SMART INDIA HACKATHON 2025

Centralized Platform For Student Activity Management(CPSAM)

- **Problem Statement ID:** SIH25093
- **Problem Statement:** Centralized Digital Platform for Comprehensive student activity record in HEIs
- **Theme:** Smart Education
- **PS Category:** Software
- **Team ID:** 53143
- **Team Name:** HackHounds

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CPSAM

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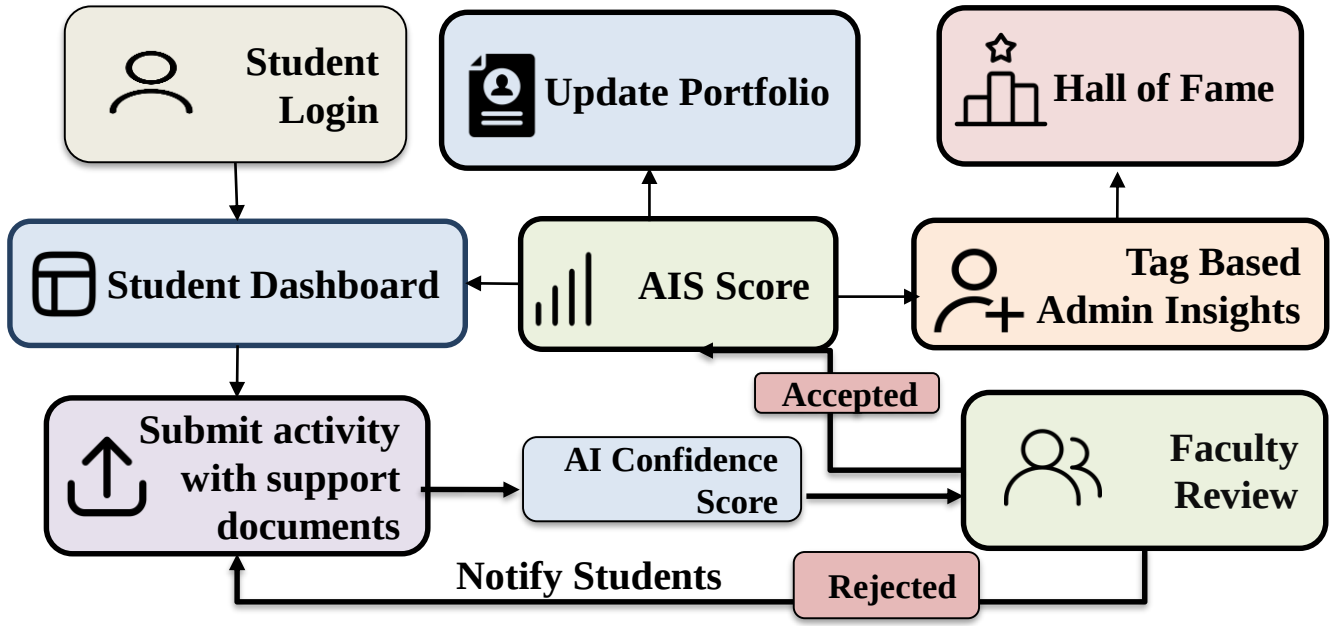
Proposed Solution

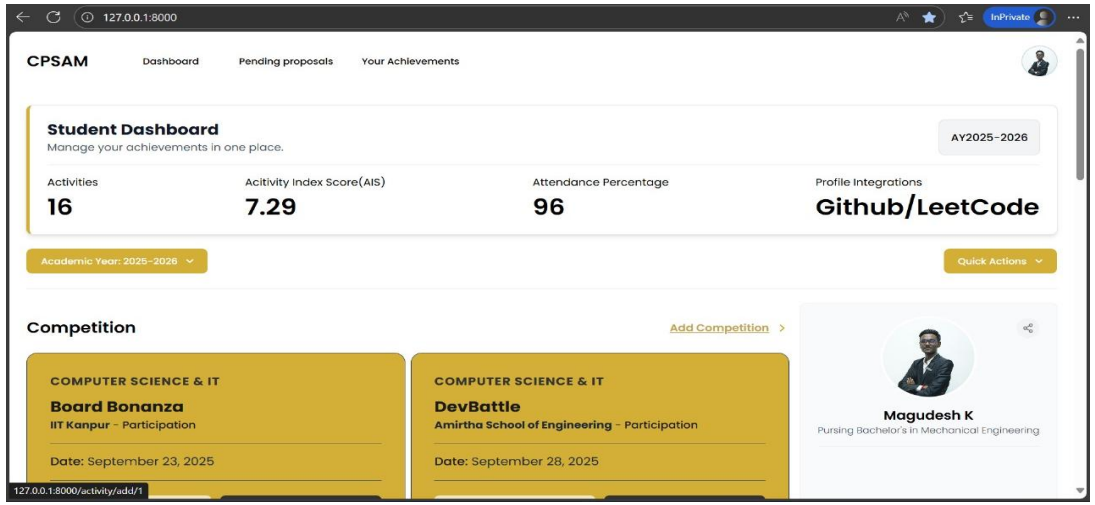
- **Student/Faculty Login** by institution Email/Reg No
- **Dashboard** with attendance percentage, activity log, submission forms, assigned goals
- Submitted activities **pending approval** from dept authority
- Approved activities, generate **AIS,** update's portfolio
- Approval aided by **AI confidence score** of support documents analysis
- Role-based admin dashboard for **data-insights view**
- **Automated Portfolio** generation as PDFs & Website

