

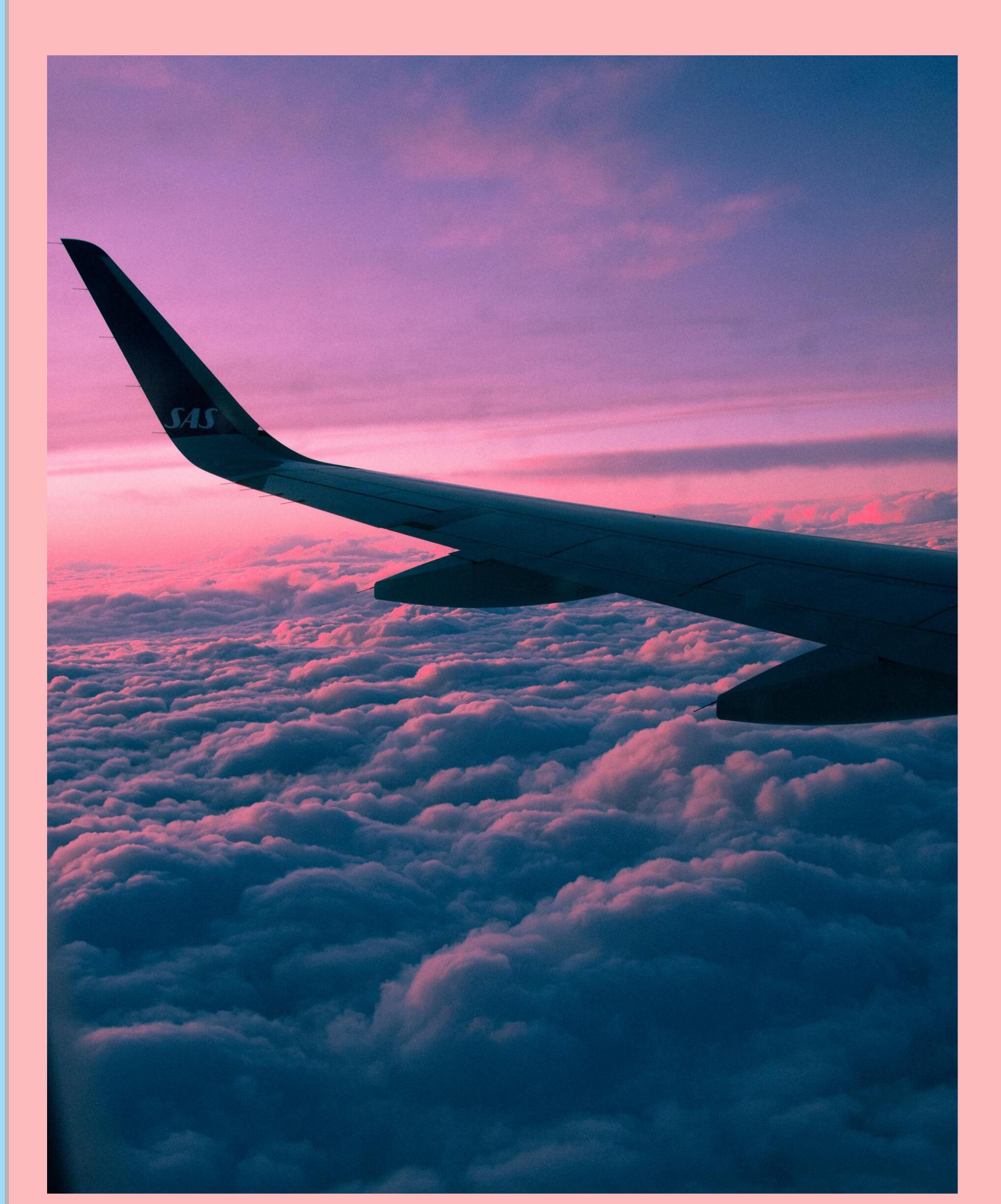
Brainstorm & idea prioritization

Flight Delay Prediction For Aviation Industry

- (L) 10 minutes to prepare
- 1 hour to collaborate
- **2-8 people** recommended

FLIGHT DELAY PREDICTION FOR AVIATION INDUSTRY

Share template feedback





Flight Delay Prediction For Aviation Industry

This project aim to campare the performance of machine dearning classification algorithm when predicting flight delays

Team gathering

Totally four participation are the in this session. we invite members to mural link and gathered in this session.

