TherapEase

Syncing Patient Movement with Care

TherapEase

At-Home Physiotherapy Monitoring App

MEET THE DEVELOPERS

SOMAY SINGH

Backend And Machine Learning Engineer

BSc (Hons.) Computer Science 3rd year
Applied AI Engineer focusing on, real world applications

KESHAV PAL

Frontend Dev And Database Architect

BSc (Hons.) Computer Science 3rd year
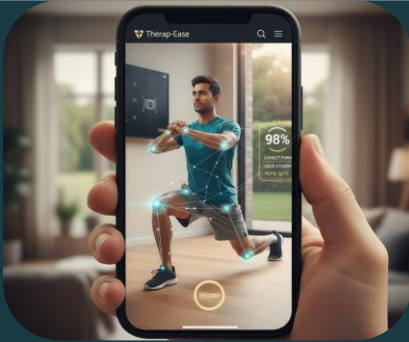Software Developer, with a focus on Data & Automation

SHIVAM YADAV

Lead Product Strategist And Researcher

BSc (Hons.) Computer Science 3rd year
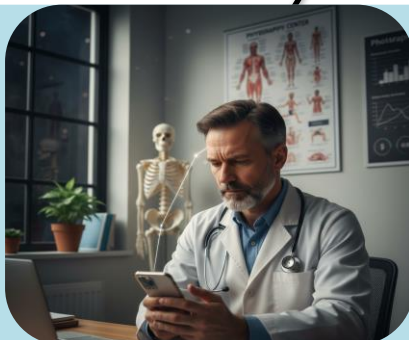Specializing in Python-driven research for ML models

