جامعة طيبة
TAIBAH UNIVERSITY

PyMedix

Timing Health, One Dose at a Time.

A Python-Based Medication Management Project

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THE PROBLEM ⚠️

many people forget:

- Medication times.
- Daily dosage schedules.
- When their medication course ends.

That can lead to:

- Health complications.
- Reducetreatment effectiveness.
- Incorrect medication usage.

PROJECT IDEA

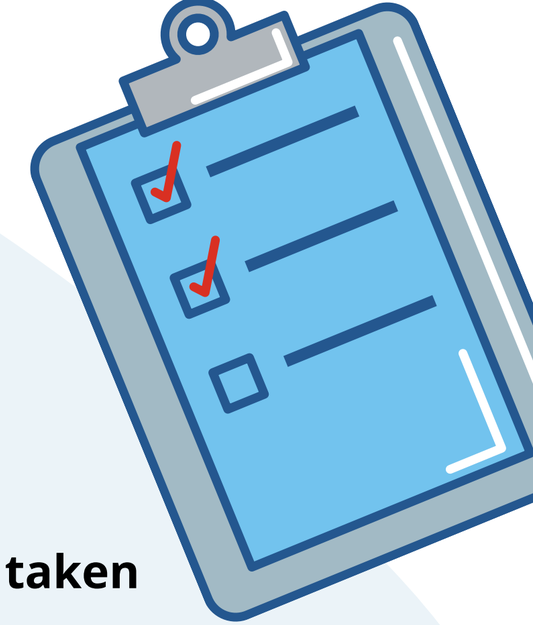
Smart Medication Reminder and Management System that helps users organize their medications, track daily doses, and manage treatment durations in a simple and efficient way.

THE SOLUTION

A smart software system that:

- Allows easy input of medication information
- Automatically calculates dose schedules
- Alerts the user when a dose is due soon
- Tracks remaining doses and removes medications automatically when finished

Project Explanation: Classes



First class: Medication

is responsible for storing medication information for each patient
It stores details such as the medication name, dosage, how many times it is taken per day, the start date, and other related information

Second class: MedicationSchedule

is responsible for managing medications.
It allows the user to add medications and delete medications for a specific patient

Third class: Reminder

is responsible for handling reminders and reports.
It calculates how many doses are remaining and shows the upcoming doses for the patient.

Project Explanation: Libraries

Pandas

used to manage medication data and store it as DataFrames
it reads from and writes to CSV files permanently
We also used text files (TXT) to generate a daily report

numpy

NumPy was used to calculate the time intervals between doses

Matplotlib

Matplotlib was used to visualize the data by displaying charts that show the remaining doses for each medication

Datetime

The datetime module was used to handle dates and times, such as the medication
start date and the time each dose should be taken

Project Explanation: Exception handling

we used exception handling to prevent the program from crashing when an error occurs

For example if the user enters a negative dosage or enters a string instead of a number, the program displays an error message explaining the mistake

THANK YOU FOR LISTENING