Set the goal

This project aim to campare the performance of ML classification algorithm when predicting flight delays

Learn how to use the facilitation tools

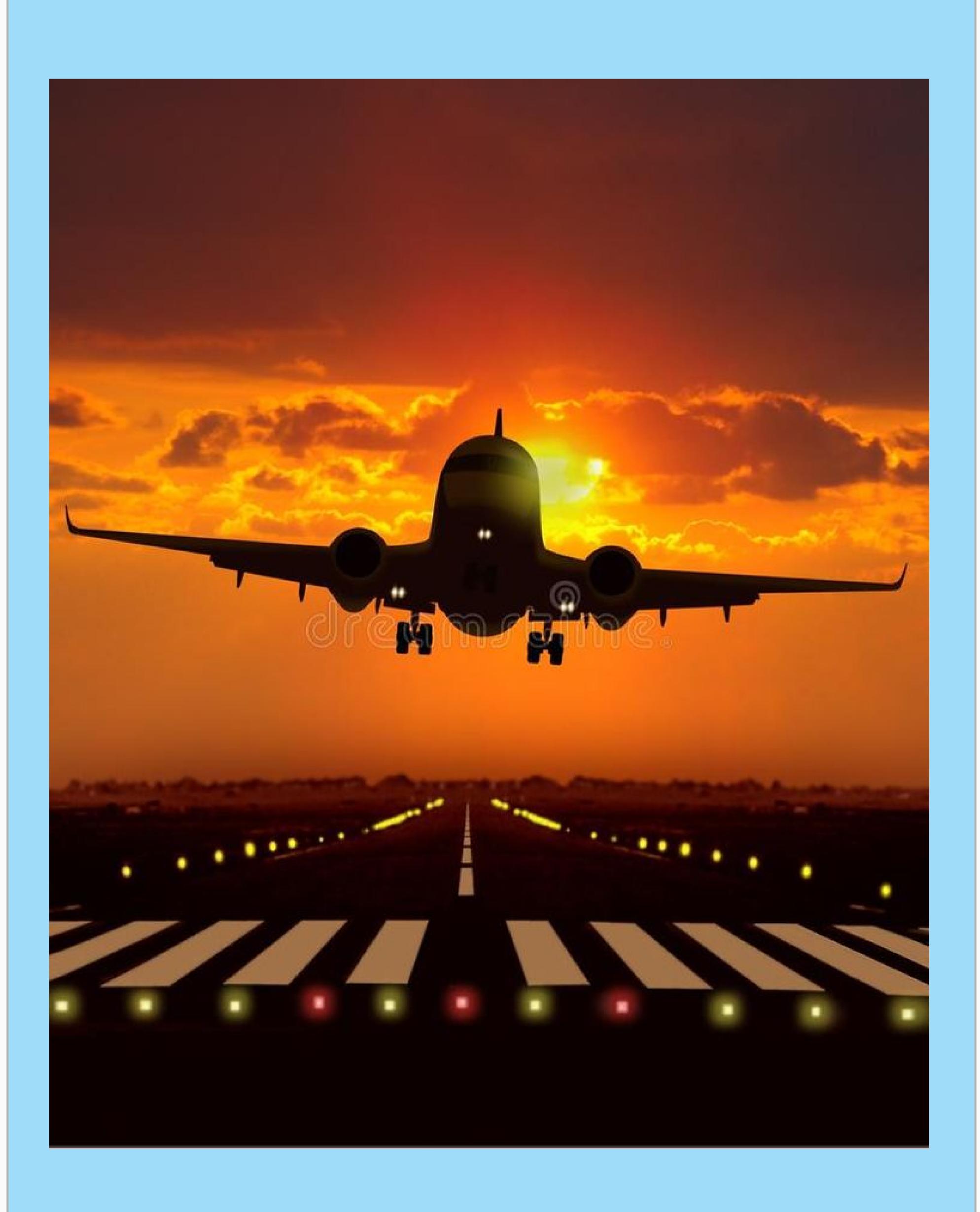
Facilitation tools can be very helpful for guiding group discussions, brainstorming Sessionis or decision making processes.

