QuikDose

Application for Dosage Adherence

Simplify Your Medication Journey

DESIGN TASK THAT GOT ME AN INTERNSHIP AT A
MAJOR TECH COMPANY

ARINDAM CHAKRABORTY

This was the task.

People forget to take their medicines. How do you ensure that they remember to take their medicines?

It has to be an application.
It should **make the user remember their dosages.**

Spoiler Alert: I got the internship.

Meet Priya.

She has been suffering from Vitamin D Deficiency for a while now.

She was prescribed medicines, but she forgets to take them.

She had to be hospitalized.
Is she the only one who forgets?

How many people in India miss their medicine doses?

According to a study (1), The Medicine Adherence rate in India is significantly lower than the global average (~50%)

~19%	50%
Medication adherence in India	non-adherence rates for chronic conditions

(1) Shah MH, Honnekeri AS, Samat DA, Shah P, Nayak UV, Kini SG. Digging Deep: Medication Adherence in Chronic Diseases and Its Association With Patient Satisfaction and Stress in an Indian Metropolis. Cureus. 2023 Oct 4;

Why do people miss their medicine doses?

- **Forgetfulness**
  One of the most prevalent reasons is simply forgetting to take the medication. This is especially common when **medications need to be taken multiple times a day**, as the likelihood of forgetting increases with frequency
- **Changes in Routine:**
  Life events such as travel, changes in work schedules, or **unexpected appointments can disrupt regular medication-taking habits**, resulting in missed doses
- **Lack of Understanding**
  Patients may not fully understand the importance of their medication or **how to take it correctly**, leading to non-adherence. This includes not knowing the consequences of missing doses
- **Emotional Factors:**
  Some individuals **may struggle with accepting their diagnosis or feel overwhelmed by their treatment regimen**, which can lead to avoidance behaviors regarding medication adherence

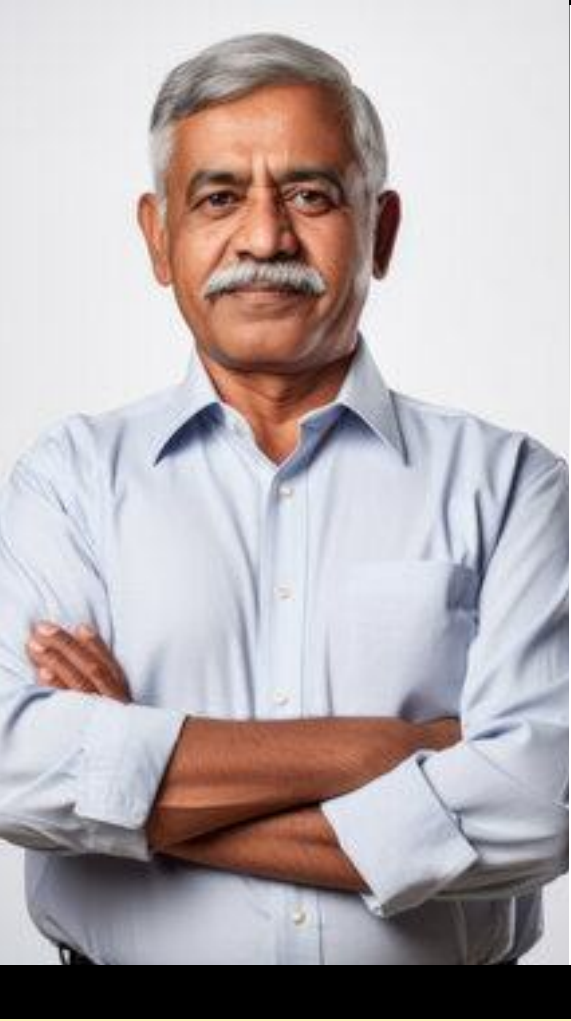
How do we make people remember their medicines?

- **Setting Reminders:**
  Using alarms or mobile apps to remind patients when it's time to take their medications.
- **Simplifying Regimens:**
  Any Interaction/Application that can help and work with patients to simplify their medication schedules and reduce the number of daily doses.
- **Motivation:**
  Providing clear information about the importance of adherence and the potential consequences of missing doses can help motivate patients.

People diagnosed with various diseases → FORGETFULNESS, STRESS, LACK OF KNOWLEDGE ETC. → **People miss their medicine doses**

People miss their medicine doses → REMINDERS, AWARENESS, REWARDS → **People adhere to their medication**

USER PERSONAS



Rajesh Kumar

Age: 55 **Location:** Delhi, India **Occupation:** Retired Government Officer
Health Condition: Type 2 Diabetes and Hypertension

Background:
Rajesh is a retired government officer who enjoys spending time with his grandchildren and reading newspapers. He has been managing diabetes for over 10 years and was recently diagnosed with hypertension. His doctor has prescribed him a complex medication schedule, which he finds hard to remember.

Goals:
To simplify tracking his medication routine.
To ensure he never misses a dose.
To monitor his health trends over time.

Pain Points:
Often forgets to take his evening dose due to family activities.
Finds medication schedules confusing, especially with varying timings.
Is unsure whether he's improving or staying on track with his health.

Technology Comfort Level:
Moderate – Uses a smartphone for WhatsApp and YouTube but is not tech-savvy.

Motivation for App Use:
Rajesh wants a simple, easy-to-use app that reminds him of his medications and helps him understand his health progress. Gamification features like streaks and rewards will motivate him to stay consistent.

USER PERSONAS

Priya Sharma

Age: 28 **Location:** Bengaluru, India **Occupation:** Software Engineer
Health Condition: Hypothyroidism

Background:
Priya is a busy software engineer working in a fast-paced tech company. She was diagnosed with hypothyroidism two years ago and must take her medication every morning before breakfast. Her demanding work schedule often leads to skipping doses.

Goals:
To integrate her medication tracking seamlessly into her daily routine.
To build consistent medication habits despite her hectic schedule.
To gain insights into her health trends for personal accountability.

Pain Points:
Misses her morning doses during early meetings or when working late nights.
Finds tracking medication and refills manually to be time-consuming.
Prefers a solution that fits into her digital lifestyle without feeling intrusive.

