

# Weather Conditions and Music Preferences



Advanced Methods of Software Engineering

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# Introduction

Briefly introduces the topic and its significance.

Highlights the data science question: Does weather influence music preferences?

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# Data Sources

## 1. Weather data

- Daily Weather Data for Germany
- Source: Deutscher Wetterdienst (DWD)
- Format: *CSV / KL2000*

## 2. Music data

- Daily Spotify Charts for Germany
- Source: *Kaggle*
- Format: *CSV*
  
- Song's Audio Features
- Source: *Spotify*
- Format: *JSON*

# Preprocessing

Explains the steps taken to obtain and preprocess the data.

# Correlations

Showcases Correlations in the data.

# Random Forest Regressor

Discusses the ML model used for prediction.  
Highlights the model's performance evaluation.  
Shows Barchart learnings and excerpt example of a tree.

# **Song Recommendation**

Explains how to use the RFR model. Showcases a Song Recommendation.

## **Conclusion**

Summarizes the main findings and answers DS question. Mentions limitations and areas for further research.



## Q&A

Allocates time for questions and open the floor for discussion. Engages with the audience and address any queries or feedback.