THE CORE ECOSYSTEM

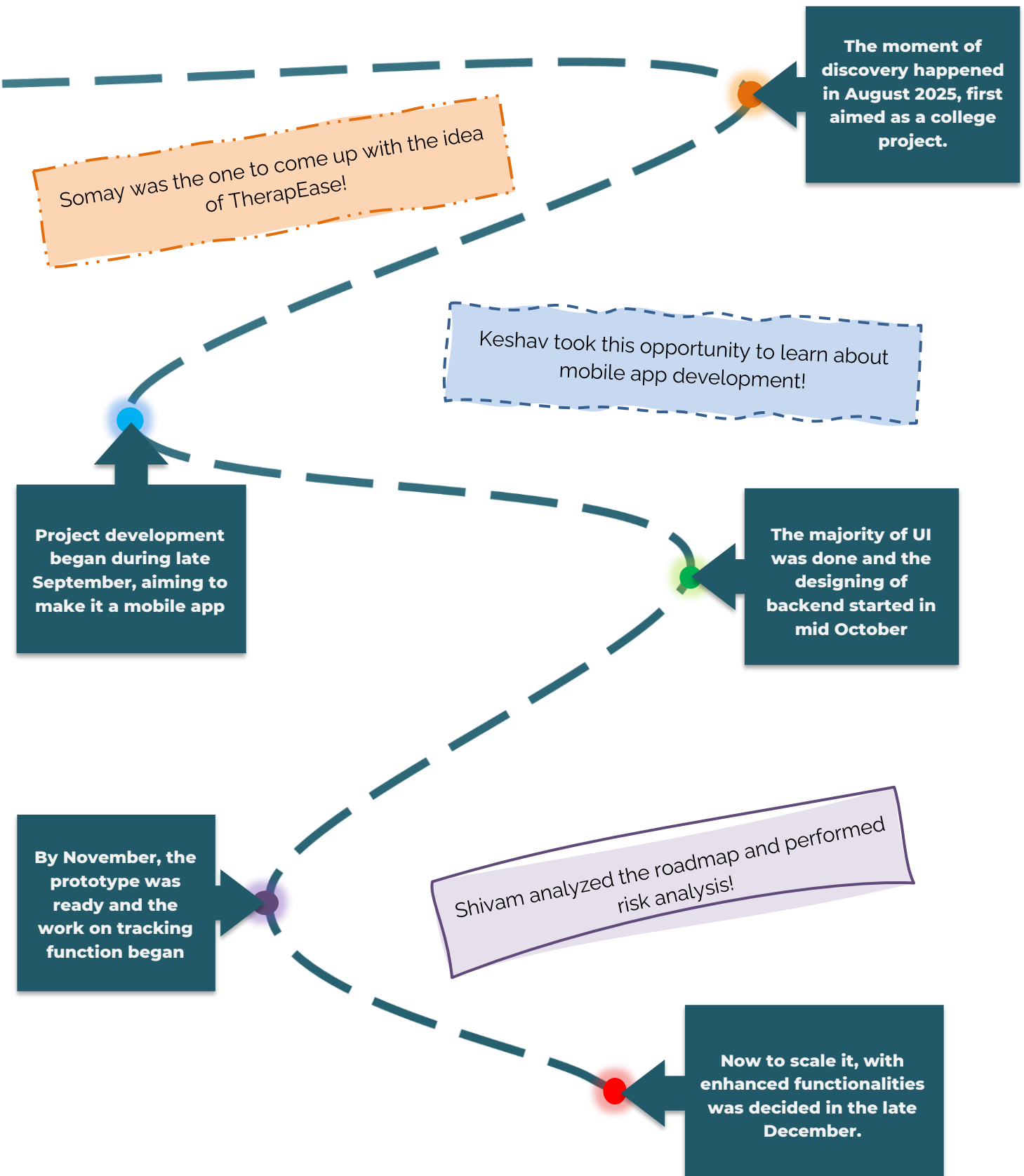Exercise Tracking

Get instant reviews

Cuts the distance

Progress Tracking

Generate prescription

GENESIS VISION

The moment of discovery happened in August 2025, first aimed as a college project.

Somay was the one to come up with the idea of TherapEase!

Keshav took this opportunity to learn about mobile app development!

Project development began during late September, aiming to make it a mobile app

The majority of UI was done and the designing of backend started in mid October

By November, the prototype was ready and the work on tracking function began

Shivam analyzed the roadmap and performed risk analysis!

Now to scale it, with enhanced functionalities was decided in the late December.

BEHIND THE WORKFLOW

Doctors can review the reports and adjust exercise plans, intensity, or frequency without needing an in-person visit.

The app monitors patients' exercises through camera or and provides feedback on their performance and progressions.

