A close up of a map

Description automatically generated

To complete the flow chart, required a lot of initial research to get a better understanding of what was necessary to complete the task. Learning how to break down each step was vital in grasping the concept, all while following the best practice: “In the face of ambiguity, refuse the temptation guess.” This meant more than learning what shape was needed but knowing why it was being used and what it identified. Approaching the flow chart with this mindset, took me a very long time to complete. One area that I had to use this best practice was the first input/output box that I created. Not sure which shape I needed to use to continue the logical flow was the first sign that I needed to do more research before continuing any further. As my understanding of the logic of the flow chart grew, my understanding for how to complete the task did as well.

Now that I understood flow charts and their design, I needed to research further into some good problem-solving practices to use in programming. Adapting habits like “identifying the small problems first” and “connecting the dots” of processes and data, helped me begin filling in the design I had created for the flow chart. By looking at the small problems, I was able to discover that I would need to use an array of [ i ] to hold an integer value for all items purchased. Using the practice of integration ensured fluidity and readability throughout the flow chart as well. Making sure that the correct variables were used will help guarantee that no error is drawn when you use the flow chart to assist in writing code. By integrating these two problem-solving techniques I was able to address a need and in doing so, also find an answer to pass on variables storing information. There are many more problem-solving practices that can be used in the same situations, though these two examples provided the necessary assistance with the assignment. Perhaps continuing to study more of these practices would benefit me and help me learn and continue learning the ever-progressing language.

References:

<https://www.cs.put.poznan.pl/csobaniec/software/python/py-qrc.html>

The Python Standard Library¶

<https://docs.python.org/3/library/>

Introduction To Flowcharts

Paget Teaches... - <https://www.youtube.com/watch?v=zfjhVS8VWPM>

Python Arrays

<https://www.programiz.com/python-programming/array>

Top of Form

The Beginner Programmer's Guide To Problem Solving [with Example]

Rajaraman Raghuraman - [https://www.codeproject.com/Tips/833768/The-Beginner-Programmers-guide-to-Problem-SolvingBottom](https://www.codeproject.com/Tips/833768/The-Beginner-Programmers-guide-to-Problem-Solving) of Form