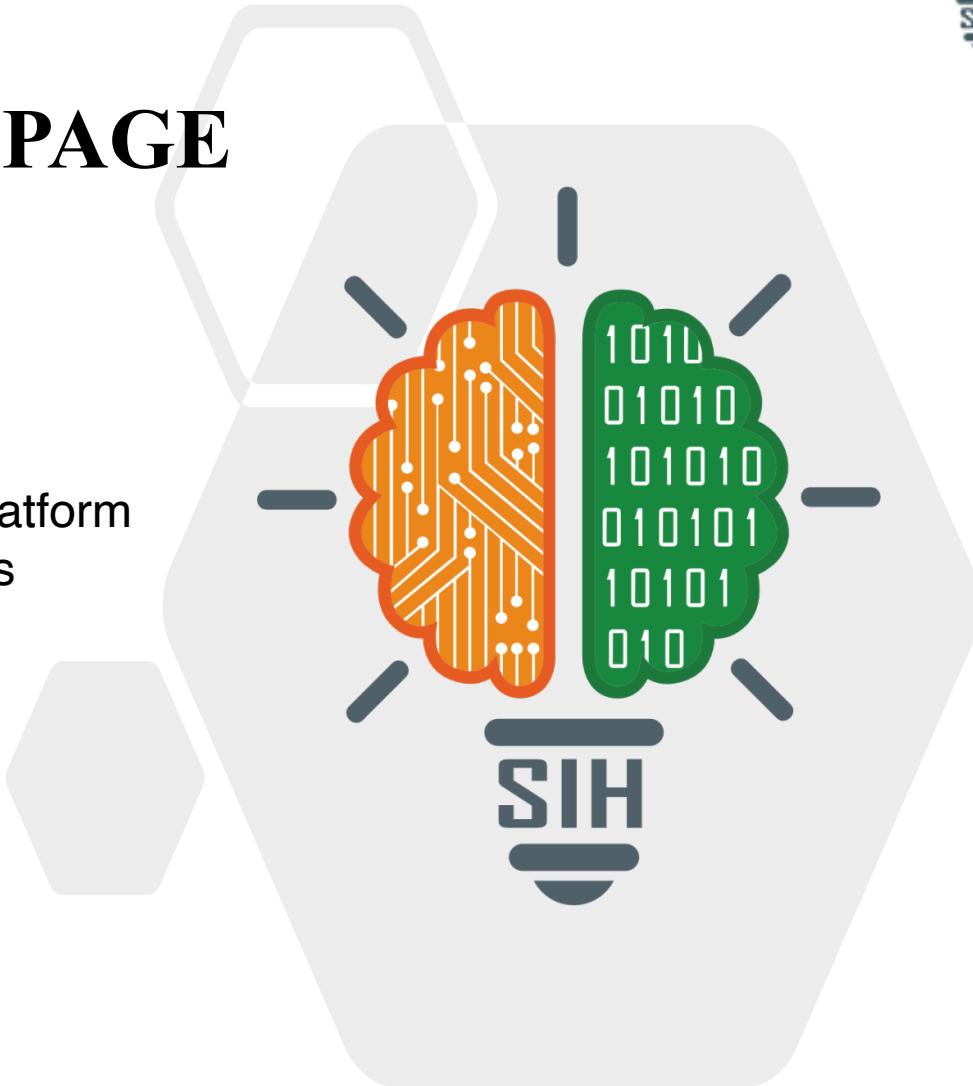


SMART INDIA HACKATHON 2025



TITLE PAGE

- Problem Statement ID – 25093
- Problem Statement Title- Centralised Digital Platform for Comprehensive student activity record in HEIs
- Theme- Smart Education
- PS Category- Software
- Team ID-
- Team Name-



IDEA TITLE

“An AI-powered platform that automatically collects, verifies, and organises student accomplishments into a dynamic, always-updated digital skills profile—saving time and providing valuable insights for students and institutions.”

