

## Overview

In this project you will need to create a REST API and use Postman to test the GET, POST, PUT, and DELETE request methods. You will need to get my project to run on the assignment 4 branch, so you can see how everything works and then create your own project with new data but having the exact same functionality.

### Part 1 – Get my code to work

This project is setup to have Docker Compose setup a python flask app and a MySQL server that will load data from the db/init.sql file the first time the database starts (note you will need to do a docker down by right clicking on the compose file in PyCharm docker service to reset the database if you make any changes to the SQL statements that load initially, it doesn't run the init.sql each time you run your project, just each time docker-compose is run from scratch). Then you need to create a flask framework to create a REST that can be tested with Postman to demonstrate GET, POST, PUT, and Delete to retrieve, create, update, and delete records. You must retrieve a list of records and individual records.

Part 2 – Build your REST API and test it with Postman use one of the following CSV files as the source: (you can use the same file from part 3)

<https://people.sc.fsu.edu/~jburkardt/data/csv/csv.html>

Use this to convert 100 records of the CSV file to an SQL insert:

<https://sqlizer.io/#/>

<https://codebeautify.org/csv-to-sql-converter>

this one works very well and doesn't seem to have a limit, but I haven't tried it for the project.

You can view and edit your CSV data in excel before you convert it, so you limit it to 100 records and can rename any fields, just save it as a CSV file.

Videos and Reading:

Assignment video: <https://youtu.be/bfAW4vOdz7Q>

- Assignment video: <https://youtu.be/5WBYxNZz8Zw>
- Part 1 - What is an API <https://www.youtube.com/watch?v=E1Xk5dk3Abc> <- It's another video I made but I don't want to record the exact same information for JavaScript, this is general information that you should know about what we are doing and isn't specific to JavaScript.
- Part 2 - What is an API: <https://www.youtube.com/watch?v=LGNkFTE3DI8>

The completed code for this project can be found here:

<https://github.com/kaw393939/PythonDockerFlaskPycharm/tree/lesson4>

## How to Submit your Project

Create a new word document that includes the following:

1. A link to your GitHub repository for a NEW project
2. Submit a word document with screen shots of the following:
  - a. **YOUR** project showing postman listing all records
  - b. **YOUR** project showing postman showing one record with a get request

- c. ***YOUR*** project showing postman creating a record by showing the post request and the results in the record listing
- d. ***YOUR*** project showing postman edit a record by showing the put request and the results in the record listing
- e. ***YOUR*** project showing postman delete a record by showing the delete request and the results in the record listing