Technology Comfort Level:
High – Actively uses fitness apps, task managers, and wearable tech.

Motivation for App Use:
Priya seeks an app that integrates reminders with her smartwatch, provides adherence insights, and uses gamified elements like streaks and progress reports to maintain consistency.

USER JOURNEY

	Diagnosis	Routine	Distraction	Missed Dose	Habit Formation
User Actions	User receives diagnosis and prescribed medication.	User attempts to integrate medication into daily routine.	User is distracted by other tasks, forgets to take the medication.	User misses a dose and doesn't take action to recover it.	User stops trying to remember or integrates medication irregularly.
Emotions	😢 Overwhelmed	😅 Frustration	😖 Guilt	😓 Resigned	😭 Hopeless
Pain Points	Not fully understanding the importance of taking medication regularly.	Busy lifestyle and lack of routine create difficulties in remembering.	Competing priorities (work, family, etc.) make remembering medication difficult.	No visible immediate effect, leading to lack of motivation.	Medication feels like an added burden,
Opportunities	Provide clear information about the importance of adherence.	Suggest simple ways to incorporate medication into routine (e.g., with meals).	Address distraction with mindfulness techniques or external reminders.	Provide gentle reminders that missing a dose is common, and offer easy recovery methods.	Reinforce the idea of small wins and progress to encourage consistency.

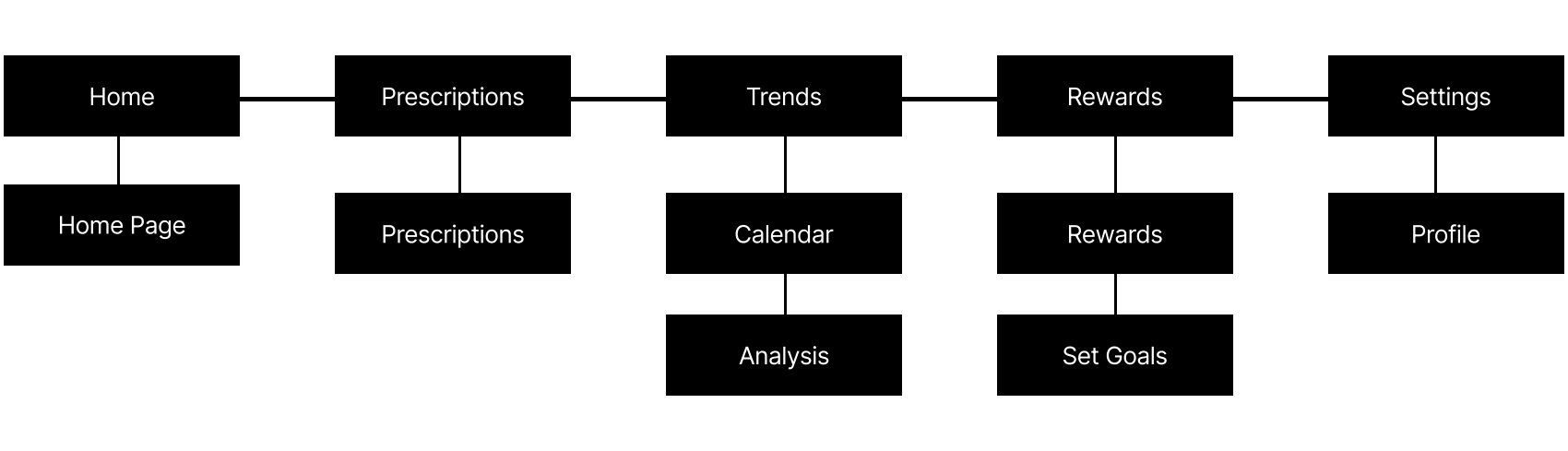
Problem Statement:

Patients with chronic diseases face significant challenges in adhering to their prescribed medication regimens due to forgetfulness, lack of knowledge about their illness, perceived stress, doubts about medication efficacy, and barriers like access, cost, and complex schedules.

These factors, compounded by dissatisfaction with healthcare and disruptions in daily routines, lead to poor adherence, increasing the risk of complications and reduced treatment effectiveness.

