API EN FASTAPI (Python)

```python
1    import mysql.connector
2    from fastapi import FastAPI
3    from pydantic import BaseModel
4
5    app = FastAPI()
6    # uvicorn main:app --reload
7
8    config = {
9        'user': 'elmoco13',
10       'password': 'elmoco13',
11       'host': '34.134.48.99',
12       'database': 'sopestarea2',
13       'raise_on_warnings': True,
14   }
15
16   class Item(BaseModel):
17       name: str
18       gender: str
19       multiplayer: int
20
21
22   cnx = mysql.connector.connect(**config)
23
24   @app.post("/add")
25   async def create_games(item: Item):
26       insert_sql = f"INSERT INTO games(name, gender, multiplayer) VALUES ('
         {item.name}','{item.gender}',{item.multiplayer})"
27       # insert_sql = f"INSERT INTO games(name, gender, multiplayer) VALUES
         ('Doom','Shooter',2) "
28       cursor = cnx.cursor()
29       cursor.execute(insert_sql)
30       inserts = cursor.fetchall()
31       cursor.close()
32       cnx.commit()
33       return {"item":inserts}
```
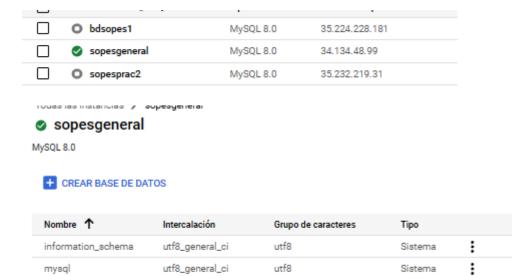
Archivo LOCUST

```python
import json
from random import randrange
from locust import HttpUser,task,between

class readFile():
    def __init__(self):
        self.data = []

    def getData(self):
        size = len(self.data)
        if size > 0:
            index = randrange(0, size - 1) if size > 1 else 0
            return self.data.pop(index)

    def loadFile(self):
        print("LOADING .....")
        try:
            with open("MOCK_DATA.json","r") as file:
                self.data = json.loads(file.read())
        except Exception:
            print(f'Error : {Exception}')

class ExampleTest(HttpUser):

    wait_time = between(0.1,0.9)
    reader = readFile()
    reader.loadFile()

    def on_start(self):
        print("On Start")

    @task
    def index(self):
        data = self.reader.getData()
        headers = {'Content-Type': 'application/json'}
        if data is not None:
            res = self.client.post("/add",headers=headers,data=json.dumps(data))

        else:
            print("Empty")
            self.stop(True)
```

Archivo de Datos

MOCK_DATA.json > {} 8 > # multiplayer
```
1    [{"name":"Adele","gender":"Bartram","multiplayer":1},
2    {"name":"Sarine","gender":"Ludovico","multiplayer":2},
3    {"name":"Chiquita","gender":"Upton","multiplayer":3},
4    {"name":"Thibaut","gender":"Karlik","multiplayer":4},
5    {"name":"Conn","gender":"Haze","multiplayer":5},
6    {"name":"Xylina","gender":"Mersey","multiplayer":6},
7    {"name":"Lorie","gender":"Ricca","multiplayer":7},
8    {"name":"Mimi","gender":"Niels","multiplayer":8},
9    {"name":"Bealle","gender":"Hildagarde","multiplayer":9},
10   {"name":"Valle","gender":"Clara","multiplayer":10},
11   {"name":"Sofie","gender":"Rosalinde","multiplayer":11},
12   {"name":"Guenevere","gender":"Lothaire","multiplayer":12},
13   {"name":"Germain","gender":"Alexis","multiplayer":13},
14   {"name":"Theodora","gender":"Waldemar","multiplayer":14},
15   {"name":"Reuven","gender":"Herminia","multiplayer":15},
16   {"name":"Bethena","gender":"Montague","multiplayer":16},
17   {"name":"Basil","gender":"Megan","multiplayer":17},
18   {"name":"Marybelle","gender":"Babbette","multiplayer":18},
19   {"name":"Onfre","gender":"Cass","multiplayer":19},
20   {"name":"Brewer","gender":"Sukey","multiplayer":20},
21   {"name":"Jenifer","gender":"Mikaela","multiplayer":21},
22   {"name":"Rania","gender":"Annora","multiplayer":22},
23   {"name":"Lavena","gender":"Pattin","multiplayer":23},
24   {"name":"Aubrey","gender":"Dorrie","multiplayer":24},
25   {"name":"Meir","gender":"Bobbye","multiplayer":25},
26   {"name":"Georgeanne","gender":"Sander","multiplayer":26},
27   {"name":"Kimberli","gender":"Miof mela","multiplayer":27},
28   {"name":"Carter","gender":"Asia","multiplayer":28},
29   {"name":"Elberta","gender":"Crystie","multiplayer":29},
30   {"name":"Peggie","gender":"Ebony","multiplayer":30},
31   {"name":"Bryn","gender":"Edyth","multiplayer":31},
32   {"name":"Angele","gender":"Wanids","multiplayer":32},
33   {"name":"Woodie","gender":"Nara","multiplayer":33},
34   {"name":"Clari","gender":"Dorisa","multiplayer":34},
35   {"name":"Skippie","gender":"Gary","multiplayer":35},
36   {"name":"Katerina","gender":"Dwight","multiplayer":36},
37   {"name":"Francois","gender":"Veda","multiplayer":37},
38   {"name":"Forbes","gender":"Farlay","multiplayer":38},
39   {"name":"Erik","gender":"Cynthie","multiplayer":39},
40   {"name":"Cicely","gender":"Willey","multiplayer":40},
41   {"name":"Jerrilee","gender":"June","multiplayer":41},
42   {"name":"Stacee","gender":"Giulia","multiplayer":42},
43   {"name":"Eveleen","gender":"Salvador","multiplayer":43},
44   {"name":"Eadie","gender":"Jordan","multiplayer":44},
45   {"name":"Fawnia","gender":"Barbie","multiplayer":45},
46   {"name":"Felike","gender":"Salomo","multiplayer":46},
47   {"name":"Fields","gender":"Roley","multiplayer":47},
48   {"name":"Loren","gender":"Gigi","multiplayer":48},
```

