# Medicine Intake tracking System

## Overview:

This is a simple Streamlit-based web application for recording, and managing user medicine intake. Created as a prototype for demonstration purpose. This web app reminds users to take medication at set intervals, and records the medication intake. Stores the intake history, and can be shared to the user's doctor and carer as CSV.

## Why do we need it:

Forgetting to take medicine reduces the treatment effectiveness, worsens existing conditions,treatment failure, and increased healthcare costs. According to WHO, over 1.5 million deaths occur worldwide because of missed medication related emergencies. These are preventable deaths, and would take overheads off emergency wards, and hospital staff.

## Limitations and Future Improvements:

- Reminders work while the web app is open only. Need to be changed to remind users at all times irrespective of usage.
- Currently data is stored locally on the local device, and would benefit if stored in the cloud in case of issues with the devices.
- Currently it supports single users only. Future modifications are possible to include family members, so that everyone can track and support others.
- Integration with pharmacy or doctor's records through Ayushman Bharat's digital records, or NHS GP records(UK) to track medicine and quantity. And to inform users of medicine refills, supply shortages, or alternate medicine etc.
- Remote monitoring of medicine intake for better results.

## Features:

- Prompts to let user record medicine intake
- Tips for users to help to remember medicine intake.
- Reminders setup as per user requirements to help users with abilities.
- Medicine Intake History for easy tracking and analysis of intake data.
- History shared as CSV file to be analysed by doctors for remote monitoring.
- Emergency contact details of doctor, hospital and local emergency number.
- Medical emergency window describing specific conditions that could be fatal, and information explaining what to do in those situations.
- Quick contact form if unable to talk, or in non critical emergencies, to contact hospital.
- Quick stats tab displaying missed and medication data.

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## Test Case:

Name: Dave

Condition: Diabetic

Doctor’s name: Dr. Satish

Emergency Numbers: 108, +919876543210

## Medication:

Metformin: First-Line medication for type 2 diabetes

Sulfonylureas: Stimulates Insulin production

DPP-4 Inhibitors: Help regulate blood sugar levels

SGLT2 Inhibitors: Help kidneys remove sugar through urine

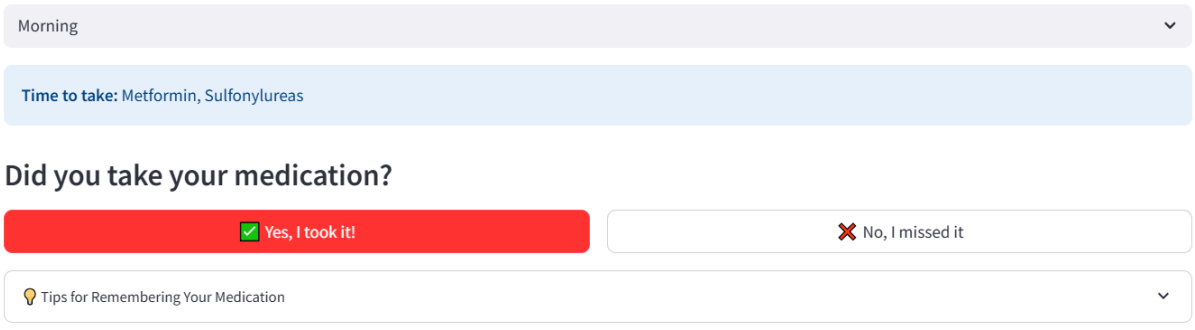
Thiazilidinediones: Improve insulin sensitivity

## Schedule:

| | |
|---|---|
| Morning - 8 AM | - Metformin, Sulfonylureas |
| Afternoon - 1PM | - DPP-4 Inhibitors, SGLT2 Inhibitors |
| Night - 7:30PM | - Metformin, Thiazilidinediones |