Greatly reduce the need for frequent hospital visits, easing overcrowding and avoid financial burden on travel expenses.
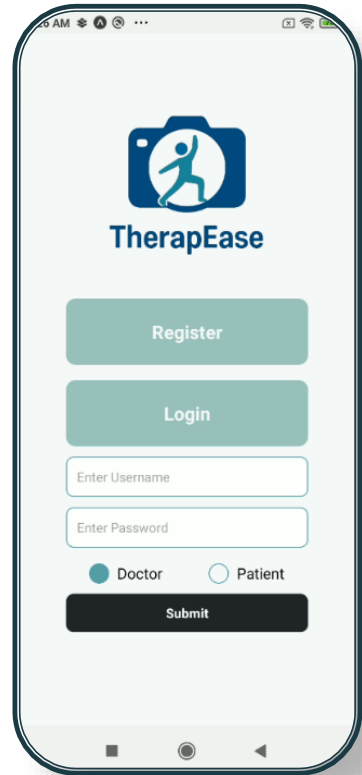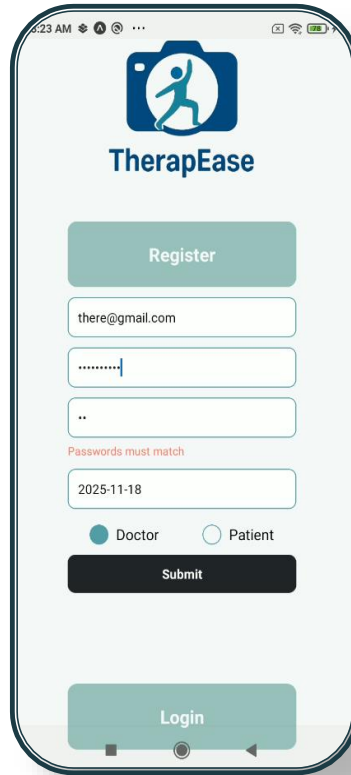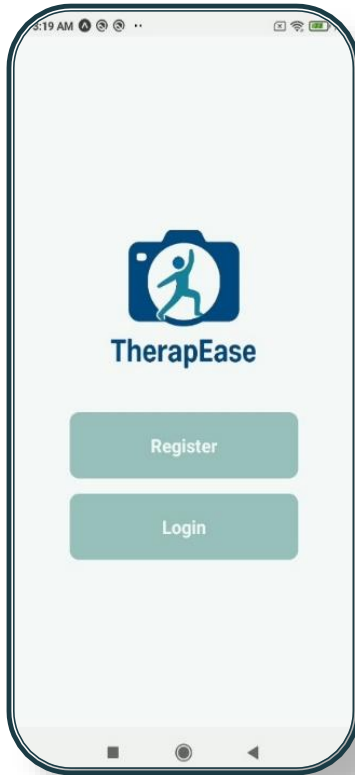
Designed for all age groups, with easy to learn navigation, exercise steps, and reminders to improve the posture for speedy recovery and correct rep count.
