Proyecto MLOps: Parte FastAPI
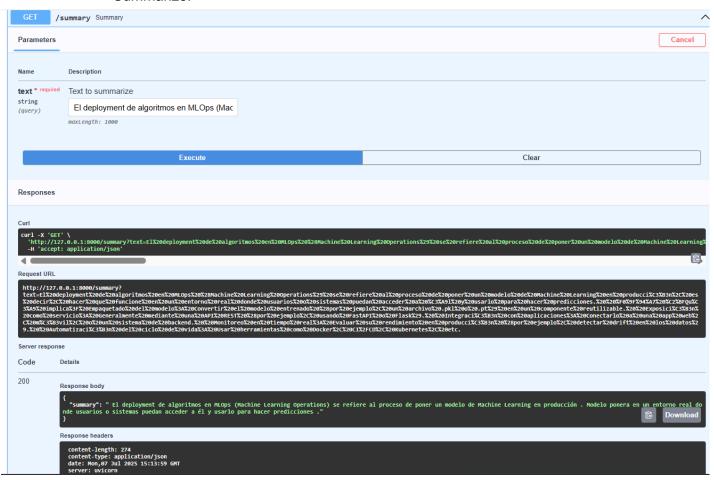
1. Instalacion de dependencias desde el shell:

2. Visualizacion de Endpoints desde web:

- Summarize:

GET /summary Summary ⌃

Parameters   Cancel

Name   Description

text * required Text to summarize
string
(query)   [El deployment de algoritmos en MLOps (Mac]

                 maxLength: 1000

                 Execute   Clear

Responses

Curl

curl -X 'GET' \
  'http://127.0.0.1:8000/summary?text=El%20deployment%20de%20algoritmos%20en%20MLOps%20%28Machine%20Learning%20Operations%29%20se%20refiere%20al%20proceso%20de%20poner%20un%20modelo%20de%20Machine%20Learning%
  -H 'accept: application/json'

Request URL

http://127.0.0.1:8000/summary?
text=El%20deployment%20de%20algoritmos%20en%20MLOps%20%28Machine%20Learning%20Operations%29%20se%20refiere%20al%20proceso%20de%20poner%20un%20modelo%20de%20Machine%20Learning%20en%20producci%C3%B3n%2C%20es
%20decir%2C%20hacer%20que%20funcione%20en%20un%20entorno%20real%20donde%20usuarios%20o%20sistemas%20puedan%20acceder%20a%20%C3%A9l%20y%20usarlo%20para%20hacer%20predicciones.%20%20%F0%9F%94%A7%20%C2%BFQu%C
3%A9%20implica%3F%20Empaquetado%20del%20modelo%3A%20Convertir%20el%20modelo%20entrenado%28por%20ejemplo%2C%20un%20archivo%20.pkl%20o%20.pt%29%20en%20un%20componente%20reutilizable.%20%20Exposici%C3%B3n%
20como%20servicio%3A%20Generalmente%20mediante%20una%20API%20REST%20%28por%20ejemplo%2C%20usando%20FastAPI%20o%20Flask%29.%20%20Integraci%C3%B3n%20con%20aplicaciones%3A%20Conectarlo%20a%20una%20app%20web%2
C%20m%C3%B3vil%2C%20o%20un%20sistema%20de%20backend.%20%20Monitoreo%20en%20tiempo%20real%3A%20Evaluar%20su%20rendimiento%20en%20producci%C3%B3n%20%28por%20ejemplo%2C%20detectar%20drift%20en%20los%20datos%2
9.%20%20Automatizaci%C3%B3n%20del%20ciclo%20de%20vida%3A%20Usar%20herramientas%20como%20Docker%2C%20CI%2FCD%2C%20Kubernetes%2C%20etc.

Server response

Code   Details

200
         Response body
         {
           "summary": " El deployment de algoritmos en MLOps (Machine Learning Operations) se refiere al proceso de poner un modelo de Machine Learning en producción . Modelo ponera en un entorno real do
         nde usuarios o sistemas puedan acceder a él y usarlo para hacer predicciones ."
         }   Download

         Response headers
         content-length: 274
         content-type: application/json
         date: Mon,07 Jul 2025 15:13:59 GMT
         server: uvicorn

- Add:

GET /add Add

Parameters

Name   Description

a * required
integer   [1]
(query)

b * required
integer   [2]
(query)

                 Execute

Responses

Curl

curl -X 'GET' \
  'http://127.0.0.1:8000/add?a=1&b=2' \
  -H 'accept: application/json'

Request URL

http://127.0.0.1:8000/add?a=1&b=2

Server response

Code   Details

200
         Response body
         {
           "result": 3
         }

- Sentiment:

GET `/sentiment` Sentiment

Parameters

Name	Description
text * required string *(query)*	Text to analyze sentiment esta parte del bootcamp me gusta mucho

Execute

Responses

Curl

```
curl -X 'GET' \
  'http://127.0.0.1:8000/sentiment?text=esta%20parte%20del%20bootcamp%20me%20gusta%20mucho' \
  -H 'accept: application/json'
```

Request URL

```
http://127.0.0.1:8000/sentiment?text=esta%20parte%20del%20bootcamp%20me%20gusta%20mucho
```

