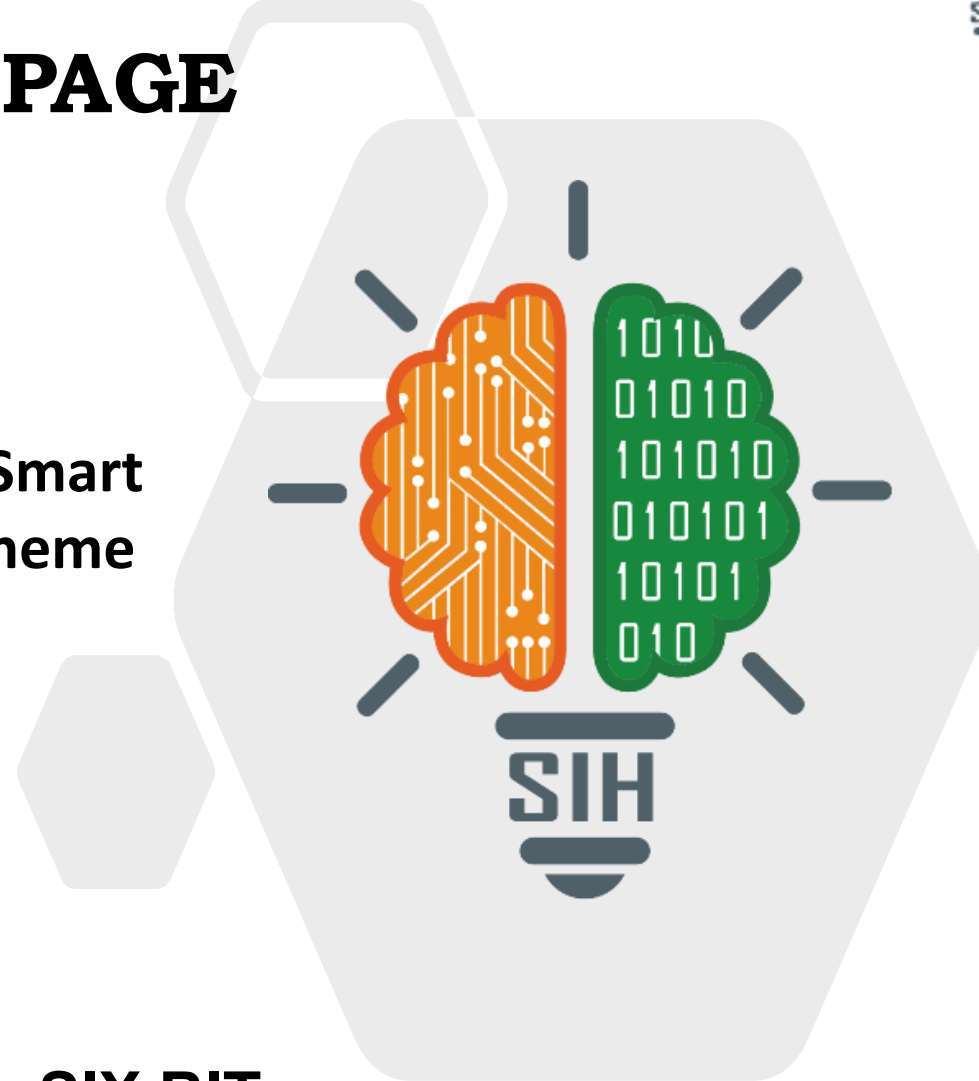


## TITLE PAGE

- Problem Statement ID – 25033
- Problem Statement Title- AI-Based Smart Allocation Engine for PM Internship Scheme
- Theme- Smart Automation
- PS Category- Software
- Team ID- SLRTCE25001
- Team Name (Registered on portal)- SIX BIT



*Our solution is an AI-based platform designed to create a "Smart Allocation Engine" for the PM Internship Scheme. It will streamline the process of matching interns with projects and ministries by using a data-driven approach.*

## User Profile Builder

- ❑ The platform will use a **10-question survey** to create a detailed user profile, capturing skills, interests, education, and preferences.

