

MacroHard career coach assistance

Andrew G, Rex, Yiren, Tingpei, Cici

Challenges:

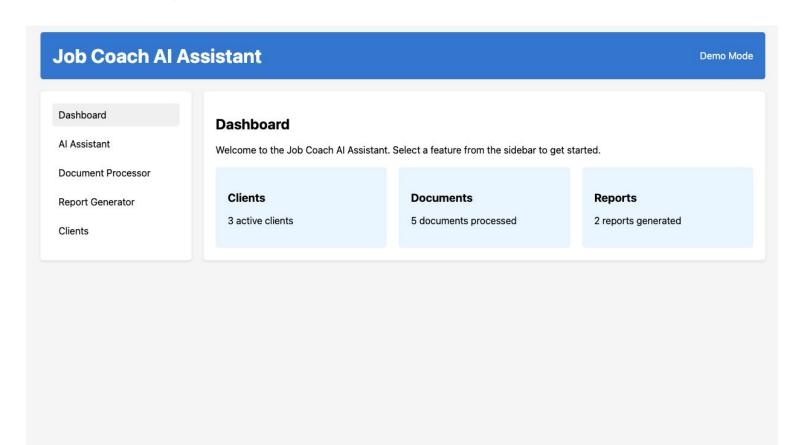
Complex documentation and support needs for job coaches

- Time-consuming paperwork processing
- Need for consistent and accurate guidance
- Multiple clients with diverse needs

Table of contents:

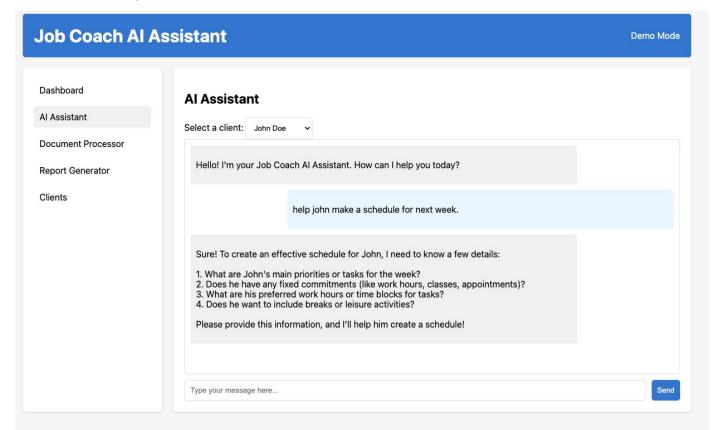
- a. Smart Document Processing
- b. Al Coaching Assistant
- c. Centralized Client Management
- d. Automation Report Generation

Home page



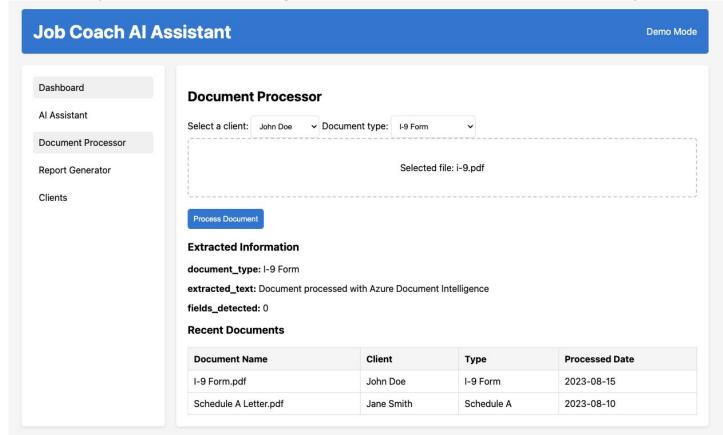
Al chatbot assistance

Al career agent helps customize task for career coach based on client's history data



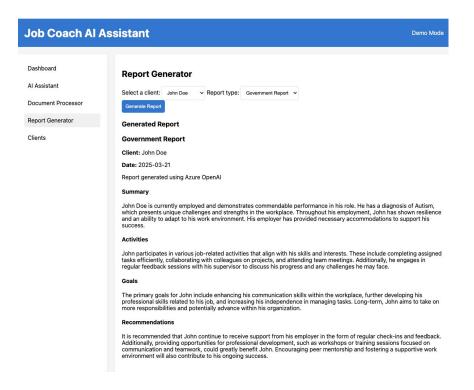
Document processor

Currently supports parsing I-9 form, Schedule A letter, and job application



Report Generator

Supports Government, Employer, Client reports



Job Coach Al Assistant

Demo Mode



Report Generator Select a client: John Doe Report type: Employer Report

Generated Report

Employer Report

Generate Report

Client: John Doe Date: 2025-03-21

Report generated using Azure OpenAl

Summary

John Doe is currently employed and demonstrates a strong ability to perform job tasks effectively, despite the challenges posed by autism. He has shown considerable progress in adapting to workplace environments and is well-regarded by colleagues and supervisors for his dedication and attention to detail.