- **Detailed Explanation of the Proposed Solution:**

A unified platform consolidates all student activities into a single digital profile using multi-source data capture like QR codes and system integrations. It features an automated verification workflow managed by faculty and generates dynamic, shareable portfolios. The system includes an institutional analytics dashboard for real-time reporting and insights.

- **How it Addresses the Problem:**

It eliminates data fragmentation by centralising records, directly streamlines accreditation reporting for bodies like NAAC/NIRF, and reduces administrative burdens through automation. The platform empowers students with portable, verified portfolios for career and academic advancement.

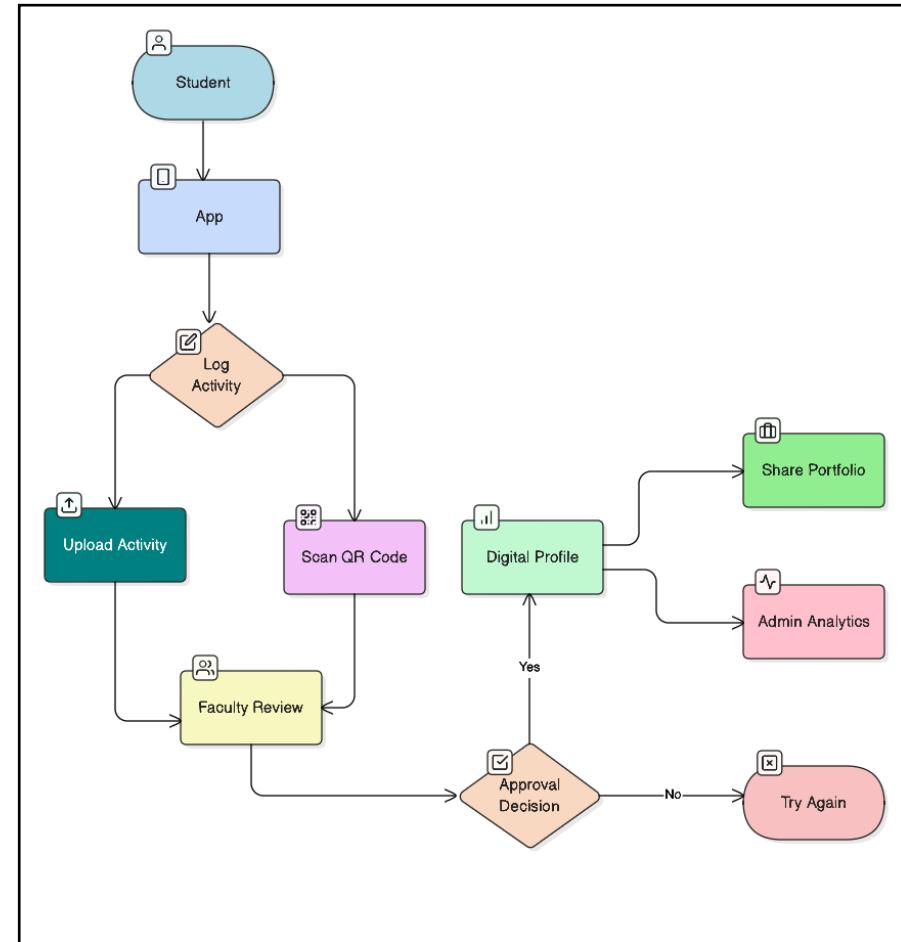
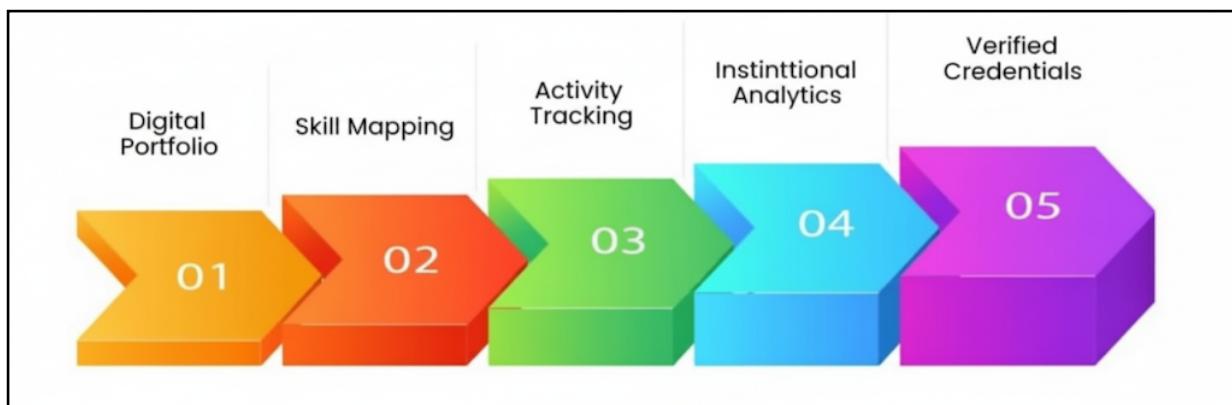
- **Innovation and Uniqueness of the Solution:**

