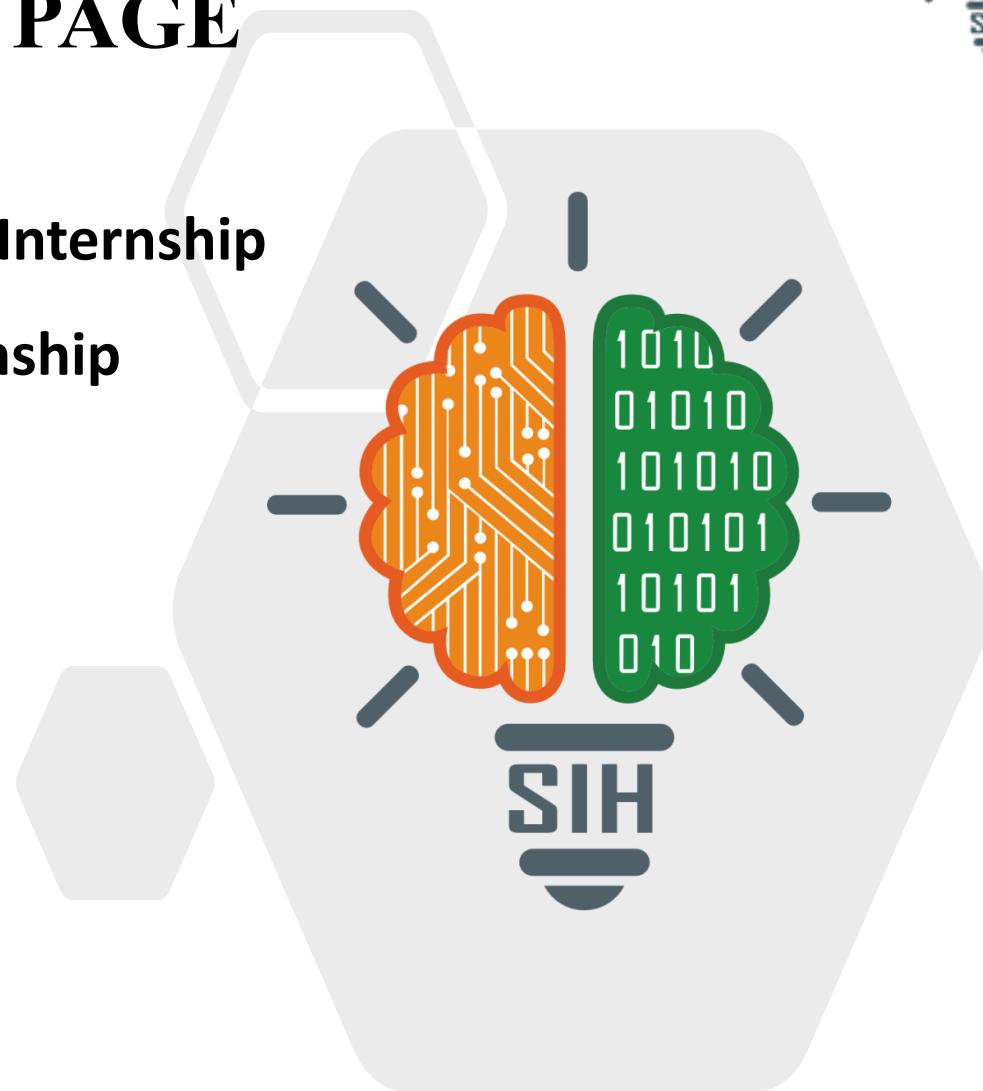


# SMART INDIA HACKATHON 2025

## TITLE PAGE



- Problem Statement ID – SIH25034
- Problem Statement Title- AI-Based Internship Recommendation Engine for PM Internship Scheme
- Theme- Smart Education
- PS Category- Software
- Team ID-106873
- Team Name :- Tech Titan



