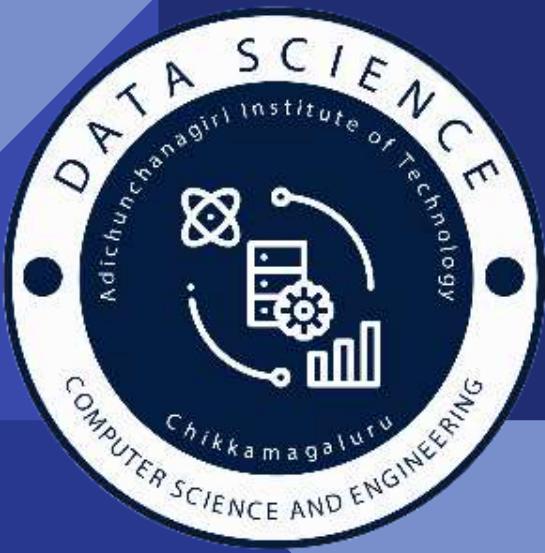


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Mini Project – Seminar On

‘‘Medi Alert: A Smart Pill Reminder for Medication Management and Adherence’’

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AGENDA

- Problem Statement
- Scope of the Project
- Project Design
- Methodology
- Implementation
- Challenges Faced
- Results
- Conclusion
- Future Work
- Question

PROBLEM STATEMENT

Individuals frequently fail to take their medications on time, leading to missed doses and inconsistent medication adherence, which may result in adverse health outcomes.

To design and implement user friendly web based application for individuals to maintain their medication adherence effectively.

SCOPE OF THE PROJECT

Develop a web-based application to manage and schedule medication reminders. Allow users to enter medicine details such as name, dosage, and timing. Send timely alerts through browser notifications, email, or SMS. Track taken and missed doses for monitoring medication adherence.

Key Features :

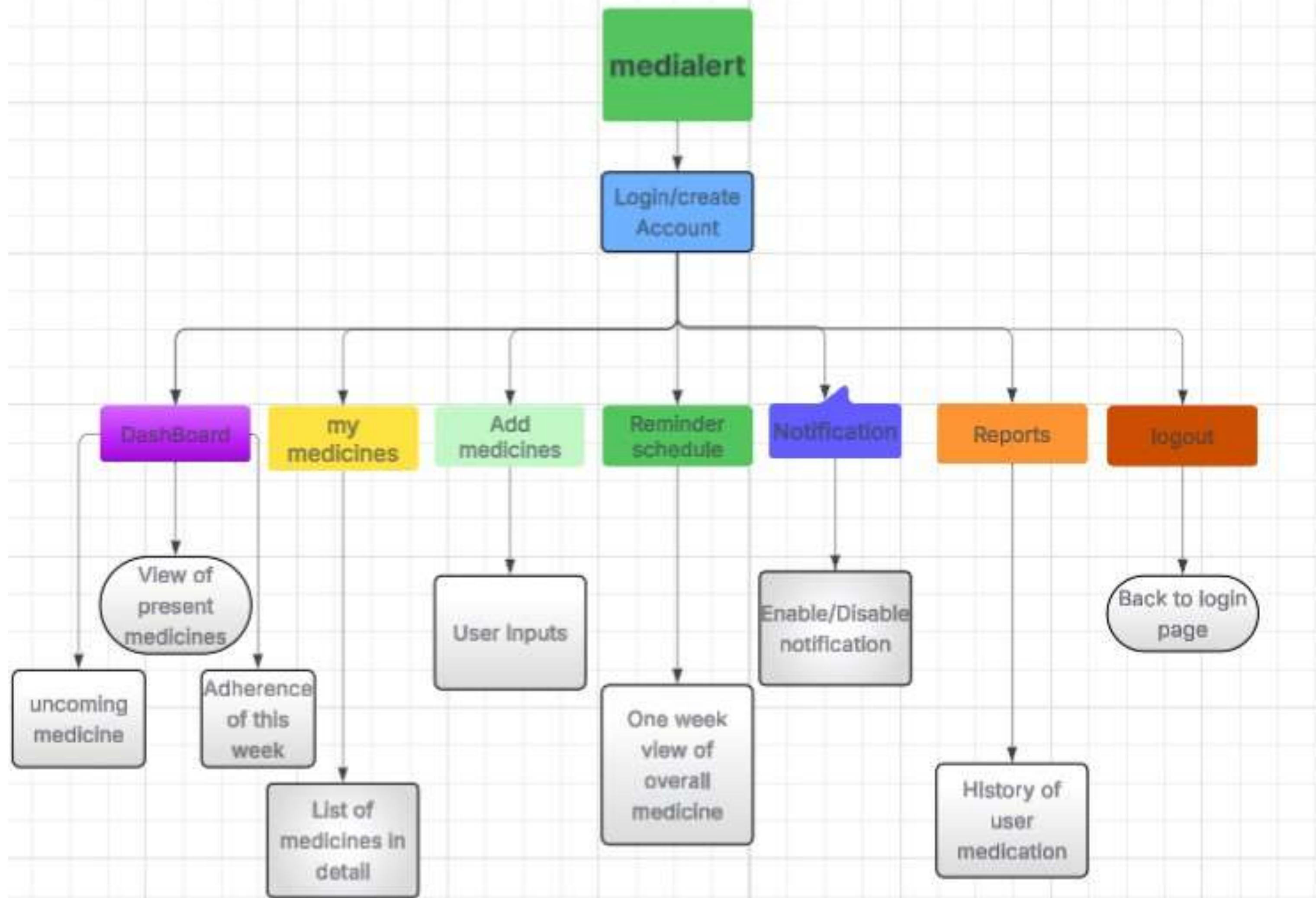
- Automated reminders via SMS.
- Medication history and adherence tracking.
- Responsive and user-friendly web interface.

