Portfolio Assignment: Object Oriented and Functional Programming with Python

By

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# 1 Finalization

The final Habit Tracker Application can be found in the following Github repository:

https://github.com/annabanananana/habit

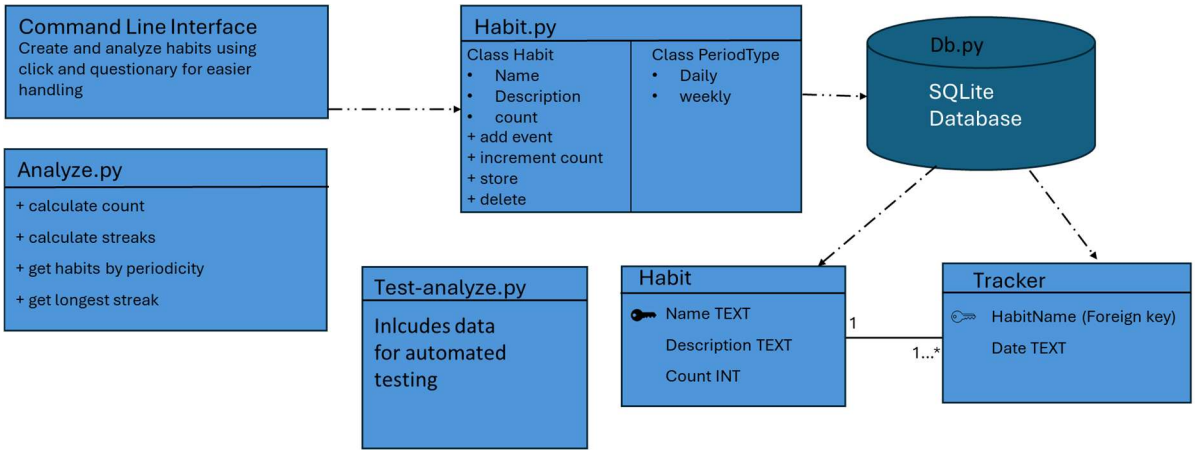


*Figure 1: Diagram of the Habit Tracker Application*

The figure roughly illustrates the building blocks of the application.

For me the most challenging part was getting used to git and github repository, but after using it more frequently I got used to it and definitely was able to appreciate it.

The habit tracker can be used via the command line interface for creating daily or weekly habits and adding dates when the habit was carried out. Other than stated in the conception phase, one cannot select habits from a predefined list, but only create new ones by oneself, and creating a habit does not mean it was carried out, which makes it more flexible in my understanding. In the analyze part the user can check how often the habit was completed all in all, not checking whether a daily habit really was ticked off daily or not, or a weekly habit every 7$^{th}$ day. To check for run streaks, one can see the current streak, and the longest streak of a habit, check for the longest streak in daily habits or weekly habits, and also check for the longest overall streak where daily and weekly habits are looked at together. The user can look at all habits that are in the database or can filter for daily and weekly habits. What I like best is the table of habits which shows an overview of all habits, their periodicity, the total count as well as current and maximum run streak. For the table I used tabulate. And of course, habits can be deleted if wanted, although I would not recommend it, because even if one stops doing the habit it might be nice in the future to still be able to look at how often one used to do this or that habit. Through the implementation of the test_analyze.py file the app can be tested automatically. I am satisfied with my habit tracker app and think that all requirements are met. The next step would be to build a graphical user interface because that is what most users by now are used to when interacting with an application.