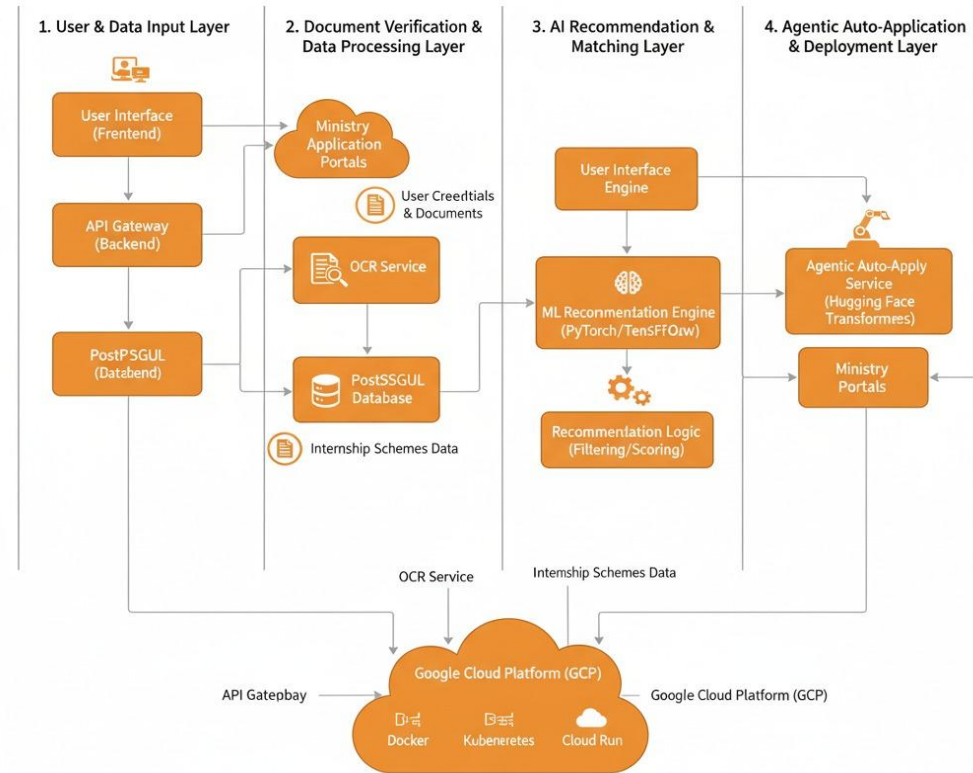
## Personalized Job Matching

- ❑ An AI engine analyzes user data to intelligently match candidates with the most suitable internship opportunities.

## Agentic Auto-Apply

- ❑ This system features an **AI agent** that can automatically generate and customize resumes and cover letters before applying to recommended positions on the user's behalf.

Our core innovation is an **AI-driven, agentic system** that automates and personalizes the internship application process. Rather than a simple database search, it learns a user's unique profile to provide intelligent recommendations and can even automatically generate and submit application materials.



## Backend & AI/ML Frameworks

Using Python, PyTorch/TensorFlow, and SpaCy, this layer powers the smart allocation engine and develops the AI agent for auto-application.

## Frontend

A dynamic user interface built with React.js for profile creation and viewing personalized internship recommendations.

## Database

PostgreSQL, MySQL, MongoDB stores all user and scheme data, forming the system's foundation.

## Cloud Infrastructure

AWS provides a scalable and reliable environment to host the entire application.



## Feasibility

- ❑ The project is technically feasible, leveraging mature technologies like machine learning and modern web frameworks.
- ❑ The main challenges are securing high-quality training data, ensuring a robust technical infrastructure, and having a team with the necessary AI expertise.

## Viability

- ❑ The inefficiency of manual internship allocation.
- ❑ It provides significant value to both interns, through personalized and fair matching, and administrators, by reducing their workload.
- ❑ The solution is also scalable for future use in other sectors.

