Workshop Grading and Promotion Policy

Workshops for this course will be assessed using the following criteria:

- Workshops are graded based on two components:
    1. Individual Logic Assignment (40%)
        - Individual work is due **2 days** **after the assigned date** (class) by **end of day 23:59 EST**
        - Individual logic assignments are to be done individually
        - Members who do not submit work on-time, will receive a zero grade for the workshop
        - Members who receive a zero grade for the individual part, will not be eligible to receive grades for the group solution part
    2. Sub-Group Overall Solution (60%)
        - Group solution is due **4 days** **after the assigned date** (class) by **end of day 23:59 EST**
        - **Name and ID of all contributing members must be stated at the top of all file submissions**
        - If not submitted on-time, a zero grade will be applied for the group portion of the workshop
        - If the submitted solution is essentially a copy of the individual parts thrown together containing no effort to properly integrate as a seamless overall solution, a zero grade will be applied for the group portion of the workshop

- A zero grade on a workshop will not be counted towards the minimum necessary number of completed workshops

- Video presentations are due **1 day after your next class** by **end of day 23:59 EST**
    o Each student must do a video presentation **at least once** by the end of the term and should minimally consist of the following:
        ▪ Description of the problem and its solution in non-technical terms. You should assume your audience is non-technical and interested in using your application solution.

        ▪ Market your application solution by providing sample screenshots of how you envision your application to look which should include a sample workflow demonstrating how easy it is to use

- You must **successfully complete 9 workshops** (if > 9 are completed, the best 9 will be used)
- Workshop solutions and presentations will be evaluated using the published workshop rubrics

Group Breakdown

Each group has **two sub-groups** determined by the assigned **member number**:

Sub-Group 1: **Members 1-3**
- **Member-1**: Responsible for doing workshop **Logic 1**
- **Member-2**: Responsible for doing workshop **Logic 2**
- **Member-3**: Responsible for doing workshop **Logic 3**

Sub-Group 2: **Members 4-6**
- **Member-4**: Responsible for doing workshop **Logic 1**
- **Member-5**: Responsible for doing workshop **Logic 2**
- **Member-6**: Responsible for doing workshop **Logic 3**

Sub-Group Solution

- Each sub-group is a team and **must work together** creating the overall group solution
- The group solution is not to be done by an individual. The group solution is expected to be a seamless solution (looking as though one person has done it) and has undergone refinement and testing to ensure the logic properly addresses the workshop problem.
- If the submitted work amounts to essentially copying and pasting everyone's logic part together, a zero grade will be applied for the group work portion.

Work Submission

All work must be emailed to your instructor. You must follow the email guidelines described below.

- All work submitted (applied to both individual and group submissions) ==**requires all contributing members names to be stated at the top of all files being submitted**==

Email Subject Line
- o Highlighted parts indicate your specific information
- o There are no spaces
- o **APS145-[SECTION]-WS[#]:Group[#]**
  - ▪ Example: **APS145-NAA-WS1:Group3**

File Attachment
Individual Work Submissions
    Attach a file containing your work (**pseudo code** OR **flowchart**)
- o Highlighted parts indicate your specific information
- o **Pseudo code**: **logic[#].fullname.pseudocode.txt**
  - ▪ Example: **logic2.Cameron Gray.pseudocode.txt**
- o **Flowchart**:   **logic[#].fullname.flowchart.jpg**   *(Note: .jpg or .png)*
  - ▪ Example: **logic3.Cameron Gray.flowchart.png**

Sub-Group Solution Submission
    Attach a file containing your group work (**pseudo code** OR **flowchart**)
- o Highlighted parts indicate your specific information
- o There are no spaces
- o **Pseudo code**: **ws[#].group.pseudocode.txt**
  - ▪ Example: **ws1.group.pseudocode.txt**
- o **Flowchart**:   **ws[#].group.flowchart.jpg**   *(Note: .jpg or .png)*
  - ▪ Example: **ws3.group.flowchart.png**

Presentation Submission
    Video files can be quite large and will most likely be rejected by Seneca's email services. Therefore, you will have to **SHARE** your video file using your Seneca account Microsoft **ONE drive**.
- o **Video file name**:   **WS[#].fullname.video.mp4**
  - ▪ Example: **WS4.Cameron Gray.video.mp4**
- o Go to https://myseneca.ca, click on (top left corner) ⊞ and select the One Drive application option
- o Upload your video file: ⤒ Upload ⌄
- o Share ⬈ the file with your instructor: **Copy the shared link**

    Copy link
    People in Seneca with the link can view >   Copy

- o Paste the shared link into your email

Workshop - 10

<u>Workshop Value</u>: 10 marks (5% of your final grade)

Workshop Overview

Online webpage calculator application tools are very popular – especially when you need an estimate when ordering products/services that have a heavy price tag attached. One example of such a product is paint. Performing an accurate cost estimate can get complicated and have many steps involved. Most customers will not dedicate too much time in doing this accurately themselves and will most likely make errors.