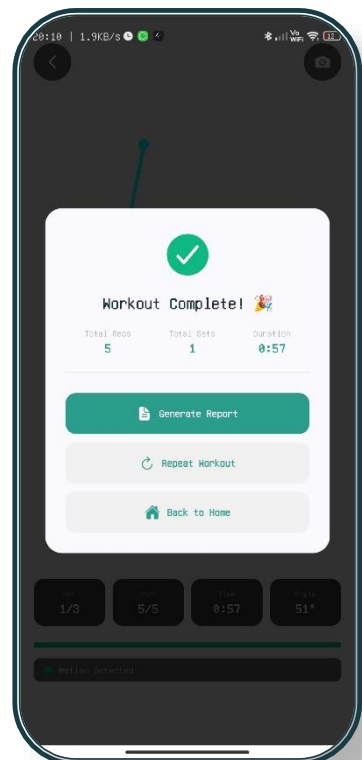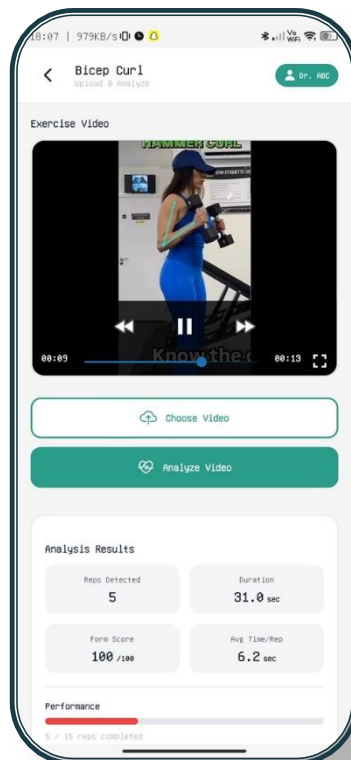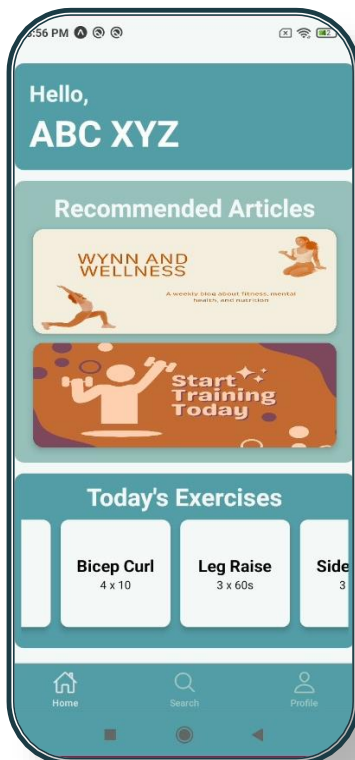
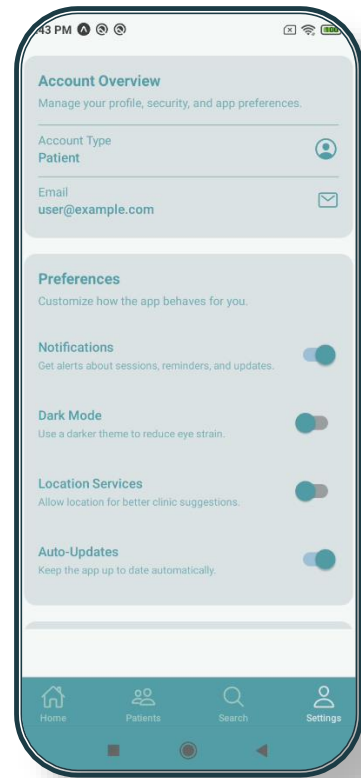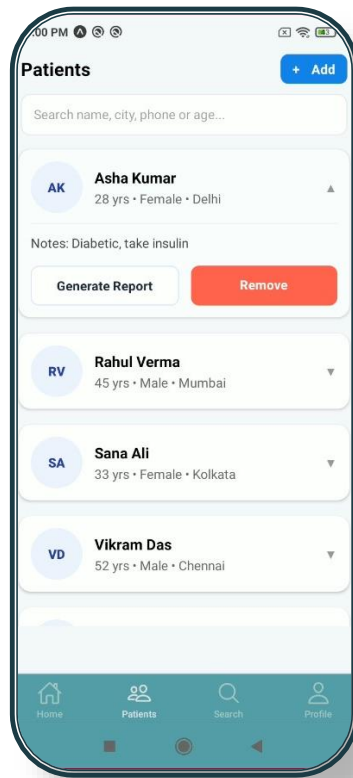All exercise data will be automatically collected and converted into a clear, structured PDF report.
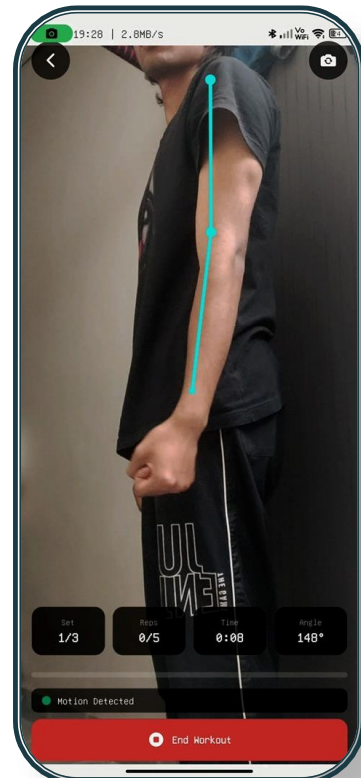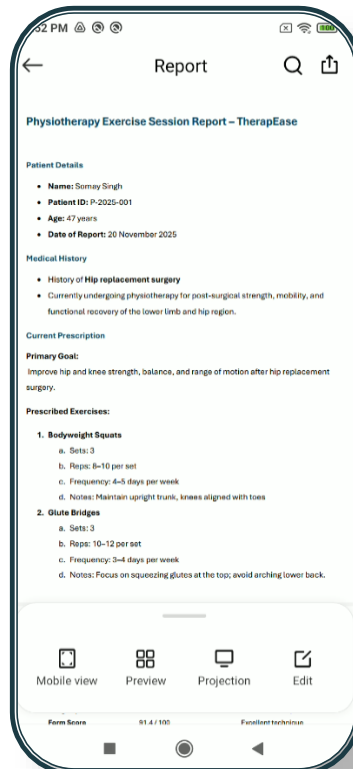
WHAT'S INSIDE

