



CODECELL-CMPN, VESIT

SYRUS HACKATHON 2025

Category Code: C1 (Open Innovation)

Problem Statement Title: EduTrade - Swap Skills, Gain Expertise

Team Name: Caffeine Coder

Institute Name: Vivekanand Education Society's Institute of Technology



Idea / Approach details



Problem Statement: Many individuals struggle with limited access to quality education, skills mismatching job market demands, financial constraints, and lack of professional networks, leading to unequal job opportunities.

Solution Overview: EduTrade is an AI-powered platform that bridges the gap between learning and employment. It provides personalized skill assessments, free learning resources, AI-driven job matching, a Skill Swap Marketplace, and instant resume generation to help users secure sustainable careers.

Target Users:

1. **Students & Fresh Graduates** – Seeking skill development, mentorship, and job opportunities.
2. **Job Seekers & Career Changers** – Looking for AI-driven job matching and skill enhancement.
3. **Mentors & Industry Experts** – Offering guidance, validating skills, and conducting learning sessions.
4. **Employers & Recruiters** – Posting jobs, reviewing candidates, and hiring skilled professionals.



Implemented Features

- **Live Face Monitoring:** Tracks emotions and stress levels in real-time.
- **Employer Job Listings & Posting:** Employers can post job openings and manage listings.
- **Role-Based Sign-In:** Secure authentication with different access levels for employers and job seekers.
- **AI Resume Parser & Scorer:** Automatically extracts key details from resumes and provides a score.
- **Skill Matching & Swapping:** Enables users to exchange skills dynamically for better job opportunities.
- **Mentoring Sessions:** Connects users with industry experts for guidance and career growth.



Innovation (Showstopper)



1. Skill Swap Marketplace

- Users exchange skills (e.g., coding for UI/UX) using a time-based token system.
- AI or manual matching ensures fair and relevant learning exchanges.

2. Job Market Integration

- AI-driven smart job matching connects users with relevant opportunities.
- Includes resume building, interview prep, and direct recruitment.

3. Automated Resume Analysis

- Extracts key details (skills, experience, education) and evaluates resumes based on job relevance using AI.

4. AI-Powered Scoring & Feedback

- Assigns a score to resumes and provides real-time suggestions for improvement to enhance job matching.