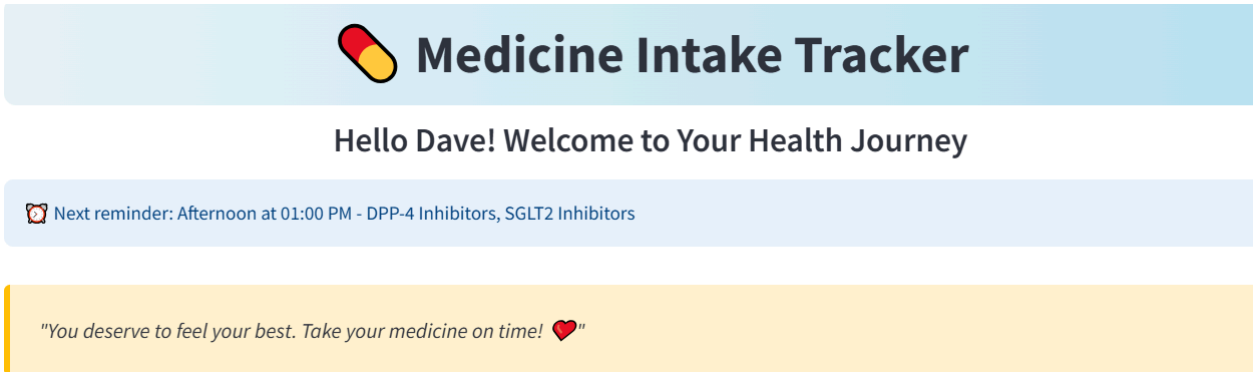
## Product and Features:

Medicine Intake:

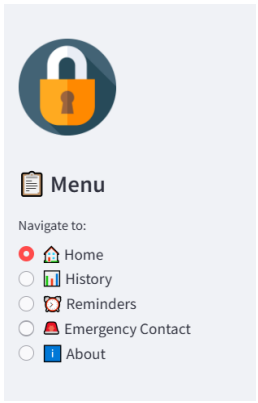



Medicine Reminder:

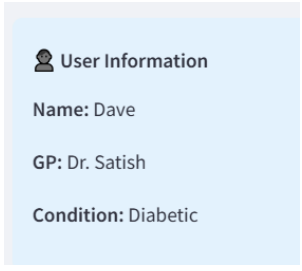
# Medicine Intake tracking System

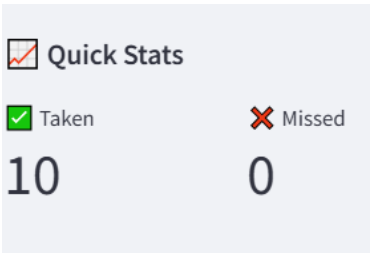



Menu bar:




User Info and quick stats:

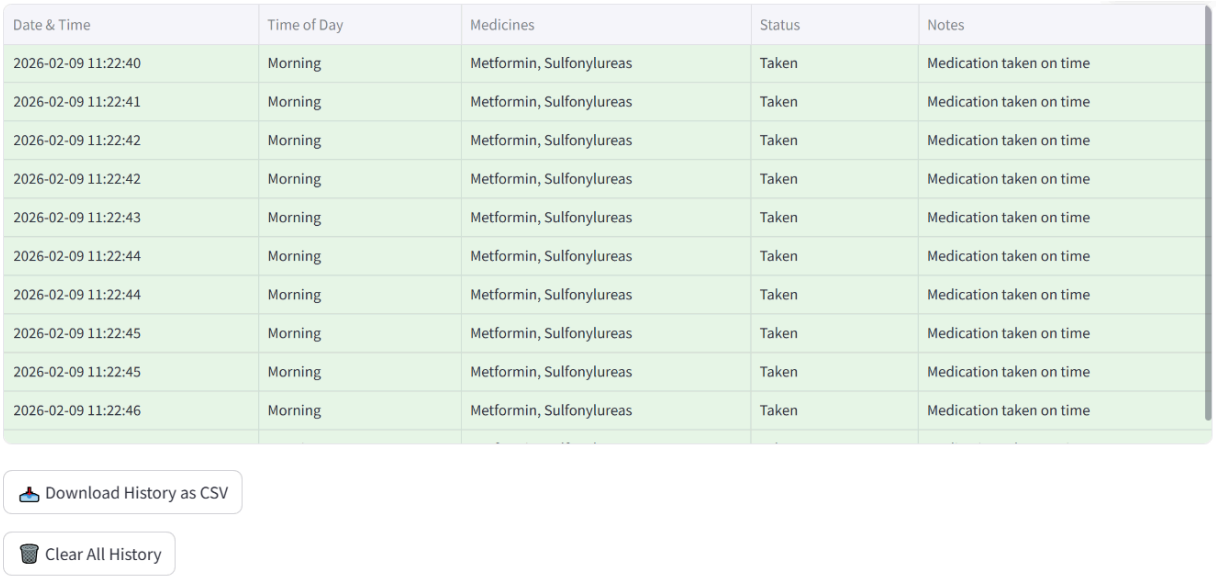



Medicine Intake History:

# Medicine Intake tracking System

Medicine intake history showing historical medicine intake and an option to download and share data as CSV for further data analysis.

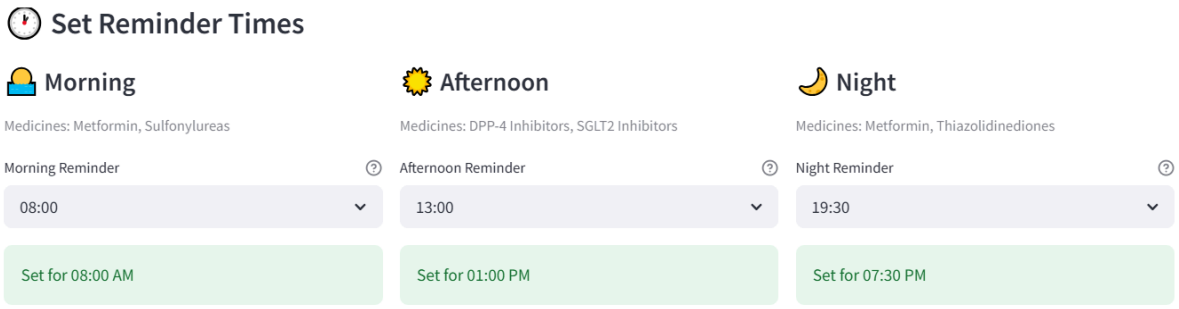


| Date & Time | Time of Day | Medicines | Status | Notes |
|---|---|---|---|---|
| 2026-02-09 11:22:40 | Morning | Metformin, Sulfonylureas | Taken | Medication taken on time |
| 2026-02-09 11:22:41 | Morning | Metformin, Sulfonylureas | Taken | Medication taken on time |
| 2026-02-09 11:22:42 | Morning | Metformin, Sulfonylureas | Taken | Medication taken on time |
| 2026-02-09 11:22:42 | Morning | Metformin, Sulfonylureas | Taken | Medication taken on time |
| 2026-02-09 11:22:43 | Morning | Metformin, Sulfonylureas | Taken | Medication taken on time |
| 2026-02-09 11:22:44 | Morning | Metformin, Sulfonylureas | Taken | Medication taken on time |
| 2026-02-09 11:22:44 | Morning | Metformin, Sulfonylureas | Taken | Medication taken on time |
| 2026-02-09 11:22:45 | Morning | Metformin, Sulfonylureas | Taken | Medication taken on time |
| 2026-02-09 11:22:45 | Morning | Metformin, Sulfonylureas | Taken | Medication taken on time |
| 2026-02-09 11:22:46 | Morning | Metformin, Sulfonylureas | Taken | Medication taken on time |

Download History as CSV

Clear All History

Daily Reminders setup:
Daily reminder setup as per doctor's suggestion and medicine. These reminders can be changed as per user's requirements. These include additional options for better management of reminders and tips for better medicine management.



