2.2 Ideation & Brainstorming Map:

Define a problem statement

Flight Delay Prediction for Aviation Industry

PROBLEM

- Nowadays, the aviation industry plays a crucial role in the world's transportation sector, and a lot of businesses rely on various airlines to connect them with other parts of the world. But, extreme weather conditions may directly affect the airline services by means of flight delays.

- To solve this issue, accurately predicting these flight delays allows passengers to be well prepared for the deterrent caused to their journey and enables airlines to respond to the potential causes of the flight delays in advance to diminish the negative impact.

- The purpose of this project is to look at the approaches used to build models for predicting flight delays that occur due to bad weather conditions.

Brainstorm

Ideas for Flight Delay Prediction

Person 1

- Analyze historical flight data
- Analyze passenger booking data to predict the likelihood of a flight delay
- Develop machine learning models such as logistic regression, decision trees, and neural networks

Person 2

- Use real-time data from weather services & air traffic control
- Use deep learning models such as convolutional neural networks (CNNs) and recurrent neural networks (RNNs)
- If You're Already at the Airport: Speak to Gate Agent

Person 3

- Use collaborative filtering techniques to analyze data from multiple airlines and airports
- Develop explainable AI models to help airlines understand the factors that contribute to flight delays

Person 4

- Monitor social media platforms to identify customer complaints
- Analyze airline operations data such as aircraft maintenance & schedules

Group ideas

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Prioritize