

SMART INDIA HACKATHON 2025



Problem Statement ID – SIH25023

Problem Statement Title – AyurSutra – Panchakarma

Patient Management and Therapy Scheduling

Software

Theme – HealthTech

PS Category- Software

Team ID – SBS01

Team Name – StackUp



PROPOSED SOLUTION – AYURSUTRA



Solution:

- Patient registration & therapy history
- Scheduling & calendar-based treatment plans
- Doctor/Therapist dashboards with reports
- Automated reminders & notifications for patients

Problem Fit:

- Replaces paper-based records with structured digital data.
- Provides real-time monitoring of patient progress & therapy outcomes.
- Reduces administrative workload through simple digital tools.
- Ensures better patient follow-up with reminders & easy history access.

Innovation & Uniqueness:

- First-of-its-kind Panchakarma platform with multilingual support, ensuring inclusivity across rural and urban Ayurveda centres.
- Govt-aligned & data-driven, supporting Ministry of AYUSH's digitization goals while enabling insights for

TECHNICAL APPROACH



Technologies to be Used:

- Frontend: React + Tailwind CSS + Shadcn UI
- Backend: Node.js + Express
- Database: MongoDB Atlas
- Notifications: Firebase Cloud Messaging (SMS, Push, Email)
- Deployment: Vercel (Frontend), Railway/Render (Backend)

Methodology & Process:

- Patients, Practitioners, and Admins access through the React frontend.
- All actions connect to the Node.js + Express backend via APIs.
- Data stored securely in MongoDB.
- Firebase handles alerts & reminders.
- Cloud deployment ensures scalability, security, and low cost.

FEASIBILITY AND VIABILITY



Feasibility:

- Low-Cost Deployment → Cloud-based, avoids heavy infrastructure costs.
- Multilingual Interface → Ensures adoption in rural & traditional centres.
- NDHM Alignment → Future-ready integration with Health IDs.
- Capacity Building → Training modules for smooth staff adoption.

Potential Challenges & Risks:

- Resistance to digital adoption in traditional centres.
- Data privacy & compliance with health IT standards.
- Connectivity issues in rural areas.

Mitigation Strategies:

- Onboarding & training to ease adoption.
- Secure cloud storage with role-based access.
- Offline-first design with SMS-based alerts for low-connectivity regions

IMPACT AND BENEFITS



Target Audience Impact:

- Patients → Hassle-free booking, timely therapy sessions, better compliance.
- Practitioners → Reduced admin work, clear patient history, improved care decisions.
- Centres/Admins → Efficient staff management, fewer errors, consistent quality of service.

Overall Benefits:

- Social: Builds trust in Panchakarma through organized, transparent care.
- Economic: Low-cost digital adoption, reduces missed appointments & resource wastage.
- Environmental: Paperless record-keeping reduces dependency on manual documentation.
- Policy-Level: Aggregated data supports evidence-based planning for Ministry of AYUSH.

RESEARCH AND REFERENCES



- **Ministry of AYUSH (Govt. of India)** – Digitization of traditional medicine & patient care initiatives
ayush.gov.in
- **National Digital Health Mission (NDHM)** – Interoperable health records & Health ID ecosystem
ndhm.gov.in
- **World Health Organization (WHO)** – Global Report on Traditional and Complementary Medicine (2019)
WHO Global Report 2019
- **Journal of Ayurveda & Integrative Medicine** – Research on Panchakarma efficacy in chronic conditions
- **Market Insight** – Ayurveda market projected to reach USD 16B by 2028 (Fortune Business Insights, 2023)

Thank You

Presented by: Team StackUp