# IDEA TITLE

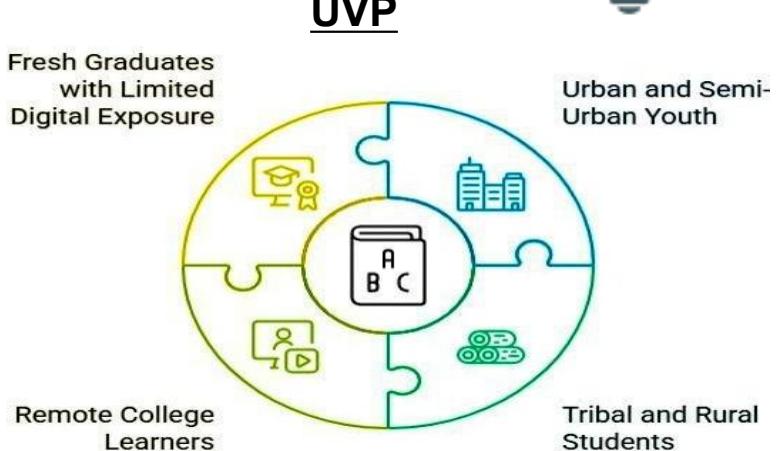
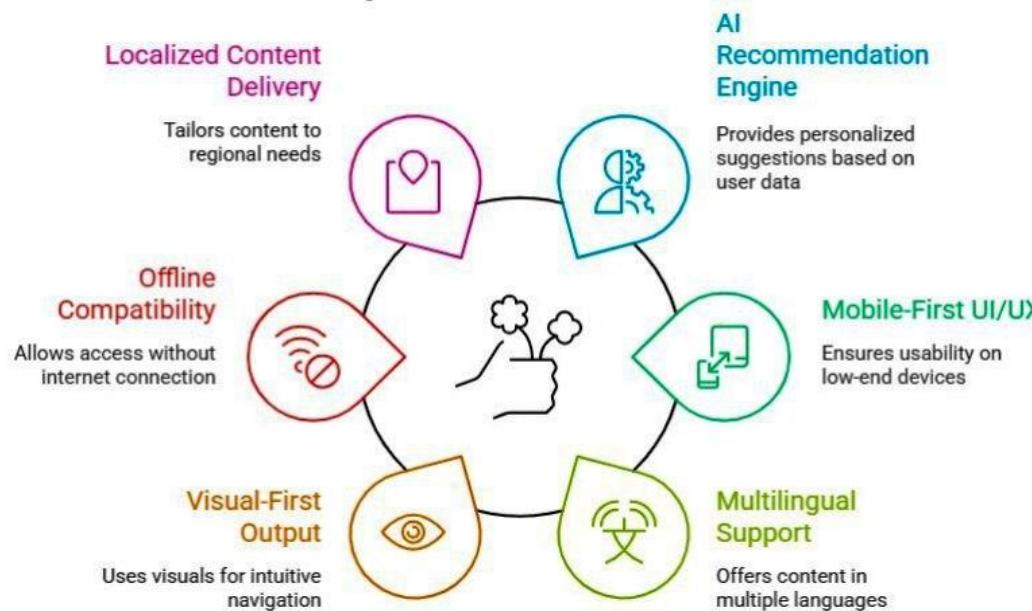


## Proposed solution:-

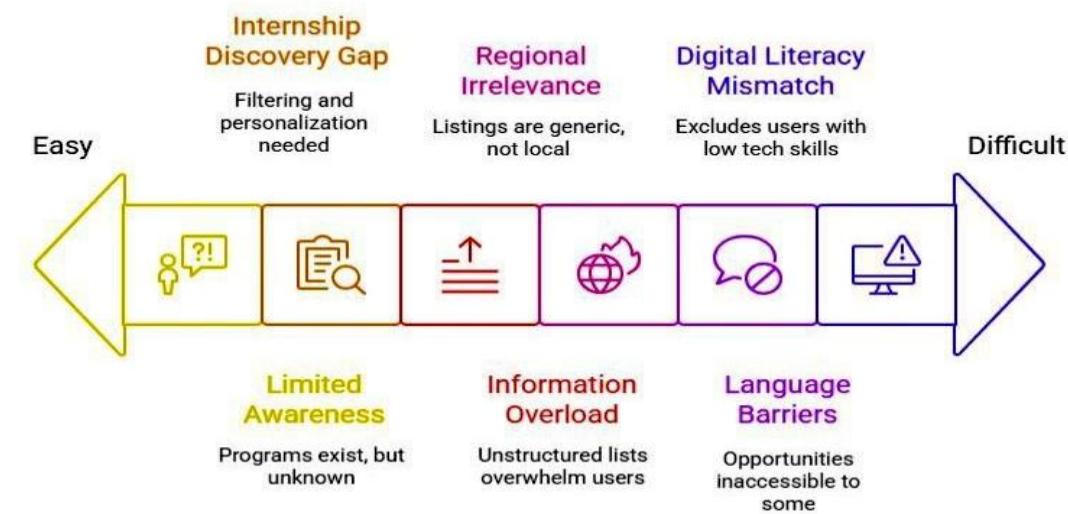
We designed a lightweight, AI-powered recommendation engine with **multilingual support** and **mobile-first architecture** to empower underserved youth in rural and semi-urban regions. The system ensures digital inclusion by offering personalized internship suggestions in regional languages, optimized for low-bandwidth environments. This platform is designed to be **simple, mobile-friendly, and accessible** to youth from diverse backgrounds, including those with limited digital literacy.

