Term Project: Personality Test

Segmentation Fault

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PROJECT INFO

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ABSTRACT

The aim of this project is to mimic a personality test. To determine the personality, the program asks 4 questions. Based on the answers given by the user the personality results are shown. After that the program asks user to rate the questionnaire. Finally all the results are saved in a file named “output.txt”.

Contents

1. Decision Tree

In order to make the decision tree more understandable, the tree has been converted into a table. The tree split in two by the first question. If the answer is yes, the first half of the results are located on the left side of the tree and the other half is on the right **(8y/8n).** Continuing from question two, the first four results are yes, and the next four results are no. Thus, a pattern is formed **(4y/4n/4y/4n).** The pattern in question three is yes for the first two results and no for the next two results **(2y/2n/2y/2n/2y/2n/2y/2n).** For the fourth question, if the answer is yes first result occurs, and if no, the second result is formed and so on **(y/n/y/n/y/n/y/n…).**

Table 1: *The decision tree is converted into a table.*

	Question 1	Question 2	Question 3	Question 4
Result 1	yes	yes	yes	yes
Result 2	yes	yes	yes	no
Result 3	yes	yes	no	yes
Result 4	yes	yes	no	no
Result 5	yes	no	yes	yes
Result 6	yes	no	yes	no
Result 7	yes	no	no	yes
Result 8	yes	no	no	no
Result 9	no	yes	yes	yes
Result 10	no	yes	yes	no
Result 11	no	yes	no	yes
Result 12	no	yes	no	no
Result 13	no	no	yes	yes
Result 14	no	no	yes	no
Result 15	no	no	no	yes
Result 16	no	no	no	no

2. Expected Results

Extravert is assumed to be **yes** for the answer and **introvert** is **no**. Likewise, yes for sensing, no for intuition; yes for thinking, no for feeling; yes for judging, and no for perceiving.

Table 2: *Expected results are converted into a table.*

	Question 4	Question 1	Question 3	Question 2
Result 1	Extravert	Sensing	Thinking	Judging
Result 2	Introvert	Sensing	Thinking	Judging
Result 3	Extravert	Sensing	Feeling	Judging
Result 4	Introvert	Sensing	Feeling	Judging
Result 5	Extravert	Sensing	Thinking	Perceiving
Result 6	Introvert	Sensing	Thinking	Perceiving
Result 7	Extravert	Sensing	Feeling	Perceiving
Result 8	Introvert	Sensing	Feeling	Perceiving
Result 9	Extravert	iNtuition	Thinking	Judging
Result 10	Introvert	iNtuition	Thinking	Judging
Result 11	Extravert	iNtuition	Feeling	Judging
Result 12	Introvert	iNtuition	Feeling	Judging
Result 13	Extravert	iNtuition	Thinking	Perceiving
Result 14	Introvert	iNtuition	Thinking	Perceiving
Result 15	Extravert	iNtuition	Feeling	Perceiving
Result 16	Introvert	iNtuition	Feeling	Perceiving

3. Correlations

In the *Table 2*, the first column has **Extravert/Introvert** pattern. In the second column, the first eight results are sensing and the last eight are intuition **(8S/8iN).** In the third column, likewise, the first two results are thinking and the next two are feeling **(2T/2F/2T/2F…)**. In the last column, the first four results are judging followed by four perceiving **(4J/4P/4J/4P).** Thus, questions in *Table 1* and columns in *Table 2* have correlations. When paired, the answers to **question 1** result **sensing or intuition, question 2** result **judging or perceiving, question 3** result **thinking or feeling, question 4** result **extravert or introvert.**

4. Implementation

```
name    = input("Enter your name: ")
surname = input("Enter your surname: ")
age     = input("Enter your age: ")
gender  = input("Enter your gender(M/W): ")

# 1- Sensing / iNtuition
question1 = input("1- When you meet someone new, do you try to guess what they are like? ")
# 2- Judging / Perceiving
question2 = input("2- Do you get angry when your friends hurt you? ")
# 3- Thinking / Feeling
question3 = input("3- Are you a cold blooded person when you face some problems/troubles? ")
# 4- Extravert / Introvert
question4 = input("4- Are you the one who starts a conversation? ")

if   question1 == "yes" and question2 == "yes" and question3 == "yes" and question4 == "yes":
    result = "1. Extravert / Sensing / Thinking / Judging"
elif question1 == "yes" and question2 == "yes" and question3 == "yes" and question4 == "no" :
    result = "2. Introvert / Sensing / Thinking / Judging"
elif question1 == "yes" and question2 == "yes" and question3 == "no"  and question4 == "yes":
    result = "3. Extravert / Sensing / Feeling / Judging"
elif question1 == "yes" and question2 == "yes" and question3 == "no"  and question4 == "no" :
    result = "4. Introvert / Sensing / Feeling / Judging"
elif question1 == "yes" and question2 == "no"  and question3 == "yes" and question4 == "yes":
    result = "5. Extravert / Sensing / Thinking / Perceiving"
elif question1 == "yes" and question2 == "no"  and question3 == "yes" and question4 == "no" :
    result = "6. Introvert / Sensing / Thinking / Perceiving"
elif question1 == "yes" and question2 == "no"  and question3 == "no"  and question4 == "yes":
    result = "7. Extravert / Sensing / Feeling / Perceiving"
elif question1 == "yes" and question2 == "no"  and question3 == "no"  and question4 == "no" :
    result = "8. Introvert / Sensing / Feeling / Perceiving"
elif question1 == "no"  and question2 == "yes" and question3 == "yes" and question4 == "yes":
    result = "9. Extravert / iNtuition / Thinking / Judging"
elif question1 == "no"  and question2 == "yes" and question3 == "yes" and question4 == "no" :
    result = "10. Introvert / iNtuition / Thinking / Judging"
elif question1 == "no"  and question2 == "yes" and question3 == "no"  and question4 == "yes":
    result = "11. Extravert / iNtuition / Feeling / Judging"
elif question1 == "no"  and question2 == "yes" and question3 == "no"  and question4 == "no" :
    result = "12. Introvert / iNtuition / Feeling / Judging"
elif question1 == "no"  and question2 == "no"  and question3 == "yes" and question4 == "yes":
    result = "13. Extravert / iNtuition / Thinking / Perceiving"
elif question1 == "no"  and question2 == "no"  and question3 == "yes" and question4 == "no" :
    result = "14. Introvert / iNtuition / Thinking / Perceiving"
elif question1 == "no"  and question2 == "no"  and question3 == "no"  and question4 == "yes":
    result = "15. Extravert / iNtuition / Feeling / Perceiving"
elif question1 == "no"  and question2 == "no"  and question3 == "no"  and question4 == "no" :
    result = "16. Introvert / iNtuition / Feeling / Perceiving"
```

```
print(result)
rating = input("Please rate our questionnaire(1-10): ")
fhand = open("output.txt", "w", encoding="utf-8")
result_number = result.split('.')[0]
fhand.write(f"{name} {surname}, {age}, {gender}, {result_number}, {rating}")
fhand.close()
```

