Project 9: A Multi-Agent Generative Resume and Cover Letter Assistant with Skill Matching

Project Description

The "Multi-Agent Generative Resume and Cover Letter Assistant with Skill Matching" is an AI tool designed to help users create tailored resumes and cover letters based on job descriptions and personal skills. The tool leverages multi-agent collaboration within CrewAI to automate different aspects of the application process, including generating tailored content, performing skill matching, and providing feedback on document quality.

- 1. **Content Generation**: A generative AI agent (e.g., GPT-4) creates personalized resume and cover letter content, aligning with the job description and user profile.
- 2. **Skill Matching**: An NLP-based agent identifies and highlights relevant skills by analyzing the job description and comparing it with the user's skills.
- 3. **Feedback and Refinement**: A feedback agent reviews the generated content, offering suggestions for improvement in structure, clarity, and relevance.
- 4. **User Interface**: An interface allows users to input job descriptions, update their skills, view generated documents, and receive feedback.

Important Tutorials:

- https://towardsdatascience.com/a-comprehensive-guide-to-collaborative-ai-agents-in-practice-1f4048947d9c
- https://www.deeplearning.ai/short-courses/multi-ai-agent-systems-with-crewai/

Note: You have the flexibility to select the models and datasets that align best with your project's goals. The steps and tools outlined here are merely suggestions to guide you; feel free to tailor, modify, or expand upon these ideas to make the project uniquely your own.