This solution promotes **digital inclusion, career readiness, and equitable access** to internships for youth across India. It aligns with **Tech for Social Good** principles and is designed for **scalable deployment** via government and community platforms.

## KEY FEATURES AND SOLUTIONS



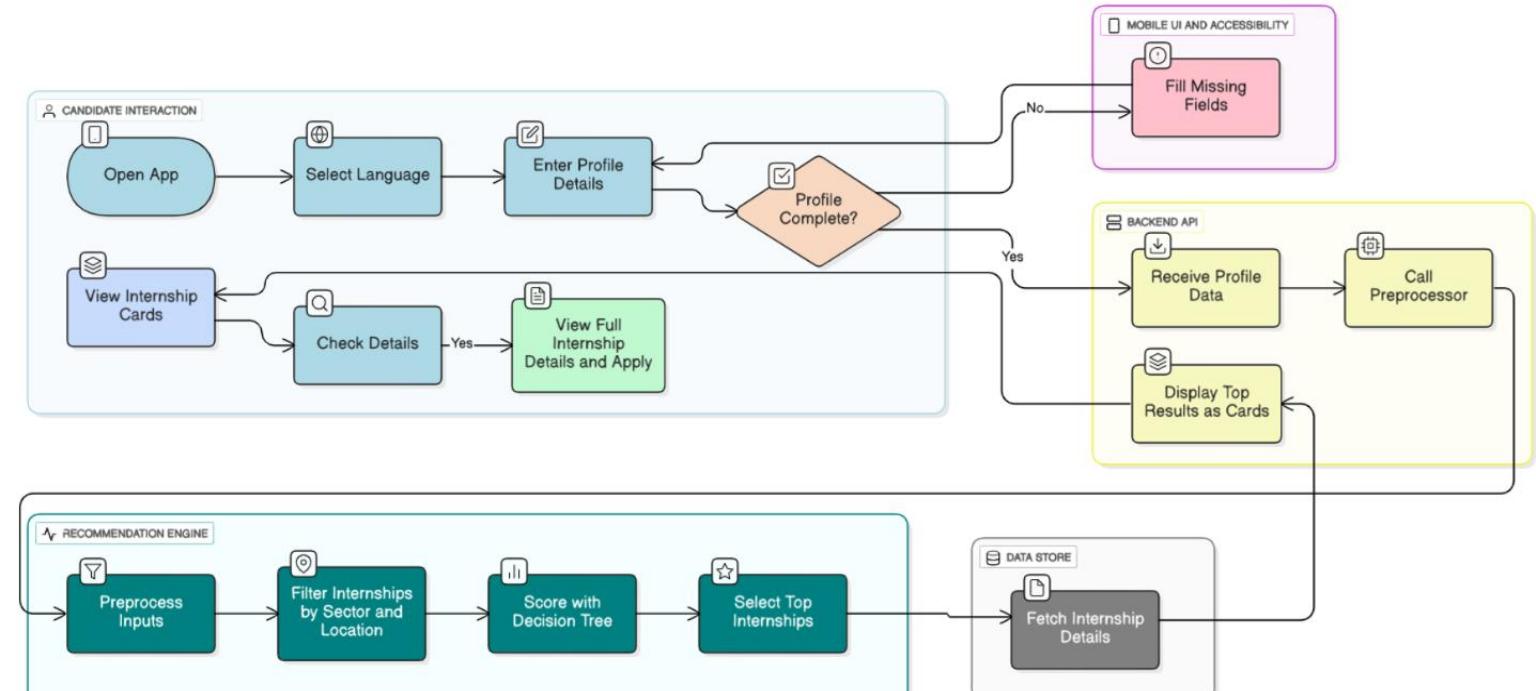
## PROBLEMS ADDRESSED



# TECHNICAL APPROACH



## TECHNICAL FLOW



## TECHNICAL FLOW

**Frontend:** JavaScript, Tailwind CSS, Progressive Web App, i18next

**Backend:** Python, Flask, Node.js, Express, REST API, Docker

**Database:** MySQL, SQLite, Elasticsearch

## INPUT

**Personal Information:** Name , age, gender

**Educational Background**

**Location Preferences:** State, City

**Work Mode Preferences:** Onsite, Remote, Hybrid

**Interests and Skills**

## OUTPUT

### Tech Trainee

Global Solutions

40% Match

Bangalore, Karnataka

IT & Software Development

₹5,000 Monthly Stipend

₹6,000 One-time Grant

Health Insurance

Industry Certificate

### Junior Executive

Prime Industries

40% Match

Kanpur, Uttar Pradesh

Banking & Financial Services

₹5,000 Monthly Stipend

₹6,000 One-time Grant

Health Insurance

Industry Certificate

# FEASIBILITY AND VIABILITY



## Technical Feasibility

Our **AI-based** recommendation engine uses a lightweight **hybrid model** with smart **skill mapping, multilingual support**, and **mobile-friendly UI**, easily integrated into the PM Internship portal for low-literacy, low-connectivity users.

## Legal and Ethical Feasibility

It guarantees that the system follows a **consent-first** design, respects **data privacy**, complies with Indian laws, remains **transparent, prevents bias**, and provides fair, trustworthy, and inclusive recommendations for all candidates.

## Operational Feasibility

The **AI-driven** recommendation engine uses simple mobile UI, **real-time updates, voice support, offline/SMS fallback**, and quick training modules, ensuring smooth adoption for rural, low-literacy youth and administrators.

## Trend & Market Feasibility

The recommendation engine aligns with **India's AI-in-governance** and **Digital India** trends, bridges the internship discovery gap for under served youth through hyper-personalized, **voice-enabled, geo-smart matching**, and offers **scalable, inclusive** career guidance across ministries.

