

Travix - Problem to be solved

Background:

BusyFlights is a flights search solution which aggregates flight results from 2 different suppliers (CrazyAir and ToughJet).

Recommended duration of test:

Allocate 2 to 3 hours to complete this exercise.

What is required:

The service (search solution) needs to be a springboot application.

The service should produce an aggregated result from both CrazyAir and ToughJet.

The service should produce a JSON response which contains a list of flights ordered by fare which has the following attributes:

airline	Name of Airline
supplier	Eg: CrazyAir or ToughJet
fare	Total price rounded to 2 decimals
departureAirportCode	3 letter IATA code(eg. LHR, AMS)
destinationAirportCode	3 letter IATA code(eg. LHR, AMS)
departureDate	Date Time in ISO8601
arrivalDate	Date Time in ISO8601

The service should expose the following search attributes:

origin	3 letter IATA code(eg. LHR, AMS)
destination	3 letter IATA code(eg. LHR, AMS)
departureDate	Date in ISO8601
returnDate	Date in ISO8601
numberOfPassengers	Maximum 4 passengers

The service should log the request and response from each of the suppliers for debugging purposes. This should preferably be done using AspectJ.

The service should connect to the both the suppliers using HTTP.

CrazyAir API

Request

origin	3 letter IATA code(eg. LHR, AMS)
destination	3 letter IATA code(eg. LHR, AMS)
departureDate	mm-dd-yyyy
returnDate	mm-dd-yyyy
numberOfPassengers	Number of passengers

Response

The response provided by CrazyAir contains a list of flights with the following attributes:

airline	Name of the airline
price	Total price
cabinclass	E for Economy and B for Business
departureAirportCode	Eg: LHR
destinationAirportCode	Eg: LHR
departureDate	mm-dd-yyyy HH:MM:ss
arrivalDate	mm-dd-yyyy HH:MM:ss

ToughJet API

Request

from	3 letter IATA code(eg. LHR, AMS)
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to	3 letter IATA code(eg. LHR, AMS)
departureDay	Day of the Month
departureMonth	Month as an Integer(1-12)
departureYear	4 digit Year
returnDay	Day of the Month
returnMonth	Month as an Integer(1-12)
returnYear	4 digit Year
numberOfAdults	Number of passengers

Response

carrier	Name of the Airline
basePrice	Price without tax(doesn't include discount)
tax	Tax which needs to be charged along with the price
discount	Discount which needs to be applied on the price
departureAirportName	3 letter IATA code(eg. LHR, AMS)
arrivalAirportName	3 letter IATA code(eg. LHR, AMS)

What you need to provide:

- A solution that meets the above requirements
- A zip/jar file containing the code that compiles and can be started as a springboot application.
- Use Maven as the build manager.
- The application should open in an IDE (i.e. IntelliJ or Eclipse) and we should be able to run it from the IDE.