Unique Value Proposition

- **Activity Index Score** based on dynamic predefined charter
- **AI-Aided** Confidence Score for ease in activity attestation
- **Integration** with Github, LinkedIn, LeetCode for activity proof
- **Structured Portfolio** generation based on **AIS** activity log
- **Goal Assignment** and Tracking
- **Leaderboard** and periodic **Hall of Fame**
- **Activity Recommendation** for students



55% Project Implemented in Institution



Student Dashboard

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TECHNICAL APPROACH

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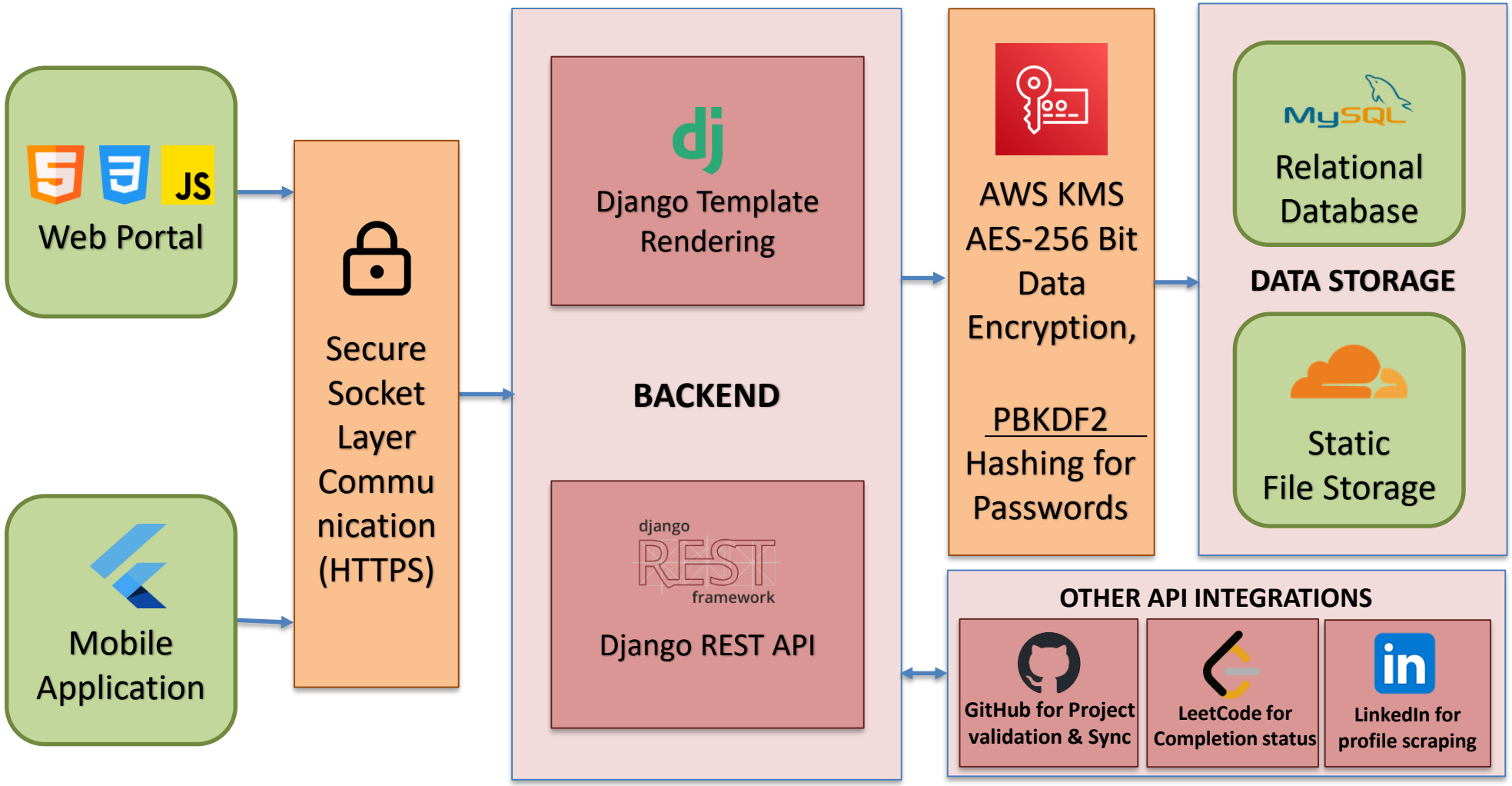

