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JSON Output

In many scenarios, users need the model to output in strict JSON format to achieve structured output, facilitating subsequent parsing.

DeepSeek provides JSON Output to ensure the model outputs valid JSON strings.

Notice

To enable JSON Output, users should:

1. Set the `response_format` parameter to `{'type': 'json_object'}`.
2. Include the word "json" in the system or user prompt, and provide an example of the desired JSON format to guide the model in outputting valid JSON.
3. Set the `max_tokens` parameter reasonably to prevent the JSON string from being truncated midway.
4. **When using the JSON Output feature, the API may occasionally return empty content. We are actively working on optimizing this issue. You can try modifying the prompt to mitigate such problems.**

Sample Code

Here is the complete Python code demonstrating the use of JSON Output:

```python
import json
from openai import OpenAI

client = OpenAI(
    api_key="<your api key>",
    base_url="https://api.deepseek.com",
)

system_prompt = """
The user will provide some exam text. Please parse the "question" and
"answer" and output them in JSON format.

EXAMPLE INPUT:
Which is the highest mountain in the world? Mount Everest.
```

```
EXAMPLE JSON OUTPUT:
{
    "question": "Which is the highest mountain in the world?",
    "answer": "Mount Everest"
}
"""

user_prompt = "Which is the longest river in the world? The Nile
River."

messages = [{"role": "system", "content": system_prompt},
            {"role": "user", "content": user_prompt}]

response = client.chat.completions.create(
    model="deepseek-chat",
    messages=messages,
    response_format={
        'type': 'json_object'
    }
)

print(json.loads(response.choices[0].message.content))
```

The model will output:

```
{
    "question": "Which the longest river in the world?",
    "answer": "The Nile River"
}
```