## CS355: Web Technologies Lab Lab 4: JavaScript

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## 1. JavaScript

JavaScript is primarily used for creating dynamic HTML pages and performing client-side validations. The HTML <script> tag is employed to insert JavaScript code into an HTML page, and it can be placed within both the body and head sections of the document.

A <script> tag typically contains two attributes:

- 1- The language attribute specifies the scripting language being used, such as JavaScript or VBScript. For example: <script language="JavaScript">.
- 2- The type attribute determines the MIME type (media type) of the scripting code. MIME types describe the format of the content. It's typically set to an alphanumeric MIME type for code. For example: <script type="text/javascript">.

JavaScript is case sensitive, and while semicolons are generally optional, they are often used to terminate statements. Each statement in JavaScript is executed by the browser in the order they are written. Single-line comments in JavaScript start with //, while multi-line comments are enclosed within /\* and \*/.

## 2. Most important statements

Javascript can do the following:

- Write into html page: document.write("Any Text")
- Change html content of an element: document.getElementById("id").innerHTML = "Any HTML"
- Change HTML Attribute Values document.getElementById('id').src ="new pic"
- Change HTML Styles (CSS): document.getElementById('id').style.color='red'
- Writing into an alert box window.alert()
- Writing into the browser console console.log()

## 3.Task

Create a currency converter web page using HTML, and JavaScript [preferred with CSS too]. The page should allow users to enter an amount in Jordan Dinar (JD) and convert it to five other currencies: Dollar, Euro, Saudi Riyal, Yen, and Pound. Additionally, provide options for users to choose the text color of the heading "Currency Converter." Ensure that the conversion rates are as follows:

- 1 JD = 1.41 Dollar
- 1 JD = 1.18 Euro
- 1 JD = 5.29 Saudi Riyal
- 1 JD = 151.06 Yen
- 1 JD = 1.02 Pound

The web page should update the converted values dynamically as the user inputs the amount in JD, and the heading text color should change according to the user's selection.