Leverages QR codes and ai OCR(Optical Character Recognition) for efficient data capture and verification, and includes skill-mapping to visualise competencies. Its API-first design ensures seamless integration with existing institutional systems, while gamification and blockchain-ready features enhance engagement and security.

TECHNICAL APPROACH



- The process starts with a Student using the App to log an activity, either by uploading proof or scanning a QR code. This activity is then sent for Faculty Review, where an Approval Decision is made.
- If the decision is Yes, the activity is added to the student's verified Digital Profile. This profile can then be used to Share a Portfolio with employers or for the institution to generate Admin Analytics.
- If the decision is No, the student is notified and must Try Again, often by submitting better evidence or correcting an error.
- technologies and tools**:
-Frontend:-Next.js,
Backend:-Node.js/
 Express.js,
Database:-PostgreSQL,
Cloud:-AWS,
AI/ML:-TensorFlow.js,
Auth:-JWT,
Tools:-Git



FEASIBILITY AND VIABILITY



► Feasibility of the idea:

- Built on proven tech (React, Node.js, PostgreSQL) and modern API-first design. Core features are low-risk and achievable within standard development timelines.

► Potential & challenges :

- Securing institutional buy-in, integrating with legacy systems (ERP/LMS), ensuring data privacy compliance, and driving voluntary user adoption beyond mandatory use.

► Strategies to overcome above challenges are:

- Start with a pilot program to demonstrate value. Use robust APIs to ensure seamless and secure integration with existing university systems.
- Prioritise data protection from the start with encryption, strict access controls, and adherence to privacy laws to build trust.
- Drive engagement through gamification (badges, leaderboards) and a seamless user experience, highlighting clear benefits for students and faculty.

IMPACT AND BENEFITS



❖ Potential impact on target audience:

- Empowers students with a verified digital portfolio for career growth, enables institutions to streamline accreditation and make data-driven decisions.

❖ Benefits of the solution:

1. Boosts student employability with verified digital portfolios.
2. Automates accreditation reporting (NAAC/NIRF).
3. Cuts administrative workload through automation.
4. Provides data-driven insights for institutional planning.
5. Builds trust with a secure, transparent verification system.



RESEARCH AND REFERENCES



- **Research on Skills Tracking in Education**

When we spoke to students, we heard the same frustration over and over: 'I have all these certificates and achievements, but when I need to apply for a job or higher studies, I can't find them, and no one knows if they're real.' They're stuck piecing together PDFs and photos into messy, unverified portfolios that recruiters don't trust.

- **Technical Feasibility and Tools**

We're building on proven, widely-used tech like React, Node.js, and PostgreSQL—tools known for scalability, strong community support, and smooth integration. With cloud hosting via AWS/GCP, we ensure reliability and real-world performance from day one.

Reference Link: https://www.education.gov.in/sites/upload_files/mhrd/files/NEP_Final_English_0.pdf

(See Sections 4.6, 11.8, 11.9, 15.9, 16.4, 17.8, 20.6, 21.4, 24.4, and 24.5 for references to multidisciplinary education, skill integration, digital academic bank of credits, and student activity documentation.)

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.