Project Documentation for Resume Checker

1. Introduction

The Resume Checker is a web-based application designed to help users analyze their resumes in PDF and DOCX formats. The application extracts text from the uploaded files and checks for the presence of key sections, providing feedback to the user. This tool is particularly useful for job seekers who want to ensure their resumes meet common standards.

2. Required Libraries

To function correctly, the Resume Checker utilizes the following libraries:

- PDF.js: A JavaScript library developed by Mozilla for rendering PDF documents and extracting text from them.

- Mammoth.js: A library for converting DOCX documents into plain text, focusing on simplicity and ease of use.

Library Inclusion Options:

- Using CDN (Content Delivery Network): This is the recommended method for quick setup. By including the library links in the HTML file, users can access the latest versions without needing to download files manually.

- Manual Download: Users can download the libraries from their respective GitHub repositories and include them in the project folder. This method is suitable for those who prefer to work with local files.

3. Functionality Overview

****File Upload****

The application allows users to upload their resumes in either PDF or DOCX format. Upon selecting a file, the application determines the file type and processes it accordingly.

Text Extraction

- **PDF Files**: The application uses PDF.js to read the uploaded PDF file and extract its text content. It processes each page of the PDF and compiles the extracted text into a single string for analysis.
- **DOCX Files**: For DOCX files, the application employs Mammoth.js to extract raw text. This library efficiently handles the conversion of DOCX content into plain text, making it easy to analyze.

Resume Analysis

Once the text is extracted, the application analyzes the content to check for the presence of key sections typically found in resumes, such as:

- Experience
- Education
- Skills

The analysis results in feedback that informs the user whether any of these sections are missing.

User Feedback

The application provides real-time feedback to users based on the analysis of their resumes. If any key sections are missing, the user receives a warning message indicating which sections need to be added. If all sections are present, a success message is displayed.

4. Testing the Application

To ensure the application works as intended, users should:

- Upload a PDF or DOCX file.
- Check the console for any extracted text to verify that the text extraction process is functioning correctly.
- Review the feedback provided by the application to confirm that it accurately reflects the presence or absence of key resume sections.

5. Troubleshooting Tips

If users encounter issues while using the application, they can refer

to the following troubleshooting tips:

- **PDF Issues: If the application fails to process PDF files, users should check the browser console for error messages that may indicate the source of the problem.**
- **DOCX Issues: If text extraction from DOCX files does not work as expected, users should try using a simple DOCX file without complex formatting, tables, or images.**

6. Future Improvements

The Resume Checker can be enhanced with several features, including:

- **Progress Indicators: Implementing visual indicators to show users that their files are being processed.**
- **Natural Language Processing (NLP): Utilizing NLP techniques to improve the analysis of resumes, providing more nuanced feedback based on the content.**
- **Database Integration: Storing analysis results in a database (e.g., Firebase, MongoDB, or MySQL) for future reference or user account management.**

7. Conclusion

The Resume Checker is a valuable tool for job seekers looking to optimize their resumes. By leveraging PDF.js and Mammoth.js, the application efficiently extracts text from uploaded files and provides actionable feedback. With potential future enhancements, the tool can evolve to offer even more comprehensive support for users in their job search.