OpenAl Document Search Assistant - Usage Guide

This guide will help you set up and use the OpenAl Document Search Assistant to extract relevant information from Word documents.

Setup Instructions

1. **Environment Setup**: Create a .env file in your project directory with your OpenAl API key:

```
OPENAI_API_KEY=your_api_key_here
```

2. Install Dependencies:

```
pip install openai python-dotenv tqdm
```

3. **Prepare Document Directory**: Create a directory named documents in the same folder as the script and place your Word (.docx) files there.

Basic Usage

```
from openai_doc_assistant import DocumentSearchAssistant
# Initialize the assistant
assistant = DocumentSearchAssistant()
# Upload documents
file_ids = assistant.upload_files("documents")
# Create assistant
assistant.create_assistant()
# Create thread
assistant.create_thread()
# Ask questions
questions = [
    "What does the document say about project planning?",
    "What are the key recommendations in the report?",
    "Summarize the findings on budget allocation."
]
results = assistant.process_questions(questions)
# Print results
for question, answer in results.items():
    print(f"\nQ: {question}")
    print(f"A: {answer}")
    print("-" * 50)
# Cleanup when done
assistant.cleanup()
```

Advanced Usage

Custom Instructions

You can provide custom instructions to guide how the assistant responds:

```
assistant.create_assistant(
   instructions="You are a document analysis expert. Extract key insights from documents, focu
)
```

Different File Types

While the script is optimized for Word documents, you can specify other file types:

```
python
file_ids = assistant.upload_files("documents", file_pattern="*.pdf")
```

Single Question Mode

For one-off questions:

```
python

response = assistant.ask_question("What are the main conclusions in the documents?")
print(response)
```

Troubleshooting

- API Key Issues: Ensure your API key is correct and has appropriate permissions
- **File Upload Failures**: Check file size limits (less than 512MB per file)
- **Timeout Errors**: For large documents, consider increasing the timeout in (ask_question())

Logging

The script logs all actions to both console and assistant_log.log. Check this file for debugging information if you encounter issues.