# **ENGFF019 Career Test Testing Methodology**

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## **Mission**

The following document outlines our testing methodology for **ENGFF019**'s Python pair programming assessment.

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# **Test Data**

## mainModule.py

All the \*Input() functions contain nearly identical code but interact with different variables.

## nameInput()

We did not implement error checking for the name, as some users may prefer to stay anonymous and provide usernames containing numbers or special characters instead.

firstName	lastName	name
6lack	the1	6lack the1
Joseph	Martin	Joseph Martin
Travish	666	Travish 666

## programStart()

startTest	Behavior / Output
0	Thanks for using our service. Have a nice day! and program terminates
1	Instructions: Enter (1) if you agree. Enter (0) if you disagree.
3	Please enter (1) to start the test, or (0) to end your session:
Α	Invalid literal for int() with base10 and program terminates

# programRestart()

enterRestart	Behavior / Output		
9c	Program will not execute further until ENTER key is pressed.		
9c + ENTER	Please enter (1) to start the test, or (0) to end your session:		
ENTER	Please enter (1) to start the test, or (0) to end your session:		

# careerQuestions.py

# creativeInput()

creativeChoice1	creativeChoice2	creativeChoice3	creativeChoice
1	0	1	2
3 (Please enter (1) if you agree, or (0) if you disagree.)	1	0	Depends on creativeChoice1's final data
0	1	K (Invalid literal for int() with base10 and program terminates)	_

# stemInput()

stemChoice1	stemChoice2	stemChoice3	stemChoice
0	1	1	2
1	9 (Please enter (1) if you agree, or (0) if you disagree.)	1	Depends on stemChoice2's final data
0	0	H (Invalid literal for int() with base10 and program terminates)	-

# laborInput()

laborChoice1	laborChoice2	laborChoice3	laborChoice
0	0	0	0
1	3 (Please enter (1) if you agree, or (0) if you disagree.)	1	Depends on laborChoice2's final data
0	0	D (Invalid literal for int() with base10 and program terminates)	-

## careerResults.py

No test data needed, as this module does not accept any explicit user inputs from the terminal interface. Test run screenshots are provided below.

## **Test Runs**

#### mainModule.py

#### nameInput()

This function should accept any data.

```
raineedust@DESKTOP-JCCL9I6 MINGW64 ~/Documents/GitHub/career-test (main)
$ C:/Python310/python.exe c:/Users/raineedust/Documents/GitHub/career-test/mainModule.py
Hello, welcome to our Career Test!

Please enter your first name: Emilia
Please enter your last name: Gardner

Hi, Emilia Gardner

Please enter (1) to start the test, or (0) to end your session: 1

Instructions:
Enter (1) if you agree.
Enter (0) if you disagree.
```

Refer to <u>Test Runs > careerResults py</u> for more name data samples.

#### programStart()

This run uses invalid data:

```
$ C:/Python310/python.exe c:/Users/raineedust/Documents/GitHub/career-test/mainModule.py
Hello, welcome to our Career Test!

Please enter your first name: yo
Please enter your last name: lo

Hi, yo lo

Please enter (1) to start the test, or (0) to end your session: 3

Please enter (1) to start the test, or (0) to end your session:
```

```
Hello, welcome to our Career Test!

Please enter your first name: 6lack
Please enter your last name: the1

Hi, 6lack the1

Please enter (1) to start the test, or (0) to end your session: A

Traceback (most recent call last):

File "C:\Users\saopa\Desktop\Programming Demo Files\Assignment\mainModule.py", line 46, in <module>
    nameInput()

File "C:\Users\saopa\Desktop\Programming Demo Files\Assignment\mainModule.py", line 19, in nameInput
    programStart(name)

File "C:\Users\saopa\Desktop\Programming Demo Files\Assignment\mainModule.py", line 25, in programStart
    startTest = int(

ValueError: invalid literal for int() with base 10: 'A'
```