PROBLEM STATEMENT

- 1. This project aims to compare the performance of machine learning classitication algorithm when predicting flight delays.
- 2. This project is used to create a model to predict flight departure delay.
- 3. Predicting flight delay can improve airline operations and passengers satisfaction. Which fill result in a positive impact on the economy.
- 4. Using machine learning to predict flight arival delays.
- 5. The input to our algorithm is rows of feature vector like departure data, departure delay, distance between the two airports scheduled arrived time.

GOOGLE COLAB

GOOGLE COLAB CAN BE
USED FOR
CREATE,SHARE,EDIT THE
PROGRAM





Brainstorm

Here some ideas

10 minutes



Person 1

Hardware

requirements

are need

Google

colab can be used

> Decision Tree algorithm is used

hardware requirements are 64 bit and RAM 24GB

Person 2

Predicting flight delays using reinforcement learning.

ANN model algorithm are used in

this project

Google colab can be used to ML project Person 3

hardware requirements are fourcore,25 GHZ min per core

> Incorporating NLP techniques to analyze passenger feedback and complainte.

algorim are used in this project

Random

forest model

operation system are used

Person 4

Hardware requirements are need smalll dataset

logistic algorithm are used in this project

Predicting Flight delays using recurrent neural networks.

Creating ensemble models by combining multiple ML algorithm to increase accurancy of prediction.

Person 5

Predicting

flight delays

with data

mining

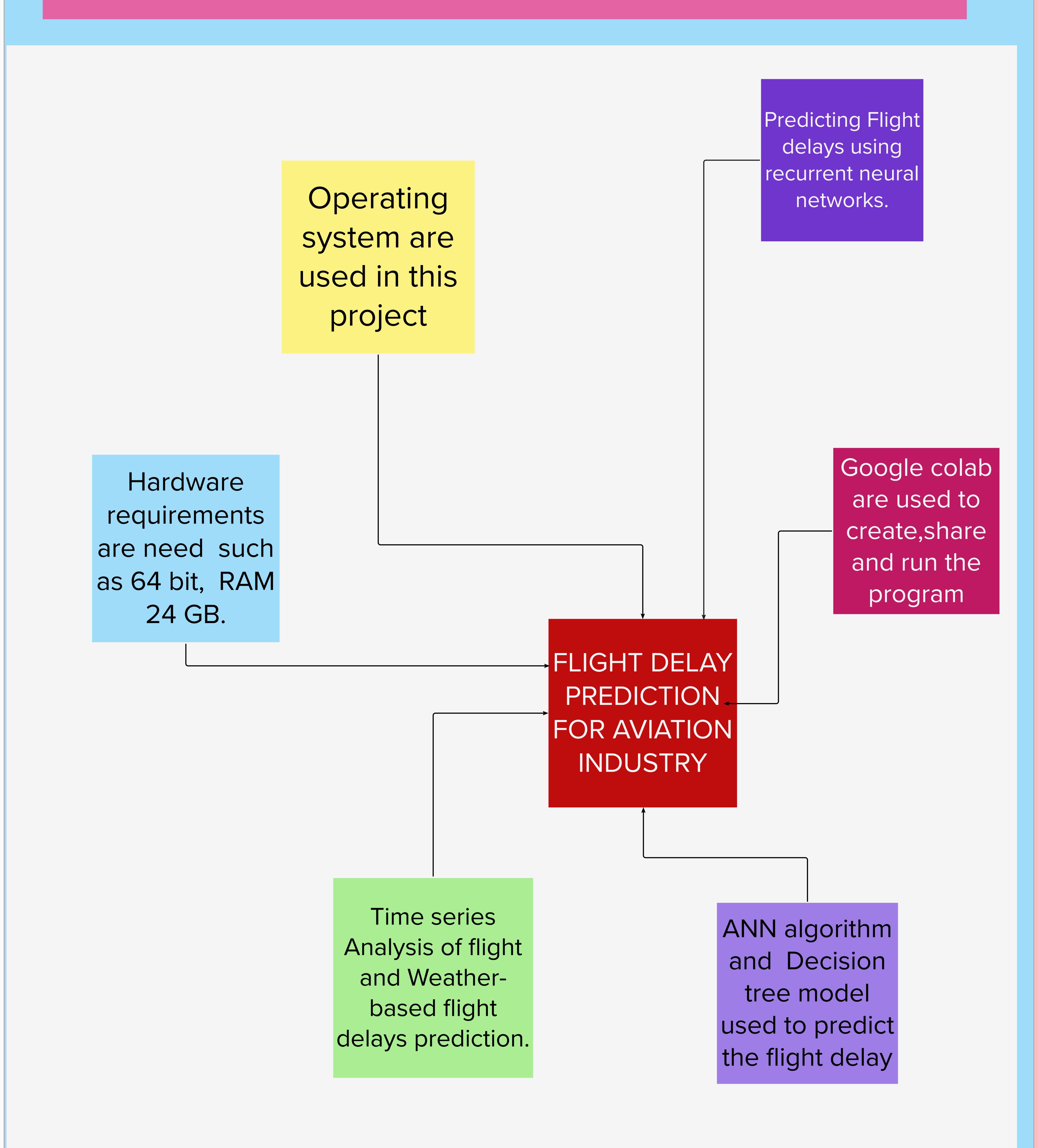
techniques.

