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 20 marks total.

- You are required to use client-side JavaScript programming for this assignment.

- **This application should be built using HTML, CSS, and JavaScript.** Use of third-party libraries or the ones used in the class is not allowed.

Tasks:

In this assignment, you are to develop a web application for a garage sale fund raiser. The organizers want an online garage sale application where the users can fill an online form and be given a receipt. The fund raiser cause, sale items and inventory are left to your discretion. Currently, you do not have to process the forms on the server side or save the data into a database. You are only required to do client-side programming where the code runs in the browser.

HTML Requirements:

- To generate an estimate, collect the user's name, email address and credit card information. **(1 mark)**
- Make sure there are at least 5 items available for sale. **(1 mark)**

JavaScript Requirements:

- All JavaScript code must be in an external script file. **(1 mark)**
- The following user inputs must be validated:
  - 2 Mandatory fields name and email address. **(1 mark)**
  - Fields with specific format **(3 marks)**:
    - Credit Card in format xxxx-xxxx-xxxx-xxxx
      e.g.: 4111-1111-1111-1111
    - Credit Card Expiry Month in format: MMM
      e.g.: NOV
    - Credit Card Expiry Year in format: YYYY
      e.g.: 2021.

- At least one item should be bought, and the value customer enters in the item quantity input boxes should be a number. **Do not use input type number in HTML. You must do the validation in JavaScript. (2 marks)**

- As a part of the fund raiser the customer must donate $10 or 10% of the total price of items they are buying, whichever is higher. Automatically calculate the donation amount based on the total purchase. **(2 marks)**

- If any errors exist, display all the error messages on the web page. Do not use a JavaScript popup box for this purpose or show only one error at a time. **(1 mark)**

- Generate a receipt to give to the customer. Show only the last 4 digits of the credit card along with the rest of the information like name, email, products, quantity, total cost, donation amount, etc. **(2 marks)**

2. Video demo explaining your code and showing the final execution of the assignment. **Make sure to showcase all the features of your application like filling the product quantity, customer name, all the validations and 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 and your code. **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. **(4 marks)**

3. 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 store as per your liking and the product names too.

Submissions:

To submit this assignment:

1. Place all 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.