#### This run uses valid data:

```
Answer: 0

You've finished the test. Below are your final scores for:
Creative Careers: 2
STEM Careers: 1
Labor Careers: 1
Based on your answers, we think you'd enjoy being a Graphics Designer, Photographer, or Comedian.
Hooray, you have come to the end of our test session!
Press ENTER to proceed ...

Hi, Emilia Gardner
Please enter (1) to start the test, or (0) to end your session: 0
Thanks for using our service. Have a nice day!

raineedust@DESKTOP-JCCL916 MINGW64 ~/Documents/GitHub/career-test (main)
$ |
```

#### programRestart()

#### Explicitly terminated:

```
Based on your answers, we think you'd enjoy being a Graphics Designer, Photographer, or Comedian.

Hooray, you have come to the end of our test session!

Press ENTER to proceed ... Type anything won't proceed until ENTER

Hi, juDAH 03 powWELL

Please enter (1) to start the test, or (0) to end your session: 0

Thanks for using our service. Have a nice day!

raineedust@DESKTOP-JCCL9I6 MINGW64 ~/Documents/GitHub/career-test (main)

$ |
```

#### **Explicitly continued:**

```
You've finished the test. Below are your final scores for:
Creative Careers: 2
STEM Careers: 1
Labor Careers: 1

Based on your answers, we think you'd enjoy being a Graphics Designer, Photographer, or Comedian.

Hooray, you have come to the end of our test session!
Press ENTER to proceed ... 9c

Hi, Emilia Gardner

Please enter (1) to start the test, or (0) to end your session: 1

Instructions:
Enter (1) if you agree.
Enter (0) if you disagree.

Would you enjoy designing a magazine cover?
Answer:
```

## careerQuestions.py

#### creativeInput()

```
IDLE Shell 3.10.3
                                                                                       X
File Edit Shell Debug Options Window Help
   Please enter (1) to start the test, or (0) to end your session: 1
   Instructions:
   Enter (1) if you agree.
   Enter (0) if you disagree.
   Would you enjoy designing a magazine cover?
   Answer: 1
   Would you enjoy taking pictures of nature?
   Please enter (1) if you agree, or (0) if you disagree.
   Would you enjoy taking pictures of nature?
   Answer: 1
   Would you like to entertain an audience?
   Answer: K
   Traceback (most recent call last):
     File "C:\Users\saopa\Desktop\Programming Demo Files\Assignment\mainModule.py", line 46
   , in <module>
                                                                                       Ln: 353 Col: 0
```

#### stemInput()

```
Are you fascinated by computers and coding? ?
Answer: 0
Does researching a new medicine sound attractive to you?
Answer: 9
Please enter (1) if you agree, or (0) if you disagree.
Does researching a new medicine sound attractive to you?
Would you like to analyze data using statistics?
Answer: H
Traceback (most recent call last):
 File "C:\Users\saopa\Desktop\Programming Demo Files\Assignment\mainModule.py", line 46, in <module>
   nameInput()
  File "C:\Users\saopa\Desktop\Programming Demo Files\Assignment\mainModule.py", line 19, in nameInput
   programStart(name)
 File "C:\Users\saopa\Desktop\Programming Demo Files\Assignment\mainModule.py", line 28, in programStart
    programRestart(startTest, name)
  File "C:\Users\saopa\Desktop\Programming Demo Files\Assignment\mainModule.py", line 36, in programRestart
    creativeInput(startTest)
  File "C:\Users\saopa\Desktop\Programming Demo Files\Assignment\careerQuestions.py", line 43, in creativeInput
    return stemInput(startTest, creativeChoice)
  File "C:\Users\saopa\Desktop\Programming Demo Files\Assignment\careerQuestions.py", line 65, in stemInput
   stemChoice3 = int(
ValueError: invalid literal for int() with base 10: 'H'
```

