

Use Case Interview

Deploying Model

Deploying end points to companies for a reinforcement learning prediction model using REST API & services

BLUE AVENIR

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Agenda

ProblemTool Stack

What is a REST API?Setup

End point DemoRunning the code

• Feedback & Inputs

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INTRODUCTION

Problem | Tech Stack

Problem

GET

uri:/is-alive

POST

uri:/predict

PUT

uri:/rewards

Creating 3 end points for the REST API

COMPANY A

handling JSON request

COMPANY B

handling file request

COMPANY A(v2)

handling JSON with product name

Client data for POST request



Hosted Server

local host server deployed using REST API end point







RL Agent
3 Best Offers

Upon **POST** request the server responds with the 3 best offers in the from of JSON. The entire query is logged in **DB**.

Tech Stack





GET

PUT

POST



Hosted Server

end point running @

http://127.0.0.1:8000

FastAPI

Server side technology



Setup locally in the host machine

Database to establish connection with server







Developer Tools

API

REST API| Setup

REST API

Representational State Transfer



- Web Framework for developing RESTful services
- It helps to connect components in a micro service layered architecture
- Follows six design principles of RESTapi's
- •Pydantic in nature i.e need to specify datatype



ASGI server

- low-level server/application interface for async methods
- •It can be run directly from a Python framework

Read/write

from server



HTTP methods

GET

POST

PUT

DELETE

Setup

CODE as INFRASTRUCTURE

USE CASES

End point cases | Feedback

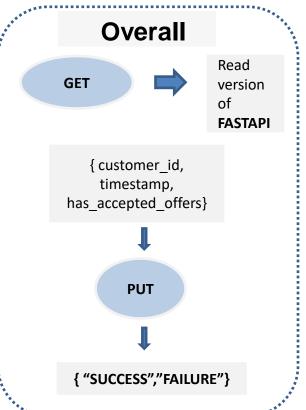
Use cases

company_B_processed.csv

Write_to_database.py App.py **Company B Company A** {customer_id, timestamp, company_B.csv states, offers} Batch_Process_ Batch Process Company_B.py Company_A.py

{customer_id, response_date,

best_offers*}



RL_output.py

CONCLUSION

FEEDBACK AND QUESTIONS