FLIGHT DELAY PREDICTION FOR **AVIATION INDUSTRY**



Group ideas

- 1. Hardware requirements are need such as 64 bit, RAM 24 GB.
- 2. Google colab are used to create, share and run the program
- 3. ANN algorithm and Decision tree model used to predict the flight delay
- Operating system are used in this project
 - 5. Time series Analysis of flight and Weather-based flight delays prediction.
 - 6. Predicting flight delays with data mining techniques.

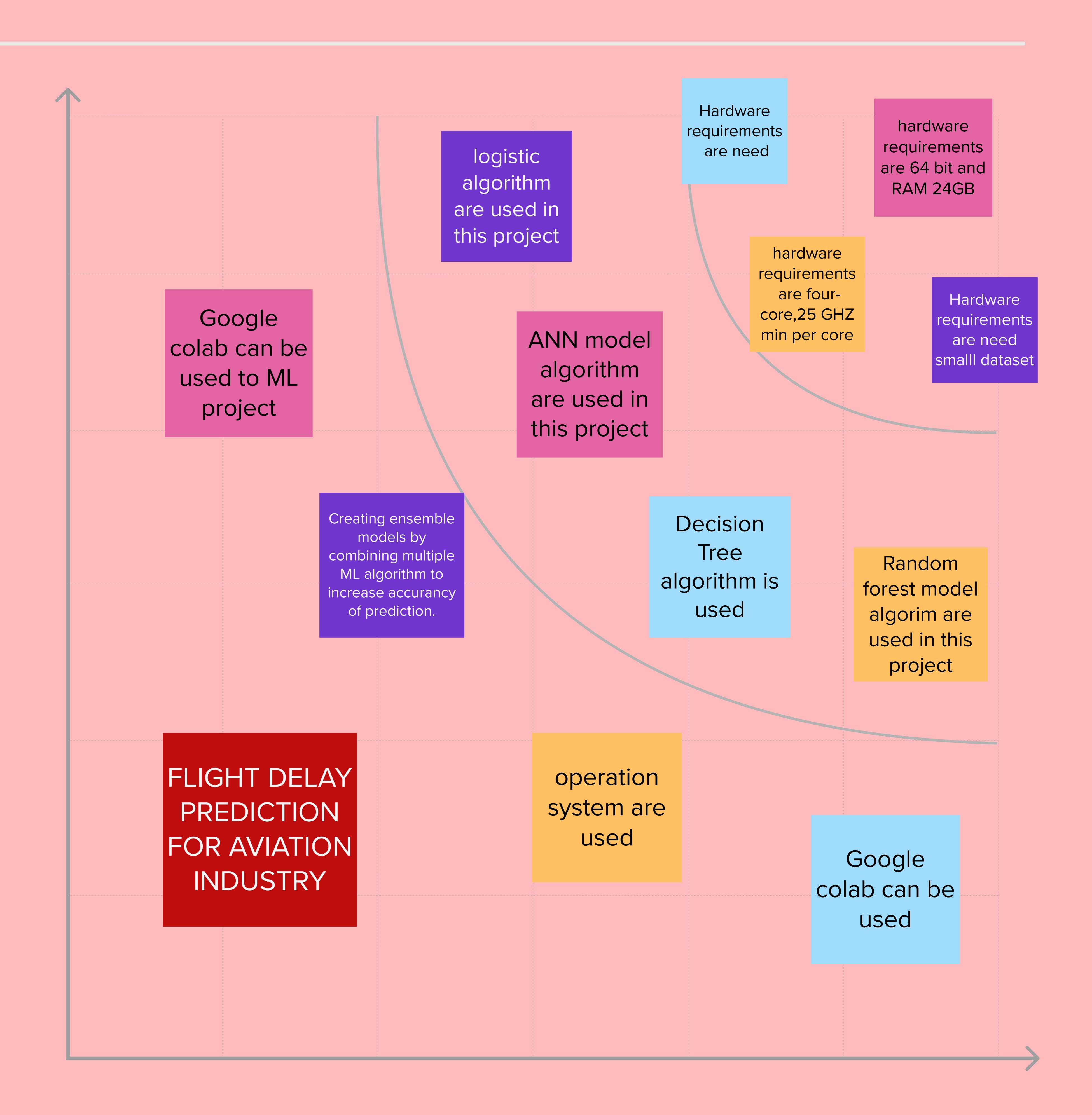


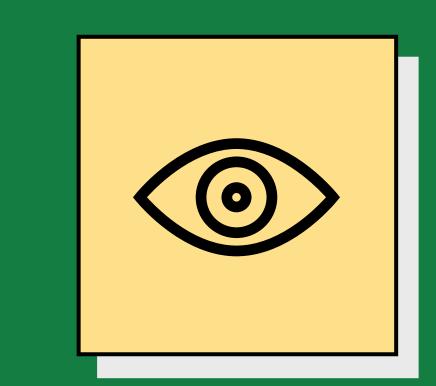


Prioritize

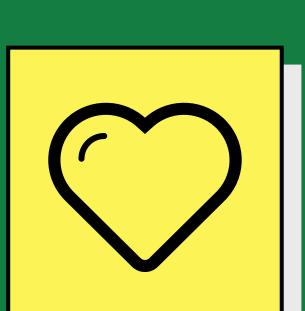
Air traffic controllers who are responsible for ensuring the safety of al flight in the airspace

① 20 minutes





Empathy Map canvas



Using this empathy map

canvas, you can identify the needs and

concerns of your

passenger, Which can

help inform your

approach to predicting

and managing flight

delays. For example:

you may want to

provide real-time

update on the flight

status or offer

alternative

transportation options

to easy their anxiety

and help them plan

ahead.



FLIGHT DELAY PREDICTING FOR AVIATION INDUSTRY

check the flight status repeatedly,try to find information on potential delays, consider alternative transportation options



WHO are we empathizing with?

passengers who are affected by flight delays

> passengers who rely on flight to get to their destination on thime

The ability to

anticipate

and prepare

for flight

delays

Announcement about flight delays and the reasons behind them

Updates from airline staff an customer service representatives

> frustration and complaints from other passenges

