DELFT UNIVERSITY OF TECHNOLOGY

TIL PYTHON PROGRAMMING
TIL6022

Groupassignment TIL6022

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1 Project Proposal

Research question
How did the Covid-19 pandemic affect the air traffic in the Netherlands?

Subquestions:

1. **What has been the airport traffic in the past 10 years, including the COVID-19 years?** Here we can use our skills on the basic functions in Python. Also, we will use our skills on visualization to make (interactive) graphs.

2. **Are there relative differences between the different airports in the Netherlands?** Here we zoom in on the different airports in the Netherlands. With basic functions we wish to investigate the main differences between the airports. For instance; what are the flight numbers/purposes? Which airports have been the most affected by the COVID pandemic?

3. **Is there a correlation between the number of COVID infections and the passenger numbers?** Here we can also distinguish between the different airports. We will use our skills on basic functions, and visualisation. Furthermore, we will develop a mathematical (regression) model to investigate the relation between the number of cases and passenger numbers.

4. **How has COVID-19 impacted air traffic from and to various regions / continents?** Possibly, air traffic between European countries has been less affected than intercontinental air traffic. Also, in Asia the pandemic rules are still very strict. Can this effect be observed from the passenger numbers?

Data:

- RIVM COVID data: new cases, reproduction number, vaccinations

- Statline monthly aviation data Dutch Airports: passengers, number of flights, country of origin/destination