PARSECRIPTION

Team

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Problem Statement

Track-Healthcare Innovation

Healthcare management often poses challenges for individuals in understanding and managing their medical data, prescriptions, and adherence to medication plans. For Example, elderly people often struggle to keep track of their numerous medications.

Parsecription aims to address these challenges by providing a comprehensive healthcare service that empowers users with insights into their medical reports, medication information extraction, and effective health monitoring.

Features

1. Medical Report Explanation

Parsecription excels in explaining medical reports, helping users comprehend their pathological data with ease.

2. Medicine Information Extraction

The platform efficiently extracts medication information from prescriptions, ensuring users have a clear understanding of their prescribed medicines.

3. Medication Reminders

Parsecription provides timely alarms to remind users to take their prescribed medications, enhancing adherence to medical plans.

Features

4. Physiological Data Extraction
The platform extracts crucial physiological data, including Blood Pressure, Pulse Rate, Blood Sugar, Height, and Weight. It then presents users with visualizations of historical data over time for better health monitoring.
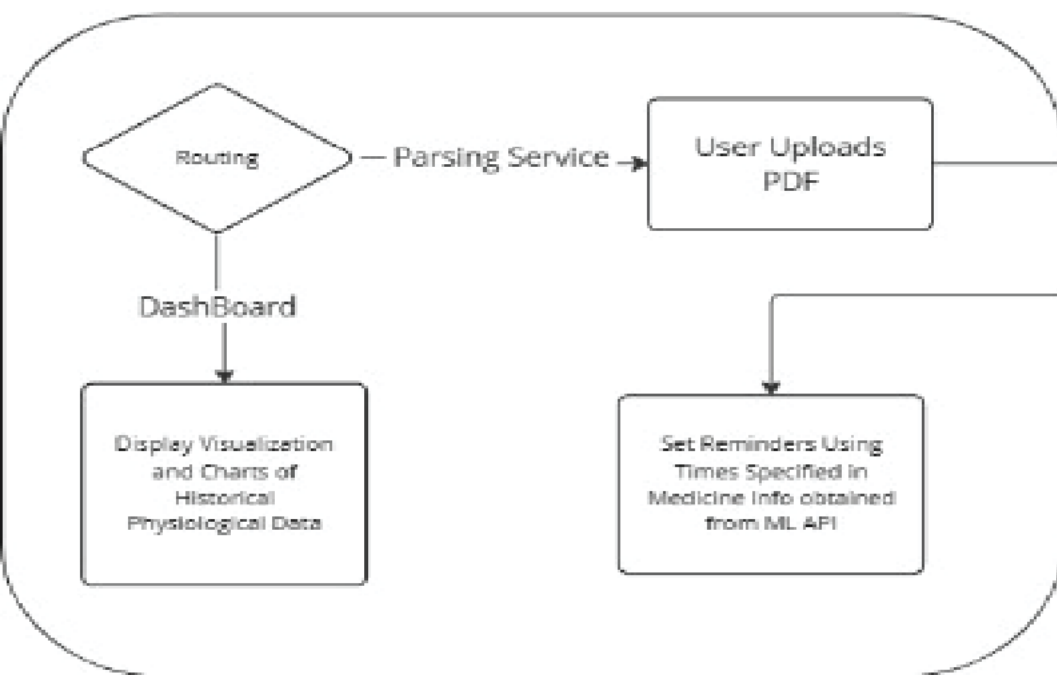
