

Do as I did: virtualization best practices

FastAPI is a modern and fast framework for building web APIs with Python. With it, you create a variety of applications and services, especially focused on APIs. When developing applications using the framework FastAPI, it is common to interact with external services through HTTP requests.

Let's define a simple endpoint that returns a greeting when accessed?

```
from fastapi import FastAPI, Query
import requests

app = FastAPI()

@app.get('/api/hello')
def hello_world():
    """
    Endpoint que exibe uma mensagem incrível do mundo da programac o
    """
    return {'Hello': 'World'}
```

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Here, we define a simple endpoint that returns a greeting when accessed.

```
@app.get('/api/restaurantes/')
def get_restaurantes(restaurante: str = Query(None)):
    """
    Endpoint para ver os card pios dos restaurantes
    """
    url = 'https://guilhermeonrails.github.io/api-restaurantes/restaurantes.json'
    response = requests.get(url)
```

In the next endpoint, we make a request to the Restaurant API. If the response is successful (200), the code loops through each item in this object, representing a restaurant, and extracts specific data, such as the restaurant name (Company), the item offered (Item), the price (price), and the description (description).

```

if response.status_code == 200:
    dados_json = response.json()
    if restaurante is None:
        return {'Dados': dados_json}

    dados_restaurante = []
    for item in dados_json:
        if item['Company'] == restaurante:
            dados_restaurante.append({
                "item": item['Item'],
                "price": item['price'],
                "description": item['description']
            })
    return {'Restaurante': restaurante, 'Cardapio': dados_restaurante}
else:
    return {'Erro': f'{response.status_code} - {response.text}'}

```

If the response is 200, indicating that the request was successful, the code loops through each item in the object `dados_json` and extracts the desired data for the specific restaurant provided as a parameter. The result is then returned in the form of a dictionary containing the name of the restaurant (Restaurant) and its menu (Menu). If the request is not successful, the code returns a dictionary indicating the error that occurred, including the status code and the response text.

```

else:
    return {'Erro': f'{response.status_code} - {response.text}'}

```

Remember: it's important to check the `status_code`, process the data, and return specific information based on the parameters provided. FastAPI's versatility makes it a solid choice for a variety of use cases, providing high performance and an enjoyable Python development experience.