### ! PROBLEM

#### Complex portals

#### Irrelevant applications

#### No career guidance

### DESCRIPTION

Rural and low-literacy youth face barriers using complex job portals.

Students lose valuable time applying to irrelevant opportunities.

First-generation learners lack awareness and career guidance.

### ✓ SOLUTION

- **Visual Internship Cards** : Pictorial cards with logos and simple icons for quick understanding.
- **Skill Proofing** : 30–60 second micro-tasks that quickly verify a candidate's claimed skill and produce a simple score tag for matching.
- **Fit-Score Ranking** : Each internship carries a % match score to help students pick the most relevant ones
- **Time Saving Recommendation Loop** : The system learns from every click and past application to continuously refine suggestions. Over time, it predicts better matches faster.
- **Career Story Audios** : short, local-language audio stories of relatable role models, clips that build awareness and aspiration.
- **Scholarship & Scheme Highlight** : automatically surface relevant government skilling schemes and short course subsidies beside internship recommendations.

# IMPACT AND BENEFITS



## IMPACT ON TARGET AUDIENCE :-



STUDENT

- Personalized Matches:** AI aligns internships with skills, interests, and goals.
- Enhanced Employability:** Gains hands-on, industry-relevant experience.
- Confidence & Career Clarity:** Motivates first-generation learners and guides career decisions



UNEMPLOYED

- Efficient Selection:** Identifies high-potential interns quickly & easily.
- Reduced Workload:** Automates matching, scheduling, and reporting
- Data-Driven Decisions:** Optimizes programs and recruitment strategy.

CORPORATE  
WORKER

- Skilled Interns:** Receives motivated, ready-to-contribute candidates.
- Focused Mentorship:** Prioritizes meaningful training over filtering unsuitable interns.
- Efficiency & Growth:** Saves time and enhances mentor leadership skills.



# RESEARCH AND REFERENCES



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