## Potential Challenges

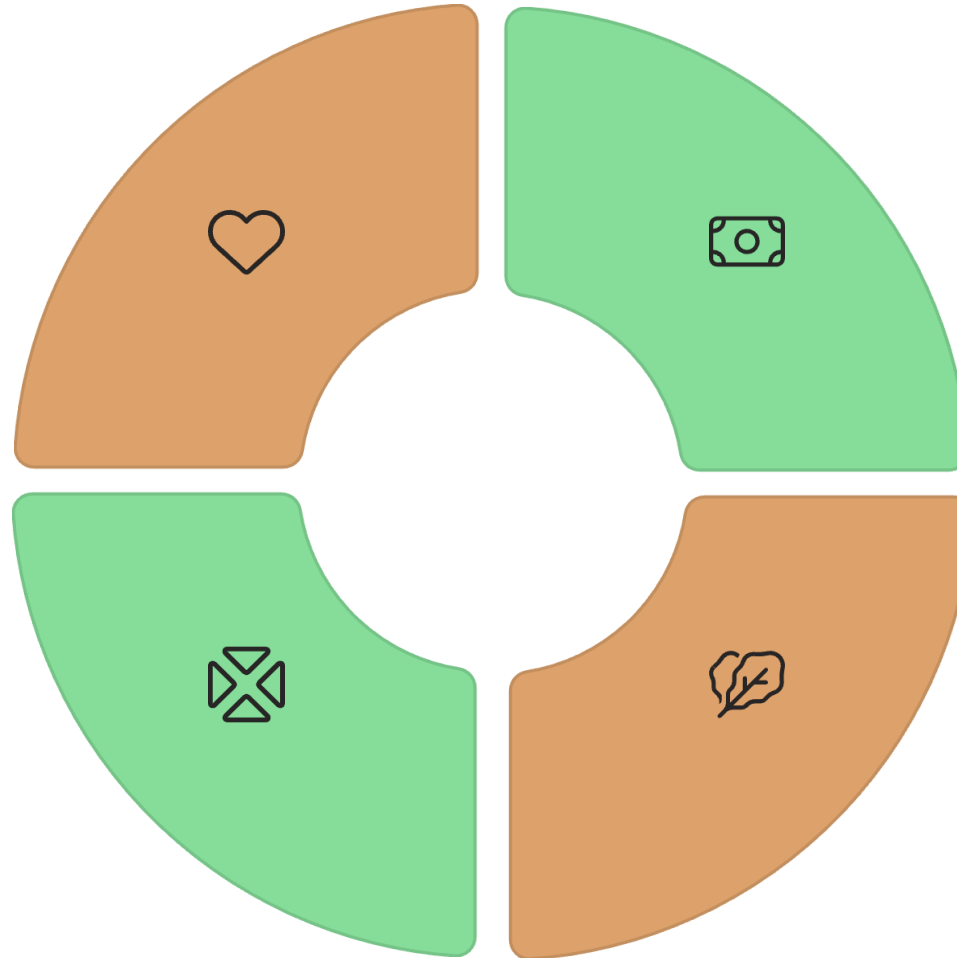
- ❑ **Data Privacy:** Mitigated by implementing strong encryption protocols.
- ❑ **Algorithm Bias:** Addressed by using fairness metrics and continuous monitoring.
- ❑ **Integration:** Can be managed by a phased, API-based approach.

## Increased Efficiency

The AI engine automates the manual screening and allocation of applications, drastically cutting down administrative time and effort.

## Better Alignment

The personalized matching algorithm connects interns to projects that genuinely fit their skills and interests, leading to more successful and meaningful outcomes.



## Enhanced Fairness

Using an objective, data-driven approach, the platform minimizes human bias in the selection process, ensuring equitable opportunities for all candidates.

## Scalability

The cloud-based architecture allows the system to easily handle a large volume of applications, making it scalable for future use and other schemes.

- i. <https://pminternship.mca.gov.in>
- ii. <https://web.umang.gov.in/landing/scheme/dashboard>
- iii. <https://the-ken.com/newsletter/make-india-competitive-again/pm-internship-scheme-another-shaky-start-to-another-shaky-skilling-programme/>
- iv. <https://sageuniversity.edu.in/blogs/pm-internship-scheme-2024-india-youth-career-opportunities>