



InternSaathi
AI Recommender Engine for PM Internships

SMART INDIA HACKATHON 2025



TITLE PAGE

- **Problem Statement ID – SIH25034**
- **Statement Title- AI-Based Internship Recommendation Engine for PM Internship Scheme**
- **Theme- Smart Education**
- **PS Category- Software**
- **Team ID- NA**
- **Team Name- InternSaathi**



IDEA TITLE

❖ Proposed Solution (Describe your Idea/Solution/Prototype)

- Detailed explanation of the proposed solution
- How it addresses the problem
- Innovation and uniqueness of the solution

TECHNICAL APPROACH

User opens main page

User accesses the platform through a browser

Inputs saved temporarily

User's search queries are stored in log files

ML Model fetches internships

ML model retrieves top 5 internships from database

Save profile

User chooses to create an account and save profile

User authentication + Profile saved

User's credentials are authenticated and profile saved

Explore internships

User chooses to explore internships without saving profile

Data sent to ML Model API

Data from log files is sent to the ML model

Results page displays internships

Top 5 internships are displayed on the results page

Redirect to login/signup

User is redirected to login/signup page

Explore internships using stored profile



Tech Stack

Authentication

JWT-based login/signup system

Database

MySQL with Python for data storage

ML Model

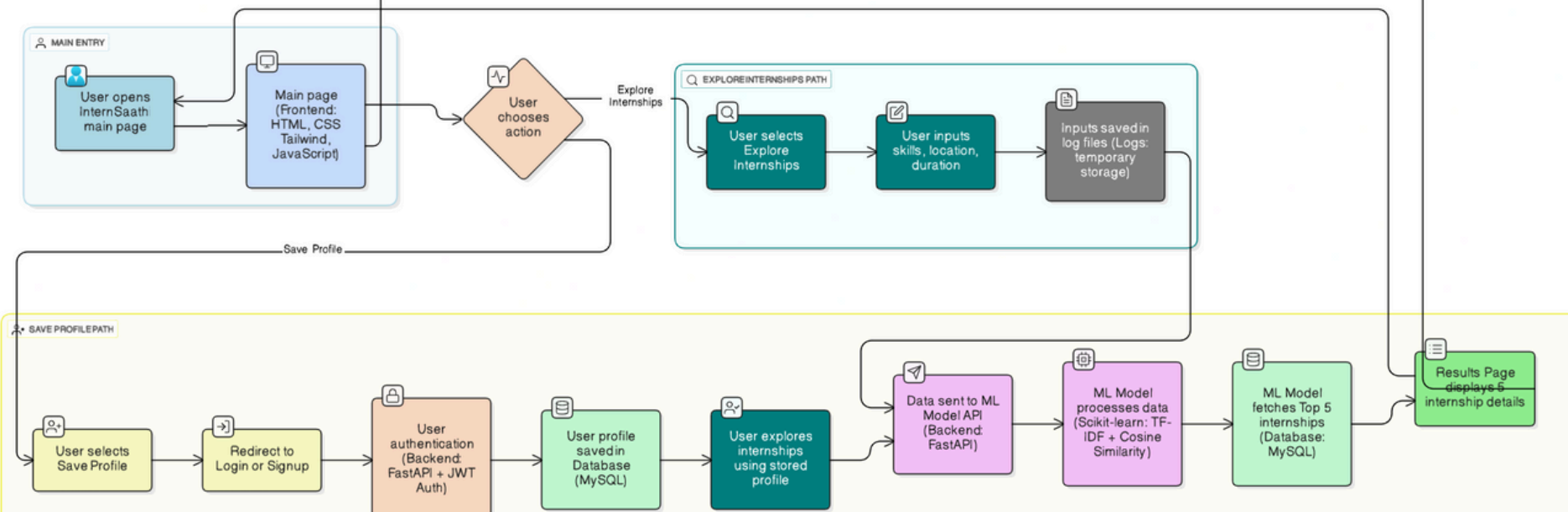
Recommendation system using Scikit learn

