### **Skill-Based Course Recommender Using AI**



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### **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-placed courses who need career direction.
- EdTech Platforms & Training Institutes—Can integrate AI-powered recommendations for better learning paths.

### **Key Winning Features**

- **Personalized Course Recommendations**: For effective upskilling, it proposes structured learning pathways depending on skills that are missing.
- **Time Saver:** Removes the need for manual resume review by automating the process of skill extraction and job comparison.
- Accurate Skill Matching: Uses Amazon Comprehend and Amazon Textract to accurately identify skills.
- **User Friendly**: Easy-to-use interface that provides immediate resume insights without requiring manual work.
- Scalability: using AWS robust infrastructure

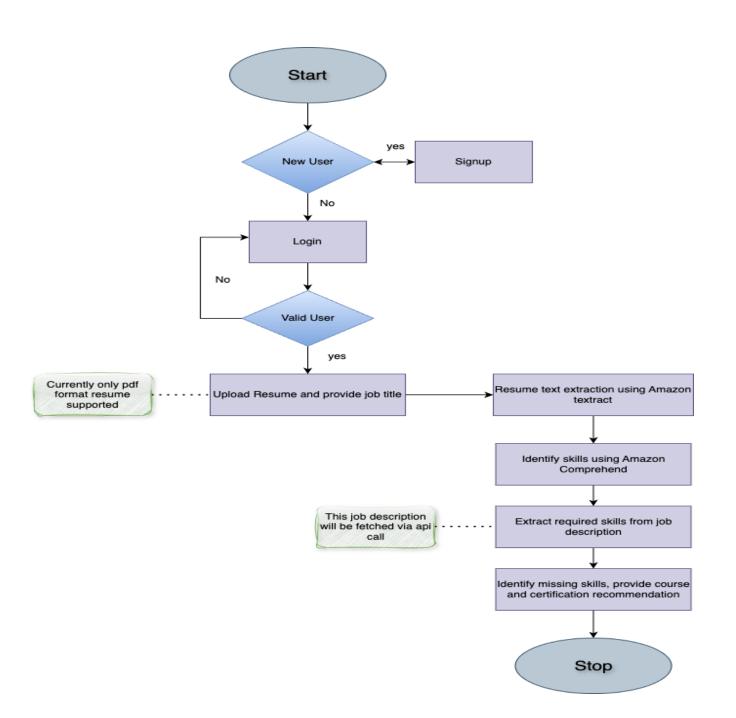
### Capabilities

- **AI-Driven Resume Analysis:** Utilising Amazon Textract & Comprehend to extracts skills from resumes.
- **Job Description Fetching:** 4-5 job descriptions are retrieved via APIs.
- Automated Skill Identification: employs NLP models to evaluate and extract required skills.
- **Missing skill analysis:** finds the skills that are missing by comparing resume skills with job requirements.
- Customised Learning Path Recommendations: suggests recommendation based on missing skills

