

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 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

- Highlighted parts indicate your specific information
- 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 <https://myseneca.ca>, click on (top left corner)  and select the One Drive application option
- Upload your video file: 
- Share  the file with your instructor: **Copy the shared link** 
- Paste the shared link into your email

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

Workshop Overview

Black boxes are widely used and referred to in the world of programming. They represent specific processes that are hidden from the consumer (end-user, programmer, or conceptually by management etc.). In the programming sense, this can be a large-scale process (a system or application) or be as minute as a function (such as a shared Application Program Interface [API], or a web-service). There are two other types; **Grey Boxes** where some knowledge of how the process works is known and **White Boxes** where all the logic is visible/known by the consumer.

In the case of “**functions**”, each function should be limited to a very specific task. Although not necessary, most of the time functions will require some input information and use that input to produce some meaningful output (or result). This workshop is focused on function-based **Black Boxes** and **White Boxes** that do a very specific task and are called from other processes as required which will simplify the overall logic. The **Black Boxes** will be briefly described for you so you will know what functions exist and can implement into your solution and where you will not have to provide an algorithm for, while the **White Boxes** will be the sub-processes you must fully define.

Recap

Black Boxes are those that you do NOT have knowledge of how it works – you only know that it should accomplish some meaningful output based the input you provide it.

White Boxes are those that you have full knowledge of how it works because you will be defining those subprocesses and exposing all the logic (the algorithm) accordingly (ex: Logic-1, Logic-2, and Logic-3 components and any additional supportive subprocesses you may want to add).

Black and **White Boxes** can be called from anywhere in your defined processes – these are merely functions that will perform specific tasks to streamline/simplify the overall algorithm.

Workshop Details

You need to create a **software application** that will be used in a grocery store **self-checkout machine**. You need to define a solution that will provide a customer the means to process the items from their shopping cart (perishable and non-perishable products), through to the payment for the items that will include an itemized receipt (total breakdown of all the items).

Work Breakdown

Refer to the supplemental PDF document for this workshop: "**Workshop_08_Supplemental.pdf**"

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 *	2 or 5	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.