Backend

FastAPI framework for server-side logic

Frontend

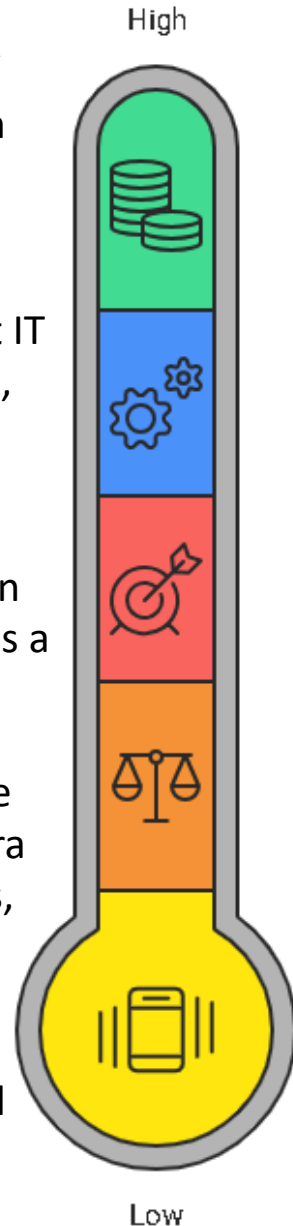
HTML, CSS, JS for responsiveness



FEASIBILITY AND VIABILITY

Analysis of Feasibility:

- **Technological Feasibility:**
 - The solution leverages lightweight rule-based / ML-light models, ensuring smooth operation on low-end mobile devices and low-bandwidth networks.
- **Regulatory Compliance:**
 - Adheres to Digital India, Data Privacy, and Govt IT Guidelines. Stores only minimal user data (skills, education, location) with encryption, ensuring data security and sovereignty.
- **Market Viability:**
 - With millions of students across rural and urban India seeking internships, the solution addresses a large-scale gap in guided opportunities.
- **Operational Flexibility:**
 - Modular design allows easy integration into the existing PM Internship Portal without major infra changes. Can be extended later for scholarships, apprenticeships, skilling programs.
- **Economic Viability:**
 - Minimal infra requirements → runs on basic cloud/server setup. Low maintenance overhead makes it cost-effective for government deployment at scale.



Strategies for Overcoming Challenges:

