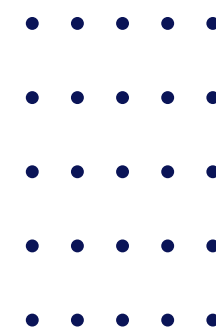


Edunet Foundation – Microsoft Internship on Foundations of Artificial Intelligence (April 2025)

DiabetesManager – Smart Diabetes Management with AI

[github Repository.](#)




By Debshata Choudhury



Idea

DiabetesManager is an AI-powered web application designed to help users manage diabetes more effectively through smart tracking, personalized diet and exercise plans, and instant analysis of blood sugar reports using **Gemini API**.

Features

-  **Smart Tracking:** Visualize blood sugar levels, medications, and health metrics on a clean dashboard.
-  **AI-Powered Analysis:** Upload medical reports (PDF) and get instant insights using Google's Gemini AI.
-  **Personalized Plans:** Generate tailored diet and exercise recommendations based on ethnicity, medication, allergies, and lifestyle data.



Gemini

Technologies Used

- **Frontend:** HTML, CSS, JavaScript
- **Backend:** Python, Flask
- **Database:** SQLite
- **AI Integration:** Google Gemini API
- **Deployment-ready:** Localhost / Cloud-compatible

How Gemini API is Used

The core AI engine is built on **Gemini API**, which performs the following:

- Extracts and interprets text data from uploaded blood sugar reports
- Identifies **patterns, trends, and anomalies** in blood glucose levels
- Suggests **personalized interventions** for diet and exercise
- Simulates a physician-like assistant to deliver **AI-generated insights** in natural language

DiabetesManager

LoginRegister

You have been logged out

Smart Diabetes Management Made Simple

Track, analyze and manage your diabetes with personalized recommendations powered by AI.

Get StartedSign In

Why Choose DiabetesManager?

Our platform combines the latest in AI technology with medical expertise

Smart Tracking

Record and visualize your blood sugar levels, medications, and health metrics in an intuitive dashboard.

AI-Powered Analysis

Upload your medical reports and receive instant analysis and personalized recommendations using AI.

Personalized Plans

Get customized diet and exercise plans tailored to your specific needs and cultural preferences.

Your Health Data, Analyzed by AI

Our platform uses Google's Gemini AI to analyze your blood sugar reports and provide insights that are easy to understand and act upon.

Upload & Analyze

Simply upload your PDF blood test results for instant AI analysis

Understand Patterns

Identify trends and patterns in your blood sugar readings

Get Recommendations

Receive personalized recommendations for diet and exercise

Personalized Nutrition & Exercise

Plans tailored to your unique needs and cultural preferences

Personalized Diet Plans

Receive diet recommendations that respect your cultural preferences while helping manage your blood sugar levels.

- Culturally-appropriate meal suggestions
- Carbohydrate counting assistance
- Glycemic Index-based food choices

Custom Exercise Routines

Get exercise plans specifically designed for diabetes management, tailored to your fitness level.

- Safe exercises for diabetic patients
- Activity intensity recommendations
- Blood sugar impact monitoring

Start Managing Your Diabetes Smarter Today

Join thousands of users who are taking control of their diabetes with our AI-powered platform.

Create Free Account

DiabetesManager

Smart diabetes management platform powered by AI to help you track, analyze, and manage your condition effectively.

Links

Home

Login

Register

Contact

support@diabetesmanager.com

(906) 123-4567

123 Health St, Medical City

Follow Us

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DiabetesManager

DashboardMedicationsDiet PlanExercise PlanUpload ReportsProfileLogout

Profile Settings

Personal Information

First Name

Barnali

Last Name

Choudhury

Age

47

Gender

Select gender

Height (cm)

167.0

Weight (kg)

65.0

Diabetes Type

Select type

Diagnosed Date

20-04-2025

Ethnicity (for culturally appropriate diet plans)

Select ethnicity

Save Changes

Change Password

Current Password

New Password

Confirm New Password

Change Password

Profile Summary

BC

Barnali Choudhury

Barnali@gmail.com

type 2diagnosed Apr 20, 2025

Height

167.0 cm

Weight

65.0 kg

BMI

23.2 Overweight

Age

47

Account Information

Username

Barnali

Email

Barnali@gmail.com

Joined

Apr 26, 2025

DiabetesManager

DashboardMedicationsDiet PlanExercise PlanUpload ReportsProfileLogout

Upload Medical Reports

Upload Blood Sugar Report

Upload your blood sugar test report PDF to get AI-powered analysis and personalized recommendations.