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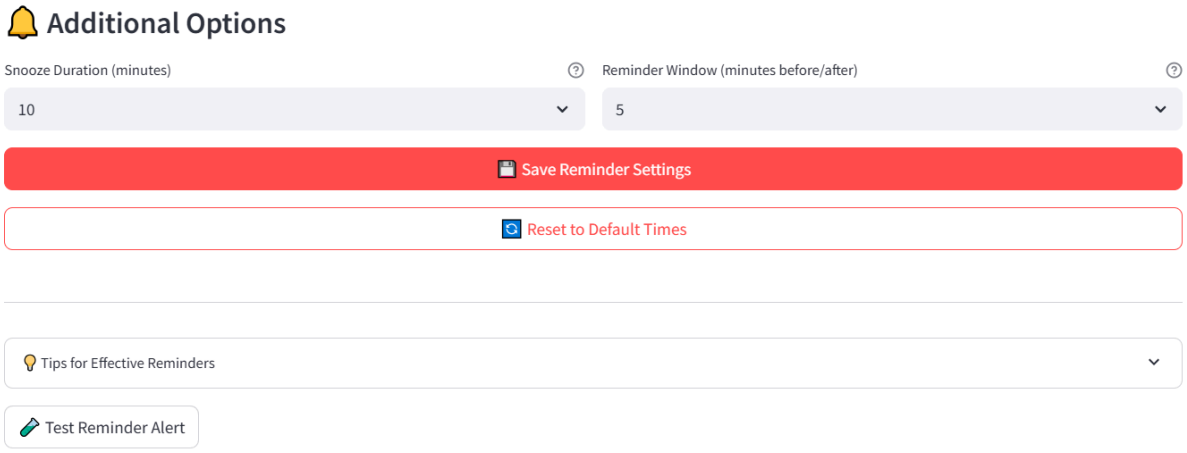
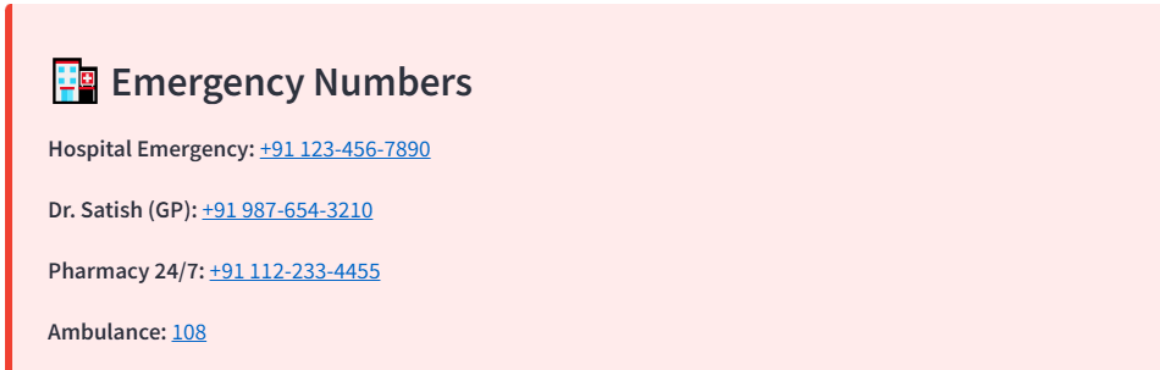
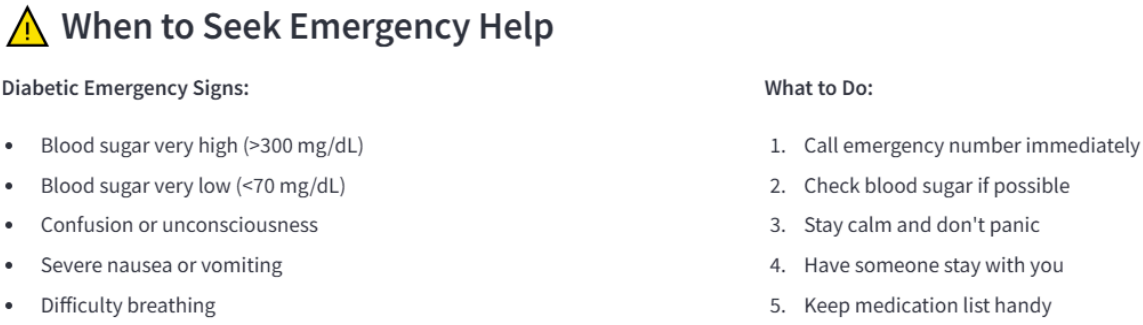



Emergency contact information:

- Include emergency contact info of hospital, and local services.
- Quick contact form for users with emergency, abilities to contact the hospital with alert bar based on the emergency level of the user.