Activities

John participates actively in team meetings and collaborates well with coworkers on projects. He has also engaged in various training sessions aimed at enhancing his communication skills and job-specific competencies. Additionally, he has been involved in social skills workshops to further improve his workplace interactions.

Goals

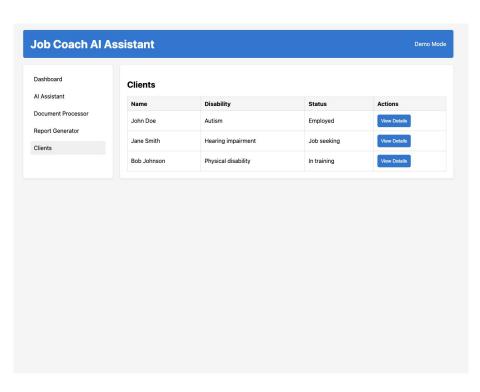
The primary goals for John include continuing to develop his interpersonal skills, increasing his confidence in expressing ideas during team discussions, and exploring opportunities for advancement within the organization. Long-term, we aim for him to take on more responsibilities that align with his strengths and interests

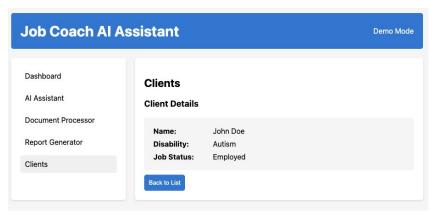
Recommendations

It is recommended that John continues to receive support through mentoring and training programs focused on communication and professional development. Regular check-ins with a job coach can help track his progress and address any challenges he may face. Creating a structured feedback loop with his supervisor can also assist in fostering a supportive work environment that encourages John's growth.

Clients management page

One page summary on each client's status





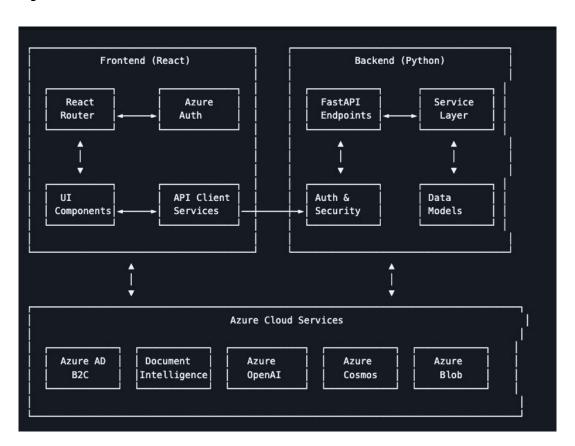
Future Roadmap

- PDF form auto-fill: Enhance document processing capabilities with automated PDF form filling for more types of government forms.
- Analytics dashboard: Provide insights and analytics to help job coaches make data-driven decisions.
- Voice interface: Enable voice commands for hands-free operation.
- Mobile app: Extend functionality to mobile devices for on-the-go access.

Technical Implementation - Architecture

- Three docker images are stored in the ACR(Azure Container Registry)
- Services are hosted on Azure VM
- Bash scripts for CI and github action for CD
- The application is exposed via HTTP on port 3001 and 80

System Architecture



Frontend

The frontend is built with React and uses the following key components:

Authentication (MSAL) - Microsoft Authentication Library for secure user authentication

UI Components (Fluent UI) - Microsoft's Fluent UI design system for consistent look and feel

Routing (React Router) - For navigation between different application sections

API Client - For communication with the backend services

Main features implemented in the frontend:

Document processing and upload interface

Al assistant chat interface

Report generation and viewing

Client management

Backend (Python FastAPI)

The backend is built with Python using FastAPI and provides the following services:

Document Service - Processes forms using Azure Al Document Intelligence

Al Service - Powers the Al assistant using Azure OpenAl

Storage Service - Manages document storage and retrieval

Report Service - Generates reports for different stakeholders

Azure Services

The application leverages several Azure services:

Azure Active Directory B2C - For user authentication and authorization

Azure AI Document Intelligence - For intelligent document processing

Azure OpenAI Service - For the AI assistant capabilities

Azure Cosmos DB - For storing document metadata and application data

Azure Blob Storage - For storing original document files

Azure Speech Services - For voice interface capabilities

Thank you for your time