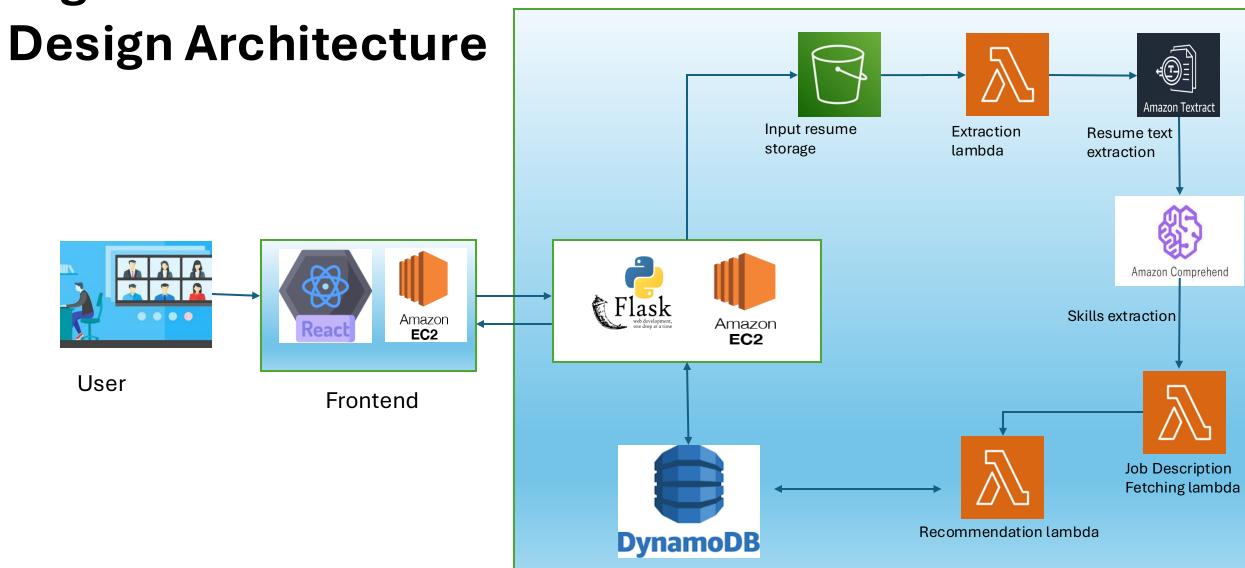
### **Justification**

- **Efficient Solution:** Completely automated, saving time on tedious resume reviews.
- Al-Powered Accuracy: Al-powered NLP skill extraction guarantees accurate outcomes.
- User Friendly Design: Simple to use UI offers quick insights.
- Market Relevance: skills are kept inline with industry demands through realtime job description analysis.
- **Upskilling Recommendation:** not only skill matching but also provides upskilling recommendation.

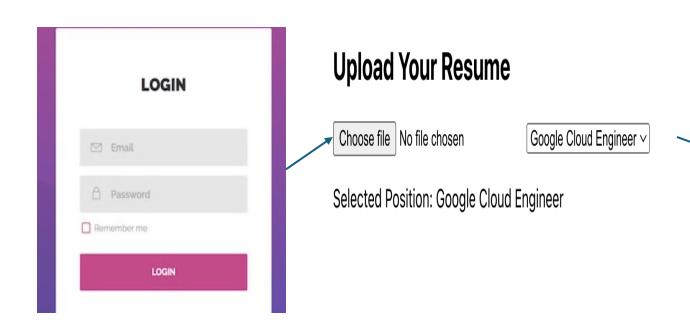
# **Workflow Diagram**



# **High Level Technical**



# **Activity Diagram**



#### Extracted Skills

Cloud Run,
Cloud Functions,
GKE, Cloud
Build,
Pub/Sub, Cloud
SQL, IAM, GCS,
App Engine,
Vertex AI,

Required
Skills(extracted from job description)

Cloud Run, Cloud Functions, GKE, Cloud Build, BigQuery Pub/Sub, Cloud SQL, IAM, GCS, App Engine, Vertex AI AI, Cloud Spanner, Cloud BigTable

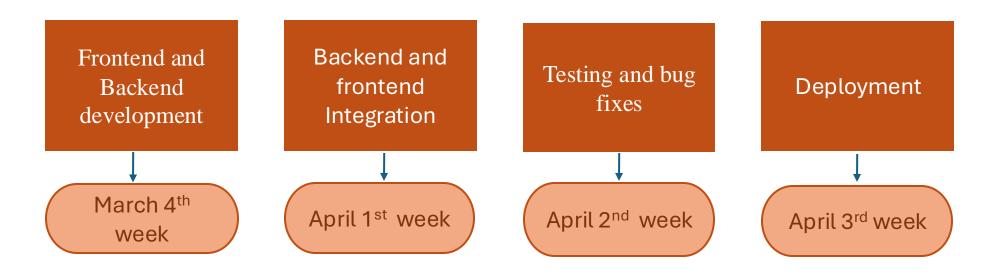
#### Missing Skills:

Cloud Spanner Cloud BigTable

#### **Recommended Certification:**

Google cloud professional Cloud Developer

### Plan for Implementation phase



### **Conclusion**

The application simplifies the process of reviewing resumes, identifying key skills, and highlighting skill gaps by comparing them with job descriptions. It assists users in filling those gaps by recommending appropriate courses and certifications, promoting their professional growth and raising their job prospects.

### References

#### **Icons and Images**

- https://designmodo.com/login-forms-websites-apps/
- https://www.flaticon.com/search?word=amazon
- https://colorlib.com/wp/html5-and-css3-login-forms/

#### **AWS Documentation**

https://docs.aws.amazon.com/index.html

#### **Others**

 https://eab.com/resources/blog/student-success-blog/4-tech-focused-waysto-build-career-readiness-for-college-students/?utm\_source=chatgpt.com



# Thank you