

## Task 1: Overview

This task involves integrating OpenAI API calls into `askquestion.py` to generate one challenging question on topic chosen in dropdown and submit the question and generate the feedback.

## Task List

### 1. Understand the Boilerplate Code:

- Review the existing `askquestion.py` structure and understand the placeholders.

### 2. Setup OpenAI API Integration:

- Replace the placeholder code in `/ask-question` end point with the provided OpenAI API call logic.
- Replace the placeholder code in `/question-feedback` with the provided OpenAI API call logic.

### 3. Integrate API Details:

- Use the specified model (`gpt-4o-2024-05-13`) and configuration (temperature: 0.2) initially and play around with various temperatures.

### 4. Define System and User Roles:

- Implement the system role to set the context as a technical interview expert.
- Implement the user role to feed the topic or prompt for question generation and feedback.

### 5. Debug and Optimize:

- Ensure proper handling of errors (e.g., invalid inputs, API issues).
- Optimize for response accuracy and performance.

## Task Solution

Update boilerplate `askquestion.py` code with two endpoints:

### Challenge 1: (/ask-question)

- Write the appropriate prompt to generate interview question for the selected topic
  - Generate only one question
  - Ensure that question is prefixed with "Question:" eg: "Question: What is .NET"
  - Ensure that the returned question doesn't have answer included.
- Call OpenAI API to execute the prompt.

### Challenge Solution 1.a:

Replace

```
prompt = f"""
```

with

```
prompt = f"Compose a challenging {topic} interview question without answer. \n Question:"
```

### Challenge Solution 1.b:

### Replace

```
prompt = f"""
```

### with

```
response = client.chat.completions.create(  
    model="gpt-4o-2024-05-13",  
    temperature=0.2,  
    messages=[  
        {  
            "role": "system",  
            "content": [  
                {  
                    "type": "text",  
                    "text": "You are an expert in technical interviews, generating relevant questions with concise  
(1-2 sentence) answers.",  
                }  
            ],  
        },  
        {  
            "role": "user", "content": [{"type": "text", "text": prompt}],  
        },  
    ],  
)
```

### Challenge 2: (/question-feedback)

- a) Generate the prompt to submit both question and answer and also get feedback along with rating between 1 and 10
- b) Call OpenAI API to get the response.

### Challenge Solution 2.a

### Replace

```
prompt = f"""  
    """
```

### with

```
prompt = f"""
```

Evaluate the following question and answer and rate the candidate's response on a scale of 1 -

10:

question: {question}

answer: {answer}

```
"""
```

## Challenge Solution 2.b

### Replace

```
response = {}
```

### with

```
response = client.chat.completions.create(  
    model="gpt-4o-2024-05-13",  
    temperature=0.2,  
    messages=[  
        {  
            "role": "system",  
            "content": [  
                {  
                    "type": "text",  
                    "text": "You are an expert in technical interviews",  
                }  
            ],  
        },  
        {"role": "user", "content": [{"type": "text", "text": prompt}]},  
    ],  
)
```