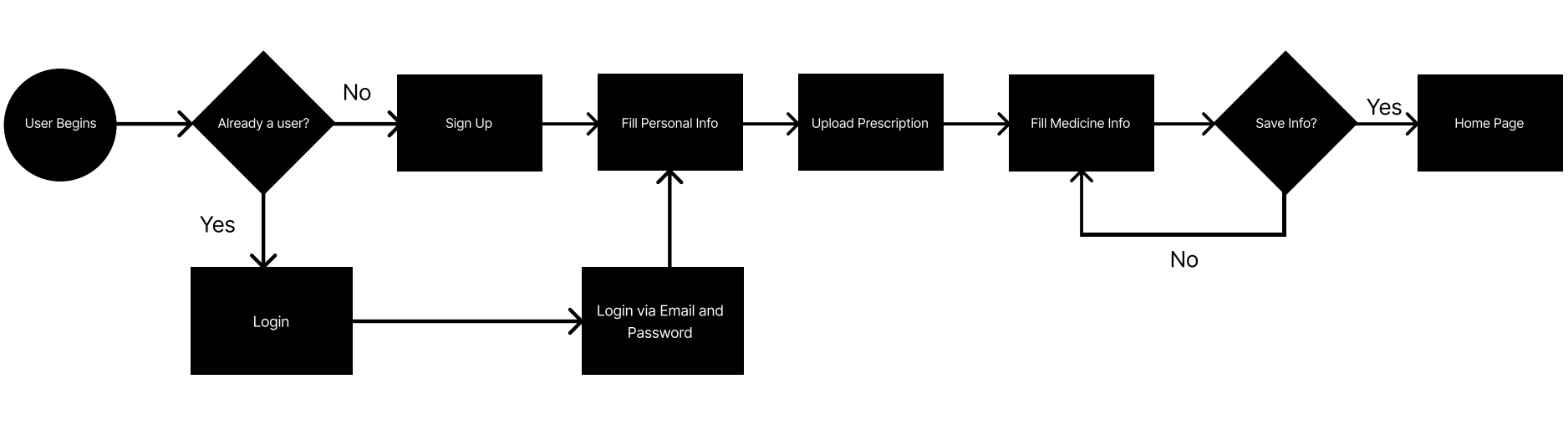
Ideation

INFORMATION ARCHITECHURE

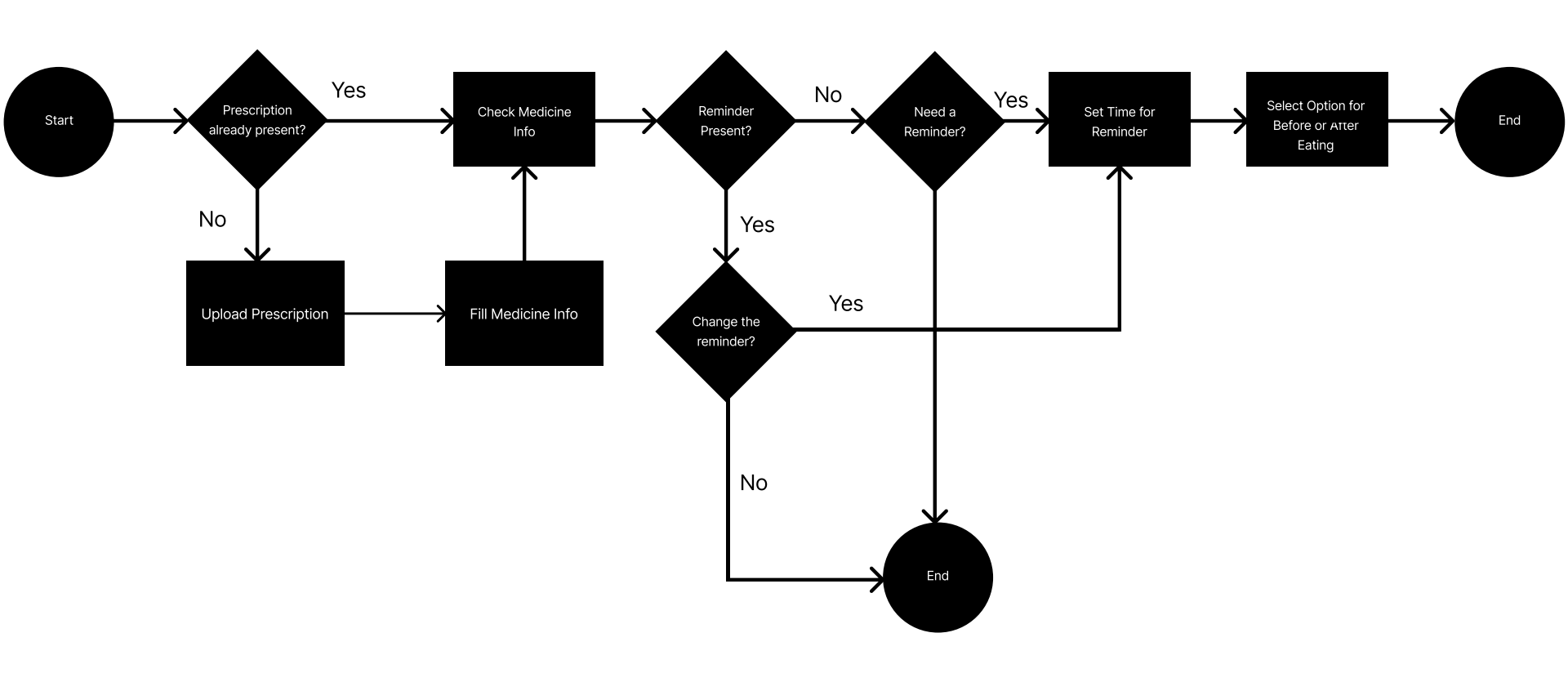


- Home
  - Home Page
- Prescriptions
  - Prescriptions
- Trends
  - Calendar
  - Analysis
- Rewards
  - Rewards
  - Set Goals
- Settings
  - Profile

