Summary of Agent to Grade Automated FAQ Answering Assignment

Agentic Workflow within Crew AI to automate the grading process for student submissions using the GroqCloud API for LLM interactions. The workflow involves sending each submission to the GroqCloud API for evaluation, collecting the results, and printing them out.

A framework for uploading and analyzing student code files in a Google Colab environment. The analysis focuses on checking for the usage of the GroqCloud API and the presence of question-answering related tasks. This approach helps in evaluating whether the student code meets the requirements of using the GroqCloud API for FAQ generation and interaction tasks.

Key Components:

Code Upload: The upload_student_code function enables the uploading of student code files in Google Colab.

Code Analysis: The analyze_code function performs basic analysis to check for GroqCloud API usage and question-answering tasks.

Test Cases: The predefined test cases provide a context for expected FAQs and simulate real-world scenarios for code analysis.

Explanation of the Code

1. **Importing Necessary Libraries**:

files from google.colab is used for uploading files in a Google Colab environment.

2. **Function analyze_code:**

This function takes a code string as input and checks for the usage of Groq API (specifically looking for "GroqCloud") and keywords related to question-answering tasks (checking for "question" and "answer").

3. **Test Cases**:

A list of test cases is defined, each containing a product description and expected FAQs. These test cases are used to simulate student code analysis.

4. Function upload_student_code:

This function handles the uploading of student code files. It uses files.upload() to prompt the user to upload a file and returns the content of the uploaded file as a string.

5. Looping Through Test Cases:

For each test case, the script prompts the user to upload the student code file.

The uploaded code is analyzed using the analyze_code function.

The expected FAQs and the results of the code analysis are printed out.

OUTPUT:

Please upload the student code file for the test case: This is a high-resolution smart TV with a sleek design, offering vibrant picture quality, built-in streaming apps, and voice assistant compatibility.

No file chosen Upload widget is only available when the cell has been executed in the current browser session. Please rerun this cell to enable.

Saving Agent_to_Grade_Automated_FAQ_Answering_Assignment.ipynb to Agent_to_Grade_Automated_FAQ_Answering_Assignment.ipynb

Test Case: This is a high-resolution smart TV with a sleek design, offering vibrant picture quality, built-in streaming apps, and voice assistant compatibility.

Expected FAQs:

- What are the different types of smart TV resolutions available?: Smart TVs come in various resolutions such as HD, Full HD, 4K, and 8K.

- Does this smart TV have built-in streaming apps?: Yes, this smart TV comes with built-in streaming apps like Netflix, Hulu, and Amazon Prime Video.

- How can I control this smart TV using voice commands?: You can use the built-in voice assistant compatibility to control the TV using voice commands.

Code Analysis:

- Groq API Usage: True

- Question-Answering Tasks: True