



UNIVERSIDAD APEC

SUSTENTADO POR:
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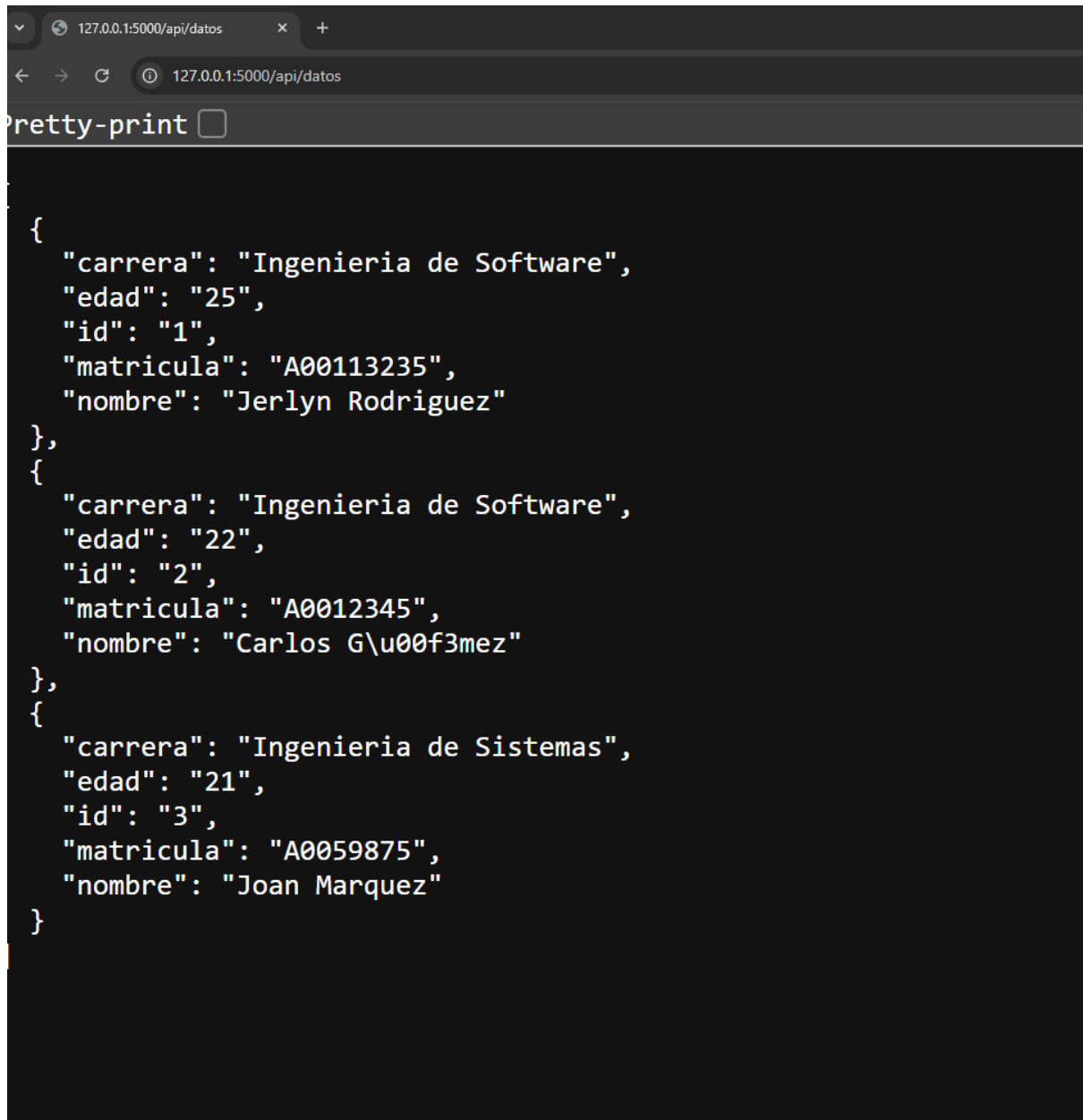
ASIGNATURA
DESARROLLO DE SOFTWARE CON TECNOLOGIA OPEN SOURCE
202610 ISO815-3173

FACILITADOR
OMAR REYES

TEMA
LABORATORIO: INTEGRACIÓN DE APLICACIONES MEDIANTE
SERVICIOS REST ESTRUCTURA

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Resultado



The screenshot shows a web browser window with the address bar displaying "127.0.0.1:5000/api/datos". The page content shows a "pretty-print" checkbox and a JSON array of three student records. The records are as follows:

id	carrera	edad	matricula	nombre
1	Ingenieria de Software	25	A00113235	Jerlyn Rodriguez
2	Ingenieria de Software	22	A0012345	Carlos G\u00f3mez
3	Ingenieria de Sistemas	21	A0059875	Joan Marquez

```
{
  "carrera": "Ingenieria de Software",
  "edad": "25",
  "id": "1",
  "matricula": "A00113235",
  "nombre": "Jerlyn Rodriguez"
},
{
  "carrera": "Ingenieria de Software",
  "edad": "22",
  "id": "2",
  "matricula": "A0012345",
  "nombre": "Carlos G\u00f3mez"
},
{
  "carrera": "Ingenieria de Sistemas",
  "edad": "21",
  "id": "3",
  "matricula": "A0059875",
  "nombre": "Joan Marquez"
}
```

Link de git

Codigo

The first screenshot shows the `app_api.py` file in the VS Code editor. The Explorer sidebar on the left shows the project structure: `LABORATORIO_REST` containing `app_api.py`, `app_cliente.py`, `datos.csv`, and `datos.txt`. The code in `app_api.py` is as follows:

```
1 from flask import Flask, jsonify
2 import csv
3
4 app = Flask(__name__)
5
6 datos = []
7
8 def cargar_csv():
9     with open('datos.csv', newline='', encoding='utf-8') as archivo:
10         lector = csv.DictReader(archivo)
11         for fila in lector:
12             datos.append(fila)
13
14 @app.route('/api/datos', methods=['GET'])
15 def obtener_datos():
16     return jsonify(datos)
17
18 @app.route('/api/datos/<id>', methods=['GET'])
19 def obtener_datos_por_id(id):
20     for d in datos:
21         if d['id'] == id:
22             return jsonify(d)
23     return jsonify({'error': 'Registro no encontrado'}), 404
24
25 if __name__ == '__main__':
26     cargar_csv()
27     app.run(debug=True)
28
```

The second screenshot shows the `app_cliente.py` file. The Explorer sidebar is the same. The code in `app_cliente.py` is as follows:

```
1 import requests
2
3 url = 'http://127.0.0.1:5000/api/datos'
4
5 respuesta = requests.get(url)
6
7 if respuesta.status_code == 200:
8     datos = respuesta.json()
9     for d in datos:
10         print(d)
11 else:
12     print("Error al conectar con el API")
13
14
```

The third screenshot shows the `datos.csv` file. The Explorer sidebar is the same. The content of `datos.csv` is as follows:

```
1 id,matricula,nombre,edad,carrera
2 1,A00113235,Jerlyn Rodriguez,25,Ingenieria de Software
3 2,A0012345,Carlos Gómez,22,Ingenieria de Software
4 3,A0059875,Joan Marquez,21,Ingenieria de Sistemas
```