

Javascript Assignments

JavaScript

1. **Basics** - Create a basic webpage that will;
 - a. Have a large bold title with “Assignment 1 – [your name]”
 - b. Create a Dialog Box that warns the user that the ‘System is Overloading’
 - c. Add text of your choice (after the Dialog Box is shown to the user)
 - d. Have a Dialog Box asking the user to enter their favourite colour.
 - e. Create a link to a 2nd HTML page called page2.html that has a heading “Assignment 2 - Variables”

2. **Variables** - On Page 2 (created in assign 1) that will use Dialog Boxes to ask the user for;
 - a. A number, which will be saved as variable 1
 - b. A 2nd number, which will be saved as variable 2
 - c. Their favourite class, which will be saved as variable 3
 - d. On page 2, have the computer print the following
 - i. Variable 1 + Variable 2 (make sure it adds mathematically)
 - ii. Variable 2 + Variable 3 (concatenation – adds by gluing together)
 - e. Create a Link to page3.html.

3. **If Statements** - On page 3 (with a heading “Assignment 3”), create an if statement that will check ‘variable 1 + variable 2’.
 - a. If it is less than 0, print the message “number is too low”
 - b. If it is greater than 100, print “number is too high”
 - c. If it is 86-100, print “great mark”
 - d. If it is 50 or 60 or 67, print “just on the edge”
 - e. Create a confirm Dialog Box that asks “Is the total really xx” where xx is the sum of variable 1 and variable 2. If the user clicks OK, ‘Math confirmed is printed on the web page. If the user clicks CANCEL, ‘Math Incorrect’ is printed.
 - f. Create a link to page4.html with heading “Assign 4 - Loops”

4. **Loops** - Create a **For loop** that will start with a variable called countdown. A Dialog Box will ask for a number and the screen will print the variable.
 - a. The for loop will subtract 1 each time and print the variable and the
 tag after each number so that the each number appears on its own line.
 - b. When the variable reaches (and prints) 0, the message “blast off” will be printed.

- c. Create a link to page5.html with heading “Assign 5 – Functions”

5. Functions – On page5 (with heading Assign 5 – Functions)

- a. Insert a picture (find on internet) that when clicked, calls the following;
- b. Create a function that will
 - i. Prompt the user twice, asking how many cokes and mars bars they want
 - ii. save the 2 numbers received from the user as variables,
 - iii. calculate the subtotal for Mars Bars (# x price), Cokes (# x price)
 - iv. Total Cost for Mars Bars and Cokes together.
- c. Use Alert Dialog box(es) to tell the user cost of Mars bars, cost of Cokes, and total cost.;
- d. Create a link to page6.html with heading “Math Functions – Assignment 6”

6. Math Functions – On page6.html, add a heading “Math Functions – Assignment 6”.

Create a game that repeatedly ask for a number until the user gets it right.

- a. First, create a Random Number from 1 and 6 (whole numbers only, including 1 & 6)
- b. Create a Prompt that will ask the user to guess a number.
 - i. Turn it into a number (use parseFloat, not parseInt)
 - ii. Round the number (just in case the user enters a decimal)
- c. Create a loop that will continue asking for a number until the user gets it right.
 - i. Create Alert Dialog Boxes with either “too high”, “too low” or “You guessed it”
 - ii. If “too high” or “too low”, prompt the user for another guess.
 - iii. After the alert for “you guessed it” appears, the loop will end.
- d. Create a link to page7.html with heading “Assign 7 – DOM”

7. Arrays – on page 7.html (with heading Assign 7 – Arrays)

- a. Create an Array with 5 string (text) items inside
- b. Type the array items at the top of the page (under Assign 7 – Arrays)
- c. Insert an appropriate picture. When clicked,
 - i. Prompt the user for a new item for the list
 - ii. Check to see if the item is already in the array
 - 1. If Yes, give an appropriate alert
 - 2. If no, add it to the array.
- d. Create a link to page8.html with heading “Assign 8 – DOM”

- 8. DOM** – On page8.html (with heading Assign 8 – DOM)
- Create a page with a table (4 columns and 2 Rows)
 - Insert 4 pictures into the 1st row (1 in each cell)
 - Insert a description below each picture in the 2nd row.
 - When the 1st picture is clicked, have the browser Go Back 1 page *(will NOT work if you opened the page directly, you must go to assign 6, click on link to Assign 7, or copy and paste URL into browser that is already open)*
 - When picture #2 is clicked, use the alert function to tell the user
 - the size of the available screen (width and height)
 - user their current location (URL address).
 - When picture #3 is clicked, change picture #3 (make sure to give ID) AND change the text under picture 3 to fit the new picture
 - When picture #4 is clicked, make
 - Use the getElementByTag to add all images into an Array and
 - Resize all their widths to 50 pixels in a for loop
 - Make Picture #4 disappear / invisible
 - Create a link to page9.html with heading “Assign 9 – Pet Rock”
- 9. Pet Rock** – On page9.html (with heading Assign 9 – Pet Rock) create functions that will communicate with the user and change the picture when the user clicks on the pet rock.
- Add the rock.png picture to the page.
 - Ask the user for their name (prompt).
 - Ask the user for their age (prompt)
 - Create a loop that will check the answer and continue asking for the person's age until they enter a valid number (Hint: use the isNaN function)
 - Make sure that the Image has an ID eg
 - Create a function that will do the following when the image is clicked (Hint: use onClick event for the image)
 - Alert message that includes the name given by the user
“I like the attention **Bob**” or “I like the attention Sue”
 - Using the image's id, change the picture of the rock picture to rock_happy picture.
 - Create a Timeout function to replace rock_happy.png with rock.png picture after 2 seconds
 - Create a link to page10.html with heading “Assign 10 – Forms”
- 10. Forms** – on page10 (with Heading Assign 10 – Forms)
- Add a form with;
 - 3 Textfields with labels for each one (Number 1, Number 2, Answer)

- ii. 2 Radio Buttons (Male & Female)
- iii. 1 Drop down List (with 3 options)
- iv. 2 Image Fields
- v. Insert a <p> tag with Message:
- vi. 2 buttons (Action = Reset Button and Action = None)
- b. Give each input type a name and id (including <p> tag)
- c. **Create a onBlur behaviour** for the 2nd textfield so that when it blurs (leaves text field), it will run a function adding the 2 textfields and placing the sum in the 3rd text field.
- d. **When the Regular button (Action = None)** is clicked
 - i. Depending on Gender chosen, a picture of a guy or girl is shown in Image Field 1
- e. **Create an onChange behaviour** - Depending on the option chosen in the drop down list, a suitable picture will appear in Image field 2 and appropriate text next to the picture. Use the <p> tag to enter text below / above the picture.
- f. Bonus: Create a link to page11.html with heading “Assign 11 – Cookies”

- 11. Bonus Marks:** Read the notes about cookies. Using the cookie.js file given in the handout drive, create a page that has 4 images of products with a price for each and 4 textfields, 1 for each picture. A button at the bottom of the images will do the following;
- a. Calculate the total cost per product (quantity ordered is entered in the textfields) and DISPLAY on page12.html (give a subtotal for each product)
 - b. Calculate the total cost and display under the subtotals.
 - c. Calculate 12% HST and display under total cost.
 - d. Calculate total amount, and display under HST.

Once you are complete put ALL assignments into ONCE folder named Assignment #2, put it on github.