Workshop Details

An online paint estimator tool is required to provide an accurate estimate of the number of cans of paint needed for the customer's needs as well as the total cost (net/sub-total: without tax and gross: with tax). You need to define the overall necessary processes required for this application.

There are some basic requirements you need to account for:

1. **<u>Paint Types</u>**

   <u>Base Paint</u>

   - Base coat paints have less coverage as they are designed to soak into the wall/surface material and seal the pores so a smooth and consistent final coat can be applied for a better professional look.
   - Typically, two (2) coats are applied for best results, but this ultimately is up to the customer if it is even used at all
   - Base coat paints have a coverage of 12 m^2 and cost $40.75 per can

   <u>Finishing Paint</u>

   - Finishing paints are more expensive and provide the final desired colour (they also have higher coverage rates if a base coat was used)
   - Depending on if a base coat paint was applied (and how many coats), the number of suggested coats required of the finishing paint varies:
     - If two (2) coats of base paint were used, one (1) coat of finishing paint is sufficient
     - If one (1) coat of base paint was used, two (2) coats of finishing paint is suggested
     - If no base paint was used, three (3) coats of finishing paint is suggested
     - The number of planned coats is ultimately up to the customer
   - Finishing paints have a coverage of 15 m^2 and cost $47.75 per can

2. **<u>Input Information</u>**
   - You need to be able to determine the overall area that needs painting to be able to provide an estimate.
   - You can't ask the customer to simply enter the total area – the online tool must determine and calculate this information based on the necessary inputs from the customer
   - You must provision for the customer to enter the required dimensions/measurements that reflect their painting requirements
   - You can assume metric meter (m) units are used.

Note/Hints
- You should not include openings that don't require painting such as doors and windows
- Don't forget about ceilings…

3. Output Information
- The final output to the customer should include the following details:
    - <u>Total area</u> to be painted
    - <u>Itemized listing of the paint</u>, unit cost/can, quantities, and total cost. This means…
        - Base paint (if applicable) will be on its <u>own line</u> (showing the unit cost per can, number of cans required and the total cost for that paint <u>before taxes</u>)
        - Finishing paint will be on its own line (showing the unit cost per can, number of cans required and the total cost for that paint <u>before taxes</u>)
    - <u>Sub-Total</u> of the detailed itemized total above <u>before taxes</u>
    - <u>Taxes (HST)</u> amount to be applied to the sub-total amount at a rate of 13%
    - <u>Total</u> of the sub-total and taxes combined

Work Breakdown

[Logic 1] Define the process that calculates the AREA to be painted. This will prompt for the room dimensions along with the door and window details.

[Logic 2] Define the process that determines the paint type(s) and calculates the number of cans of paint required. The total area information will be sent to this subprocess (an input) since this will have been already calculated and the process should prompt for the number of coats of each paint type. Don't ignore the default suggestions for best results.

[Logic 3] Define the process that displays the itemized details of the estimate and calculates the sub-total, taxes, and total cost of the required cans of paint. All the estimate detail information such as total area and the number of cans of each paint type etc. will be sent to this subprocess (as input) as this will have already been determined).

[Group Solution] Create a "main" process that will call the other subprocesses as required to solve the overall problem.

Your Tasks

1. Where applicable, apply the core components of the **computational thinking** approach to problem solving to help you synthesize a solution
2. Communicate the independent logic parts and group solutions using pseudo code/flowchart (see assignments below)
3. Create a video presentation to market your envisioned application

Individual and sub-group assignments

Sub-Group 1 (pseudo code)				
Task	**Subtask**	**Member(s)**	**Marks**	**Comments**
Pseudocode	Logic 1	**4**	40%	Members are graded <u>individually</u>
	Logic 2	**5**	40%	
	Logic 3	**6**	40%	
	Group Solution	**4-6**	60%	Eligible members get <u>same mark</u>
Sub-Group 2 (flowchart)				
Task	**Subtask**	**Member(s)**	**Marks**	**Comments**
FlowChart	Logic 1	**1**	40%	Members are graded <u>individually</u>
	Logic 2	**2**	40%	
	Logic 3	**3**	40%	
	Group Solution	**1-3**	60%	Eligible members get <u>same mark</u>
Video	Presentation *****	**1 or 4**	100%	Members rotate weekly

* Presentation: Decide among yourselves which member among the entire group will be doing the presentation. Priority should be given to those who have not yet done one.