

# DATA PROJECT

## #5

### Flight Data



# DATA

What & Where



# DATA SOURCE

**Flight take-off data from the  
JFK airport**

- **departure times**
- **destination information**
- **meteorological data**



**You can find & download the  
dataset directly from Kaggle  
(link in Notion ➔)**



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# DATA TRACKS

**SELECT ONE or COMBINE**

I - Data Engineering

II - Data Analytics

III - Data Science

# TRACK I

# DATA ENGINEERING

## Understand your data

- **What are the measurement units for times, distances and all the meteorological columns?**
- **What is a "taxi-out time" and how it is calculated?**



# TRACK I

# DATA ENGINEERING



## Bonus Challenge



Integrate additional data

- Get the carbon emissions for each flight from a public API  
(link in Notion →)



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# TRACK II

# DATA ANALYTICS

## Descriptive Statistics

- What are the most common airlines, routes & destinations?
- At which time of the day do the most planes take off?
- Does traveling behaviour differ between weekends & weekdays?



# TRACK II

# DATA ANALYTICS



## Bonus Challenge



### Why are flights delayed?

- Are there common times or days, when flights are delayed?
- How do specific weather conditions affect delays?



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# TRACK III

# DATA SCIENCE

## Hypothesis testing

- Flight delays are more common during certain times or days
- Certain airlines have higher rates of flight cancellations
- Weather conditions significantly impact flight schedules



# TRACK III

# DATA SCIENCE



## Bonus Challenge



## Delay prediction

- **Predict, if a flight is delayed**
- **Try to predict delay degrees**
  - **small delay (up to 10min)**
  - **medium delay (10-40min)**
  - **large delay (40min+)**



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# LEARNINGS

**Why you should do  
this project**



# LEARNINGS

## Track I - Data Engineering

You learn to get an understanding of your data and to enrich it further

## Track II - Data Analytics

You learn to align your analytics tasks to a specific question or problem

## Track III - Data Science

You learn how to test hypotheses and to refine a classification problem



**WHAT WOULD YOU  
DO WITH THIS  
DATA?**



**LET ME KNOW** 

# BONUS

## FREE Data Notion Space



# DATA NOTION SPACE

- ✓ Learning roadmap
- ✓ Resources & tutorials
- ✓ Data project tools

## Fabian Werkmeister

I help you to become fluent in Data and enable you to translate between business & tech ★ Data Scientist @FUNKE ★  Python  Data Science  Data Engineering

Talks about #data, #python, #mindset, #datascience, and #productivity

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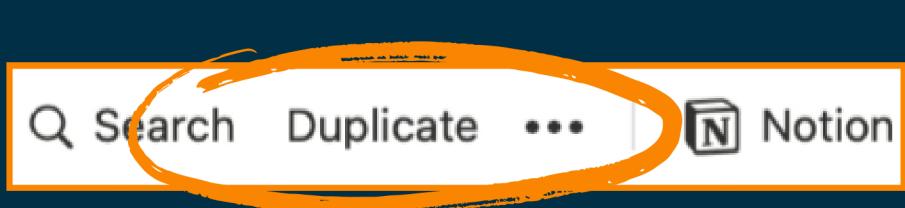
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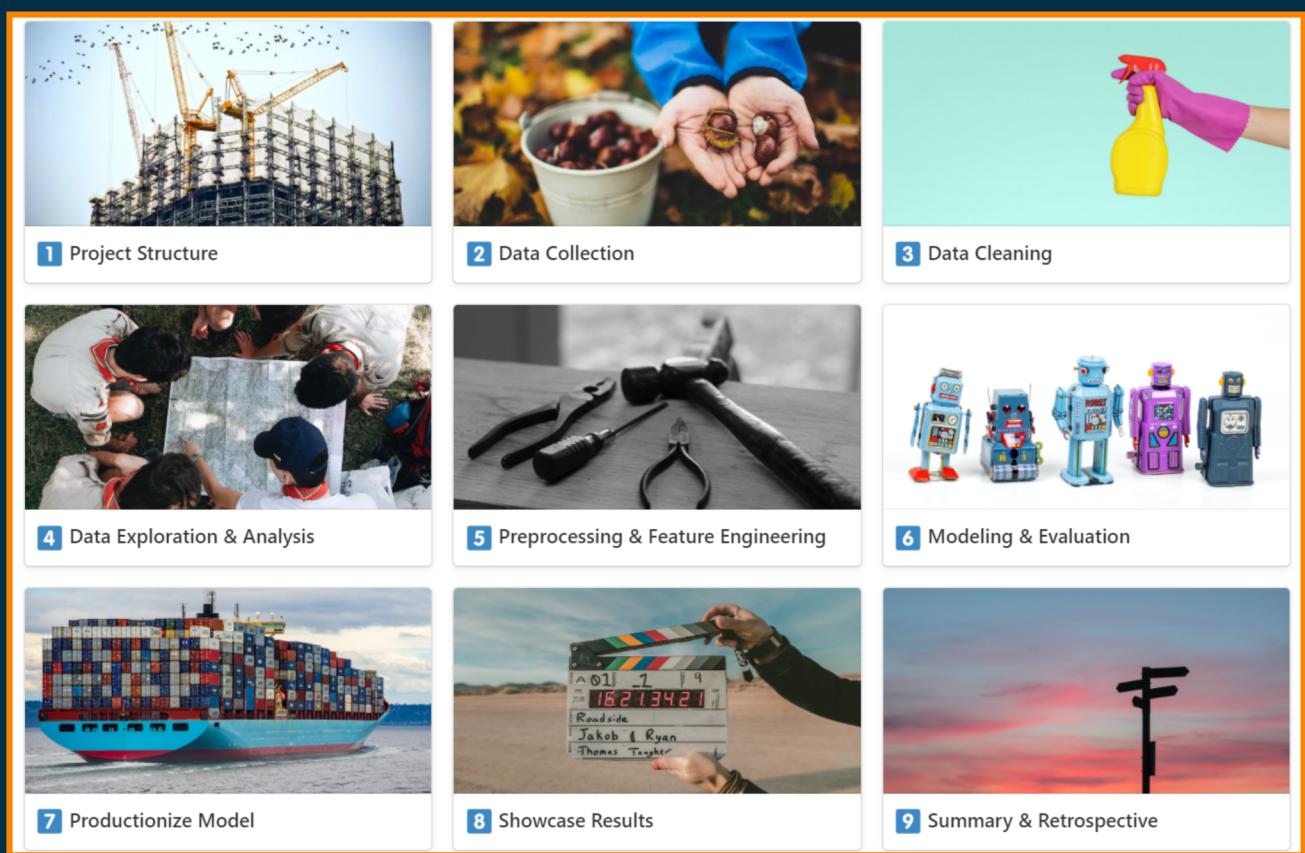
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# DATA NOTION SPACE

Simply click "Duplicate" and get  
your very own Notion Data space









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HI, I'M FABIAN

I HELP YOU  
TO BECOME  
FLUENT IN DATA

FOR PROJECT IDEAS EACH FRIDAY

Follow & hit the 

