

Exercise04: Javascript

Objectives:

To learn to use Javascript and play with basics

- simple variables (local and global), conditions, loops, methods, and arrays.
- User input validations.
- Event Handling

Work with your group (or by yourself). Each group should only upload one submission.

Credits (for edits): Isaac Martin, Zahra Hosseini.

1 Warm Up: Try Some Examples

1. First, open blackboard, go to Course Contents, and then download exercise04.zip file into your workspace (U:\workspace or something like that!). Then, unzip.
2. Play with each of the given examples (in the examples directory). Open them using a text editor of your choice and modify parts of the html or js files to learn how the different instructions work. If you want to use eclipse instead of notepad or vim or emacs etc., create a new static web project and create new html file and open it with a browser.
3. Note: w3schools.com is a good site to learn about web technologies.

Note that the assignment assumes you have understood these examples.

2 Form Validation

- Create two files **validation.html** and **validation.js**
- Change the TITLE of the validation.html page to "Validation Form". Create a HTML form in validation.html with the following Fields and a submit button. Make it look reasonably good.

Field Label	Field Type	Validation rule
Name	TextField	*Required. Must contain only alphabetical or numeric characters.
Gender	Dropdown	*Required.
Address	TextArea	*Required.
Email	TextField	*Required. Must be in the form xxx@xxx.xxx x should be alphanumeric (e.g. no special symbols).

Phone	TextField	Must be in the form xxx-xxx-xxxx or xxxxxxxxxxxx x should be numeric
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*Required = Cannot be Empty.

- Write Javascript code in validation.js to validate the above form when user clicks Submit button. Your code should display a confirmation if the validation was successful, or if there was an error, display an error message describing the cause of the error. Remember to include validation.js in the head section of validation.html

3 Event Handling

Write a Javascript and HTML code to implement the functionality shown in 'Problem2Output.mp4' included in the .zip file.

Hint : It uses HTML5 Canvas commands (see w3schools.com).

Submission:

Make sure your solutions work on Chrome (which is what TAs will use to grade the assignment). Zip your html and js files and submit on black board. Remember there is only one submission per group. Make sure to include all the files that are needed in order to run your program.