LOGIN / REGISTERATION PAGE

PATIENT SCREEN

DOCTOR SCREEN

Screen 1 (Home):
Hello,
Dr. ABC XYZ

Upcoming Appointments

Keshav, #12321
27 October at 17:30

Shivam, #11354
27 October at 20:00

Somay, #14354
28 October at 09:00

Patient Activity Chart

Random values

Average value | Samples

Home | Patients | Search | Profile

Screen 2 (Patients):
Patients   + Add

Search name, city, phone or age...

AK **Asha Kumar**
28 yrs • Female • Delhi

Notes: Diabetic, take insulin

Generate Report | Remove

RV **Rahul Verma**
45 yrs • Male • Mumbai

SA **Sana Ali**
33 yrs • Female • Kolkata

VD **Vikram Das**
52 yrs • Male • Chennai

Home | Patients | Search | Profile

Screen 3 (Settings):
Account Overview
Manage your profile, security, and app preferences.

Account Type
Patient

Email
user@example.com

Preferences
Customize how the app behaves for you.

Notifications
Get alerts about sessions, reminders, and updates.

Dark Mode
Use a darker theme to reduce eye strain.

Location Services
Allow location for better clinic suggestions.

Auto-Updates
Keep the app up to date automatically.

Home | Patients | Search | Settings

EXTRA SCREENS (Report, Upload, Camera)

Screen 4 (Upload):
Exercise Session
All the best!
Complete your exercise and upload a short video for your doctor.

Exercise Video
Upload a video of you performing this exercise so your doctor can review your form.

✓ Video uploaded

Exercise Details
Name   Bicep Curl
Reps   5
Sets   3
Prescribed by   Dr. ABC
End Date   7 Dec
Notes   Before breakfast

Video selected successfully.
Watch and learn!

▶ Watch Exercise Tutorial

Screen 5 (Report):
← **Report**

Physiotherapy Exercise Session Report – TherapEase

Patient Details
• **Name:** Somay Singh
• **Patient ID:** P-2025-001
• **Age:** 47 years
• **Date of Report:** 20 November 2025

Medical History
• History of **Hip replacement surgery**
• Currently undergoing physiotherapy for post-surgical strength, mobility, and functional recovery of the lower limb and hip region.

Current Prescription

Primary Goal:
Improve hip and knee strength, balance, and range of motion after hip replacement surgery.

Prescribed Exercises:
1. **Bodyweight Squats**
   a. Sets: 3
   b. Reps: 8–10 per set
   c. Frequency: 4–5 days per week
   d. Notes: Maintain upright trunk, knees aligned with toes
2. **Glute Bridges**
   a. Sets: 3
   b. Reps: 10–12 per set
   c. Frequency: 3–4 days per week
   d. Notes: Focus on squeezing glutes at the top; avoid arching lower back.

Mobile view | Preview | Projection | Edit

Form Score   81.4 / 100   Excellent technique

Screen 6 (Camera):
Set 1/3 | Reps 0/5 | Time 0:08 | Angle 148°

● Motion Detected

● End Workout

IMPACT BEYOND THE CODE

The ultimate **ambition** of the project extends far beyond algorithmic precision. The team is driven by a singular **mission**: to ensure that high-quality rehabilitative care is no longer a luxury, but a fundamental **right**.

By leveraging **open-source** technology and standard mobile hardware, the initiative seeks to bridge the global healthcare gap, transforming every smartphone into a **clinical ally** and bringing expert-guided **recovery** to the most underserved corners of the world.

NOTE: TherapEase is currently in active development. Interested in making an impact? Contact the developers to collaborate.

ARTICLE BY:

Keshav Pal
BSc (H.) Computer Science 3rd year