

Dear Candidate,

Congratulations on being selected to participate in our selection process for Full Stack Developer at Horsell Technology!

Project Overview:

Your assignment is to develop a functional user interface using any technological stack for the existing Python code. The code serves as a resume processing tool, similar to the ongoing projects. Additionally, you will be responsible for deploying the project on the Azure platform.

Assignment Tasks:

- 1. Backend Development:
 - Please ensure that the provided Python code is prepared to serve as the backend of the application, utilising Flask as the recommended framework.
 - Implement endpoints to handle file uploads, process the resumes, and return the best candidate based on their qualifications.
 - Ensure that the backend code is well-structured, readable, and follows best practices.
- 2. Frontend Development:
 - Set up a project and create a simple UI for the resume processing system.
 - Design the UI to include a file upload functionality and display the results from the backend. (Beautification is not the main aim)
 - Implement logic to handle file uploads, send them to the backend API, and display the returned results in the UI.
- 3. Deployment on Azure (Use Free-tier services):
 - Configure an Azure App Service to serve as the hosting platform for both the front end and back end of the application.
 - Set up an Azure Storage Account to store the static frontend files.
 - Build the React frontend and upload the static files to the Azure Storage Account.
 - Set up an Azure App Service to host the frontend files.
 - Connect the frontend and backend on Azure by updating the API endpoints in the frontend code to use the Azure App Service URLs.
 - Test the fully functional website on Azure to ensure the frontend and backend are connected.

About the python code:

The provided Python code features an efficient function called process_candidates. It allows for the evaluation of job candidates based on their resumes and the specified job requirements. To utilise this script, ensure you have installed the PyPDF2 library to read the text from the uploaded PDF files.

When executed, the function prompts the user to input the desired job qualifications, enabling a flexible and dynamic evaluation process. The script then analyses each candidate's PDF resume and calculates the similarity between their qualifications and the specified job requirements using a token-based approach.

The final step involves printing the similarity scores for each candidate's qualifications. This user-friendly output aids hiring managers in rapidly identifying the most suitable candidates for the role, streamlining the hiring process and saving valuable time.

Submission Details:

1. Deadline:

Please complete the assignment within 3 days of receiving this email. You can
write an email to <u>technology@horsell.com.au</u> if extension is required with
justified reason and displaying current progress.

2. Submission Requirements:

- Provide the modified Python code for the backend.
- Submit the code for the frontend.
- Include a document that explains the deployment process on Azure.
- Submit the working URL for the final deployed project on Azure.

3. Submission Method:

- Send your assignment to <u>technology@horsell.com.au</u> in a zip file.
- Use the subject line: "[Your Name] Assignment FE".

Evaluation Criteria:

- Correctness and functionality of the codes.
- Design and functionality of the frontend UI.
- Successful deployment of the project on Azure.
- Overall code quality, readability, and adherence to best practices.
- Submission within the given timeframe.

Please note that this assignment is a crucial part of our selection process. It will not only evaluate your technical skills but also your ability to work with existing code, develop user interfaces, and deploy projects on cloud platforms.

We wish you the best of luck with your assignment. If you have any questions or need any clarifications, please feel free to reach out.

All The Best!! Looking forward to meeting you in the next round...

With regards,

Drew Horsell

Founder and Managing Director