

Flight quality analysis

Programming Challenge

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Background

An airline wants us to create a solution to analyse airline aircraft flight data quality to find inconsistencies from flight records in real-time. Currently, the airline has dedicated persons doing work manually by using Excel. Your task is to help the airline to automate data quality analysis.

Task

Create a .NET Core program, which will do the following

1. Create REST API to analyze flights stored in the server.
2. Read flights from CSV file stored in the server.
3. Convert CSV flights to JSON model.
4. REST API should return flights in JSON format to the client.
As a HTTP client, you can use e.g. curl command prompt tool.
5. Create another REST API to analyze flight chains. e.g. aircraft departure airport is HEL and arrival LHR. Logical next departure airport for aircraft would be LHR and arrival airport e.g. HEL. Find inconsistencies.
6. REST API should analyze all flight chains and return inconsistent flights.

In coding, pay attention to code quality and testing and documenting code logic. Also remember it's not important to get everything right. It's important that you try.

Enjoy problem solving!