Southern New Hampshire University

IT 140 Final Project Script One Draft Guidelines and Rubric
Rental Car Billing Script

Overview: For your final project, you will be creating four small scripts. Collectively, the four scripts will demonstrate your ability to engage in the fundamental scripting and problem-solving approaches that are represented by the course outcomes.

Reminder: This the first draft. Even if your script is not functioning perfectly, submit your draft and get feedback so that you can improve on it for the final submission in Module Five.

Prompt: For this script, you will be using variables and branches. A variable is used to remember a value for later use. The statement “age = 15” defines a variable named age, which Python uses to refer to a new object with the integer value 15. When a statement executes that assigns a value to an existing variable, Python updates the variable to refer to the newly assigned object. Likewise, reading a variable's value reads the value of the object referred to by the variable. So, in Python, if you set a variable to a string, the variable is now a type string object.

To write useful programs, we almost always need the ability to check conditions and change the behavior of the program accordingly. Conditional statements give us this ability. The simplest form is if statement. A programmer commonly requires more than one if statement in branches, in which case the elif (short for "else if") keyword or else keyword can be used.

Your task for Final Project Script One is to create a simple rental car billing calculator. This script also emphasizes the importance of using and modifying variables, and how branches may impact your approach in creating a script.

You will work on this project in the Project One: Rental Car Billing Script Draft module in Codio. Following the directions in that module, you will also be able to determine the exact placement of the comments you will need to make in the code. Follow the directions in the module in Codio to walk through the activity.

Your script should address the following critical elements:

I. In Your Script (Annotated Text File)
Refer to the directions in the module in Codio for how to export out and comment your completed script.
   A. Identify examples of three uses of **variables** in the script using comments in your code. Be sure your examples indicate the each of the following fundamental types:
      i. Assigning a numerical value and string to variables
      ii. Changing variable values
      iii. Modifying variables with data-type-appropriate operators
   B. Identify examples of the use of **branches** and explain using comments in your code. Be sure your comments identify the following fundamental statements: if, elif, and else statements.

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Reminder: The following critical element **is not submitted** with your draft, but you should be sure to consider the elements of your reflection that you will submit with your finalized script in Module Five.

II. **Applying Your Experience**

Making mistakes when you learn to write code is common. It is part of learning. What is important is developing the skill of learning how to understand your errors and then fix them (debugging). For this part of your final project, you will respond to the following:

A. Reflecting on your experience with this activity, explain the importance of knowing how and when to use and modify variables, and using branches. Support your response with examples from the activity of the types of errors and your method for fixing them.

Rubric

Guidelines for Submission: This is a draft of part of the final project. Complete the steps in Codio. Feedback will be provided by your instructor to incorporate in the final submission and the reflection document.

Critical Elements	Proficient (100%)	Needs Improvement (75%)	Not Evident (0%)	Value
Variables	Identifies three uses and fundamental types of variables in code and explains using comments	Identifies variables in code using comments, but uses are inappropriate or inaccurate, or comments lacks key details	Does not identify three uses and fundamental types of variables in code or explain using comments	45
Branches	Identifies three uses and fundamental types of branches in code and explains using comments	Identifies branches in code using comments, but uses are inappropriate or inaccurate, or comments lacks key details	Does not identify three uses and fundamental types of branches in code or explain using comments	45
Script Comments	Code comments explain and facilitate navigation of the code	Comments provide little assistance with understanding the code	Code is not fully annotated, or comments do not explain the code or do not facilitate navigation of your code	10
			Total	**100%**