

# Habit Tracker App - Design and Features

An Easy-to-Use Tool for Building Better Habits

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Date: 03.11.2024

# What is the Habit Tracker App?

- This app helps users build and manage habits with a simple interface. Users can set goals, track their progress, and analyze their habits.

```
--- Dashboard ---  
1. Add New Habit  
2. Show Existing Habits  
3. Edit Existing Habit  
4. Habit Analysis  
5. Check Off Habit  
6. Exit
```

```
Enter your choice (1-6): █
```

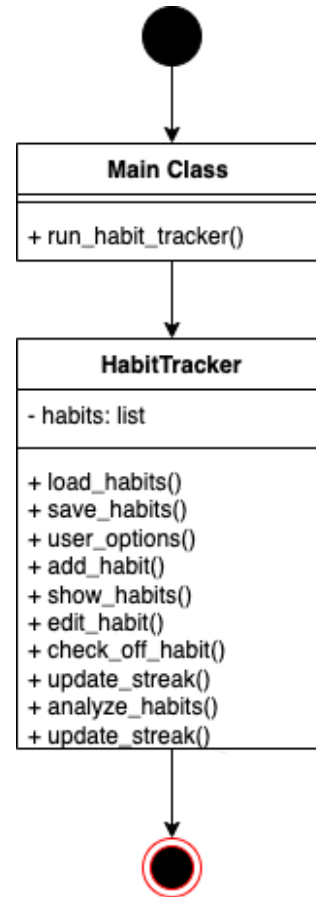
# Tools and Technology

- **Python:** Main programming language for the app's code.
- **JSON:** Used to save and load user data, making data management easy and efficient.
- **Command Line Interface (CLI):** Simple, beginner-friendly interface that displays options in a numbered list.

# Key Components

- **Data Management:** Saves and loads habits in habits.json.
- **User Options:** Displays options for managing habits.
- **Habit Management:** Adding, editing, resetting, and removing habits.
- **Progress Tracking:** Checking off habits and tracking streaks.

# Diagram



# How to Use the Habit Tracker

1. **Add Habits:** Choose the "Add New Habit" option and set up your habit details.
2. **Edit Habits:** Select a habit to modify its periodicity, name, or specification.
3. **Check Off Habits:** Mark daily habits as complete to track progress.
4. **Analyze Habits:** View detailed analysis of completed dates and streaks.

# Features and Benefits

- **Customizable Habits:** Add and personalize each habit.
- **Progress Tracking:** Users can see streaks and analyze habits over time.
- **Simple Interface:** Clear menu with straightforward options.
- **Data Privacy:** All data is saved locally, ensuring privacy.

# In-Depth Habit Analysis

- Shows total completed instances, current and longest streaks.
- Easy access to a summary of each habit's progress.

```
--- Habit Analysis ---  
Total Habits: 5  
Total Completed Instances: 0  
Average Current Streak: 0.00 days  
  
Habit: Drink Water  
  Periodicity: Daily  
  Specification: Drink 8 glasses of water  
  Completed Dates: No completions yet  
  Current Streak: 0 days  
  Longest Streak: 0 days
```



# Why Use This App?

- **Goal Achievement:** Helps users build consistent habits.
- **Data Control:** No external servers, meaning data is secure on users' devices.
- **User-Friendly:** Simple to use with easy-to-understand options.
- **Future Improvements:**
  - **User Authentication:** Enable users to create personal accounts, making habits private and accessible only to the logged-in user.