

Personal Information Manager – Documentation

1. Project Overview and Objectives

The Personal Information Manager is a beginner-level Python project developed as part of Task 1 – Week 1: Python Basics. The main objective of this project is to strengthen the programming foundation by applying core Python concepts such as variables, user input and output, string formatting, loops, and basic validation. This project demonstrates the ability to build a complete, interactive Python program that runs successfully in a development environment.

2. Setup and Installation Instructions

- Install Python 3 on the system and ensure it is added to the system PATH.
- Install Visual Studio Code (VS Code) as the code editor.
- Create a project folder named 'week1-personal-info'.
- Open the folder in VS Code using File → Open Folder.
- Open the terminal in VS Code and run the program using the command: `python personal_info.py`.
- Follow the prompts displayed in the terminal to enter user information.

3. Code Structure Explanation

The project consists of a primary Python file named `personal_info.py`. The program begins with a welcome message followed by static personal information stored using variables such as name, age, city, and hobby. It then collects dynamic user input for favorite food and favorite color using the `input()` function. A while loop is implemented to validate user input and prevent empty values. The program also performs a basic calculation to convert age into months. Finally, all information is displayed using formatted output with f-strings, ensuring clarity and readability.

4. Screenshots of Working Application

The following screenshot shows the Personal Information Manager program running successfully in the Visual Studio Code terminal. It demonstrates proper execution, user input prompts, and formatted output.

The screenshot shows a VS Code interface with the following details:

- File Explorer:** Shows files like `personal_info.py`, `README.md`, and `test_input.txt`.
- Code Editor:** Displays the `Personal Information Manager.py` script. The code initializes a static user with name "Alex Johnson", age 22, city "San Francisco", and hobby "playing guitar". It then prompts the user for their favorite food, validating input until a valid food item is entered.
- Terminal:** Shows the command line output of running the script, which prints the static information and then asks for the user's favorite food.
- Suggested Actions:** Buttons for "Build Workspace" and "Show Config".

```
personal_info.py > Personal Information Manager.py ...  
1 # Personal Information Manager  
2 # Author: Your Name  
3 # Week 1 Python Task  
4  
5 # Welcome message  
6 print("-" * 40)  
7 print(" PERSONAL INFORMATION MANAGER")  
8 print("-" * 40)  
9 print()  
10  
11 # static information  
12 name = "Alex Johnson"  
13 age = 22  
14 city = "San Francisco"  
15 hobby = "playing guitar"  
16  
17 # User Input  
18 print("Please tell me about yourself:")  
19 print("-" * 30)  
20  
21 favorite_food = input("What's your favorite Food? ")  
22 while favorite_food.strip() == "":  
23     print("Please enter a valid food!")  
24     favorite_food = input("What's your favorite Food? ")  
25  
26 print(f"Hello {name}, your age is {age}, you live in {city} and your hobby is {hobby}.")  
27  
28 print("-----")  
29 print("PERSONAL INFORMATION MANAGER")  
30  
31 print("-----")  
32 print("Please tell me about yourself:")  
33 print("-----")  
34 print("What's your favorite food?")  
35 print("-----")  
36 PS C:\Users\Wuthu Pandian\OneDrive\Documents\personal_info_manager> & 'c:\users\wuthu pandian\appdata\local\programs\python\python312\python.exe' 'c:\users\wuthu pandian\vscode\extensions\ms-python.python\debugpy-1.2.5\client\pydevd.py --port 5678 --file c:\users\wuthu pandian\onedrive\documents\personal_info_manager\personal_info.py'>[Personal Information Manager.py]  
-----  
PERSONAL INFORMATION MANAGER  
-----  
Please tell me about yourself:  
-----  
What's your favorite food?  
-----  
PS C:\Users\Wuthu Pandian\OneDrive\Documents\personal_info_manager>
```

5. Explanation of How Technical Requirements Were Met

- Variables were used to store more than four pieces of personal information.
 - User input was collected using the `input()` function for dynamic data.
 - Basic input validation was implemented using a while loop and string methods.
 - String formatting was achieved using Python f-strings for structured output.
 - The program was tested and executed successfully in VS Code, as shown in the screenshot.