PROJECT DESIGN

- **Frontend:** HTML, CSS
- **Backend:** Python ,Django
- **Database:** Mysql
- **SMS Notification Service:** Twilio API–sends automated medication reminders via SMS

METHODOLOGY

- Identify user requirements for medication scheduling, reminders, and tracking.
- Design the system flow, user interface, backend structure, and database.
- Develop the frontend using HTML, CSS easy for user interaction.
- Implement the backend using Django and integrate the database for storing schedules.
- Set up notification systems (email/SMS) and test the application for smooth performance.

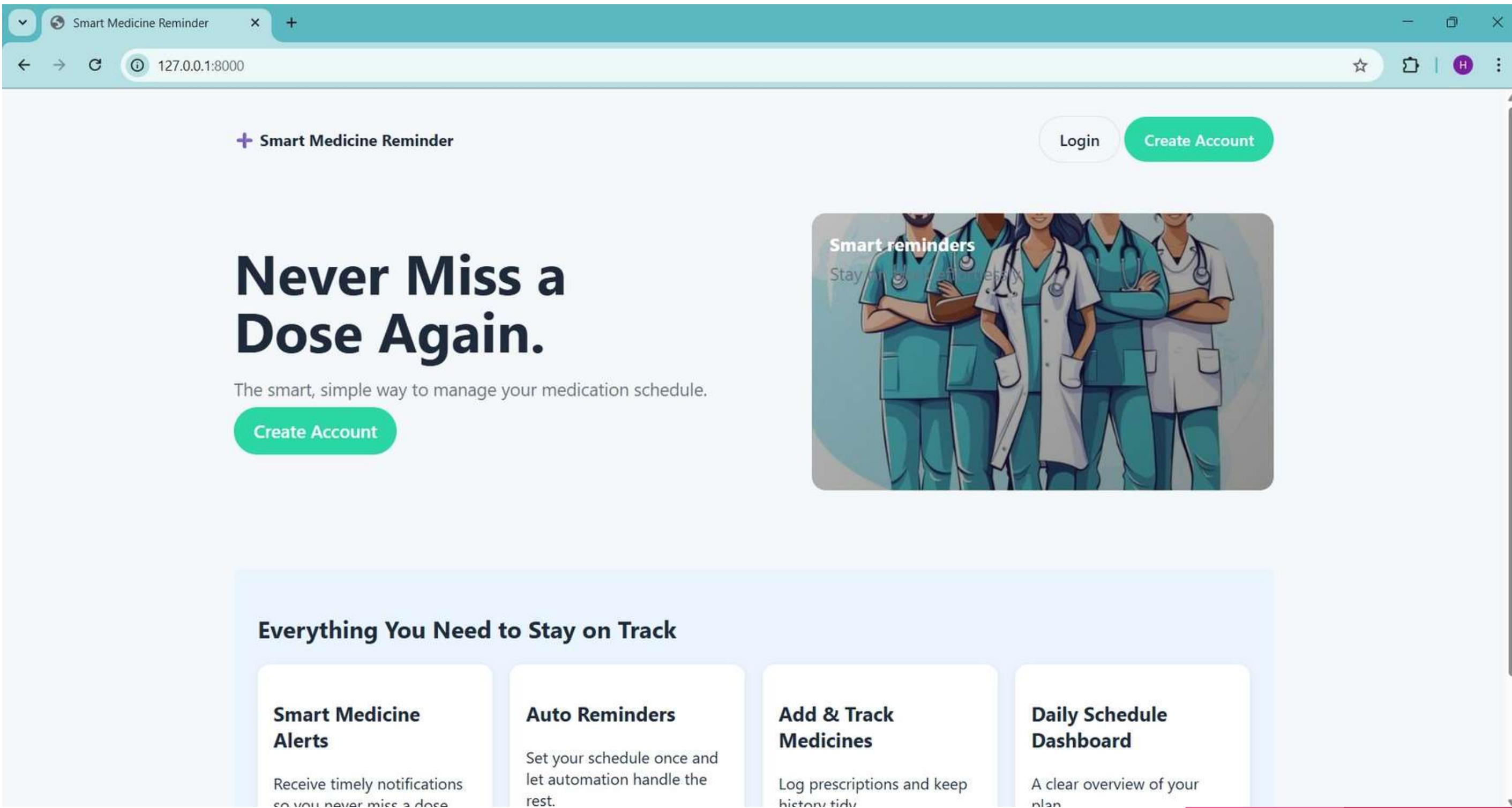


CHALLENGES FACED

- Ensuring reminders were sent exactly on time .
- Managing multiple reminder types (email, SMS).
- Making the interface simple for all users.
- Tracking taken and missed doses need to be precise .

RESULTS

Role-based login/register for User



The screenshot shows a web browser window titled "Smart Medicine Reminder" with the URL "127.0.0.1:8000". The page features a teal header bar with the title and a navigation bar with icons for back, forward, refresh, and search. Below the header is a "Smart Medicine Reminder" logo and a "Create Account" button. On the right side, there are "Login" and "Create Account" buttons. The main content area has a large heading "Never Miss a Dose Again." followed by the subtext "The smart, simple way to manage your medication schedule." and a "Create Account" button. To the right is a graphic of four healthcare professionals (two men and two women) in scrubs. A light blue callout box at the bottom left lists four features: "Smart Medicine Alerts", "Auto Reminders", "Add & Track Medicines", and "Daily Schedule Dashboard".

Smart Medicine Reminder