Instancia de la Base de Datos

☐	◯ bdsopes1	MySQL 8.0	35.224.228.181	
☐	✅ sopesgeneral	MySQL 8.0	34.134.48.99	
☐	◯ sopesprac2	MySQL 8.0	35.232.219.31	

Todas las instancias / sopesgeneral

✅ sopesgeneral

MySQL 8.0

➕ CREAR BASE DE DATOS

Nombre ↑	Intercalación	Grupo de caracteres	Tipo	
information_schema	utf8_general_ci	utf8	Sistema	⋮
mysql	utf8_general_ci	utf8	Sistema	⋮
performance_schema	utf8mb4_0900_ai_ci	utf8mb4	Sistema	⋮
sopestarea2	utf8_general_ci	utf8	Usuario	⋮
sys	utf8mb4_0900_ai_ci	utf8mb4	Sistema	⋮

Captura de request en Locust

Type	Name	# Requests	# Fails	Median (ms)	90%ile (ms)
POST	/add	5	0	290	2300
	Aggregated	5	0	290	2300

Captura de los datos ingresados a la base de datos

123 id	ABC name	ABC gender	123 multiplayer
22	Ros	Maisey	848
23	Ethelyn	Carrissa	696
24	Juieta	Lilly	115
25	Ulises	Tybi	683
26	Saloma	Misha	125
27	Nananne	Saloma	394

```
INFO:      Application startup complete.
IMPRIMEINDO OBJETO NAME:  Ros
IMPRIMEINDO OBJETO GENDER:  Maisey
IMPRIMEINDO OBJETO MULTI:  848
INFO:      127.0.0.1:59147 - "POST /add HTTP/1.1" 200 OK
IMPRIMEINDO OBJETO NAME:  Ethelyn
IMPRIMEINDO OBJETO GENDER:  Carrissa
IMPRIMEINDO OBJETO MULTI:  696
INFO:      127.0.0.1:59147 - "POST /add HTTP/1.1" 200 OK
IMPRIMEINDO OBJETO NAME:  Juieta
IMPRIMEINDO OBJETO GENDER:  Lilly
IMPRIMEINDO OBJETO MULTI:  115
INFO:      127.0.0.1:59147 - "POST /add HTTP/1.1" 200 OK
IMPRIMEINDO OBJETO NAME:  Ulises
IMPRIMEINDO OBJETO GENDER:  Tybi
IMPRIMEINDO OBJETO MULTI:  683
INFO:      127.0.0.1:59147 - "POST /add HTTP/1.1" 200 OK
IMPRIMEINDO OBJETO NAME:  Saloma
IMPRIMEINDO OBJETO GENDER:  Misha
IMPRIMEINDO OBJETO MULTI:  125
INFO:      127.0.0.1:59147 - "POST /add HTTP/1.1" 200 OK
IMPRIMEINDO OBJETO NAME:  Nananne
IMPRIMEINDO OBJETO GENDER:  Saloma
IMPRIMEINDO OBJETO MULTI:  394
INFO:      127.0.0.1:59147 - "POST /add HTTP/1.1" 200 OK
WARNING:  WatchFiles detected changes in 'main.py'. Reloading...
INFO:      Started server process [8348]
```