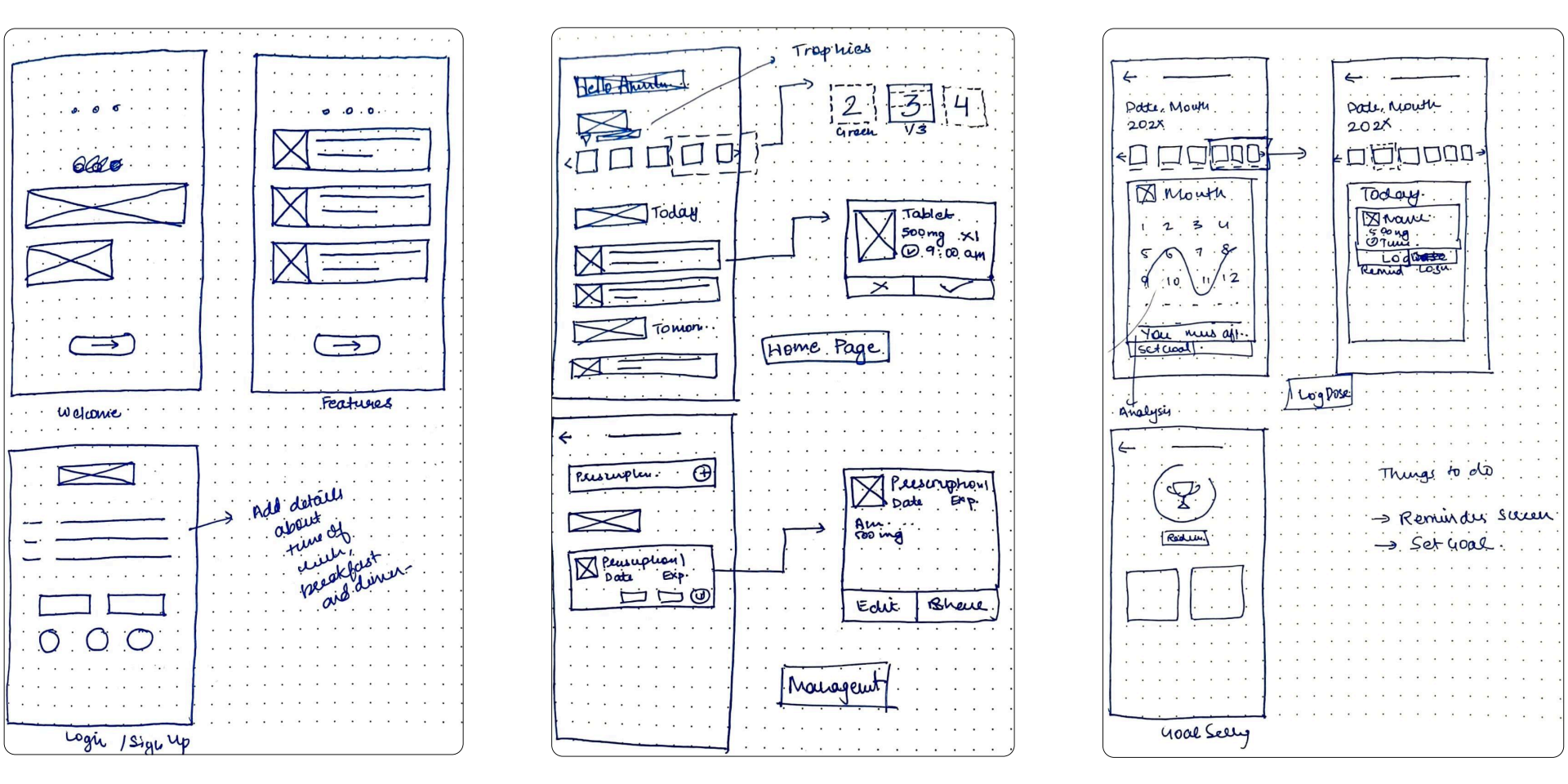
USER FLOW FOR ONBOARDING


User Begins
Already a user?
No
Sign Up
Fill Personal Info
Upload Prescription
Fill Medicine Info
Save Info?
Yes
Home Page
No
Yes
Login
Login via Email and Password

USER FLOW FOR REMINDERS


Start
Prescription already present?
Yes
Check Medicine Info
Reminder Present?
No
Need a Reminder?
Yes
Set Time for Reminder
Select Option for Before or After Eating
End
No
Upload Prescription
Fill Medicine Info
Yes
Change the reminder?
Yes
No
End

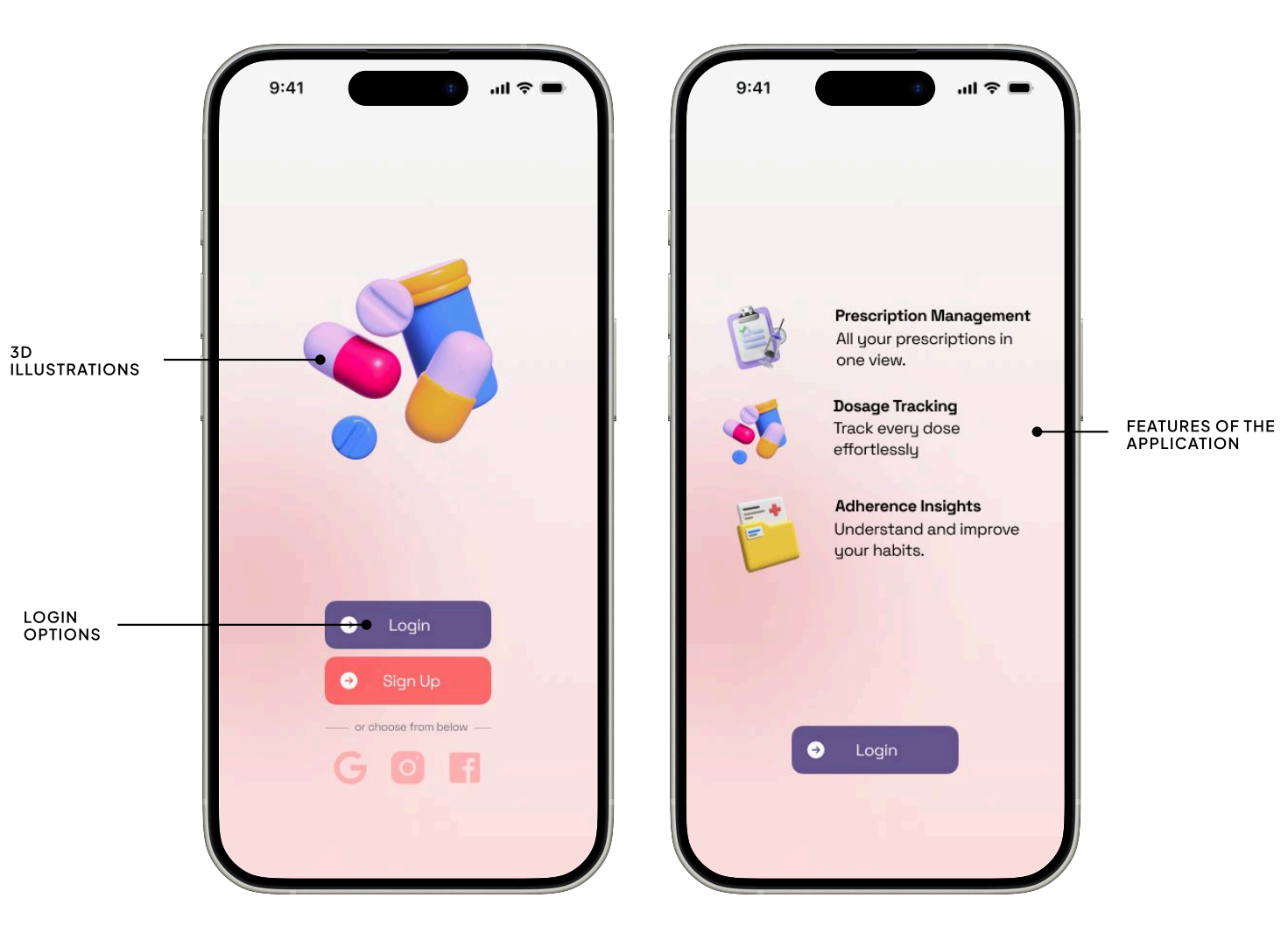
LOW FIDELITY WIREFRAMES


Welcome
Features
Add details about time of lunch, breakfast and dinner
Login / Sign Up
Trophies
Today
Home Page
Management
Edit
Share
Month
Analysis
Log Dose
Things to do
→ Reminder Screen
→ Set Goal
Goal Setting