Hosting

- Can be carried out in institution or government owned AWS/GCP.
- Each module hosted in a VPC in separate instances.

AI Modules

- XGBoost for AI Confidence Score Calculation.
- Google Flan-T5-Large Model for recommendation & summarization.

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FEASIBILITY AND VIABILITY

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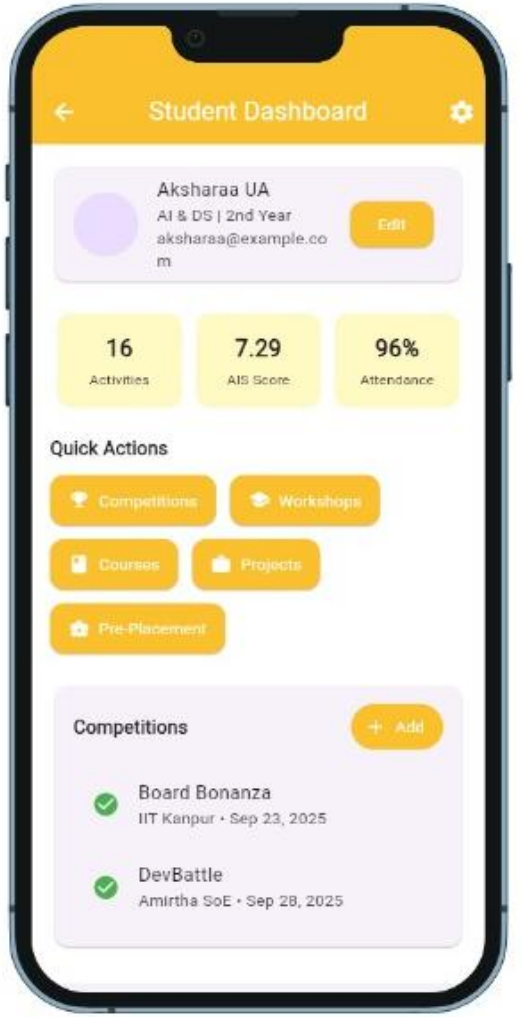
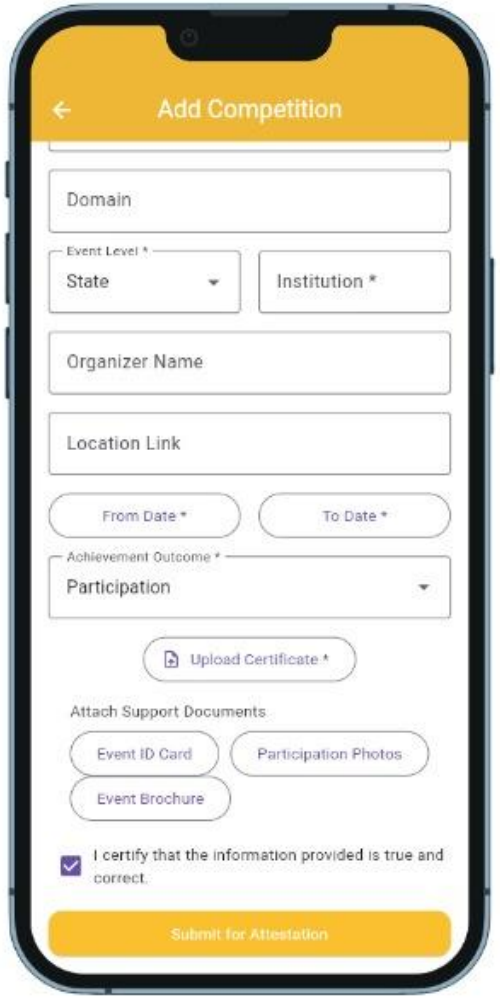
Challenges	Solutions
Student submitted achievements may lack credibility	Division authority attestation for acceptance
Unorganized submissions and Fragmented activity records	Structured forms & Centralized portal
Manual attestation is slow for large student numbers	Attestation supported with confidence score by AI
Data security vulnerabilities in large scale data	AES-256 data encryption and secure process flow

