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SI 568

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## Mini Project Report

I had several different milestones over the course of my project. I initially wanted to create an AI interface that could give food recommendations to assist in customer preparedness and wait times. However, I ran into issues with that so I stuck with creating a sorted chat transcript based on burgers, nuggets, and fries, with the initial question being limited to McDonald's. From this point, my project did not solve business problems as I initially hoped so I had to go back to the drawing board. The project I ended up completing was to create an AI resource to assist both applicants and employers in their job search and hiring process. A common issue within a lot of businesses is the hiring process which often allocates a significant amount of resources to find the best candidate along with the work the candidates must do before applying.

I created two different Python scripts for each role, one for the applicant, and the other for the employers. An applicant can enter their resume pdf and immediately get roles that match their experience. They can then ask open-ended follow-up questions, building off of previous answers. It is important to know that you cannot limit the questions being asked, but the AI can now store and understand contextual information to previous questions, and answer accordingly. This is something that I struggled with a lot in my previous project, so I am happy with these results. Moving on, employers have a similar script that lets them input an applicant's resume pdf and immediately get a summary of that resume. After, they have the option to enter another candidate's resume, with the process continuing until they decide to exit. Within the files, I have

also submitted a few sample resumes from the website, BeamJobs, for you to test out with the script.

I strongly believe that this project can utilize AI to solve business problems in the hiring process and productivity. Applicants' understanding of their skills and being able to ask questions helps them understand where they are and what they can do. Although most may already have prior knowledge of their skills and roles, the AI's input adds a potential for other jobs they are qualified for that they are unaware of. Employers' hiring process can be time-consuming and draining to having to look through resumes, so a resume summary may be able to assist in those times. I do not wish to indulge in the ethical debate about the use of AI within the hiring process, but it is still a very useful tool that can potentially speed things up.

## **Timeline summary:**

- 1. March 25-April 3: Learn the AI documentation, retrieve the key, connect the AI, and complete the prior project
- 2. April 17: Updated the project to change my business problem. Created an interface to give applicants jobs roles they match on their resumes, and offered chances to ask additional questions.
- 3. April 18: Created a second interface for employers to input applicant resumes to retrieve summarized information. Cleaned up both interfaces and debugged errors.

## **Strengths:**

- 1. Able to get information from AI responses and store them for context.
- 2. Both types of users can get immediate feedback on the entered information.
- 3. Applicants have the option to ask for contextual information about their resumes.

#### Weaknesses:

- 1. Unable to enter multiple file types, I picked pdf because most people pick that. However, it removes preference.
- 2. Employers cannot currently ask additional questions other than entering a new resume for a summary. I originally kept this for usability purposes to make summary times faster.
- 3. Changed the original idea but kept functionality.

#### Files:

- 1. requirements.txt detailed system requirements for the project
- 2. README.md detailed information and interface breakdown on how to use it.
- 3. yourkey.py a file where you need to enter your openai api key.
- 4. applicants.py the script which applicants can run to get resume information.
- 5. employers.py the script which employers can run to get resume summaries.

## 6. RESUME SAMPLES (5)

I included 5 sample resumes by Stephen Greet from different articles on the website beamjobs.com. These samples are for the roles of 'data scientist', 'business', 'attorney', 'data analyst', and 'dentist.' I have picked the first resume from all five of these articles below. You can also feel free to use your resume or another sample you have.

- a. sample1.pdf: 9 Data Scientist Resume Examples for 2023
- b. sample2.pdf: 5 Business Resume Examples That Got the Job in 2023
- c. sample3.pdf: 7 Attorney Resume Examples That Got the Job in 2023
- d. sample4.pdf: 11 Data Analyst Resume Examples for 2023

- e. sample5.pdf 5 Dentist Resume Examples Guaranteed to Work in 2023
- 7. sampleoutput.pdf a pdf file highlighting what the outputs should look like for both applicants and employers.

# **Requirements:**

Applicants and employers can read the requirements.txt file for more information about system requirements. They should also read the README.md files for detailed instructions and other general information. They can also view the sampleoutput.pdf to view how the interface should look when input. Users can also access the media references below.

## **Media References**

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