They may also feel helpless or uncertain about what to do if their flight is delayed.

airport staff who need to manage operations and deal with any disruption

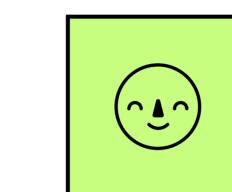
GOAL

To predicting the flight delay for aviation industry

What do they THINK and FEEL?

PAINS

Fear of missing connecting flight wasted time and money, anxiety about potential travel disruptions



GAINS

Peace of mind from being able to accurately predict potential delays, above to plan accordingly and avoid disruptions

They need

to plan their

travel

schedule



What other thoughts and feelings might influence their behavior?

Effective management of flight delays requirement consideration of these emotions and motivation

> we can better understand their needs and design

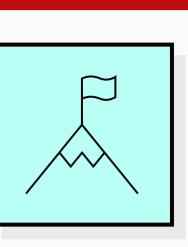
The oppoortunity to find alternative transportation options

Stress and pressure caused by high demand and tight schedules

> they may think about the possible reasons for the delay.

More effective solutions to address their concerns and make their travel experience more pleasant.

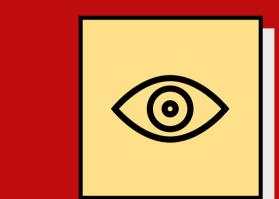
What do they need to DO? Type your paragraph...



Make alternate arrangements

They see the airlines website in mobile app

Display showing flight information and updates



What do they SEE?

Automated messages from the airline about the status of their flight.

platforms where they can check the flight status

other oline

Anxiety and stress about missing connecting flight or important events

> They may post their frustration or complaints on social media or review platform

Acrowed and chaotic airport terminal.