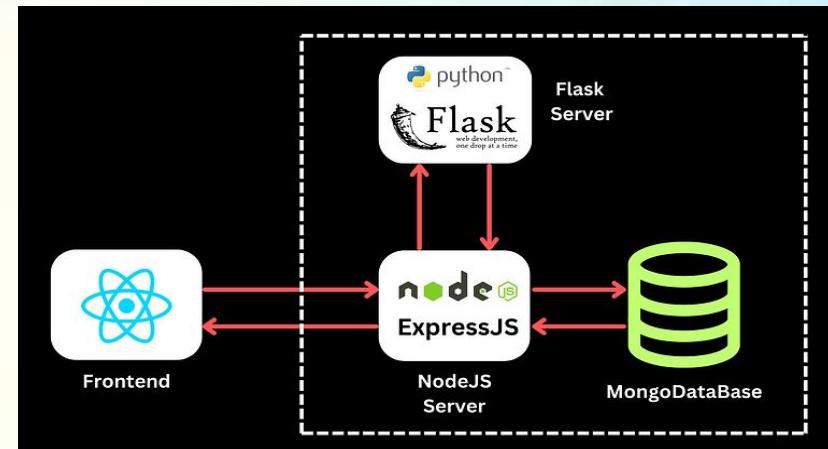
Tech Stack

Frontend: React.js

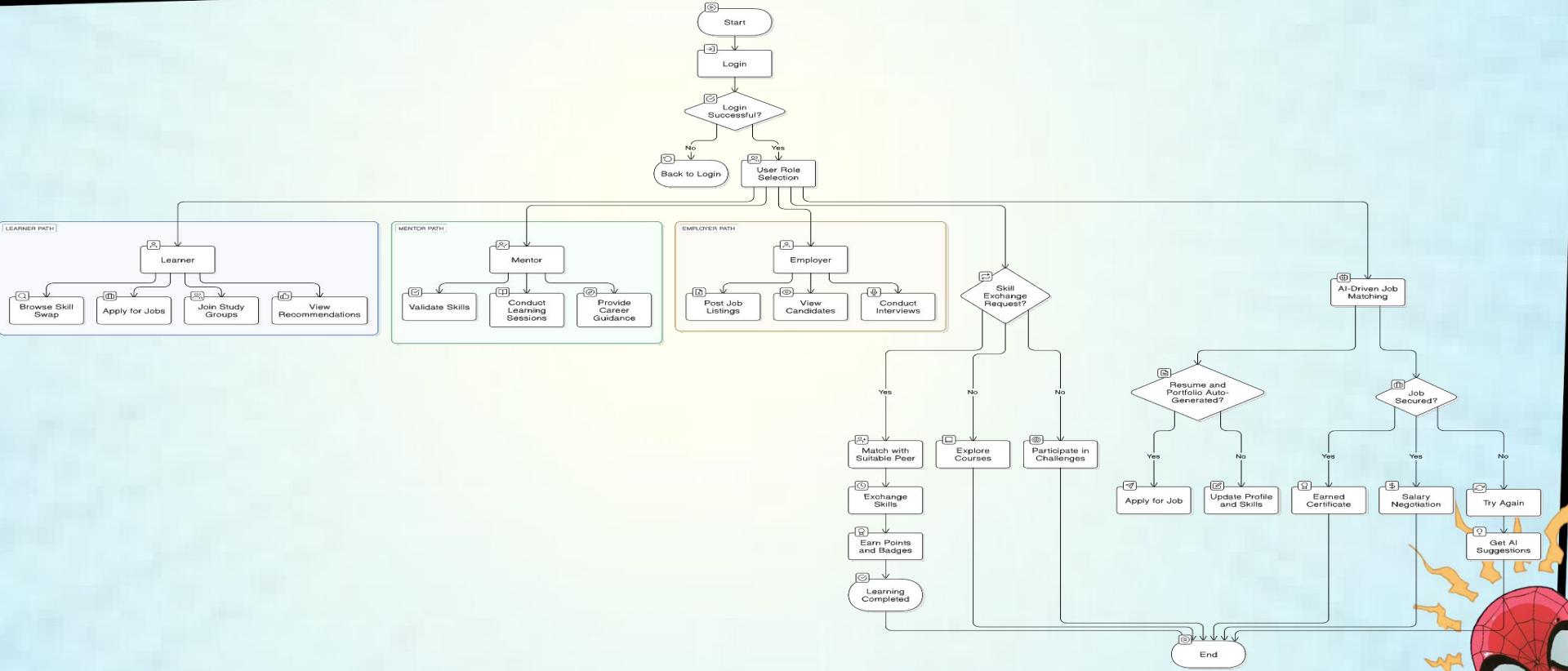
Backend: Node.js, Flask

Database: MongoDB

Machine Learning: Python



Use Case Diagram



Future Objective

1. **Peer-to-Peer Learning via Video Calls** – Enables live skill exchange sessions through secure video calls, fostering interactive learning and mentorship.
2. **Decentralized Learning & Skill Verification** – Blockchain-based certificates for verified skill endorsements and decentralized skill records to ensure credibility across platforms.
3. **AI Video Summarizer for Skill Swap Sessions** – AI-powered summarization of recorded sessions for quick knowledge retrieval and learning insights.
4. **Metaverse & VR-Based Learning Modules** – Immersive learning through VR-based training simulations and virtual skill swap rooms for hands-on experiences.
5. **Smart Contracts for Skill Exchange & Payments** – Secure and automated transactions using blockchain to ensure fair exchanges and fraud prevention in freelancing & mentorship.
6. **Automated AI Job & Internship Applications** – AI auto-applies to relevant jobs and internships based on user skills, with smart tracking of application status and interview scheduling.

