

Assignment 3 – Programming Project 9.3 Report

Understanding –

For Assignment 3, I will be focusing on programming project 9.3. The other 2 were laid out in understanding and design and frankly it makes no sense to write 4 different reports for this week's assignment. (Especially when the other assignments are to generate 10 random numbers and to use an if $x == y$ statement)

The program seems to be pretty straightforward. It asks the user for their name in the format of First Middle Last (or First Last) and will then display the output in the format of Last, First Middle_Initial (or Last, First).

The biggest step is that the program must be able to produce the same result whether it's 2 names entered or 3 names (and whether they enter their middle initial or entire middle name).

Design –

I have attached a PDF at the bottom of this document with my original flow. As we learned about functions, I attempted to create functions to find the names and use advanced techniques.

I figured there are a few major steps (in no particular order):

1. Determine how many names/words were entered
2. Separate the names
3. If a middle name exists, setup the middle name accordingly.

Testing –

As each function was written, I tested each for its accuracy and usage. I don't really know what else to explain here, other than there was a LOT of compiling and minor changes to make sure that certain spots were working and acting accordingly, specifically with the substring function (which I will go over in the reflection).

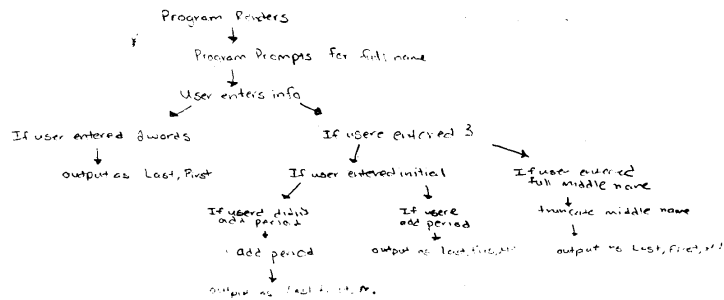
Reflection –

The idea (and implementation) of the program was actually pretty straightforward, but there were 2 issues that I ran into (1 of which I resolved and 1 of which I need to look into further).

The first was the usage of the substr function. I had such a hard time because I was defining it as substr(startIndex, endIndex) and NOT substr(startIndex, length). Because of this, getting first name always worked because the length and endIndex for that first length was the same value, HOWEVER the second/third name kept causing me issues. It took me a long time to realize that was the issue because of the fact that 1 name worked fine and the other was grabbing way more text than it should have. Luckily after reading into the function more it finally dawned on me the dumb mistake I was making.

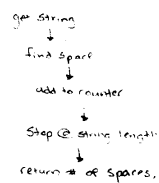
The other issue, which I want to look into more, is finding “incorrect” values entered; that is if the values are not actually names. To my knowledge, since it’s a string it will accept any value that is placed into it (unlike an int or double or etc). The only way I can think would be to setup some RegEx to search for numbers and characters that don’t exist in names normally, however we haven’t gone over that yet.

° programming project 9.3

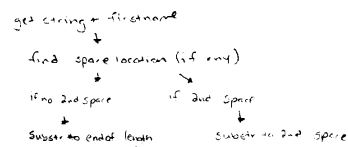


° functions

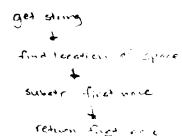
° number of spaces



° get second name



° get first name



Substring (beginning index, length)

° get third name