Mobile Application





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IMPACT AND BENEFITS

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IMPACTS

Centralized Data Repository
Centralizing data related to student activity in one central data hub.

Community Growth
Students/faculty engage in community share insights and resources.

Talent Identification
Identifying students' skills and encouraging like-domain network growth.

Institutional Value
Better track and project student achievements, helps improve institution visibility.

BENEFITS

Ease of access
Student data with various metrics from one single portal.

Efficiency and Productivity
Improve admin decisions in implementing new schemes & programs.

Convenience
Downloadable data sheets for accreditation or internal review.

Automated Portfolio
Institution attested professional portfolio in means of web links and PDFs for placements

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IMPLEMENTATION OF PROTOTYPE

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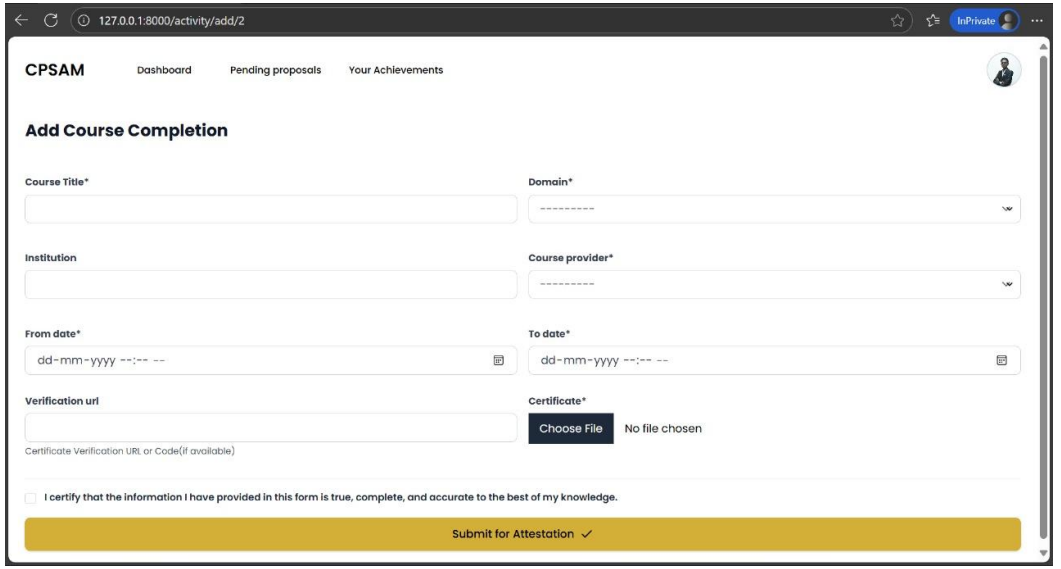
- **40% Foundational Implementation** involving student identity management live for 4000 students in our institution
- **Phase 2 Activity Submission & AIS** roll out planned on October 2nd week
- Future enhancement include **portfolio generation**, personalized activity recommendation.

Activity Submission Page



YOUTUBE URL
https://youtu.be/EeSpYc_Sseg?si=SGw6Ndz6mSrzkCFi

PROTOTYPE URL
https://cpsam.me/

RESEARCH AND REFERENCES

- Implemented foundational framework consisting identity management & event management features; future roll out scheduled on 10.10.25 includes achievement submission updates.- https://src.drmcet.ac.in/
- https://www.ijraset.com/research-paper/studentsphere-indicating-a-centralized-space-for-student-records
- *https://journals.librarypublishing.arizona.edu/itlt/article/id/5809/*
- https://en.wikipedia.org/wiki/Mahara_(software)
- *https://en.wikipedia.org/wiki/Studywiz*