#### laborInput()

```
Would you enjoy flying a plane?
Answer: 1
Do you enjoy assembling DIY (DO-IT-YOURSELF) products?
Please enter (1) if you agree, or (0) if you disagree.
Do you enjoy assembling DIY (DO-IT-YOURSELF) products?
Answer: 0
Would you like to counsel people with drug or alcohol addiction?
Answer: D
Traceback (most recent call last):
 File "C:\Users\saopa\Desktop\Programming Demo Files\Assignment\mainModule.py", line 46, in <module>
   nameInput()
 File "C:\Users\saopa\Desktop\Programming Demo Files\Assignment\mainModule.py", line 19, in nameInput
    programStart(name)
  File "C:\Users\saopa\Desktop\Programming Demo Files\Assignment\mainModule.py", line 28, in programStart
    programRestart(startTest, name)
  File "C:\Users\saopa\Desktop\Programming Demo Files\Assignment\mainModule.py", line 40, in programRestart
   programStart(name)
  File "C:\Users\saopa\Desktop\Programming Demo Files\Assignment\mainModule.py", line 28, in programStart
   programRestart(startTest, name)
  File "C:\Users\saopa\Desktop\Programming Demo Files\Assignment\mainModule.py", line 36, in programRestart
    creativeInput(startTest)
 File "C:\Users\saopa\Desktop\Programming Demo Files\Assignment\careerQuestions.py", line 43, in creativeInput
    return stemInput(startTest, creativeChoice)
  File "C:\Users\saopa\Desktop\Programming Demo Files\Assignment\careerQuestions.py", line 72, in stemInput
   return laborInput(startTest, creativeChoice, stemChoice)
  File "C:\Users\saopa\Desktop\Programming Demo Files\Assignment\careerQuestions.py", line 92, in laborInput
   laborChoice3 = int(
ValueError: invalid literal for int() with base 10: 'D'
```

## careerResults.py

## careerOutput1()

```
File Edit Shell Debug Options Window Help
```

```
Please enter (1) to start the test, or (0) to end your session: 1
Enter (1) if you agree.
Enter (0) if you disagree.
Would you enjoy designing a magazine cover?
Would you enjoy taking pictures of nature?
Answer: 1
Would you like to entertain an audience?
Are you fascinated by computers and coding? ?
Does researching a new medicine sound attractive to you?
Answer: 0
Would you like to analyze data using statistics?
Answer: 0
Would you enjoy flying a plane?
Answer: 0
Do you enjoy assembling DIY (DO-IT-YOURSELF) products?
Would you like to counsel people with drug or alcohol addiction?
You've finished the test. Below are your final scores for:
Creative Careers: 3
STEM Careers: 0
Labor Careers: 0
Based on your answers, we think you'd enjoy being a Graphics Designer, Photographer, or Comedian.
Hooray, you have come to the end of our test session!
Press ENTER to proceed ...
Hi, 6lack the1
Please enter (1) to start the test, or (0) to end your session:
```

#### careerOutput2()

```
*IDLE Shell 3.10.3*
```

```
File Edit Shell Debug Options Window Help
   Please enter your first name: Joseph
   Please enter your last name: Martin
   Hi, Joseph Martin
   Please enter (1) to start the test, or (0) to end your session: 1
   Instructions:
   Enter (1) if you agree.
Enter (0) if you disagree.
   Would you enjoy designing a magazine cover?
   Would you enjoy taking pictures of nature?
   Would you like to entertain an audience?
   Are you fascinated by computers and coding? ?
   Does researching a new medicine sound attractive to you?
   Answer: 1
   Would you like to analyze data using statistics?
   Answer: 1
   Would you enjoy flying a plane?
   Do you enjoy assembling DIY (DO-IT-YOURSELF) products?
   Would you like to counsel people with drug or alcohol addiction?
   Answer: 0
   You've finished the test. Below are your final scores for:
   Creative Careers: 0
   STEM Careers: 3
   Labor Careers: 0
   Based on your answers, we think you'd enjoy being a Software Developer, Scientist, or Data Analyst.
   Hooray, you have come to the end of our test session!
   Press ENTER to proceed ...
```

