
TRACK A HABIT

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ALL IMAGES AND GRAPHICS USED ARE FROM POWERPOINT



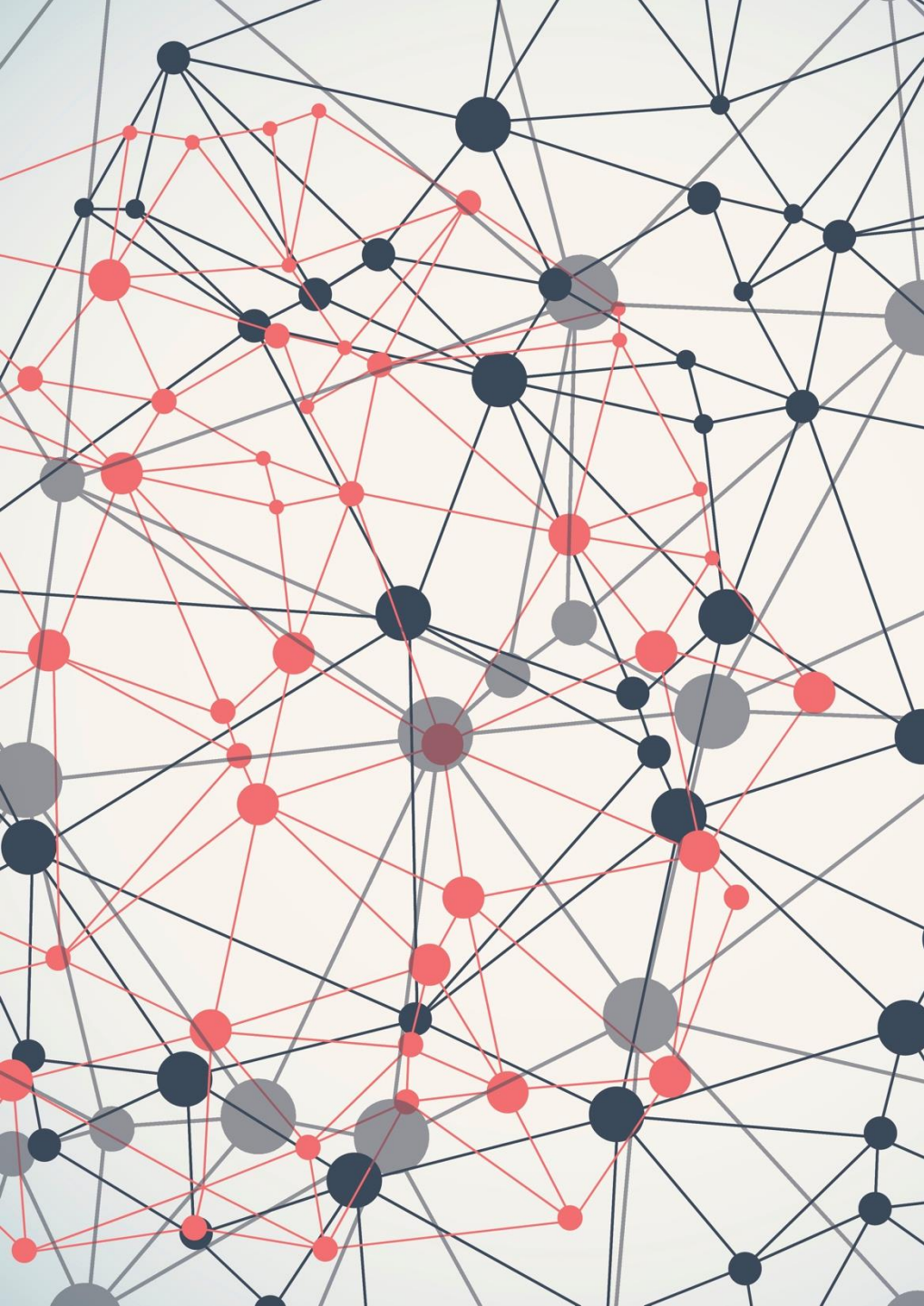


TABLE OF CONTENT

- 1. INTRODUCTION
- 2. APPLICATION DESIGN
- 3. TOOLS AND TECHNOLOGIES
- 4. HOW TO USE IT
- 5. CONCLUSION

1. INTRODUCTION

Track A Habit

Lightweight application



Analyze habits



Persistent storage