High Fidelity Wireframes

ONBOARDING

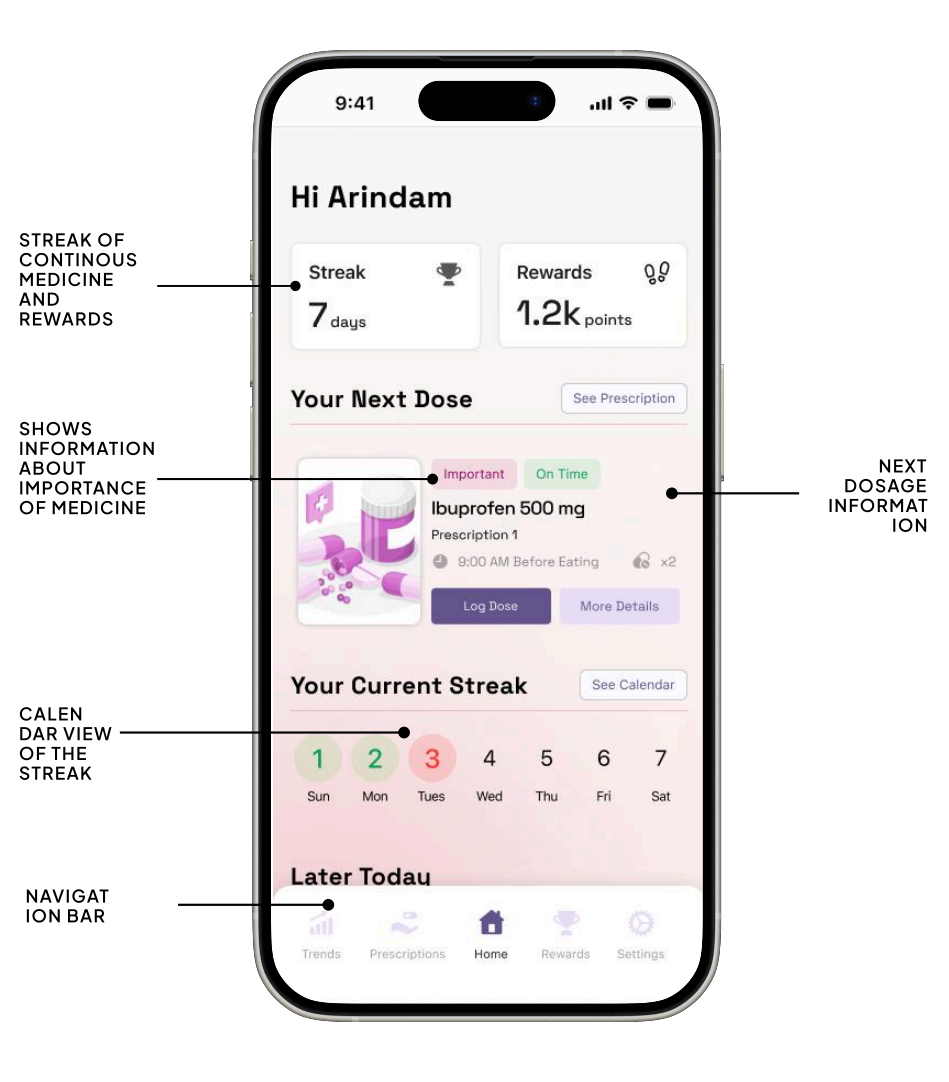
The app outlines its main features to familiarize users with its benefits and purpose. This sets expectations for functionality and usability.

