

HABIT TRACKER CONCEPT

Habit tracker is an app built to help users build and monitor their habits using a comprehensive set of tools.

Features

The app is meant to be used through the command line or terminal where users input commands in order to access the following features:

- Habit creation: User can be create habits given their name and periodicity. When the habit no longer needs to be tracked the user can delete the habit.
- Progress tracking: Users can track the days they have completed or missed completing habits through check-ins which the user can use to mark a habit as completed for a specific day, if the user fails to complete a habit within the specified time the habit is marked as missed.
- Streak tracking: Streaks are number of consecutive time periods the habit has been completed. The user will be able to view the longest streak from a habit, the current streak for a habit and the longest streak of all habits.
- Analysis: The user will also be able to view information about the habits they track including their periodicity and history of completion.

Project Requirements

The app is to be built with The python programming language using the pysqlite3 library to handle database connections, the Typer framework to handle user interaction through the command line and the rich framework to format command line output.

The app will be built with 4 modules

1. db.py: this module is responsible for handling database operations. It will contain functions for actions including creation of tables, the storage and deletion of habits, etc.
2. Habit.py: this will contain the definition of the habit class and it's methods. It will contain methods for operations including checking-in habits.
3. Analytics.py: This will contain functions which will form the habit trackers analytical features including finding the longest streak, longest streak of a habit, a habits history, etc.

4. Cli.py: This will contain all functions regarding input and output in the app.

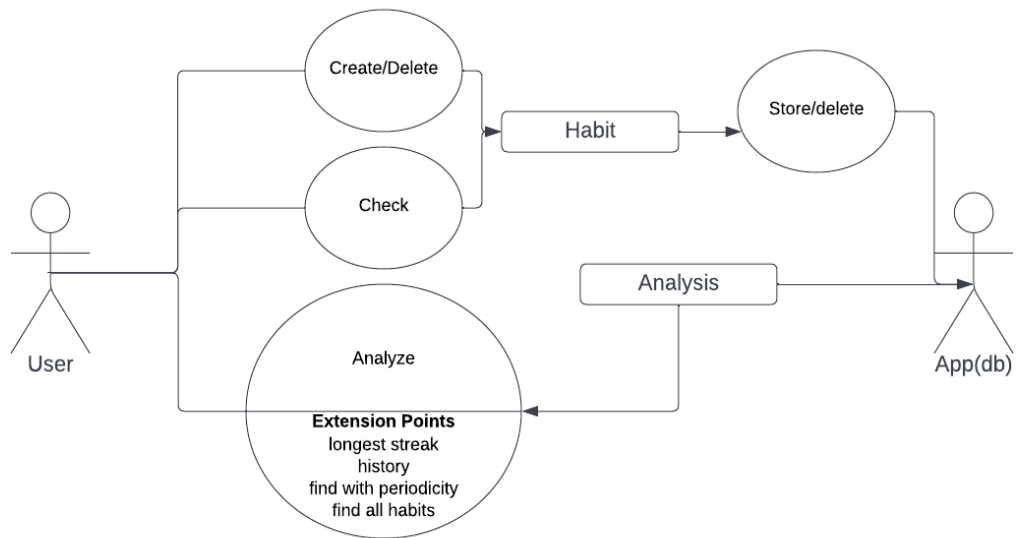


Diagram representing the processes in the app.

Closing

In conclusion the habit tracker will make use of python's object oriented and functional capabilities to provide users with a solution that helps them build and monitor their habits efficiently using a range of features.

Link to github repo: <https://github.com/Dtome5/habit-tracker> .