127.0.0.1:8000

+ Smart Medicine Reminder

Login Create Account

Never Miss a Dose Again.

The smart, simple way to manage your medication schedule.

Create Account

Smart reminders

Stay on track with ease.

Smart medicine alerts

Receive timely notifications so you never miss a dose.

Auto Reminders

Set your schedule once and let automation handle the rest.

Add & Track Medicines

Log prescriptions and keep history tidy.

Daily Schedule Dashboard

A clear overview of your plan.

RESULTS

User can view the present medicines adherence in dashboard

The screenshot shows the 'Smart Meds' dashboard interface. On the left, a sidebar menu lists 'Smart Meds' (selected), 'Dashboard' (highlighted in green), 'My Medicines', 'Add Medicine', 'Reminder Schedule', 'Notifications', 'Reports', and 'Logout'. The main content area features a teal header bar with the text 'Good morning, hrushank AJ!' and a message 'Missed Medicine — You missed your dose yesterday.' Below this, a section titled 'Today's Medicines' lists three medications: 'Pain killer' (Night), 'crocine' (Afternoon), and 'paracetamol' (Morning, Night). Each item has a 'Take' button to its right. In the bottom left, a pie chart titled 'Adherence This Week' shows 90% adherence with the message 'Good job!'. The bottom right contains a section titled 'Upcoming Reminders' with a list: '• Today, 09:00 PM — Sample Medicine' and '• Tomorrow, 08:00 AM — Sample Medicine'.

Smart Meds

Dashboard

My Medicines

Add Medicine

Reminder Schedule

Notifications

Reports

Logout

Good morning, hrushank AJ!

Missed Medicine — You missed your dose yesterday.

Today's Medicines

Pain killer
Night Take

crocine
Afternoon Take

paracetamol
Morning,Night Take

Adherence This Week

90%

Good job!