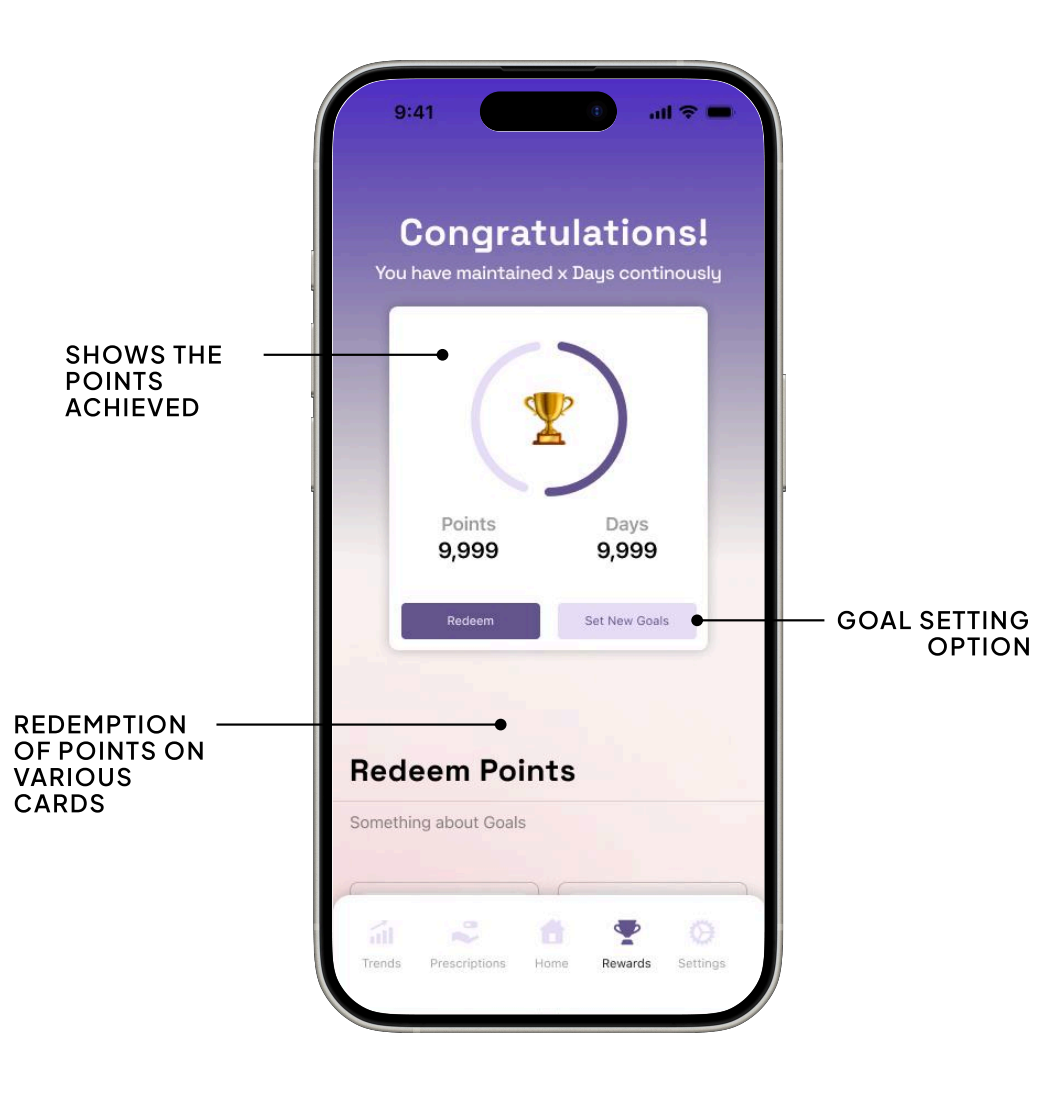

3D ILLUSTRATIONS
LOGIN OPTIONS
Login
Sign Up
Prescription Management
All your prescriptions in one view.
Dosage Tracking
Track every dose effortlessly
Adherence Insights
Understand and improve your habits.
Login
FEATURES OF THE APPLICATION

High Fidelity Wireframes

Home Page

The Home Page gives the user options to log their next dose, view their rewards and their current streak on the calendar.


STREAK OF CONTINOUS MEDICINE AND REWARDS
SHOWS INFORMATION ABOUT IMPORTANCE OF MEDICINE
CALENDAR VIEW OF THE STREAK
NAVIGATION BAR
NEXT DOSAGE INFORMATION
Hi Arindam
Streak
7 days
Rewards
1.2k points
Your Next Dose
Ibuprofen 500 mg
Log Dose
More Details
Your Current Streak
Later Today


SHOWS THE POINTS ACHIEVED
REDEMPTION OF POINTS ON VARIOUS CARDS
GOAL SETTING OPTION
Congratulations!
You have maintained x Days continously
Points
9,999
Days
9,999
Redeem
Set New Goals
Redeem Points

