

# Zania | AI Challenge

## Problem Statement

Create an AI agent that leverages the capabilities of a large language model. This agent should be able to extract answers based on the content of a large PDF document and post the results on Slack. Ideally, you use OpenAI LLMs. **If you use the Langchain or LLama Index framework to implement this agentic functionality, please don't use pre-built chains for the task. Implement the logic yourself.** Please write production grade code as opposed to scripts as we will be evaluating your code quality.

## Submission Guidelines

To submit your solution, please provide the following:

1. A link to your GitHub repository where you've hosted your code.
2. List all the ways you can make the solution more accurate
3. How you would have made your code more modular, scalable and production grade
4. A video or demo of your program in action.

### User Journey:

The user will. input the PDF b. questions to answer c. ask the agent something like "Answer the questions and post results on Slack.."

### Supported Input File Types

Your application should support the following file types for input:

PDF

### Input Requirements

You need to provide two inputs:

A list of questions.

A PDF file containing the document over which the questions will be answered.

### Ideal Output Format

- The output should be a structured JSON blob that pairs each question with its corresponding answer.
- Answers should be word to word match if the question is a word to word match
- If the answer is low confidence, reply with “Data Not Available”

### Quality

- Create high quality code as you would for a production model. Be mindful of writing a good readme, clean code, and so on.

5.

## OpenAI Key

**sk-proj-**

**hHIL1kX2JBAmxppCVWEs9xj0TYkzTbbP0RfDAawZDsUF0FF8I3NRRrnrp5T3B1bkF  
JUebeHoSMJHC9sW3pf2oFpGABGI5Bx0NiLf5eqo40X8EAJ0A86uPUyHwXka**

Note:

- Do not commit the keys to Git or Github.
- The Api keys have a limit of \$5 so use it judiciously.
- Please use the gpt-4o-mini model. Don't use GPT-4 or 16K token models.

## Question(s)

If you have any questions feel free to reach out to us at [shruti@zania.ai](mailto:shruti@zania.ai).

## **Appendix - Sample questions and files**

### Questions

1. What is the name of the company?
2. Who is the CEO of the company?
3. What is their vacation policy?
4. What is the termination policy?

Sample PDF file

[handbook.pdf](#)