COM S/SE 319 : Construction of User Interfaces
Fall 2020

Homework 2

[Total Points: 50]

Assignment Due: **Tuesday, September 8, 2020, 11:59 PM**

1. **Warm Up: Try Some Examples (HTML & Javascript)**
   a. First, open canvas, go to Assignments, and then download **Fall2020_HW02_Code.zip** file into your workspace (U:\workspace or something like that!). Then, unzip.
   b. Play with each of the given examples (in the **ExamplesJS** 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.
   c. Check the code of the example function of validation2.html in the **ExampleValidation** and see how it works by open validation2.html in web 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.	✔ / ✘
Last name	TextField	***Required.** Must contain only alphabetic or numeric characters.	✔ / ✘
Gender	Dropdown(male, female)	***Required**	✔ / ✘
State	Dropdown(California, Florida, New York, Texas, Hawaii, Washington, Colorado,Virginia, Iowa, Arizona)	***Required** Select from given list..	✔ / ✘

*Required field = Cannot be Empty.

    d) Read http://www.w3schools.com/js/js_validation.asp.

    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.) and the notification message about the correct format of input to users (check ExampleValidation/validation2.html as an example) .

- 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).	✔ / ✖
Phone	TextField	***Required.** Must be in the form xxx-xxx-xxxx or xxxxxxxxxx. x should be numeric	✔ / ✖
Address	TextField	***Required** Must be in the form of city & state. example: Ames,IA	✔ / ✖

*Required field = Cannot be Empty.

        d) Read http://www.w3schools.com/tags/att_input_pattern.asp. 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 and the notification message about the correct format of input to users (check ExampleValidation/validation2.html as an example) .

g) Remember to include **validation2.js** in the head section of **validation2.html**.

2. <u>What to Submit:</u>

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**].