High Fidelity Wireframes

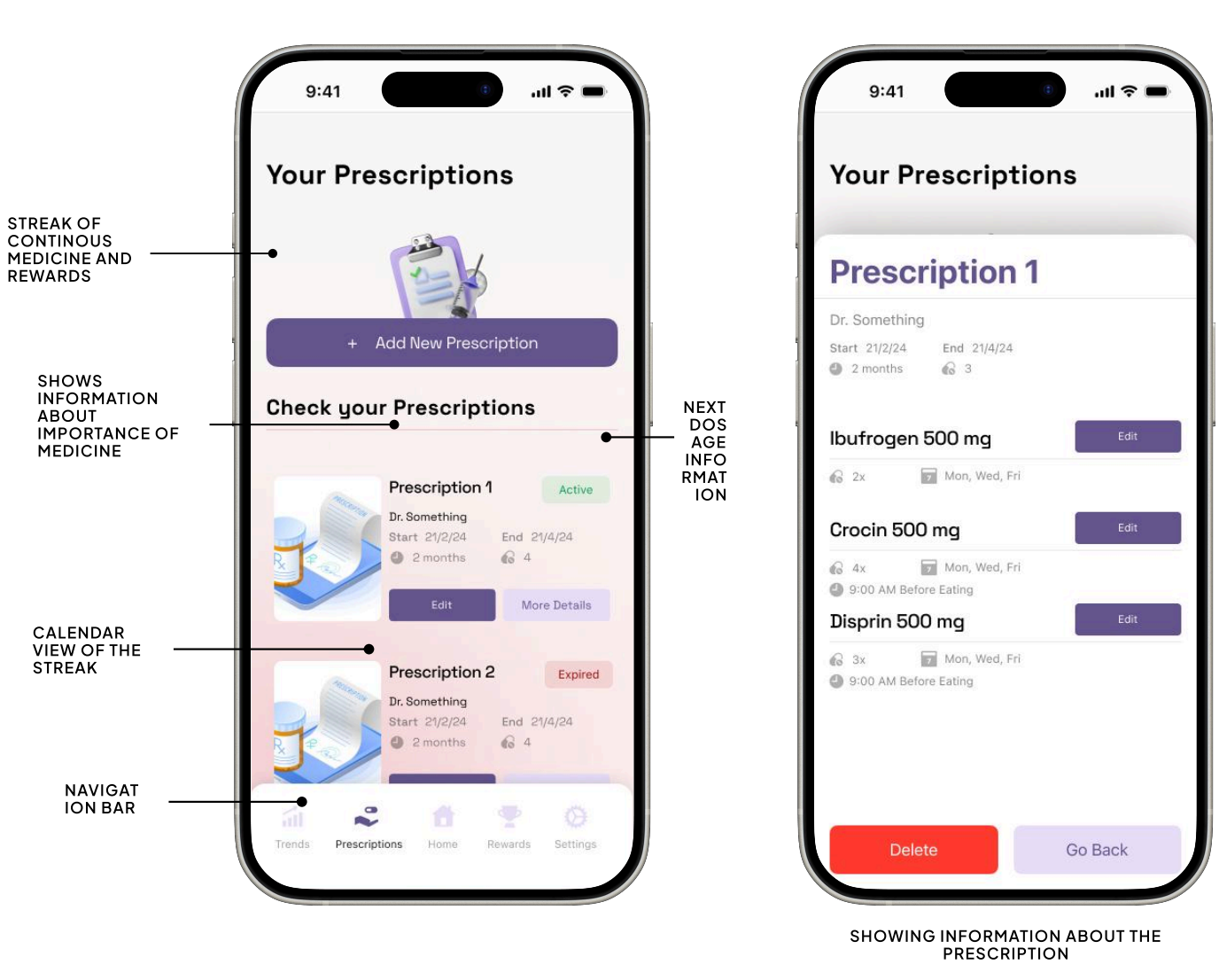
Rewards Page

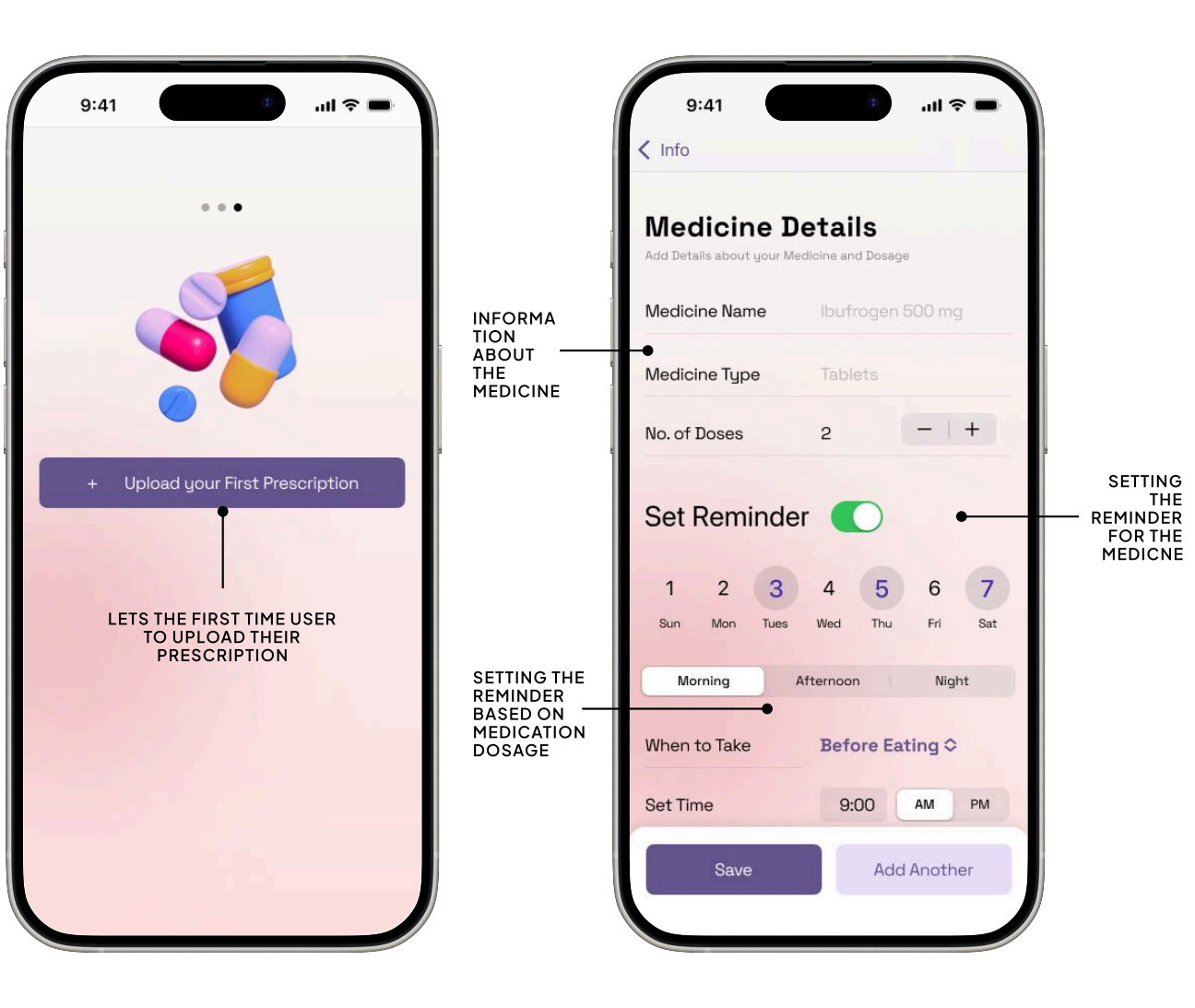
The rewards page helps the user to see how far they are at the process and how much they have received the rewards for the same.

High Fidelity Wireframes

Prescription Management:

Users input and review prescriptions to ensure their medication schedule is always accessible and updated.


STREAK OF CONTINOUS MEDICINE AND REWARDS
SHOWS INFORMATION ABOUT IMPORTANCE OF MEDICINE
CALENDAR VIEW OF THE STREAK
NAVIGATION BAR
NEXT DOSAGE INFORMATION
Your Prescriptions
Add New Prescription
Check your Prescriptions
Prescription 1
Prescription 2
Ibufrogen 500 mg
Crocin 500 mg
Disprin 500 mg
Delete
Go Back
SHOWING INFORMATION ABOUT THE PRESCRIPTION


Upload your First Prescription
LETS THE FIRST TIME USER TO UPLOAD THEIR PRESCRIPTION
INFORMATION ABOUT THE MEDICINE
Medicine Details
Medicine Name
Medicine Type
No. of Doses
Set Reminder
Morning
Afternoon
Night
When to Take
Before Eating
Set Time
9:00
Save
Add Another
SETTING THE REMINDER BASED ON MEDICATION DOSAGE
SETTING THE REMINDER FOR THE MEDICINE

