API Specification
Web Engineering, 2019

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1   Requirements

The requirements for this API specification, as described in the Web Engineering Project Description found on Nestor are as follows:

Design a RESTful API that allows for accessing the following data:

1. all airports available in the USA

2. all carriers operating in US airports

3. all carriers operating at a specific US airport

4. all statistics about flights of a carrier from / to a US airport for a given month or all months available (‡)

5. number of on-time, delayed, and cancelled flights of a carrier from / to a US airport for a given month or all months available.

6. number of minutes of delay per carrier attributed to carrier-specific reasons (i.e. attributes carrier and late aircraft in the dataset) /all reasons, for a given month or all months available and for a specific airport / across all USairports

7. descriptive statistics (mean, median, standard deviation) for carrier-specific delays (as above) for a flight between any two airports in the USA for a specific carrier / all carriers serving this route.

Entries entries marked with (‡) require support for both retrieval and manipulation (addition, update, deletion) of data through the API; otherwise only retrieval is to be supported. Each API endpoint should support both JSON and CSV representations of the resources (i.e. Content-Type is application/json and text/csv) available at least by an appropriate query parameter. JSON is the default option if none is specified.