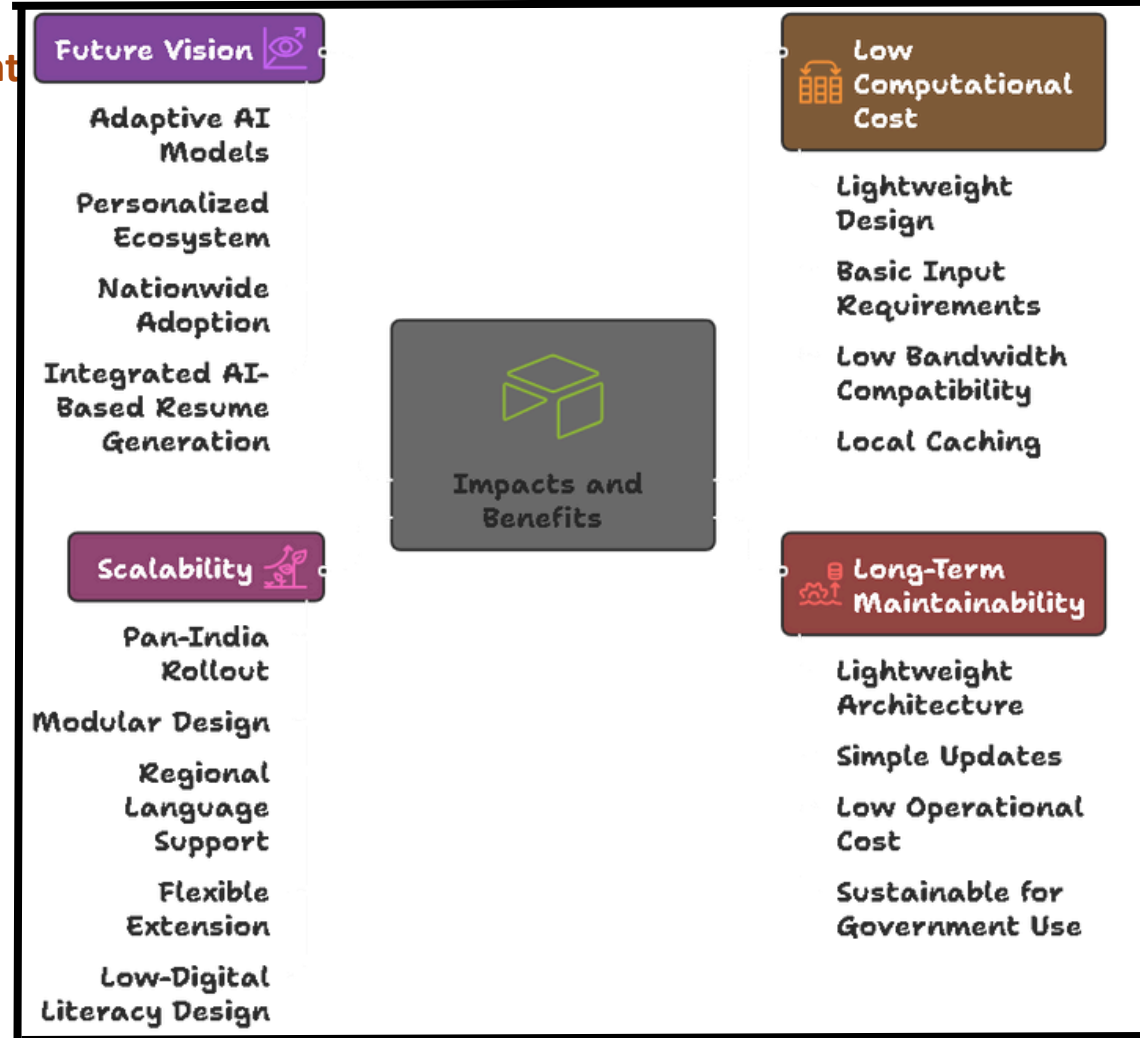
- **Offline Usability:** Local caching to store candidate preferences and recommendations for use in low-connectivity areas.
- **Regional Language Support:** Integrating multilingual UI/UX for pan-India accessibility.
- **Lightweight Algorithms:** Rule-based and ML-light models for recommendations, reducing compute load.
- **Scalability:** Cloud-ready microservice design for future nationwide adoption.
- **User Simplicity:** Visual cards, icons, minimal text → easy for low-digital-literacy users.

IMPACT AND BENEFITS

• POTENTIAL IMPACT ON THE TARGET AUDIENCE:

Sustainability :

- **Low Computational Cost** : **Lightweight** , **rule based machine learning design** ensures less computational cost .
- **Works in low bandwidth** , rural and tribal regions **since it only takes basic candidate inputs** (skills , education , location , interest) , **no heavy pdfs or large uploads are needed** ,
- **can use local caching** to store preferences and give results in low internet areas
- **Long-Term Maintainability with Minimal Resource Overhead** :
- **Light weight Architecture**
- **Simple Updates**
- **Low operational Cost**
- **Sustainable for Government Use**



Scalability :

- **Pan - India rollout** with modular design for easy integration into existing PM internship Scheme Portal .
- **Regional language support** for inclusivity and accessibility .
- **Flexible to extend to other schemes** (scholarships ,skilling)
- Designed for areas with **low - digital literacy** .

Future Vision:

- Transition to adaptive AI models that **improve with candidate feedback** ,
- Personalized ecosystem with **career guidance and skills-gap analysis**
- **Nationwide adoption** : empowering millions of first generation learners with better opportunities .
- **Integrated AI - based resume generation feature**

RESEARCH AND REFERENCES

- Details / Links of the reference and research work

IMPORTANT INSTRUCTIONS

Please ensure below pointers are met while submitting the Idea PPT:

1. Kindly keep the maximum slides limit up to six **(6)**. (Including the title slide)
2. Try to avoid paragraphs and post your idea in points /diagrams / Infographics /pictures
3. Keep your explanation precise and easy to understand
4. Idea should be unique and novel.
5. You can only use provided template for making the PPT without changing the idea details pointers (mentioned in previous slides).
6. You need to save the file in PDF and upload the same on portal. No PPT, Word Doc or any other format will be supported.

Note - You can delete this slide (Important Pointers) when you upload the details of your idea on SIH portal.