

LESSON 11 - GUIDE

OBJECTIVE

- The objective of this lesson is to show students how we can build our own API, as well as introduce them to the concept of 'server' and 'client' side.
- We are going to review and use in practice different methods to GET, POST, PUT or DELETE data via an API endpoint.
- This lesson uses a mock example of an airline booking system that would allow us to fetch information about flights, insert or delete some records.

HOW TO STRUCTURE THIS LESSON

1. Introduce Flask package (we covered this before during Python lesson 6) and introduce/refresh the concept of endpoints.
2. Your first script to use as an example would be:
build_api/building_own_api.py which contains several endpoints. Build these endpoints one at a time together with cohorts and run them to see what data they return.

```
app = Flask(__name__)

# GETTING INFORMATION

@app.route('/')
def hello():
    return {'hello': 'Universe'}

@app.route('/flights')
def get_flights():
    return jsonify(flights)

# http://127.0.0.1:5000/flights

@app.route('/flights/<int:id>')
def get_flight_by_id(id):
    flight = search_flight(id, flights)
    return jsonify(flight)

# http://127.0.0.1:5000/flights/555

get flight by id()
```

3. Before you move to the 'client side' script and concept, ensure that *building_own_api.py* is running and your endpoints are live.
4. Discuss the 'client side' concept explaining that "now we act as users of the flight API that was created". Comment / uncomment code snippets to show how to add or update data via an API endpoint.

5. NB: students will have a starter pack folder for this lesson. Check it in advance to see what they have already before you start coding.