5. Outputs

Table 3: *The inputs to test the program.*

	name	surname	age	gender	Question 1	Question 2	Question 3	Question 4	rate
					Sensing / iNtuition	Judging / Perceiving	Thinking / Feeling	Extravert / Introvert	
Result1	Mehmet Ali	Ozturk	50	M	yes	yes	yes	yes	10
Result2	Hayriye	Yilmaz	60	W	yes	yes	yes	no	6.5
Result3	Elif Betul	Yildız	15	W	yes	yes	no	yes	3
Result4	Ayse Beyza	Kara	21	W	yes	yes	no	no	7
Result5	Asiye	Koyuncu	32	W	yes	no	yes	yes	5
Result6	Selim Eymen	Kutuk	21	M	yes	no	yes	no	7
Result7	Busra	Turkoz	12	W	yes	no	no	yes	4.5
Result8	Zubeyir	Aktas	7	M	yes	no	no	no	8.5
Result9	Kamil	Kuru	11	M	no	yes	yes	yes	3.5
Result10	Zeynep Sena	Olgun	88	W	no	yes	yes	no	1
Result11	Kutay	Bitmis	33	M	no	yes	no	yes	9
Result12	Irem	Akdu	53	W	no	yes	no	no	10
Result13	Hilal	Yazici	35	W	no	no	yes	yes	6.5
Result14	Mehmet Akif	Koz	20	M	no	no	yes	no	10
Result15	Hasan	Kuyu	27	M	no	no	no	yes	7
Result16	Abdulkadir	Gormez	47	M	no	no	no	no	4

Table 4: *The outputs from the inputs.*

	result	output.txt
Result1	1. Extravert / Sensing / Thinking / Judging	Mehmet Ali Ozturk, 50, M, 1, 10
Result2	2. Introvert / Sensing / Thinking / Judging	Hayriye Yilmaz, 60, W, 2, 6.5
Result3	3. Extravert / Sensing / Feeling / Judging	Elif Betul Yildiz, 15, W, 3, 3
Result4	4. Introvert / Sensing / Feeling / Judging	Ayse Beyza Kara, 21, W, 4, 7
Result5	5. Extravert / Sensing / Thinking / Perceiving	Asiye Koyuncu, 32, W, 5, 5
Result6	6. Introvert / Sensing / Thinking / Perceiving	Selim Eymen Kutuk, 21, M, 6, 7
Result7	7. Extravert / Sensing / Feeling / Perceiving	Busra Turkoz, 12, W, 7, 4.5
Result8	8. Introvert / Sensing / Feeling / Perceiving	Zubeyir Aktas, 7, M, 8, 8.5
Result9	9. Extravert / iNtuition / Thinking / Judging	Kamil Kuru, 11, M, 9, 3.5
Result10	10. Introvert / iNtuition / Thinking / Judging	Zeynep Sena Olgun, 88, W, 10, 1
Result11	11. Extravert / iNtuition / Feeling / Judging	Kutay Bitmis, 33, M, 11, 9
Result12	12. Introvert / iNtuition / Feeling / Judging	Irem Akdu, 53, W, 12, 10
Result13	13. Extravert / iNtuition / Thinking / Perceiving	Hilal Yazici, 35, W, 13, 6.5
Result14	14. Introvert / iNtuition / Thinking / Perceiving	Mehmet Akif Koz, 20, M, 14, 10
Result15	15. Extravert / iNtuition / Feeling / Perceiving	Hasan Kuyu, 27, M, 15, 7
Result16	16. Introvert / iNtuition / Feeling / Perceiving	Abdulkadir Gormez, 47, M, 16, 4

6. Conclusion

Decision tree is essential to understand which answers lead which results. It also provides a graphical pattern for each question. Expected results also have a pattern which is similar to the decision tree. By this correlations the questions types are determined. The implementation is done by if-else conditions. Outputs for each result are tested.

This project might not give real results. However it shows that implementation of algorithms does not need to be complex. Even with some if-else conditions a personality test can be implemented.