High Fidelity Wireframes

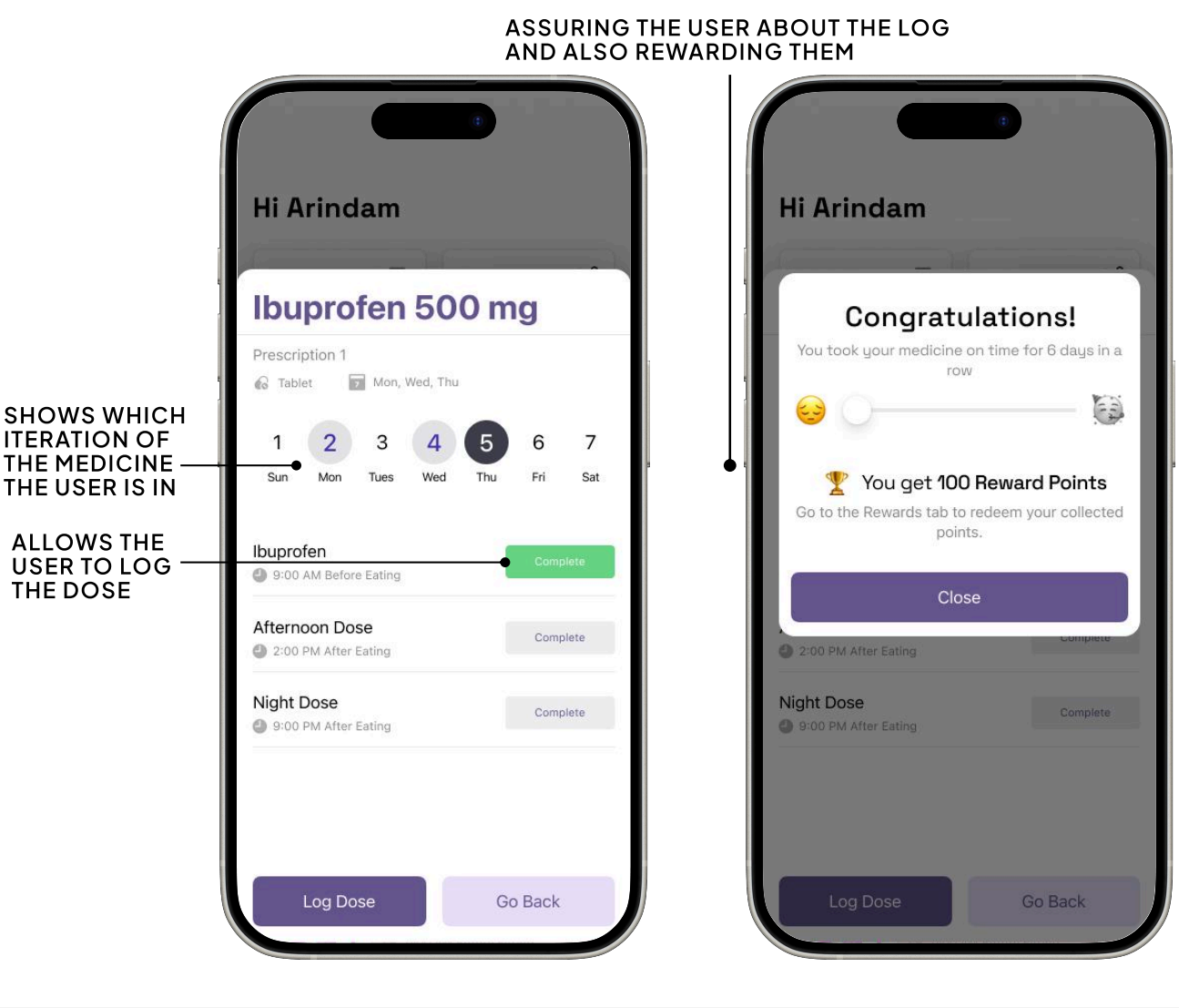
Reminder Setting

When the user onboards for the first time, the app asks to upload the prescription, and then Add Medicine details, where they can add a reminder for their medicine.

High Fidelity Wireframes

Logging a Dose

When the user saves a dose, and they have taken it, they can log the dose on the app and gain points.


SHOWS WHICH ITERATION OF THE MEDICINE THE USER IS IN
ALLOWS THE USER TO LOG THE DOSE
ASSURING THE USER ABOUT THE LOG AND ALSO REWARDING THEM
Hi Arindam
Ibuprofen 500 mg
Afternoon Dose
Night Dose
Complete
Log Dose
Go Back
Congratulations!
You took your medicine on time for 6 days in a row
You get 100 Reward Points
Close

UPDATED USER JOURNEY

	Awareness	Onboarding	Engagement	Growth	Loyalty
User Actions	Searches for solutions online. Finds and downloads the app.	Creates a profile. Adds medications. Enables notifications.	Logs doses daily. Views progress dashboard. Earns streak badges.	Explores adherence insights. Tracks trends visually.Receives refill alerts.	Redeems rewards. Refers the app. Maintains long-term adherence.
Emotions	🤒🧐 Sick -> Curious	🤔😁 Skeptical -> Reassured	😀😚 Empowered -> Satisfied	😎 Confident	🥰 Happy
Pain Points	Lack of awareness about adherence solutions.	Fear of a complex setup process.	Boredom or lack of motivation to log doses daily.	Overwhelmed by unstructured data.	Losing interest after the initial usage phase.
Opportunities	Highlight app features through ads and reviews.	Provide a seamless, intuitive onboarding experience with tips.	Gamify the process with streaks and badges.	Offer simplified visuals and actionable insights.	Use rewards and referrals to maintain engagement.

Learnings from the task

The task is to measure design efficiency & not design skills.

Use resources available online like Material M3, Apple and Figma Design Systems that make your workflow faster instead of creating stuff from scratch.

Use Jargons wisely.

Your process should include some names of frameworks, methodologies that already exist that show you are academically in tune with the design process.

Use storytelling in your task presentation.

Often times than not, you might not a chance to present your work on a call. So, make your submission in a storytelling format and try to tell a story through your work. Let all the design jargons fall into the story. This makes it an interesting read.