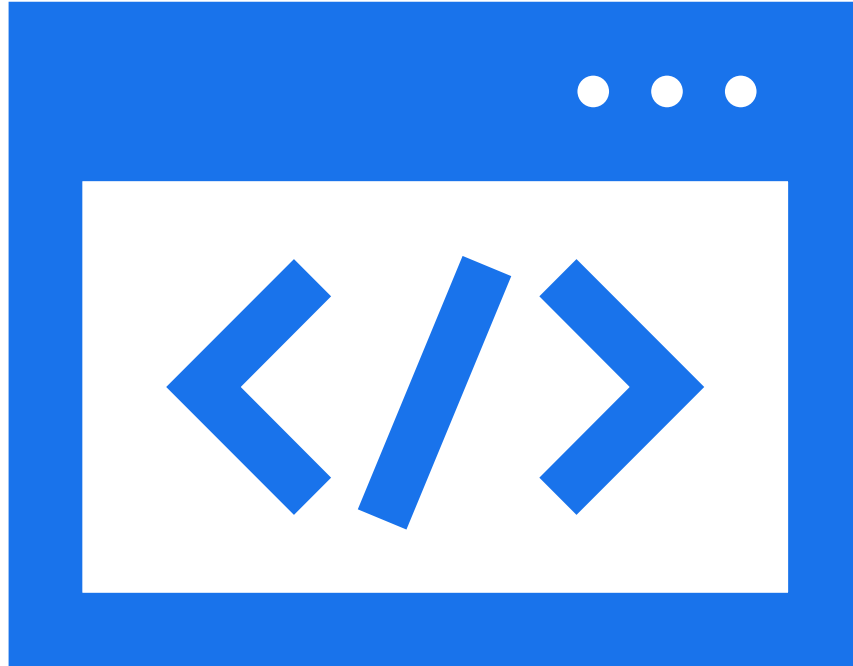


Keep track of habits



Command line interface

2. APPLICATION DESIGN



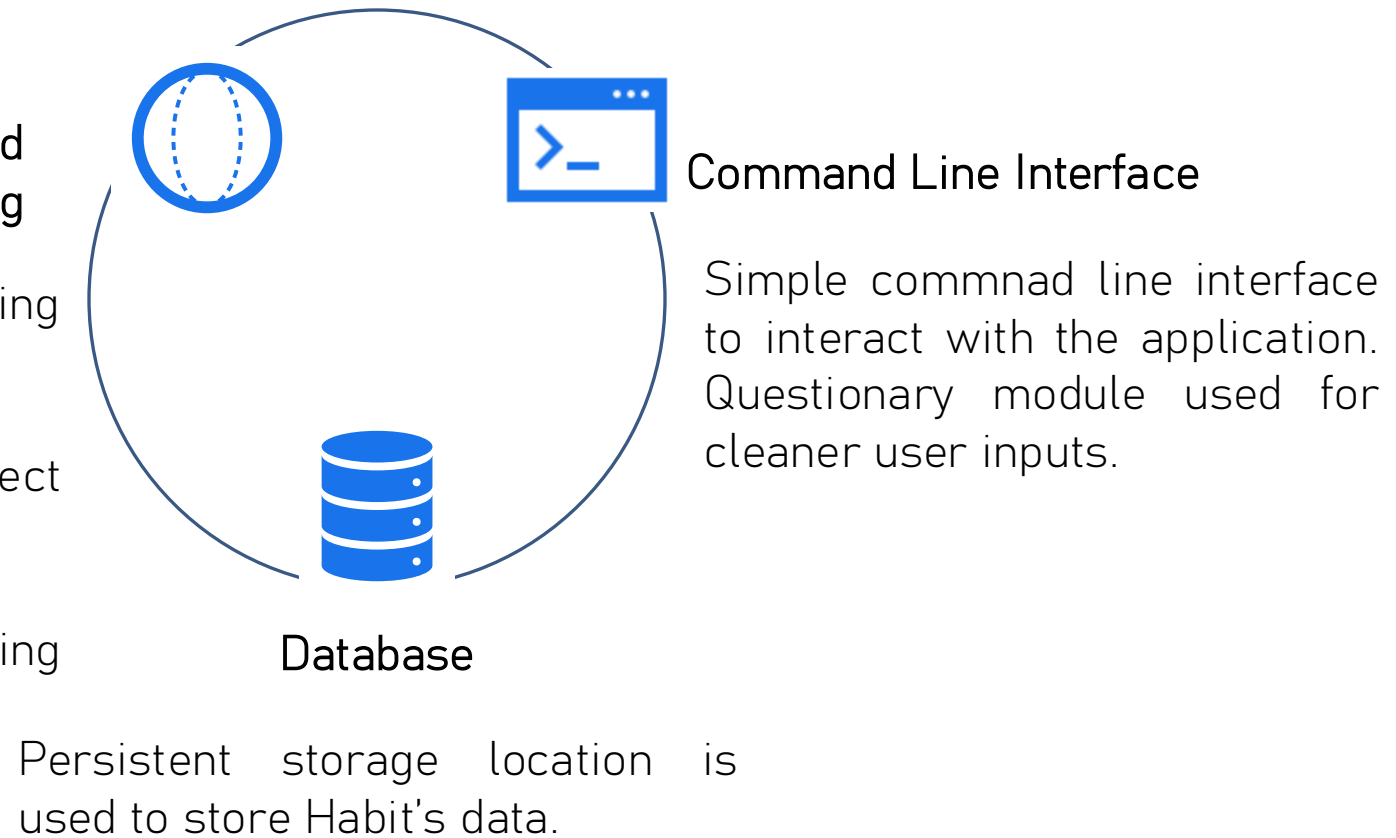
2. APPLICATION DESIGN

Object Oriented and Functional Programming

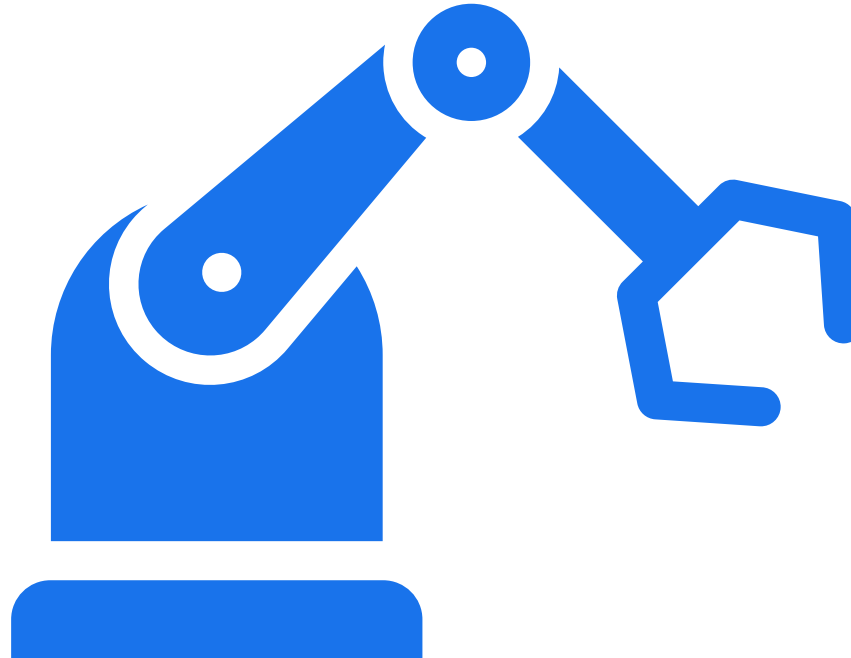
Track a Habit uses two programming paradigms.

Habit class is designed using Object Oriented paradigm.