Upcoming Reminders

- Today, 09:00 PM — Sample Medicine
- Tomorrow, 08:00 AM — Sample Medicine

RESULTS

User can Add a New Medicines

The screenshot shows a web browser window with the title "Add Medicine" and the URL "127.0.0.1:8000/medicines/add/". The page is titled "Add a New Medicine" and contains instructions: "Fill in the details below to set up your reminders." A sidebar on the left is titled "Smart Meds" and includes links: Dashboard, My Medicines, Add Medicine (which is highlighted), Reminder Schedule, Notifications, Reports, and Logout.

Add a New Medicine

Fill in the details below to set up your reminders.

Medicine Name

Type

Dosage

Frequency

Start Date

End Date

Time Slots

Morning

Afternoon

Night

RESULTS

Weakly table of user input medicines

The screenshot shows a web browser window titled "Reminder Schedule" with the URL "127.0.0.1:8000/schedule/". The page is titled "Smart Meds" and displays a weekly medicine reminder schedule for the period November 24 - November 30, 2025.

The sidebar on the left contains the following navigation links:

- Dashboard
- My Medicines
- Add Medicine
- Reminder Schedule** (highlighted)
- Notifications
- Reports
- Logout

The main content area shows a grid of medicine reminders for each day of the week:

November 24 - November 30, 2025						
Mon 24	Tue 25	Wed 26	Thu 27	Fri 28	Sat 29	Sun 30
Pain killer 50 mg, 09:00 PM	Pain killer 50 mg, 09:00 PM	Pain killer 50 mg, 09:00 PM	crocine 10 mg, 01:00 PM	crocine 10 mg, 01:00 PM	crocine 10 mg, 01:00 PM	crocine 10 mg, 01:00 PM
crocine 10 mg, 01:00 PM	crocine 10 mg, 01:00 PM	crocine 10 mg, 01:00 PM	paracetamol 100 mg, 08:00 AM			
		paracetamol 100 mg, 08:00 AM	paracetamol 100 mg, 09:00 PM			
		paracetamol 100 mg, 09:00 PM				

RESULTS

Notification Traking

The screenshot shows a web browser window titled "Notifications" at the URL "127.0.0.1:8000/notifications/". The left sidebar, titled "Smart Meds", contains links for Dashboard, My Medicines, Add Medicine, Reminder Schedule, Notifications (which is highlighted), and Reports. The main content area is titled "Notifications" and includes a "Clear All" button. It features two sections: "Enable Push Notifications" (with an "Enabled" checkbox and a "Save" button) and a list of notifications. The notifications are:

- Upcoming Dose** (if n.type == 'missed') **Missed Dose**
paracetamol — 100 mg at 08:00 AM soon
- New Medicine Added**
paracetamol has been added to your schedule. recently

RESULTS

Reports /History of a specific user

The screenshot shows a web browser window for a medication management application named "Smart Meds". The URL is 127.0.0.1:8000/reports/. The sidebar on the left lists various features: Dashboard, My Medicines, Add Medicine, Reminder Schedule, Notifications, and Reports (which is currently selected). A green button labeled "vs last period" is visible above the main content area. The main content area displays a "Detailed History" table with the following data:

Date	Medication	Scheduled Time	Status
Nov 24, 2025	Pain killer 50 mg	09:00 PM	Missed
Nov 24, 2025	crocine 10 mg	01:00 PM	Missed
Nov 25, 2025	Pain killer 50 mg	09:00 PM	Missed
Nov 25, 2025	crocine 10 mg	01:00 PM	Missed
Nov 26, 2025	Pain killer 50 mg	09:00 PM	Due
Nov 26, 2025	crocine 10 mg	01:00 PM	Due
Nov 26, 2025	paracetamol 100 mg	08:00 AM	Due
Nov 26, 2025	paracetamol 100 mg	09:00 PM	Due

A message "Chart coming soon" is displayed in the center of the main content area.

CONCLUSION

The Medialert project helps users take their medicines on time by giving clear and timely reminders while tracking their medication history. Overall, it makes daily health management easier and improves medication adherence through a simple and user-friendly system.

Future Work

- Help doctors and caregivers remotely monitor whether patients are taking their medicines on time.
- It can be linked with smart devices like smartphones to give automatic physical alerts.
- The system can be enhanced with AI to analyze user habits
- Real-time health monitoring web-based application

Questions?

Thank You

