Assignment 3

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 45 marks total.

- This assignment is to evaluate your server-side programming (PHP) 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. HTML and CSS for static content - Web Form **(3 marks)**

    - 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.

    - At least 2 products should be available for purchase at the same time. The application's business logic must handle the products correctly and allow users to purchase multiple products in one go.

2. **PHP – Server-side form validations and server-side form processing:**

    - **Note:** You have to write server-side code only, for validations and form processing. Do not write client-side (JavaScript) code for form processing or validations.

    - The following user inputs must be validated:
        - Mandatory fields **(3 Marks)**:
            - Name
            - Phone
            - Postcode
            - Address
            - City
            - Province

- Fields with specific format (use regular expressions) **(8 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 validation errors exist, display a unique message for each erroneous input using PHP code. **(3 marks)**
- Generate a receipt to give to the customer, including all the information entered by the user and the products bought. Use only server-side scripting for this. Do not use any client-side code for processing the form. **(6 marks)**
- Calculate and include sales tax for **each** province/territory in Canada. In the receipt, display the tax based on the province selected by the user. **(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)**

3. 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.** 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. **Please submit .mp4 files only.** You can use Zoom/PowerPoint for doing that, but you can use any other software for recording the video too if you prefer another software. **(6 marks)**

4. Programming Style, Standards and overall completion of the tasks. **(10 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 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. **Submit .mp4 files only for the video.**

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.