Java Script – L2: Trend.Nxt Hands-on Assignments

Estimated Efforts: 2 PDs

For detailed ToC and other Details: https://wipro365.sharepoint.com/sites/ku-practice-4101/KMSitesContent/gdo1/JavaSkills/Skills_TOC/JavaScript_L2_LG.aspx

Author: saigeetha.danda@wipro.com

Date: 27th May 2018

ToC :

Topic No	Topic Name	Sub Topics	Min No of Assignments to be Done
1	**JavaScript Strings**	JavaScript String Methods	2
2	**JavaScript Numbers**	JavaScript Numbers Methods	1
3	**JavaScript Math**	JavaScript Math Object	2
4	**JavaScript Dates**	JavaScript Date Formats & Methods	2
5	**JavaScript Arrays**	JavaScript Arrays Methods	2
6	**JavaScript Booleans & Type Of**	JavaScript Booleans & Type Of	1
7	**JavaScript Type Conversion**	JavaScript Type Conversion	1
8	**JavaScript Regular Expressions**	JavaScript Regular Expression	1
9	**JavaScript Form Validation**	JavaScript Form Validation	1
10	**JavaScript HTML DOM**	DOM Methods DOM Elements DOM HTML DOM CSS DOM Events DOM Navigation DOM Nodes	2

11	**JavaScript Browser BOM**	1. JavaScript Window 2. JavaScript Location 3. JavaScript Screen 4. JavaScript History 5. JavaScript Navigator 6. JavaScript Popup 7. JavaScript Cookies 8. JavaScript Timing	2
Total Min No of Assignments to be Done			**17**

Topic 1: JavaScript Strings

Assignment 1:
Write a JavaScript function to split a string and convert it into an array of words.

Assignment 2:
Write a JavaScript function to extract a specified number of characters from a string.

Assignment 3:
Write a JavaScript function that takes a string which has lower and upper case letters as a parameter and converts upper case letters to lower case, and lower case letters to upper case.

Topic 2: JavaScript Numbers

Assignment 1:

Write a JavaScript program to convert temperatures to and from Celsius, Fahrenheit.

Assignment 2:

Write a JavaScript program to compute the sum of the two given integers. If the two values are same, then returns triple their sum.

Topic 3: JavaScript Math

Assignment 1:

Write a JavaScript function to format a number up to specified decimal places.

Assignment 2:

Write a JavaScript function to generate a random integer.

Assignment 3:

Write a JavaScript function to round a number to a given decimal places.

Assignment 4:

Write a JavaScript function to calculate the percentage (%) of a number.

Topic 4: JavaScript Dates

Assignment 1:

Write a JavaScript function to test whether a date is a weekend or not.

Assignment 2:

Write a JavaScript function to count the number of days passed since beginning of the year.
Assignment 3:

Write a JavaScript function to get a full textual representation of the day of the week (Sunday through Saturday).

Assignment 4:

Write a JavaScript function to get difference to Greenwich time (GMT) in hours.

Topic 5: JavaScript Arrays

Assignment 1:

Write a JavaScript program to remove duplicate items from String type array (ignore case sensitivity).

Assignment 2:

Write a JavaScript function to find the longest common starting substring in an array of strings.

Assignment 3:

Write a JavaScript function to get nth largest element from an unsorted array.

Topic 6: JavaScript Booleans & Type Of

Assignment 1:

Write a JavaScript function to check whether the given argument is function or string or object or number by using Type Of operator.

Assignment 2:

Write a JavaScript function to check greatest of two numbers by using Boolean() function.

Topic 7: JavaScript Type Conversion

Assignment 1:
Write a JavaScript function to convert given date to a string object and display.

Assignment 2:

Write a JavaScript function to convert given number to a string object and display.

Topic 8: JavaScript Regular Expressions

Assignment 1:

Write a JavaScript program to search a date within a string using Regular Expression.

Assignment 2:

Write a JavaScript function to check whether a given value is a valid url or not.

Topic 9: JavaScript Form Validation

Assignment 1:

Create a form with a text field to accept email address. Write a pattern that validates e-mail address. The email should contain the following characters.

- Uppercase (A-Z) and lowercase (a-z) English letters.

- Digits (0-9).

- Characters ! # $ % & ' * + - / = ? ^ _ ` { | } ~

- Character (period, dot or fullstop) provided that it is not the first or last character and it will not come one after the other.

Assignment 2:

Write a JavaScript program to create a form with a text field to accept pin code. Write a pattern that validates pin code.

Topic 10: JavaScript HTML DOM

Assignment 1:

Write a JavaScript program to get the width and height of the window (any time the window is resized).

Assignment 2:
Write a JavaScript program to change the background image of document.

Assignment 3:

Write a JavaScript program to highlight the bold words of the following paragraph, on mouse over a certain link.
Output:

[Mouse over here to bold words in your para]

When a web page is loaded, the browser creates a **D**ocument **O**bject **M**odel of the page.
The **HTML DOM** model is constructed as a tree of **Objects**

Assignment 4:

Write a JavaScript program to display a random image (clicking on a button) from list of images.
Add list of images in an array.

Topic 11: JavaScript Browser BOM

Assignment 1:

Create a basic page in html with an image in it. When the user clicks on the image, open a new tab or window that displays the Google home page. Add a form button beneath the image labelled 'Close'. When the button is clicked, the new tab or window should close.

Assignment 2:

Create a java script function to change the background colour of a paragraph based on input which is given by user through prompt dialog.