

Project 1: Pseudocode Me a Sandwich

COSC 1423 | Fall 2023

Instructor: Megan Avery

Topics: program design & pseudocode

Goal: Write pseudocode that describes how to make your favorite sandwich, something at least as complex as a peanut butter and jelly sandwich.

Turn In Instructions: A .pdf file named project01_firstname_lastname.pdf that contains the required pseudocode. Projects with incorrect file names will lose 3 points. If you're completing the extension you will need to turn in a .py file in addition to the .pdf file.

What pseudocode?

Pseudocode is essentially fake code. It lays out the instructions for how to do a specific task. These instructions are detailed and encompass each part of the task.

Implementation (90 pts):

Using as much detail as is required, write pseudocode that would teach a computer how to make your favorite sandwich. If you are assuming some previous knowledge from the computer (e.g. how to spread ingredients on a slice of bread) simply state this assumption. If I sat down and followed your instructions I should get the sandwich and nothing else. If you are familiar with coding incorporate whatever knowledge you may have in the pseudocode. For example, you might wish to write a "function" that could be used for the spreading of an ingredient on a slice of bread. You will not be penalized if you don't reference coding constructs in your pseudocode, it's understood that some students have never coded before.

Design Doc Questions (10 pts):

1. How long did this assignment take you to complete?
2. Did you complete the extension?
3. What was the most challenging part of the assignment?
4. What did you learn from the process of doing this assignment?
5. Did you use AI for this assignment? If so, what queries did you use?

Considerations:

Whoever is following your instructions will do only what you tell them to do. For instance, if you forget to tell them to open the jar of peanut butter they will be unable to do the rest of the steps to make the sandwich. You need to be as concise as possible while giving all the required information.

Extension (+5 pts):

Take your pseudocode and write a Python program. This could mean anything from simply printing out your instructions to introducing more advanced constructs like variables and functions. Printing out the instructions will gain you full extra credit but part of this exercise is for me to gain insight into how much you already know about coding. You're encouraged to make this as complex as you are able. Your code should be in a .py file. You will only receive +2 pts if your code doesn't run successfully. You will receive no extra points if it is not actually Python.