm(“Are you sure?”);



JavaScript Popup Boxes :

Alert Box:

- An alert box is often used if you want to make sure information comes through to the user.
- When an alert box pops up, the user will have to click "OK" to proceed.

Syntax:

```
<script>
    alert("Hello World!")
</script>
```

Prompt Box :

- A prompt box is often used if you want the user to input a value before entering a page.

- When a prompt box pops up, the user will have to click either "OK" or "Cancel" to proceed after entering an input value.
- If the user clicks "OK“, the box returns the input value. If the user clicks "Cancel“, the box returns null.

```
<script>
    var name=prompt("What is your name? "," ")
    document.write("Hello <br>"+name)
</script>
```

Confirm Box :

- A confirm box is often used if you want the user to verify or accept something.
- When a confirm box pops up, the user will have to click either "OK" or "Cancel" to proceed.
- If the user clicks "OK", the box returns true. If the user clicks "Cancel", the box returns false.

```
var answer=confirm("Are you sure!")
```