#### careerOutput3()

```
File Edit Shell Debug Options Window Help
    Please enter your first name: Travish
   Please enter your last name: 666
   Hi, Travish 666
   Please enter (1) to start the test, or (0) to end your session: 1
   Instructions:
   Enter (1) if you agree.
Enter (0) if you disagree.
   Would you enjoy designing a magazine cover?
   Answer: 0
   Would you enjoy taking pictures of nature?
   Answer: 0
   Would you like to entertain an audience?
   Are you fascinated by computers and coding? ?
   Answer: 0
   Does researching a new medicine sound attractive to you?
   Answer: 0
   Would you like to analyze data using statistics?
   Answer: 0
   Would you enjoy flying a plane?
   Answer: 1
   Do you enjoy assembling DIY (DO-IT-YOURSELF) products?
   Would you like to counsel people with drug or alcohol addiction?
   Answer: 1
   You've finished the test. Below are your final scores for:
   Creative Careers: 0
   STEM Careers: 0
Labor Careers: 3
   Based on your answers, we think you'd enjoy being a Pilot, Carpenter, or Social Worker.
   Hooray, you have come to the end of our test session!
   Press ENTER to proceed ...
```

## careerOutput4()

```
*IDLE Shell 3.10.3*
File Edit Shell Debug Options Window Help
    Please enter your first name: 6lack
    Please enter your last name: the1
   Hi, 6lack the1
    Please enter (1) to start the test, or (0) to end your session: 1
    Instructions:
    Enter (1) if you agree.
Enter (0) if you disagree.
    Would you enjoy designing a magazine cover?
    Would you enjoy taking pictures of nature?
    Would you like to entertain an audience?
    Are you fascinated by computers and coding? ?
    Does researching a new medicine sound attractive to you?
    Answer: 0
    Would you like to analyze data using statistics?
    Answer: 0
    Would you enjoy flying a plane?
    Do you enjoy assembling DIY (DO-IT-YOURSELF) products?
    Would you like to counsel people with drug or alcohol addiction?
    Answer: 0
    You've finished the test. Below are your final scores for:
    Creative Careers: 0
    STEM Careers: 0
    Labor Careers:
```

Unfortunately, we do not have suitable careers based on your answers. We will keep improving on the test in the futu

# **Complete Test Run in Windows Terminal**

Hooray, you have come to the end of our test session!

Press ENTER to proceed ...

1st page:

```
Windows PowerShell
PS C:\Users\raineedust\Documents\GitHub\career-test> cd C:\Users\raineedust\Documents\GitHub\career-test
PS C:\Users\raineedust\Documents\GitHub\career-test> py mainModule.py
Hello, welcome to our Career Test!
Please enter your first name: Emilia
Please enter your last name: Gardner
Hi, Emilia Gardner
Please enter (1) to start the test, or (0) to end your session: 1
Instructions:
Enter (1) if you agree.
Enter (0) if you disagree.
Would you enjoy designing a magazine cover?
Answer: 0
Would you enjoy taking pictures of nature?
Answer: 1
Would you like to entertain an audience?
Answer: 1
Are you fascinated by computers and coding? ?
Answer: 1
Does researching a new medicine sound attractive to you?
Answer: 0
```

#### 2nd page:

```
Windows PowerShell
                      × + ~
Would you like to analyze data using statistics?
Answer: 1
Would you enjoy flying a plane?
Answer: 0
Do you enjoy assembling DIY (DO-IT-YOURSELF) products?
Would you like to counsel people with drug or alcohol addiction?
Answer: 0
You've finished the test. Below are your final scores for:
Creative Careers: 2
STEM Careers: 2
Labor Careers: 1
Based on your answers, we think you'd enjoy being a Graphics Designer, Photographer, or Comedian.
Based on your answers, we think you'd enjoy being a Software Developer, Scientist, or Data Analyst.
Hooray, you have come to the end of our test session!
Press ENTER to proceed ...
Hi, Emilia Gardner
Please enter (1) to start the test, or (0) to end your session: \boldsymbol{\theta}
Thanks for using our service. Have a nice day!
PS C:\Users\raineedust\Documents\GitHub\career-test>
```