Server response

Code	Details

200

- Length:Response body

```
{
  "label": "POSITIVE",
  "score": 0.9615129232406616
}
```

Response headers

```
content-length: 47
content-type: application/json
date: Mon,07 Jul 2025 15:12:27 GMT
server: uvicorn
```

- Length:

GET /length Text Length

Parameters

Name	Description
text * required string (query)	Text to count length **¿Qué es Machine Learning? ->** Es una ra

Execute

Responses

Curl

```
curl -X 'GET' \
  'http://127.0.0.1:8000/length?text=%2A%2A%C2%BFQu%C3%A9%20es%20Machine%20Learn
  -H 'accept: application/json'
```

Request URL

```
http://127.0.0.1:8000/length?text=%2A%2A%C2%BFQu%C3%A9%20es%20Machine%20Learnin
%3E%2A%2A%20Es%20una%20rama%20de%20la%20inteligencia%20artificial%20que%20permi
0expl%C3%ADcitamente%20programadas%20para%20cada%20tarea.%20En%20vez%20de%20esc
o%20relaciones%2A%2A%20para%20tomar%20decisiones%20o%20hacer%20predicciones.%20
e%20los%20datos%2C%20sin%20ser%20programados%20expl%C3%ADcitamente%20para%20ell
20Modelo%20de%20Aprendizaje%20autom%C3%A1tico%20m%C3%A1s%20apropiado.%2A%2A%2A
```

Server response

Code	Details

200	Response body
	
	``
	{
	  "length": 646
	}
	``

WINE MODEL:

Wine Classifier API 1.0 OAS 3.1

/openapi.json

Predict wine class from chemical features

default

GET / Read Root

POST /predict Predict

Responses

Curl

```
curl -X 'GET' \
  'http://127.0.0.1:8000/' \
  -H 'accept: application/json'
```

Request URL

```
http://127.0.0.1:8000/
```

Server response

Code	Details
200	Response body

```
{
  "message": "Welcome to the Wine Classifier API "
}
```

Response headers

```
content-length: 49
content-type: application/json
date: Mon,07 Jul 2025 15:48:24 GMT
server: uvicorn
```

Responses

```
INFO:     Waiting for application startup.
INFO:     Application startup complete.
INFO:     127.0.0.1:61458 - "GET /docs HTTP/1.1" 200 OK
INFO:     127.0.0.1:61458 - "GET /openapi.json HTTP/1.1" 200 OK
INFO:     127.0.0.1:61551 - "POST /predict HTTP/1.1" 200 OK
INFO:     127.0.0.1:61630 - "POST /predict HTTP/1.1" 200 OK
```

● Clase 1 y clase 2:

```
{
  "alcohol": 14,
  "malic_acid": 0,
  "ash": 0,
  "alcalinity_of_ash": 0,
  "magnesium": 0,
  "total_phenols": 0,
  "flavanoids": 0,
  "nonflavanoid_phenols": 0,
  "proanthocyanins": 0,
  "color_intensity": 14,
  "hue": 0,
  "od280_od315_of_diluted_wines": 0,
  "proline": 0
}
```

Request body required

Edit Value | Schema

```
{
  "alcohol": 1,
  "malic_acid": 2,
  "ash": 3,
  "alcalinity_of_ash": 4,
  "magnesium": 5,
  "total_phenols": 0,
  "flavanoids": 8,
  "nonflavanoid_phenols": 0,
  "proanthocyanins": 1,
  "color_intensity": 1,
  "hue": 1,
  "od280_od315_of_diluted_wines": 0,
  "proline": 0
}
```

Execute

Execu

Responses

Responses

Curl

```
curl -X 'POST' \
  'http://127.0.0.1:8000/predict' \
  -H 'accept: application/json' \
  -H 'Content-Type: application/json' \
  -d '{
  "alcohol": 1,
  "malic_acid": 2,
  "ash": 3,
  "alcalinity_of_ash": 4,
  "magnesium": 5,
  "total_phenols": 0,
  "flavanoids": 8,
  "nonflavanoid_phenols": 0,
  "proanthocyanins": 1,
  "color_intensity": 1,
  "hue": 1,
  "od280_od315_of_diluted_wines": 0,
  "proline": 0
}'
```

Curl

```
curl -X 'POST' \
  'http://127.0.0.1:8000/predict' \
  -H 'accept: application/json' \
  -H 'Content-Type: application/json' \
  -d '{
  "alcohol": 14,
  "malic_acid": 0,
  "ash": 0,
  "alcalinity_of_ash": 0,
  "magnesium": 0,
  "total_phenols": 0,
  "flavanoids": 0,
  "nonflavanoid_phenols": 0,
  "proanthocyanins": 0,
  "color_intensity": 14,
  "hue": 0,
  "od280_od315_of_diluted_wines": 0,
  "proline": 0
}'
```

Request URL

`http://127.0.0.1:8000/predict`

Request URL

`http://127.0.0.1:8000/predict`

Server response

Code   Details

200

Response body

```
{
  "predicted_class": "class_1"
}
```

Response headers

```
content-length: 29
content-type: application/json
date: Mon,07 Jul 2025 15:35:32 GMT
server: uvicorn
```

Server response

Code   Details

200

Response body

```
{
  "predicted_class": "class_2"
}
```