**CTA 5 Text File Editing C++**

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# **Pseudocode:**

Procedure appendToFile(filename, data)

Open the file named filename in append mode

If the file is open

Write data to the file

Close the file

Display "Data appended to filename successfully."

Else

Display "Unable to open file: filename"

End If

End Procedure

Procedure reverseString(str)

Create a new string reversedStr and copy str into it

Initialize start to 0

Initialize end to length of str - 1

While start is less than end

Swap characters at position start and end in reversedStr

Increment start

Decrement end

End While

Return reversedStr

End Procedure

Function validateInput(input)

Define a regex pattern that allows letters, digits, '.', ',', '!', and '?'

Return whether input matches the regex pattern

End Function

Function main()

Initialize userInput as an empty string

Declare inFile // a file input stream

While true

Display "Enter text to append to CSC450\_CT5\_mod5.txt (or type 'quit' to exit): "

Read userInput from the user

If userInput is equal to "quit" Then

Break // Exit the loop

End If

If not validateInput(userInput)

Display "Invalid input. Please provide text with only letters, digits, '.', ',', ‘!’, and '?'"

Continue // Skip this iteration and prompt for input again

End If

Call appendToFile("CSC450\_CT5\_mod5.txt", userInput)

End While

Open the input file "CSC450\_CT5\_mod5.txt" for reading and assign it to inFile

If the file is not open

Display "Unable to open CSC450\_CT5\_mod5.txt for reading."

Return 1

End If

Read the entire content of inFile into a string named fileContent

Close inFile

Reverse the content of fileContent and store it in reversedContent

Open a new output file "CSC450-mod5-reverse.txt" for writing

If the file is open

Write reversedContent to the file

Close the file

Display "Reversed content saved to CSC450-mod5-reverse.txt."

Else

Display "Unable to open CSC450-mod5-reverse.txt for writing."

Return 1

End If

Return 0

End Function

# **Figures Section**

## **Figure 1.**

Asking for User input, performing validation, and limiting special characters input.

A screen shot of a computer code

Description automatically generated

## **Figure 2**

GitHub Repo

A screenshot of a computer program

Description automatically generated