

Skill-Based Course Recommender Using AI (Modified)

Code Crafters

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Pain we are addressing

- For new students, it's important to choose a job role that matches their skills, interests, and long-term goals.
- Students must know the exact skills required for various jobs to avoid wasting time on irrelevant topics.
- Personalized career advice is necessary, as current platforms don't guide students in finding the best job opportunities for them.
- Without proper guidance, students struggle to stand out among thousands of applicants.

How We Fix It Using AI & Distributed Computing

- AI extracts skills from resumes using Natural Language Processing (NLP).
- Compares student skills with job requirements and identifies missing skills.
- AI recommends courses and certifications to bridge skill gaps.

Conceptualization & Justification for Our Solution

Conceptualization:- The Course Recommendation System is designed to assist students in selecting courses that best align with their interests, academic background, and career aspirations.

Justification:- Choosing a viable career path can be challenging due to the vast number of courses available. Without proper guidance, students may feel uncertain, make uninformed decisions, or regret their choices when applying for jobs.

Market Research & Their Limitations

- **University Career Services** – Provide general guidance but lack AI-driven job recommendations.
- **Traditional Resume Screening Tools** – Only check formatting and keywords, not career progression insights.
- **No Real-Time Market Insights** – Current tools don't analyze industry trends to recommend high-demand skills.

Target Market and Value Propositions

- **New Students** – Those who need guidance in choosing a career path.
- **Universities & Career Centers** – Institutions helping students with job placements and career planning.
- **Bootcamp & Online Learners** – Individuals taking self-paced courses who need career direction.
- **EdTech Platforms & Training Institutes** – Can integrate AI-powered recommendations for better learning paths.

Business Model – How We Make Money?

1) University & Career Center Partnerships

- Collaborate with **colleges & universities** to integrate the platform into career services.

2) Subscription-Based Model

- Offer monthly/annual premium plans for students & job seekers.
- Free basic version with limited job matches & skill analysis.

Team members expertise and contributions

- **Frontend:-** React.js, UI/UX Design
- **AI/ML:-** AWS Textract, AWS Comprehend, NLP processing
- **Cloud & Backend :-** AWS S3 , AWS Lambda, EC2, Python, Rest API

Collaborative Tools for Development & Communication

- **GitHub:** Version control, collaborative code management
- **Microsoft OneDrive:** For sharing and collaborative document editing.
- **Discord:** Group communication

References:-

- "Using AI for Career Path Recommendations" – Research Paper

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Thank you