5. Syntax-Agnostic Parsing
Thanks to the power of OpenAI GPT-3.5 Function Calling, Parsecription offers syntax-agnostic parsing of medicine data, eliminating the need for users to adhere to specific prescription formats.
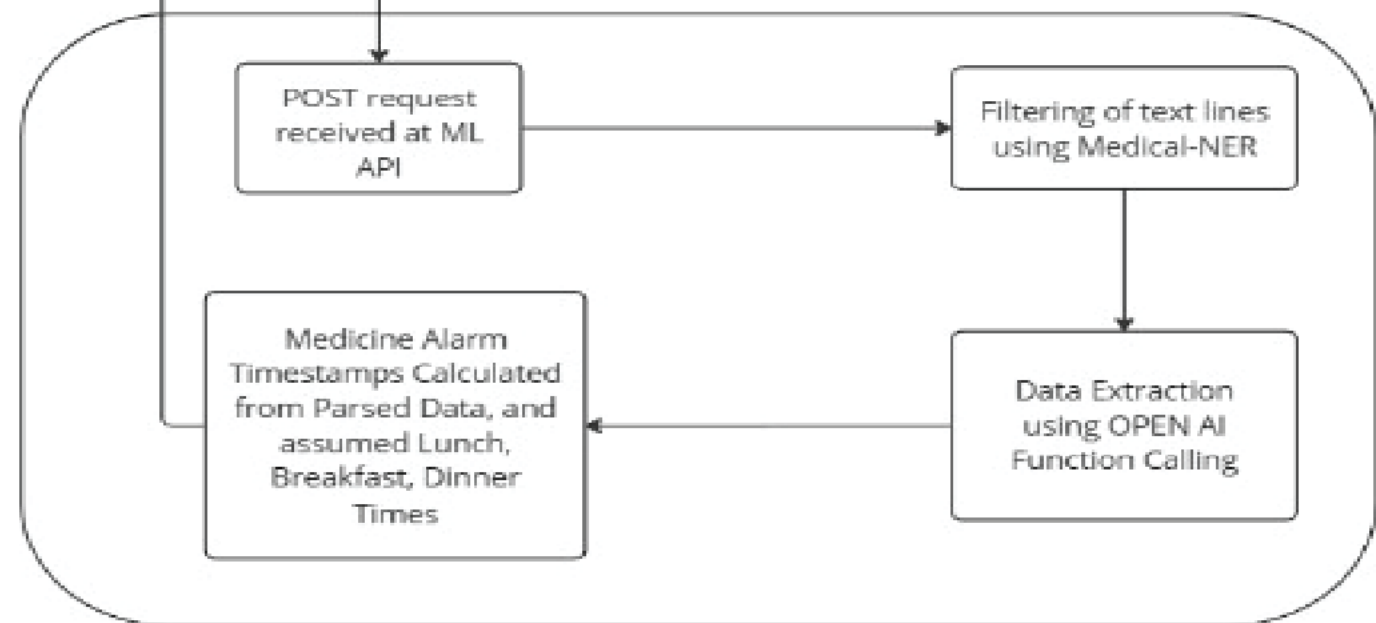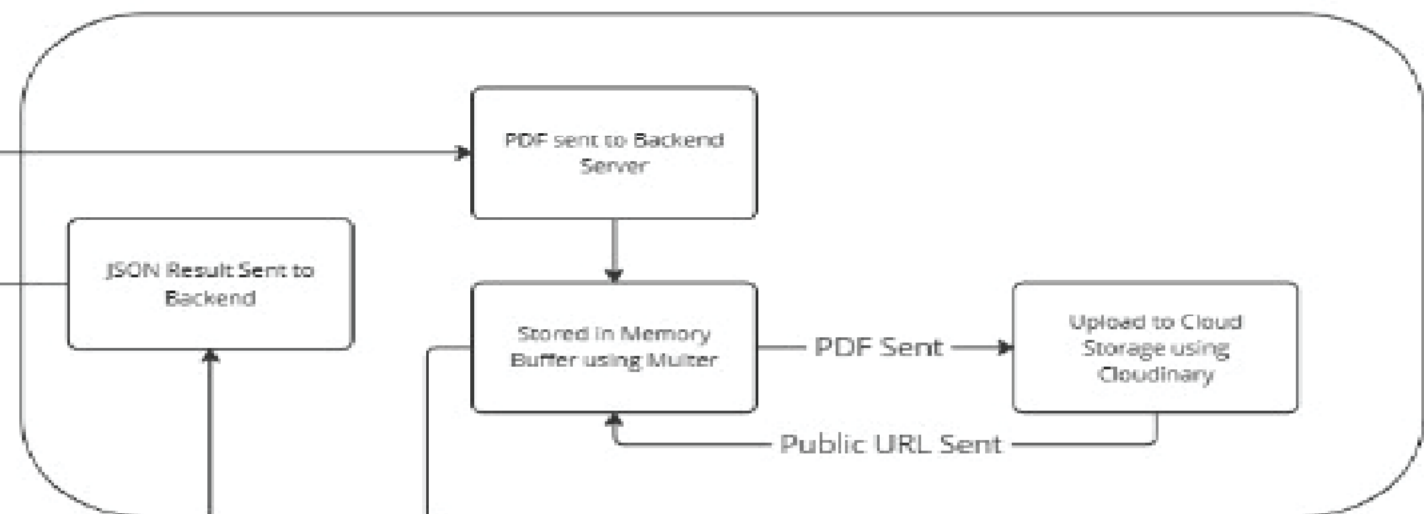
6. Current Compatibility
The platform currently supports typed prescriptions and images or scans of typed prescriptions.

FRONTEND

BACKEND

Routing — Parsing Service → User Uploads PDF

DashBoard

Display Visualization and Charts of Historical Physiological Data

Set Reminders Using Times Specified in Medicine Info obtained from ML API

JSON Result Sent to Backend

PDF sent to Backend Server

Stored in Memory Buffer using Multer — PDF Sent → Upload to Cloud Storage using Cloudinary

Public URL Sent

POST request received at ML API → Filtering of text lines using Medical-NER

Medicine Alarm Timestamps Calculated from Parsed Data, and assumed Lunch, Breakfast, Dinner Times ← Data Extraction using OPEN AI Function Calling

ML API

Features under Progress

Handwritten Prescription parsing

Parsecription is actively working on supporting handwritten prescriptions using text-detection and vision transformers for Optical Character Recognition (OCR).

Calender API

The platform is in the process of integrating the Google Calendar API to seamlessly incorporate medication schedules into users' calendars.

THANK YOU