## **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
  - 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 <u>not</u> 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
- APS145-[SECTION]-WS[#]:Group[#]
  - Example: APS145-NAA-WS1:Group3

#### File Attachment

#### **Individual Work Submissions**

Attach a file containing your work (pseudo code OR flowchart)

- Highlighted parts indicate your specific information
- Pseudo code: logic[#].fullname.pseudocode.txt
  - Example: logic2.Cameron Gray.pseudocode.txt
- 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)

- Highlighted parts indicate your specific information
- There are no spaces
- Pseudo code: ws[#].group.pseudocode.txt
  - Example: ws1.group.pseudocode.txt
- 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**.

- Video file name: WS[#].fullname.video.mp4
  - Example: WS4.Cameron Gray.video.mp4
- Go to <a href="https://myseneca.ca">https://myseneca.ca</a>, click on (top left corner) and select the <a href="One Drive">One Drive</a> application option
- O Share the file with your instructor: Copy the shared link
- o Paste the shared link into your email

# Workshop - 7

Workshop Value: 10 marks (5% of your final grade)

# **Workshop Overview**

As you have probably recognized by now, computer systems and applications are all about data. Data is always introduced to the system or application at some point as input. Data input is traditionally accomplished by using a keyboard or mouse, but it is important to be aware there are <u>many</u> other ways to obtain data input.

Computer applications can also obtain data input by "pulling" it from some other source (other than a human/end-user). This source can be local (on the same machine) or remote (using the internet). There are many methods available to "pull" data and you will be learning about these in the coming semesters. The most common however, involve files, databases, and webservices.

Another widely used method of data input is through the use of scanners. These are often used in retail stores to scan barcodes for easy data entry. Use of this type of technology is extremely efficient when compared to a manual human method of input – especially if you can use this technology automatically without even human intervention.

This workshop is an introduction to using more modern methods of data input and to integrate it into your solutions which ultimately add more efficiencies to daily business processes.

# **Workshop Details**

A car wash business is looking for a system that will further automate their daily redundancies - more specifically, the processing of customers who line-up for a car wash.

To address most of the inefficiencies and costs, the operation has decided to use a **fully automated computer** <u>kiosk</u> approach (similar to a drive-through) which will eliminate the need for a cashier to manually process each customer car wash request and payment. Regular customers can simply drive up to the kiosk, select a wash option, make a credit card payment (<u>NO CASH</u>), and proceed to get the car washed.

The new approach in processing customer transactions has opened an opportunity to offer **prepaid monthly VIP memberships** that permits up to 3 washes per day at a reduced monthly charge.

**Note**: The process of signing up for VIP membership is <u>not</u> done through the kiosk system and therefore does not have to be addressed in this workshop.

When VIP members create their account (not done using the kiosk), they select the wash-tier they want to sign-up for and are charged accordingly for that tier (this is the wash tier they have prepaid for). VIP members will have a stick-on chip affixed to their vehicle windshield.

Vehicles approaching the kiosk station are automatically scanned by the system and if a stickon chip is successfully detected and read, VIP members can be identified including their individual contracted wash tier option.

VIP members have the **option to override** the wash-tier they signed up for (applies only to that one wash and does not affect their subscription agreement). If a VIP customer chooses a **different wash-tier from their agreement**, <u>regular rates will be charged</u> for the selected wash-tier (<u>even if it is a less expensive tier</u>).

**Note**: If a VIP member wants more than 3 washes on the same day, the customer will have to pay regular rates.

<b>Car Wash Options</b>		
<u>Tier-1</u> "Basic"	\$ 4.00	
<u>Tier-2</u> "Clean"	\$10.00	
<u>Tier-3</u> "Super Clean"	\$17.00	

You do not have to describe the details of the receipt, but a receipt should be generated.

# Work Breakdown

[Logic 1] Define the logic for a **regular** customer who must pay for the selected wash-tier to get their car washed.

**[Logic 2]** Define the logic for a **VIP** customer who will <u>not have to pay</u> because they are getting the wash-tier they have prepaid for in their membership.

**[Logic 3]** Define the logic for a **VIP** customer who wants a <u>different wash-tier</u> from what they have prepaid in their membership **OR** has <u>exceeded their three-wash limit</u> for the day.

**[Group Solution]** Create a "main" process that calls the appropriate defined subprocesses to produce a complete solution to the 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	1	40%	Members are graded <u>individually</u>	
	Logic 2	2	40%		
	Logic 3	3	40%		
	Group Solution	1-3	60%	Eligible members get same mark	
Sub-Group 2 (flowchart)					
Task	Subtask	Member(s)	Marks	Comments	
FlowChart	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 same mark	
Video	Presentation	1 or 4	100%	Members rotate weekly	

<sup>\*</sup> **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.