CO-OP SUMMATIVE Demonstration of Skills (Rich Task)

WHAT IS IT?

- An opportunity to teach and/or demonstrate to your co-op teacher what you have learned at your co-op placement.
- Focuses on a specific task(s) that best reflect(s) your skill development to date during your co-op experience (e.g. Performing an oil change at an auto shop, teaching a lesson in a classroom, etc.)
- Should take 20-30 minutes, but can be longer if arranged with your co-op teacher.
- Worth 30% of your final mark, so MAKE IT COUNT!!!!!
- Must be coordinated **BY YOU** and your supervisor for a date and time that fits everyone's schedule.

STEPS:

- Use the **Demo Plan Rich Task Template**
- The template is a working copy that you can use to discuss your demo plan with your supervisor.
- The Demonstration plan needs to be submitted via smore link to the box in Google classroom
- Sign up for the date and time of your Demonstration with your co-op teacher via the Google calendar

EXPECTATIONS:

- Be prepared and organized for your demonstration Plan is well organized and includes a range of skills
- Communicate effectively with a strong sense of purpose and enthusiasm (using workplace specific vocabulary or terminology.)
- Use visuals to enhance your presentation.
- Be familiar with all the components of your demonstration (including preliminary work leading up to your task(s) and the follow-up procedure once work is completed).
- Be sure to demonstrate a variety of skills acquired (Essential Skills, Technical Skills and work habits)
- Be prepared to answer questions about the work being performed.
- You will be assessed in all of the four categories (Application, Knowledge and Understanding, Communication and Thinking and Inquiry)

Student Name @ Co-op Placement: Varun Dawrha

Date(s): July 19th

Time of Demo:

Description of Activity:

What will you be teaching me?

I will be writing Python code. I will make a program that will showcase the skills that I've learned when learning Python. The activity I will do will be extracting the text from image and I will also write a code to plot a graph from the text file.

Rationale:

Why have you chosen this specific task or set of tasks? For example: Is it important to your daily routine? Is this task an important function of the business?

As a student I personally gets lots of writing work to perform and if any image has a perfect text that I need for my work will be beneficial but copying text from the image will be time consuming and also its hard to copy text from the image, similarly in the businesses the employes work so hard and if any of text file they have to copy from thee image will be hard so by using my Python code it will be easy to extract the text from image which is not time consuming and also interesting to perform. Observing a graph is also an important in our daily because sometimes looking at the values might be confusing for example for business owner just looking at the profit and loss table might not get right indentation of total is in how much profit but observing at the increasing profit line the owner might feel more successful. Similarly, we can see in the weather report that at what time will be temperature be, observing the visual of the graph make it more understandable.

Details of the Activity:

Outline the specific steps and details of the activity.

Activity: Extracting Text from Image and Plotting a Line Graph

Part 1: Extracting Text from an Image

Step 1: Install Required Libraries

- Ensure that you have Python installed on your system.
- Install the following libraries:
- pytesseract: for optical character recognition (OCR)
- Pillow: for working with images in Python

Step 2: Import Libraries

- Import the necessary libraries in your Python script:

Step 3: Set Tesseract Path (Optional)

- If Tesseract OCR is not in your system's PATH, you need to provide the path to the Tesseract executable:

Step 4: Load and Process the Image

- Provide the path or filename of the image you want to extract text from.
- Open the image using the `Image.open()` function.

Step 5: Extract Text from Image

- Use the `pytesseract.image_to_string()` function to perform OCR on the image and extract the text.

Step 6: Display or Use the Extracted Text

- You can choose to display the extracted text on the console or use it in your further processing.

Part 2: Plotting a Line Graph

Step 1: Install Required Libraries

- Ensure that you have the matplotlib library installed:

Step 2: Import Libraries

- Import the necessary libraries in your Python script:

Step 3: Read Data from a Text File

- Provide the path or filename of the text file containing the data for the line graph.
- Read the lines from the file and extract the x and y values.

Step 4: Plot the Line Graph

- Use the `plt.plot()` function to plot the line graph.
- Customize the graph by setting labels, title, and other options.

Step 5: Display the Graph

- Use the `plt.show()` function to display the line graph.

Required Materials:

- Computer
- Visual Studio code
- Txt.file
- Image

Special Instructions for Co-op Teacher:

Demonstration of Skills Evaluation Rubric

Student: _____ Workplace:

Category	Level 1 50-59%	Level 2 60-69%	Level 3 70-79%	Level 4 80-100%		
Communication						
Demonstration Plan Complete	Plan is basic or incomplete	Plan is completed with some effectiveness	Plan is completed with effectiveness	Plan is highly professional and exceeds expectations		
Use of visual elements in Demo Plan and during demo	Limited or ineffective use of visual elements	Some use of visual elements	Effective and appropriate use of visual elements	Visual elements add impact and are highly effective		
Use of language conventions (uses work-related terms)	There are errors and vocabulary is limited.	There are few errors and vocabulary is somewhat suitable	There are no errors and vocabulary is suitable	There are no errors and vocabulary is highly suitable		
Interest and enthusiasm	There is limited evidence of interest/enthusias m	There is some evidence of interest/enthusiasm	There is considerable evidence of interest/enthusias m	There is thorough evidence of interest/enthusias m		
		Application				
Overall organization and evidence of preparation and planning	Limited organization and evidence of preparation and planning	Some organization and evidence of preparation and planning	Considerable organization and evidence of preparation and planning	A high degree of organization and evidence of thorough preparation and planning		
Evidence of the development of a range of workplace skills appropriate to their placement	Evidence of limited workplace skills	Evidence of emerging workplace skills	Considerable evidence of a range of workplace skills.	Thorough evidence of higher level workplace skills		
Knowledge and Understanding						
Knowledge of Essential Skills and work habits required for career	Basic knowledge demonstrated	Some higher level knowledge demonstrated	Considerable higher level knowledge demonstrated	Thorough higher level knowledge demonstrated		
Ability to answer questions at the demo	Many questions not answered or answers not known	Some questions not answered or answers not known	All questions answered appropriately	All questions answered thoroughly		
Thinking and Inquiry						
Selection of an appropriate Rich	Selected task is very basic and there is no or little	Selected task is somewhat appropriate and	Selected task is appropriate and	Selected task is highly appropriate and there is		

Task and well-	evidence of	there is some	there is evidence	thorough
developed rationale	critical thought	evidence of critical	of critical thought	evidence of
	_	thought	_	critical thought