Lufthansa API Project

**Business case**

Using the Lufthansa API we want to be able to, given an airport, calculate the delayed flights (how late, how many) over a period of time in order to be able to improve service. We also want to be able to have a way to list which flights are available between airports.

We will look at the airports within the major countries of UK, Spain, Germany, France and Italy.

The Lufthansa API returns request data in JSON format which can be stored within a database (most likely MongoDb) for future querying.

Because flight information can change regularly we will automate calls to the API daily so that the database contains most recent flights and departures/arrivals information each day.

**Reference API’s**

**Cities API**

Returns the requested city’s local airports. City is requested by 3 letter shortcode (London below – LON)



Text

Description automatically generated

A picture containing graphical user interface

Description automatically generated

Could be useful for automating queries/requests based on a city’s airport within a country.

**Customer Flight Information API**

Takes flight number and date and returns flight status. Can also be used via arrivals/departures entry point to query specific airports via IATA code returning all flights within 4 hour window.





Text

Description automatically generated

Text

Description automatically generated

**Flight schedules API**

Gives list of all possible flights direct/connecting between two airports on a given date. Today and 360 days in future availability.

Below is London Heathrow to Munich



Text

Description automatically generated

Text

Description automatically generated

**Example python request code**

Text

Description automatically generated

The above code loops through a selection of seven airports, over four hour “windows” for each and returns all the flight arrival information for each. The example only uses one day (12th October 2022).

This code output can easily be piped into a file or json interpreter for storage.

It would absolutely be possible to have this as a daily script.