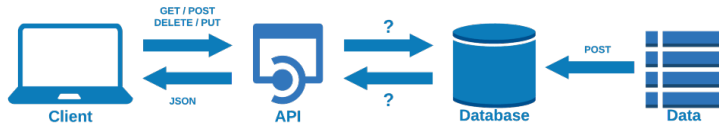
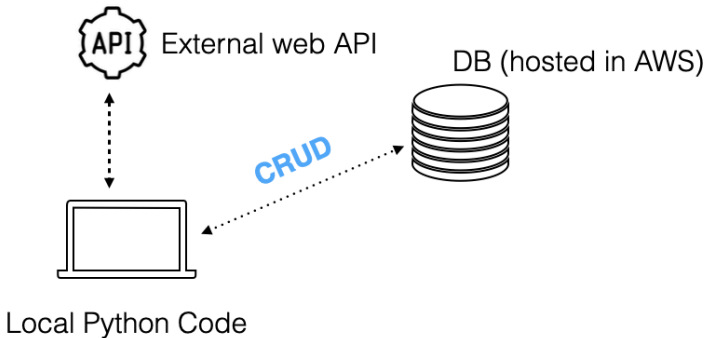


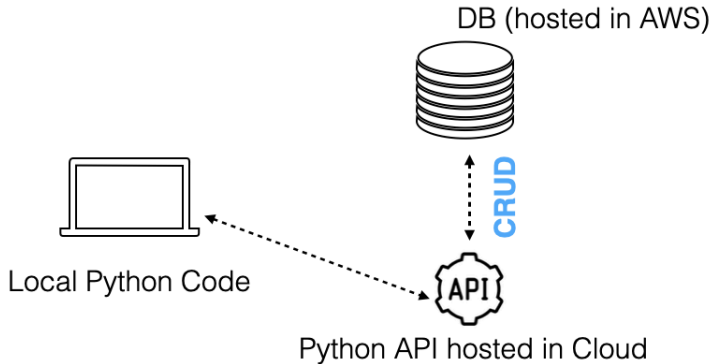
# RECAP API



## WHAT WE DID SO FAR



# WHAT ARE WE BUILDING NOW



# WHEN TO CREATE AN API

Use an API to share data with other users if you don't just want them to download files or access the DB directly. In general, consider an API if:

1. A data set is large, making download via FTP unwieldy or resource-intensive.
2. A users will need to access your data in real time, such as for display on another website or as part of an application.
3. Data in your application changes or is updated frequently.
4. Users only need access to a part of the data at any one time.
5. Users will need to perform actions other than retrieve data, such as contributing, updating, or deleting data.

# ANATOMY OF A REST API

Key components:

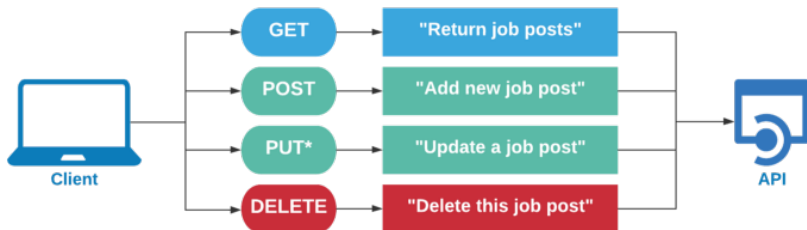
1. the url and endpoint
2. the method
3. the data.

## API URL



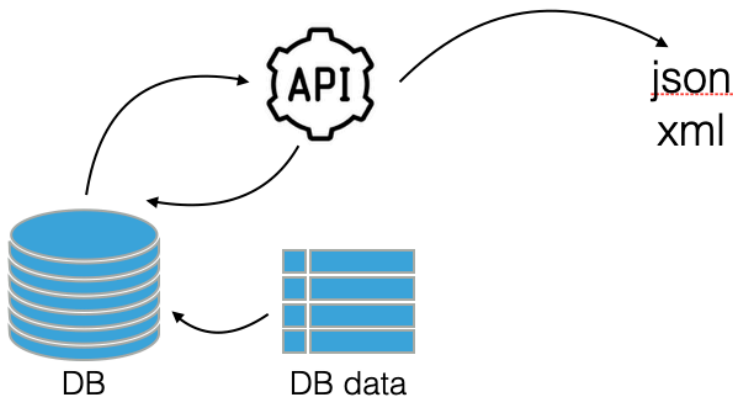
The general structure of an HTTP request URL

## API Methods



## ANATOMY OF A REST API CONT.

Data



When designing an API:

→ Organize the API around resources

`https://adventure-works.com/orders` // Good

`https://adventure-works.com/create-order` // Avoid

→ Define operations in terms of HTTP methods

Resource	POST	GET	PUT	DELETE
/customers	Create a new customer	Retrieve all customers	Bulk update of customers	Remove all customers
/customers/1	Error	Retrieve the details for customer 1	Update the details of customer 1 if it exists	Remove customer 1
/customers/1/orders	Create a new order for customer 1	Retrieve all orders for customer 1	Bulk update of orders for customer 1	Remove all orders for customer 1



# PYTHON FLASK

```
# import main Flask class and
    request object
from flask import Flask,
    request

# create the Flask app
app = Flask(__name__)

@app.route('/query-example')
def query_example():
    return 'Query String
        Example'

@app.route('/form-example')
def form_example():
    return 'Form Data Example'

@app.route('/json-example')
def json_example():
    return 'JSON Object
        Example'

# run app
app.run()
```



Access via browser at  
<http://127.0.0.1:5000/query-example>