Python HOW TO structure a Beginner OR Advanced Projects ?

Video

https://youtu.be/6OSpm4uXqDw?si=DcuqUbdI24Y0awVo

Notes

- There is no standard rule as to what a Python directory should look like

Structure 1 Notes - For Small Projects

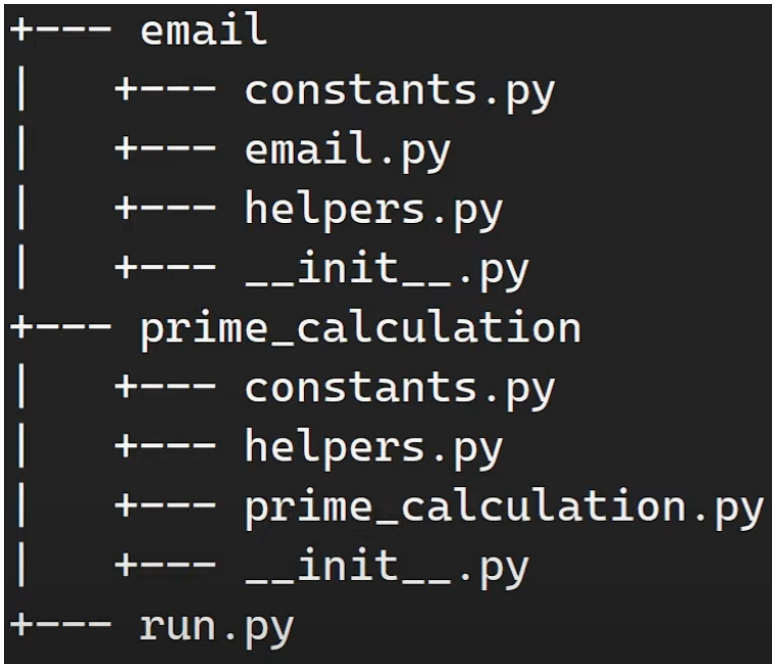
- run.py - trigger for running minimal functions (only a few)
  - imports functions from helpers.py
  - triggering the entire project
  - Contains a function such as `run()` and `if name == 'main':` to call it

- helpers.py/functions.py - could contain all the functions
  - Contains the actual functionality of the project such as `is_prime()`

- constants.py - Store constants

Structure 2 Notes - For Larger Projects

- Create separate folders for different functionality, essentially creating separate packages that can then be used in other projects
    - Create a prime folder and an email folder
        - Each contains its own helpers.py and constants.py
        - But also with a convention file __init__.py and a file containing a class
- The __init__.py file allows you to write `import email` to import the package
    - Just like you can write `import random`



- Is the operation performed on the object or by the object?
    - if it is done by the object, it should be a member operation. If it could apply to other things too, or is done by something else to the object then it should be a function (or perhaps a member of something else).

Resources

- Structures From Video - https://github.com/jimdevops19/project-structures
- https://docs.python-guide.org/writing/structure/
- https://realpython.com/python-application-layouts/

- https://stackoverflow.com/questions/193161/what-is-the-best-project-structure-for-a-python-application