

Dear colleagues,

We have prepared for you a small project which solution should be delivered to us in one week from the time when you get and mail from us. Please be aware that solutions sent after this deadline will not be accepted.

### **Project description**

The goal of the project is to prepare a regression model predicting so called Take-Off Weight of an aircraft. The initial training set contains a list of flights of Ryanair from 2016-10-01 till 2016-10-15 (training.csv). A candidate is given a validation dataset (validation.csv) where the Take-Off Weight must be predicted. The evaluation will be conducted by comparing the results provided by a candidate with values known to Ryanair. RMSE is to be used as a base measure of a model quality.

A candidate is expected to deliver the results as a CSV file. Additionally, a description containing exploratory data analysis of the dataset and the method must be attached.

### **Description of columns in the dataset.**

DepartureDate – date of departure  
DepartureYear – year of departure  
DepartureMonth – month of departure  
DepartureDay – day of departure  
FlightNumber – flight number  
DepartureAirport – departure airport code  
ArrivalAirport – arrival airport code

Route - route  
ActualFlightTime – flight time  
ActualTotalFuel – burnt fuel  
ActualTOW - take-off weight (kg)  
FlownPassengers – flown pax  
BagsCount – flown bags  
FlightBagsWeight – flown bags weight

Regards,

Data & Analytics Team