

# Habit Tracker App - README







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## Overview

The Habit Tracker App is a lightweight and user-friendly tool to help users build and maintain healthy habits. Users can create daily or weekly habits, mark completions, view progress, and analyze performance through interactive visualizations.

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## Features

-  Add daily or weekly habits
  -  Mark completions easily
  -  View completion history and streaks
  -  Visual habit analytics using Plotly
  -  Data stored locally in SQLite
  -  Logging of all actions and errors
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## Technologies Used

- **Frontend:** Streamlit
  - **Backend:** Python
  - **Database:** SQLite
  - **Visualization:** Plotly, Seaborn, Matplotlib
  - **Logging:** Python's built-in `logging`
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## Project Structure

```
├── app.py           # Main Streamlit application
├── db.py            # Database operations (SQLite)
├── habit.py         # Habit class model
├── analytics.py     # Analytics and visualizations
├── logger.py        # Logging setup
├── habits.db        # SQLite database file
├── /logs            # Log files
└── README.md        # Project readme
```

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## How to Run the App

### 1. Clone the repository

```
https://github.com/mandylegend/IU_Habit_Tracker.git
```

```
cd habit-tracker
```


## 2. Install required packages

```
pip install streamlit pandas plotly seaborn
```

## 3. Run the app

```
streamlit run app.py
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 App Screenshots (seperate screenshot pdf with explantion have been attached)

- Habit creation form
- Streak visualizations
- Completion history logs

*(Include images in a folder if needed)*




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## Logging & Security

- All user interactions and errors are logged into timestamped files in the `/logs` folder.
- Ensures transparency and makes debugging easier.

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## Future Improvements

-  Add reminder notifications
-  Build mobile-friendly layout
-  User authentication for personal habit storage

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## Credits

Developed by **Mandar More** with ❤️ using Python and Streamlit.