

## Assignment 2

### Important Notes:

- This is an **individual assignment**.
- I will be checking for borrowed or copied assignments. All work is to be done from scratch, you may not use any templates or other assistances.
- This assessment is out of 30 marks total.
- This assignment is to evaluate your JavaScript skills for form validation and processing along with previously learnt HTML and CSS skills.

### Tasks:

In this assignment, you are to develop a web application for an online store. The type of store that you design, and its products and inventory is left to your discretion.

**1. Apply CSS to improve the user experience. (2 marks)**

**2. HTML Static Content - Web Form**

- The front end must collect **all** the information needed to make a sale to the customer. I have included a few in the description which are mandatory and must be included in your form. **(1 mark)**
- At least 2 products should be available for purchase. The user must be able to buy more than one product at the same time. The application's business logic must handle the products correctly. **(1 mark)**

**3. JavaScript - Form Validations and Client-side form processing:**

- All JavaScript code must be located in an external script file. **(1 mark)**
- The following user inputs must be validated:
  - **Mandatory fields (3 Marks):**
    - Name
    - Phone
    - Postcode
    - Address
    - City
    - Province

- Fields with specific format **(4 marks)**:
    - Credit Card in format xxxx-xxxx-xxxx-xxxx  
eg: 4111-1111-1111-1111
    - Credit Card Expiry Month in format: MMM  
eg: NOV
    - Credit Card Expiry Year in format: yyyy  
eg: 2021
    - Email should be in the format x@y.z where x, y, and z are one or more alphanumeric characters.  
eg: test@test.com
  - The values entered in the fields 'Password' and 'Confirm Password' should be the same. **(2 marks)**
  - If any errors exist, display a unique message for each erroneous input. Do not use a JavaScript popup box for this purpose. **(1 mark)**
  - Generate a receipt to give to the customer, including all the information entered by the user and the products bought. Use only client-side scripting for this. Do not use any server-side code for processing the form. **(5 marks)**
  - Calculate and include sales tax for **each** province/territory in Canada. **(2 marks)**
  - Make sure that the receipt is generated only if the customer has bought products worth \$10 or more. Otherwise give an error to the customer and tell them that the minimum purchase should be of \$10. **(2 marks)**
- 4. Video demo explaining your code and showing the final execution of the assignment. Make sure to showcase all the form validations mentioned above properly and then submit the form to generate the receipt.** If you are working in a group, make sure to explain who did which part of the assignment. There should be a 50% - 50% division of effort between both the group members. For the video demo, you are not required to use your camera, but you can if you want. You are only required to record your screen and your voice explaining the solution. **(4 marks)**
- 5. Programming Style, Standards and overall completion of the tasks. (2 marks)**
- It is a good idea to practice conforming to a set of programming standards. Refer to the posted summary of the IT Standards posted in IT Programs > General Resources.

*You can choose the design, fonts and colors as per your preference as long as you fulfill the minimum requirements mentioned above. You can name your online shop as per your liking and the product names too.*

**Submissions:**

To submit this assignment:

1. Place all of your code into a single folder. Zip (or RAR) this folder and submit the zipped file to eConestoga. No cover sheet is required for this assignment. A good way to make sure everything is correct; is to unzip the file you are submitting on a different location on your computer and making sure everything works.
2. **Upload the video explanation separately from your code zip file.** Please do not zip your video with the code. You may have to make a second submission for that as the dropbox only allows you to submit one file at a time.

**Note:** You can submit multiple times if you want. Please mention in comments which submission to evaluate. Also note that if you resubmit after the due date, late penalties apply as per your Program Handbook.