# COM S/SE 319 : Software Construction and User Interfaces Fall 2018

#### HW 2

[Total Points: 50]

Assignment Due: Wednesday, September 19, 2018, 11:59 PM

[N.B.:5% penalty per day up to maximum of 7 days from **September 20**, **2018**]

### 1. Warm Up: Try Some Examples (HTML & Javascript)

- a. First, open canvas, go to Assignments, and then download HW02.zip file into your workspace (U:\workspace or something like that!). Then, unzip.
- b. 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.

Note: w3schools.com is a good site to learn about web technologies.

Note that the assignment assumes you have understood these examples.

Note: Please always use relative path in your homeworks and Portfolios

#### 2. Form Validation

- 2.1 Create a form in HTML and validate entries of the form using javascript. [25 points]
  - **2.1.1** Create two files validation1.html and validation1.js.
  - **2.1.2** The TITLE of the validation1.html page should be "Validation Form".
  - **2.1.3** Create a HTML form in **validation1.html**:
    - a) Containing the fields as in the table below.
    - **b)** In addition, it should also have a "Continue" button.
    - c) Make it look reasonably good.

Validation rules will be explained in next step.

FIELD LABEL	Field Type	Validation rule	RESULT
First name	TextField	*Required.  Must contain only alphabetic or numeric characters.	<b>✓</b> / <b>X</b>
Last name	TextField	*Required. Must contain only alphabetic or numeric characters.	<b>✓</b> / <b>X</b>
Gender	Dropdown(male, female)	*Required	<b>✓/X</b>
State	Dropdown(Californi a, Florida, New York, Texas, Hawaii, Washington, Colorado, Virginia, Iowa, Arizona)	*Required Select from given list	<b>✓</b> / <b>X</b>

## \*Required field = Cannot be Empty.

- d) Read <a href="http://www.w3schools.com/js/js\_validation.asp">http://www.w3schools.com/js/js\_validation.asp</a>.
- e) Now, write Javascript code in **validation1.js** so that when user clicks "**Continue**" button it does the following:
  - It validates the entries (as per the table above) and for each entry

displays if the validation was successful, else it displays

. (These images are included in the lab's zip file as correct.png and wrong.png.)

- Once the validation is successful, it goes to the next page (validation2.html)
- f) Remember to include **validation1.js** in the head element of validation html

## 2.2 Create a form in HTML and validate entries of the form using javascript. [20 points]

2.2.1 Create two files validation2.html and validation2.js.

- **2.2.2** The TITLE of the validation2.html page should be "Contact information".
- **2.2.3** Create a HTML form in validation2.html:
  - a) Containing the fields as in the table below.
  - **b)** In addition, it should also have a "Submit" button.
  - c) Make it look reasonably good.

Validation rules will be explained in next step.

FIELD LABEL	Field Type	Validation rule	RESULT
Email	TextField	*Required. Must be in the form xxx@xxx.xxx x should be alphanumeric (e.g. no special symbols).	<b>✓/ X</b>
Phone	TextField	*Required.  Must be in the form  xxx-xxx-xxxx or  xxxxxxxxxx.  x should be numeric	<b>✓</b> / <b>X</b>
Address	TextField	*Required Must be in the form of city & state. example: Ames,IA	<b>✓</b> / <b>X</b>

<sup>\*</sup>Required field = Cannot be Empty.

- **d)** Read <a href="http://www.w3schools.com/tags/att\_input\_pattern.asp">http://www.w3schools.com/tags/att\_input\_pattern.asp</a>. Also, do look at validation example in ExamplesJS folder.
- e) Write Javascript code in **validation2.js** to validate the form as per the rules in the above table when the user clicks Submit button
- f) Your code should display if the validation was successful, or if there was an error, display .
- g) Remember to include validation2.js in the head section of validation2.html.

## 2. What to Submit:

Make sure your solutions work on Chrome (which is what TAs will use to grade the assignment). Submit via Canvas a **compressed file (.zip)** (rename it with your LAST NAME) containing the following:

- 1. All the files (.html and .js) which are needed in order to run your program(s). [45 points]
- 2. A **report** (.docx or .pdf) describing your solution approach and screenshots of every required output. [5 points].