Supported formats and report types:

- PDF files from lab test reports
- Reports containing blood glucose levels
- A1C test results
- Fasting glucose test reports
- Glucose tolerance test reports

Select Report File

Choose FileNo file chosen

Maximum file size: 10MB. PDF format only.

Upload & Analyze

How it Works

1 Upload Your Report

Upload your blood sugar report in PDF format

2 AI Analysis

Our AI analyzes your report and extracts key insights

3 Get Recommendations

Receive personalized diet and exercise recommendations

4 Take Action

Implement the suggestions to improve your health

Privacy & Security

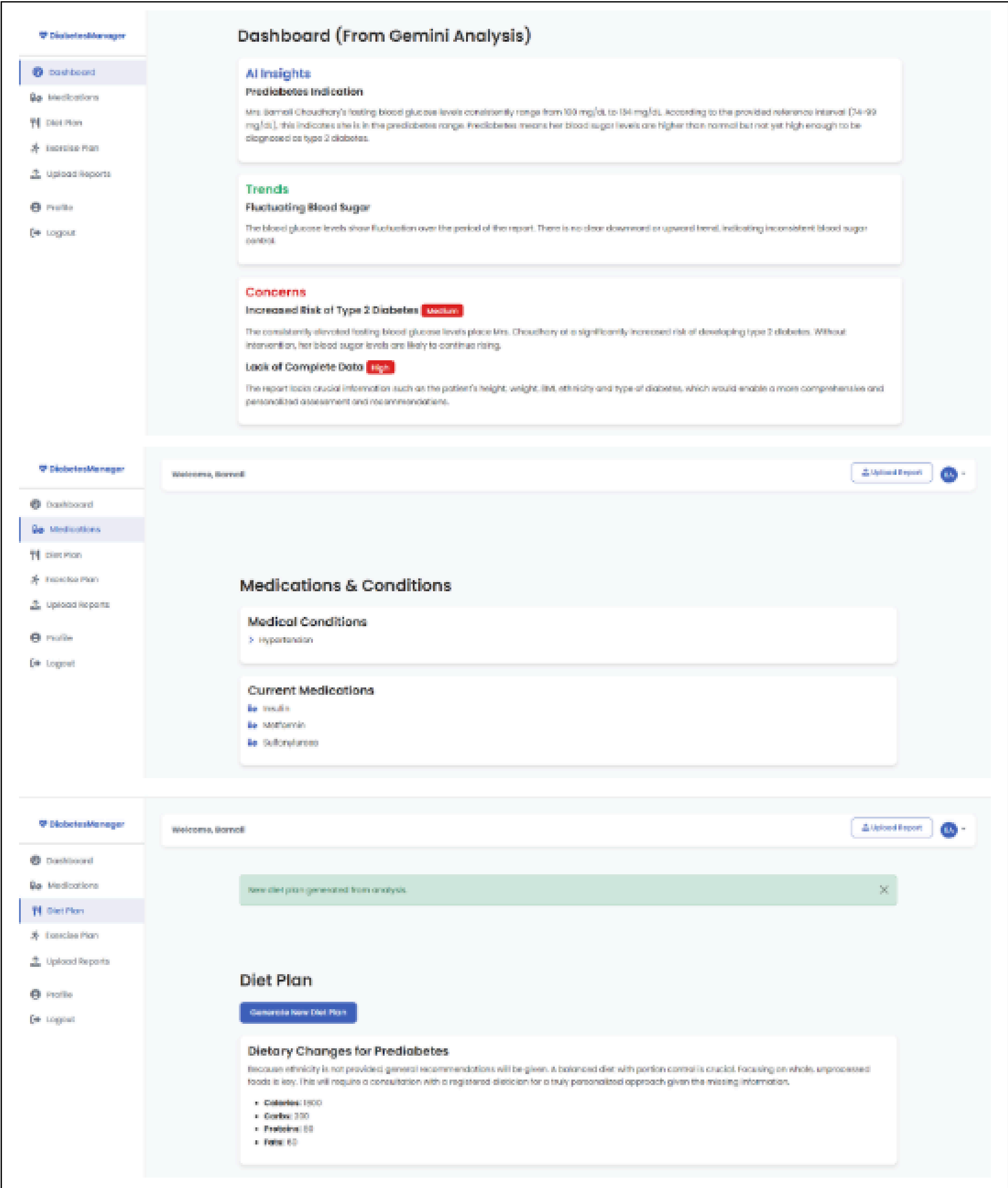
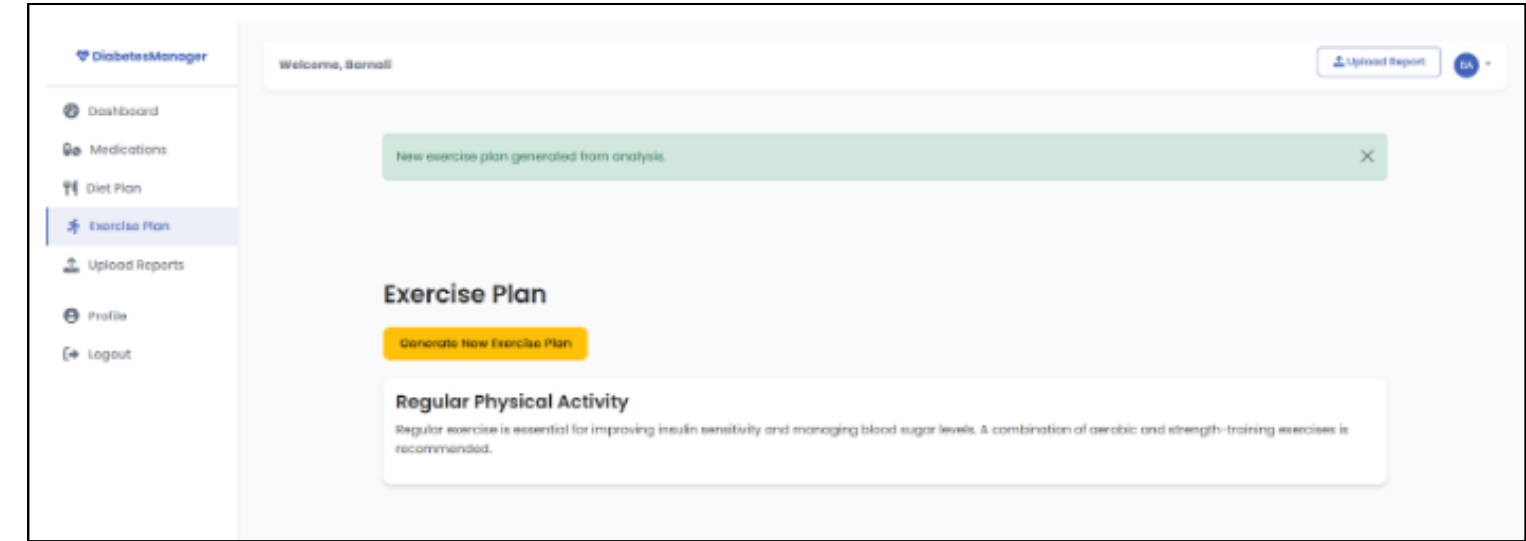
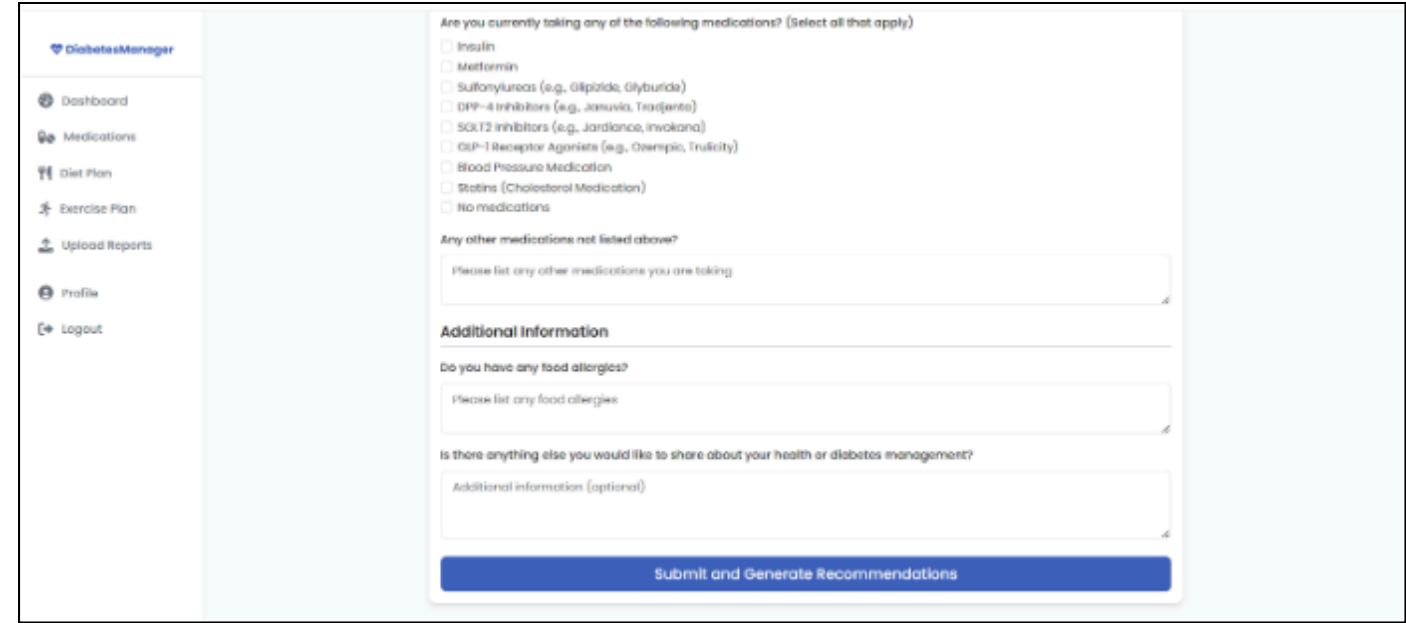
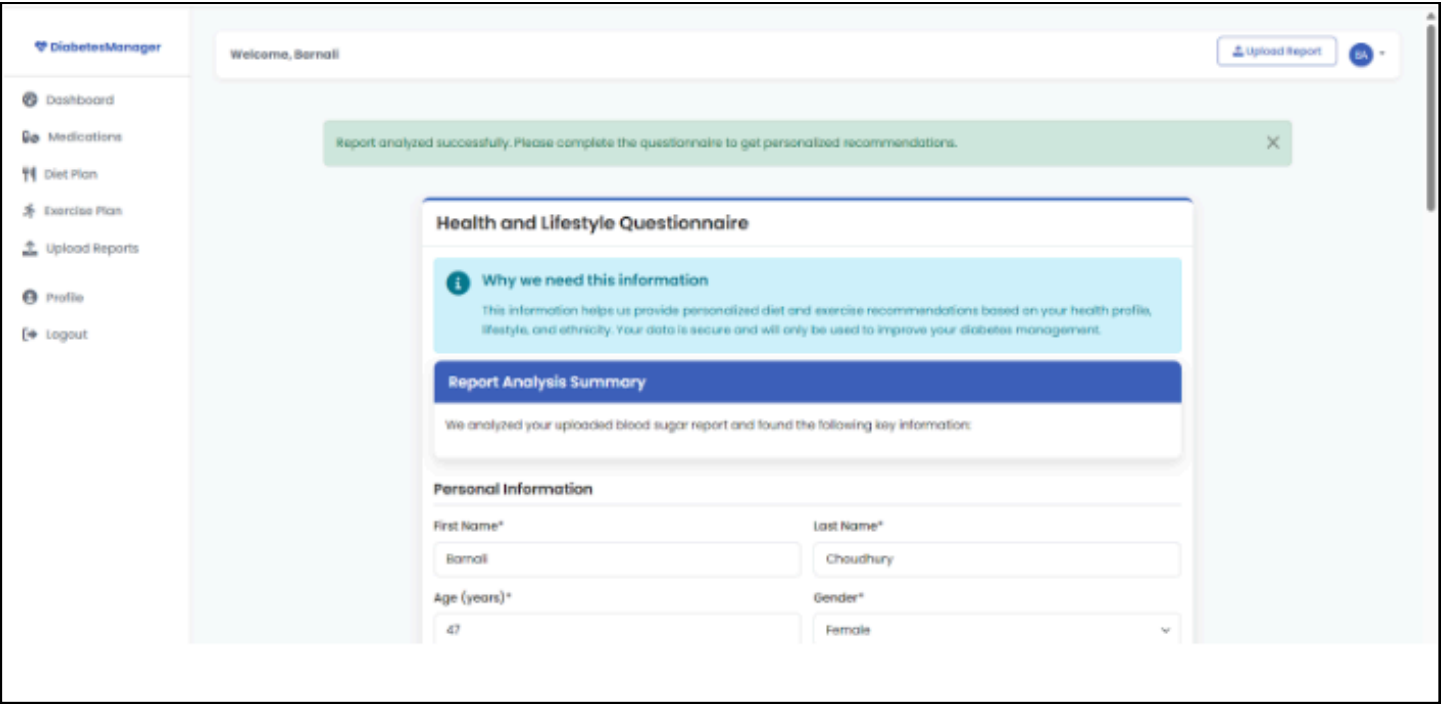
Your health data is important to us. Here's how we keep it safe:

Your reports are securely stored and encrypted

Only you can access your data

Analysis is performed with strict privacy controls

You can delete your data at any time

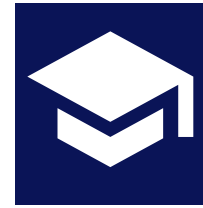


Thankyou

Personal Details



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B.Tech in CSE from Amity Noida



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