



"AI-Powered Talent Bridge: Building a Self-Sustainable Ecosystem for Student Profiling and Job Matching"

Hackathon Problem Statement:

In today's educational and employment landscape, universities managing hundreds of technical colleges face significant challenges in tracking student employment and organizing databases efficiently. The absence of an integrated and sustainable system makes it difficult to connect students with the right opportunities, align their skills with industry needs, and ensure long-term employability.

To address these challenges, there is a need for a self-sustainable, AI-powered platform that not only connects candidates with potential employers but also generates valuable insights for universities. Such a platform must enable continuous skill development, promote employability, and create value for all stakeholders—students, universities, and employers—while maintaining its scalability and financial sustainability over time.

The objective of this hackathon is to design and develop a **self-sustaining, AI-driven ecosystem** that simplifies the candidate selection process, enhances resume optimization, matches students with relevant internships and job opportunities, and enables universities to offer targeted training programs based on real-time data insights.

Hackathon Objectives

- 1. Develop a Centralized, Self-Sustainable Database System:**
 - Create a platform that aggregates student data from multiple technical colleges under a university into a centralized system.
 - Ensure the platform is designed to be financially viable by incorporating features like subscription models for employers and value-added services for students and universities.
- 2. AI-Backed Resume Builder and Optimizer:**
 - Integrate AI-powered tools to help students craft professional resumes tailored to industry demands.
 - Include features that continuously update resumes based on students' evolving skills, certifications, and achievements.
- 3. Advanced Candidate Search and Matching:**
 - Implement AI and Machine Learning algorithms to enable companies to search for candidates based on specific qualifications, skills, and experience efficiently.
 - Introduce predictive analytics to match students with jobs and internships most relevant to their profiles and career goals.
- 4. Internship and Placement Opportunities:**
 - Design an automated system for companies to post job and internship requirements, enabling seamless applications and placements.
 - Incorporate mechanisms for tracking employment outcomes and gathering feedback to improve future opportunities.
- 5. Upskilling and Training Insights for Universities:**



- Develop a dashboard for universities to analyze student profiles, identify skill gaps, and offer targeted upskilling programs.
 - Enable universities to leverage these insights to design training programs that align with industry trends, ensuring long-term employability.
- 6. Financial Sustainability Features:**
- Include monetization options such as premium features for employers, data analytics services for universities, and career enhancement tools for students.
 - Ensure the platform generates sufficient revenue to cover operational costs and reinvest in system enhancements.

Scope of the Hackathon

- 1. Platform Development:**
 - Build a scalable and user-friendly platform that consolidates data from various colleges while ensuring data security and privacy.
 - Incorporate mechanisms for ongoing updates and self-sustainability through partnerships, subscriptions, or sponsorships.
- 2. AI and ML Integration:**
 - Utilize AI and ML models to automate resume optimization and enhance candidate-job matching.
 - Include features that adapt to industry needs and student preferences, making the platform future-proof.
- 3. Internship & Placement Module:**
 - Automate the process of connecting students with internships and placements, providing feedback loops for continuous improvement.
 - Ensure the system tracks and analyzes employment trends to support long-term sustainability.
- 4. University Dashboard for Sustainability:**
 - Offer universities actionable insights to improve training and academic programs.
 - Design a subscription-based dashboard for universities to access detailed analytics, ensuring the financial sustainability of the platform.
- 5. User Experience:**
 - Prioritize an intuitive and seamless experience for both students and employers.
 - Ensure the platform is accessible across devices to maximize engagement and usability.
- 6. Collaborative Development:**
 - Encourage teams with diverse skill sets to contribute to the platform's front-end, back-end, AI/ML models, and UX/UI design.

Outcome Expectations

- **A Functional Prototype:** A centralized platform that effectively connects students with job and internship opportunities while providing actionable insights to universities.



- **AI-Powered Resume Builder:** Tools that optimize resumes and continuously improve based on user progress and feedback.
- **Dynamic Candidate Database:** A searchable database with real-time matching capabilities, enabling employers to find the most suitable candidates easily.
- **University Insights Dashboard:** A robust analytics dashboard for universities to design tailored training programs and track student outcomes.
- **Self-Sustaining Revenue Model:** Features that generate revenue, such as premium services for employers and universities, ensuring financial viability.
- **User-Friendly Interface:** An intuitive, accessible platform for students, universities, and employers alike.