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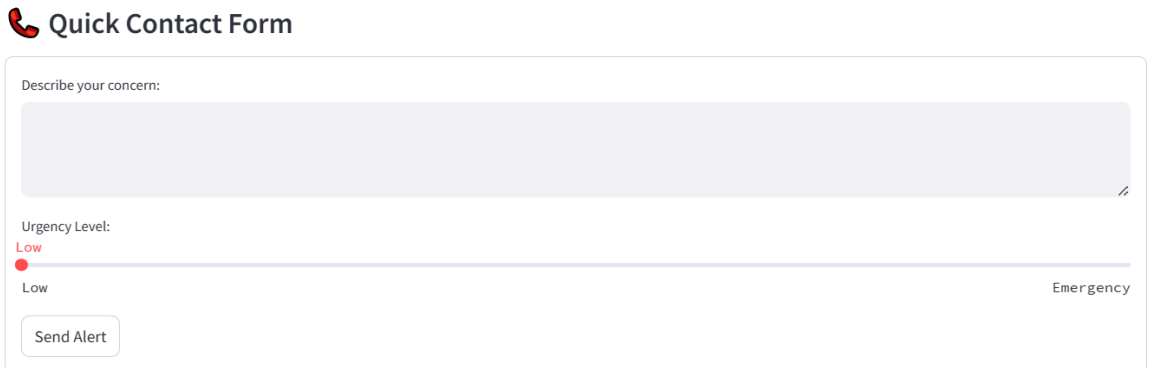
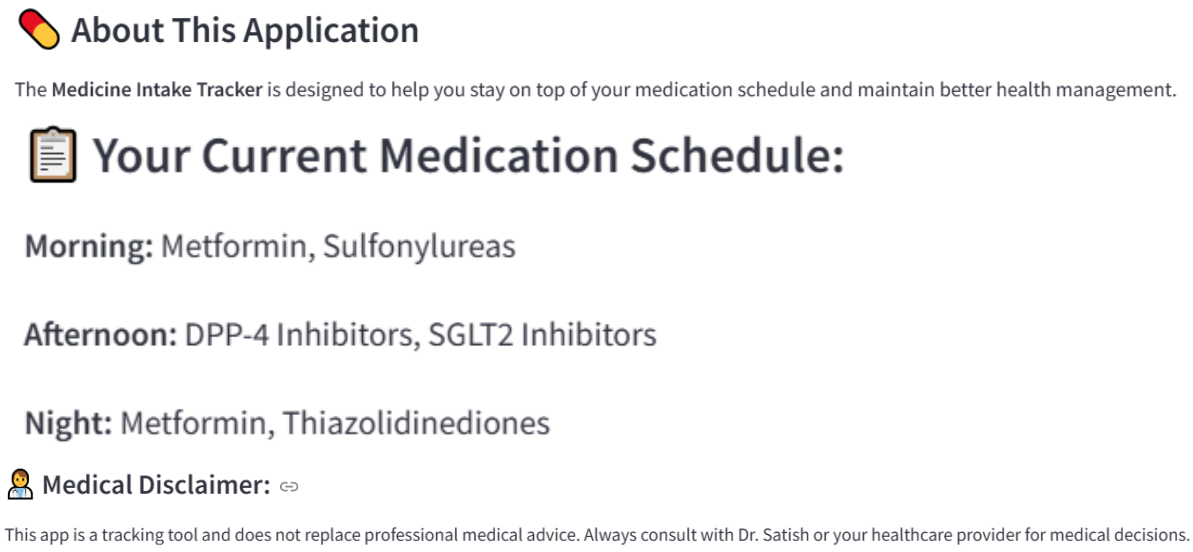



About info:

This shows the information about the web app, and the features it holds, and disclaimer. Some of them are shown below.



# Medicine Intake tracking System

## Tech Stack:

Python 3.14.0
Streamlit 1.54.0
Users would need a Streamlit server to run the web app with the following command.

```
bash

streamlit run ninth_version.py
```

## Acknowledgements:

Please note we have used Jupyter Notebook to create basic python code. And used the python code to generate Streamlit code using Claude.ai.

## REFERENCES:

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