Analysis module was developed using Functional paradigm.



3. TOOLS AND TECHNOLOGIES



3. TOOLS AND TECHNOLOGIES



Python used to develop the application.

Its simplicity and its support of Object-Oriented programming makes it ideal for building scalable, maintainable, and easy to understand software's code.



Python libraries used:

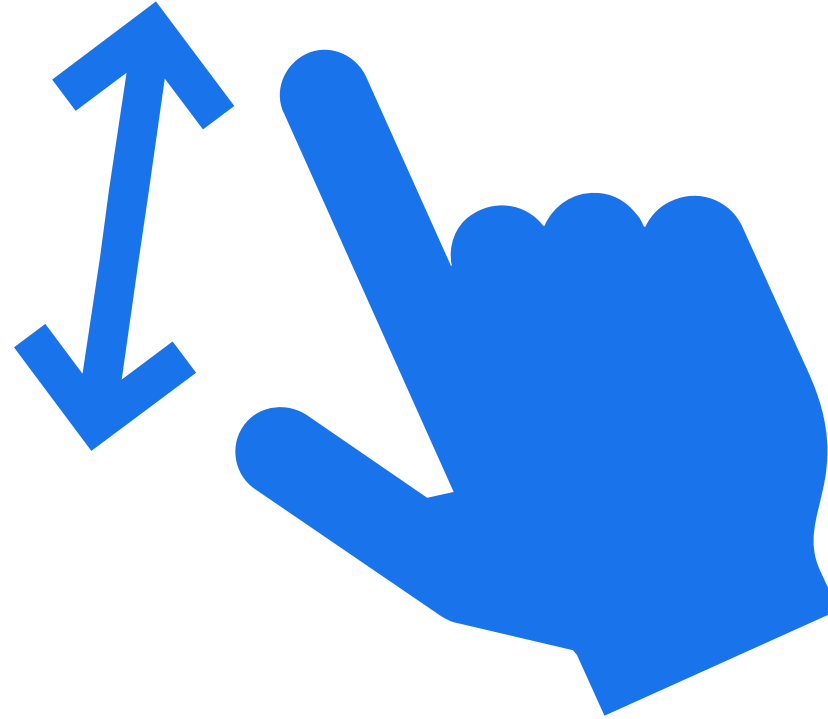
Third party:

- Questionary
- Pytest

Standard:

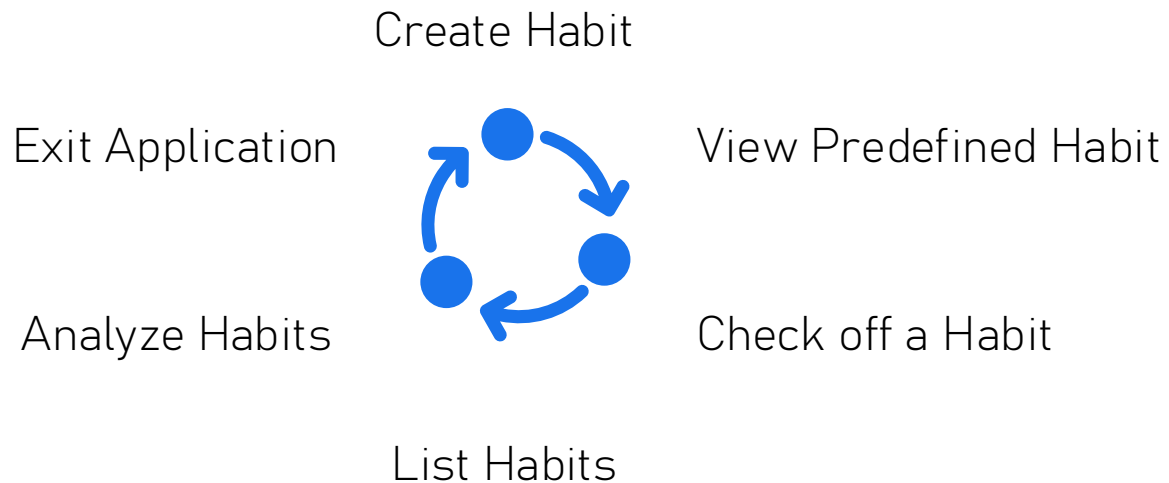
- Datetime
- sqlite3

4. HOW TO USE IT



4. HOW TO USE IT

Main Control Loop



```
Welcome to Track A Habit App!
```

```
?
```

```
What would you like to do? (Use arrow keys)
```

```
» Create Habit
```

```
View Predefined Habits
```

```
Check off a Habit
```

```
List Habits
```

```
Analyze Habits
```

```
Exit Application
```

4. HOW TO USE IT

Create a Habit

```
What would you like to do? Create Habit
?
Enter the habit name: Play Guitar
?
Would you like to add a description? Yes
?
Enter the habit description: Play Guitar Every Day
? Select the periodicity: (Use arrow keys)
» Daily
  Weekly
  Monthly
```

The application guides the user to create a Habit.

1. Ask the user for the habit name
2. Ask if the user wants to add a description
3. Select habit periodicity
4. Database is updated with a new Habit. In case the name was already used, the application will not store it.

Analyze Habits

```
What would you like to do? Analyze Habits
? Select an analysis option: (Use arrow keys)
» Longest Streak For All Habits
  Longest Run For A Habit
  Habit struggle analysis
```

3 user options:

See longest streak for all habits

See longest run for a habit

See struggle analysis

4. HOW TO USE IT

List Habits

```
What would you like to do? List Habits
? Please select an option (Use arrow keys)
» View All Habits
  View All Habits Same Period
```

User is able to see a list of Habits:

1. Every habit that the user created
2. Possibility to filter habits based on its periodicity

Check-off Habits

```
What would you like to do? Check off a Habit
? Select a habit: (Use arrow keys)
» Play Guitar
```

When user selects "Check off a Habit", the application shows a list of previously created habits.

5. CONCLUSION



5. CONCLUSION

Track A Habit

Description



Track a Habit is a lightweight back-end application that enables the user to create, check-off, and analyze habits that were previously created.

Room for Improvement



A graphical-user-interface will enhance the usability of the application.

Challenge



The main challenge lays in implementing the logic required to analyze habit streaks and struggles.

<https://github.com/cris2carrere/TrackAHabit>