Milestone 2: Control Structure Activity

# This loop will allow the inner if and else statements to keep iterating whike the appropriate condition is met. I also ensured that throughout this code 4 spaces were used to ensure proper indentation techniques. I chose the while statement because when writing the below if and else statements the code would only run once without it. I did do external research and looked at lots of examples on Stack Overflow and freecodecamp’s programming basics for Python tutorial video on multiple occasions. This assisted in providing clarity to various elements throughout this process. I believe that the while control structure provides the most efficient way of solving the iteration process and makes the program smart because it is not based on a certain specified integer value to manipulate the looping process but an actual true condition.

while True:

# Allows the user to input a value and stores it in the variable user\_input. Best practices used simple but efficient uniform naming scheme in addressing variables. This control structure is the most efficient in storing the user inputted values. I tried to do this variable and a stand-alone print statement to manipulate the string formatting that resulted in additional code. I also made sure and try to use single quotes with simple strings and most arguments

user\_input = input('Enter input string: \n')

# Checks to see if the user inputted value is not equal to q and allows the program to iterate to the next sequence unless True.

if(user\_input != 'q'):

# Replaces the specific values of the user\_input variable with the specified value. I also ensured that all code followed uniform spacing between the values and operators. The tool I used to ensure the variable stored was correct formatting was the print statement.

user\_input = user\_input.replace(' ', '')

# This if else statement checks to see if a comma was used in the user input and if that condition was met, splits the user inputted values at their comma. This if statement also prints the user inputted values at position 0 and 1. The else statement is in case the conditions are not met in the if statement. This condition also informs the user of a syntax format error. I had to go back to the previous chapter 3.2 to review using the correct index arguments, so I could achieve the desired print output. Ex: [0] vs [0:1].

if ',' in user\_input:

user\_input = user\_input.split(',')

print ('First word: ' + user\_input[0])

print ('Second word: ' + user\_input[1])

print("")

print("")

else:

print('Error: No comma in string.')

# Terminates the program if true, based on the ‘related’ If condition is not true listed above.

else:

break

Professional Reflection:

Cyber security is extremely critical in today’s technological world. I firmly believe that every person will need some sort of digitalized protection now and in the future. I enjoy finding vulnerabilities and conducting investigations of suspicious circumstances. I personally have conducted investigations for several companies that were related to payment card industry data security standard or PCI-DSS. These investigations were for flaws in c-store point-of-sale systems, card site devices, and various skimming techniques used on fuel dispensers utilizing various data transfer techniques.

The practice of PCI-DSS is to protect the user’s personal account numbers or PAN. This will allow consumers to have a secure and safe environment to conduct financial purchases. The practice to cyber security isn’t limited to these examples, and reaches a broad range of topics such as phone, computer, network, and even children’s toys. I project cyber security in the future will be a necessity to protect ones way of life not just privacy.

The best way to prepare for a role in the cyber security field is to first understand physical security. I served in the military as a Security Forces member for several years, providing various physical security implantations. Cyber security will always encompass physical security like keeping an entry access log for data centers or critical network infrastructure areas. The next step, I would achieve is to practice on interpersonal skills like effective listening and communicating techniques. I would then progress to the basics in computer technologies followed up with a shot of networking fundamentals.