

Ideation Phase

Brainstorm & Idea Prioritization Template

Date	19 September 2022
Team ID	PNT2022TMID04987
Project Name	Developing A Flight Delay Prediction Model Using Machine Learning
Maximum Marks	4 Marks

Brainstorm & Idea Prioritization Template:

Brainstorming provides a free and open environment that encourages everyone within a team to participate in the creative thinking process that leads to problem solving. Prioritizing volume over value, out-of-the-box ideas are welcome and built upon, and all participants are encouraged to collaborate, helping each other develop a rich amount of creative solutions.

Use this template in your own brainstorming sessions so your team can unleash their imagination and start shaping concepts even if you're not sitting in the same room.

Reference: <https://www.mural.co/templates/empathy-map-canvas>

Step-1: Team Gathering, Collaboration and Select the Problem Statement



Brainstorm & idea prioritization

Use this template in your own brainstorming sessions so your team can unleash their imagination and start shaping concepts even if you're not sitting in the same room.

🕒 10 minutes to prepare
🕒 1 hour to collaborate
👤 2-8 people recommended



Before you collaborate

A little bit of preparation goes a long way with this session. Here's what you need to do to get going.

🕒 10 minutes



Team gathering

Define who should participate in the session and send an invite. Share relevant information or pre-work ahead.



Set the goal

Think about the problem you'll be focusing on solving in the brainstorming session.



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Define your problem statement

What problem are you trying to solve? Frame your problem as a How Might We statement. This will be the focus of your brainstorm.

🕒 5 minutes



Key rules of brainstorming

To run a smooth and productive session



Stay in topic.



Encourage wild ideas.



Defer judgment.



Listen to others.



Go for volume.



If possible, be visual.

Step-2: Brainstorm, Idea Listing and Grouping

2

Brainstorm

Write down any ideas that come to mind that address your problem statement.

🕒 10 minutes

TIP



You can select a sticky note and hit the pencil [switch to sketch] icon to start drawing!

Keerthanaa

Communication loss due to poor connection	Needed when there is heavy mist condition	Failures in ARTCC radars
TRACON's seperation mislead	It affects mostly on Pilot	Scured level of boundry
It affects mostly on passengers	Hospitality is greatly involved	Sudden landing of flight in midway for emergency
It occurs occasionally in emergency	During Takeoff and Descent	Sometimes it may lead to time delay for co passengers
Business class may get affected by this	Management is involved	Connecting passengers may take excess time
It is usually seen during business hour or festives	In the midway of travel	It needs to be fixed as it takes much time

Indhuja

Increased turbulence may lead to Aircraft Damage	Passengers' lives are at risk	Fog, Thunderstorm, Mist are some adverse weather conditions
Results in Delayed Take-off	Affects both Pilot and Passengers.	Flights must be scheduled according to meteorological conditions.
Affects the Pilot's Vision	Impacts include Shattered windcreens, jet engine ingestion, engine failure.	Airplane colors and jet engine spinner markings help to repel birds
Bird strikes occurs mostly during Landing Phase of the Flight	Affects the aircraft parts such as engines and windscreen which may lead to unavoidable expenses	Bird strikes are minor damage but may pose threats to safety.
Waiting for Crew will affects mainly the passengers' travel plans	May leads to ticket cancellation by customers	A Backup Crew must be employed during the delay.
Crew held up in Traffic and Crew reported sick.	Delayed arrival of crew will affects the reputation of the Airline Company.	Resting periods for crew must be planned appropriately.

Jeyanthi

Delayed Catering results in unwanted expenses to airlines	Results in Financial impact on airlines	Proper Schedule must be planned to avoid delays
Happens because of late arrival of catering trucks	Best Catering firm must be employed by the airlines	Have severe impacts on passengers' who have Health problems
Prolonged Security checks will results in Dissatisfaction of customers	Affects mainly the passengers	Does not affects the airlines in any manner
Occurs mainly due to security breach and terminal evacuation	Occurs in airports which follows strict checking procedures	Impacts Travelers' plans
Causes due to refueling, baggage loading etc.	Delays occurs mainly due to Transportation of fuel	Proper maintenance and Cargo handling
Increased efficient of aircraft engines	Ideal Cleaning crew must be employed by airlines	Will affects the trustworthiness of the airlines

Indhumathi

Cargo affects mostly on passengers	Transportation department	Loading and unloading of ULD
May get delayed by Customs	Crew members are affected	To balance the delay crew has to work on extra flights
When there is need of immediate flight	They could be over stressed due to this	Technical supporters are questioned
Fuel tank capacity need to be ensured	Landing gear functions must be checked	Radars, safety measurements and ATC must be checked
Overweight must be avoided	Need to alarm before it crosses flight envelope	Should have proper power backups
Must have more ways for proper flight function when there is mechanical problem	It must recognize the problem and to work without any permissions	It must give alerts to ATC when there is any malfunctions

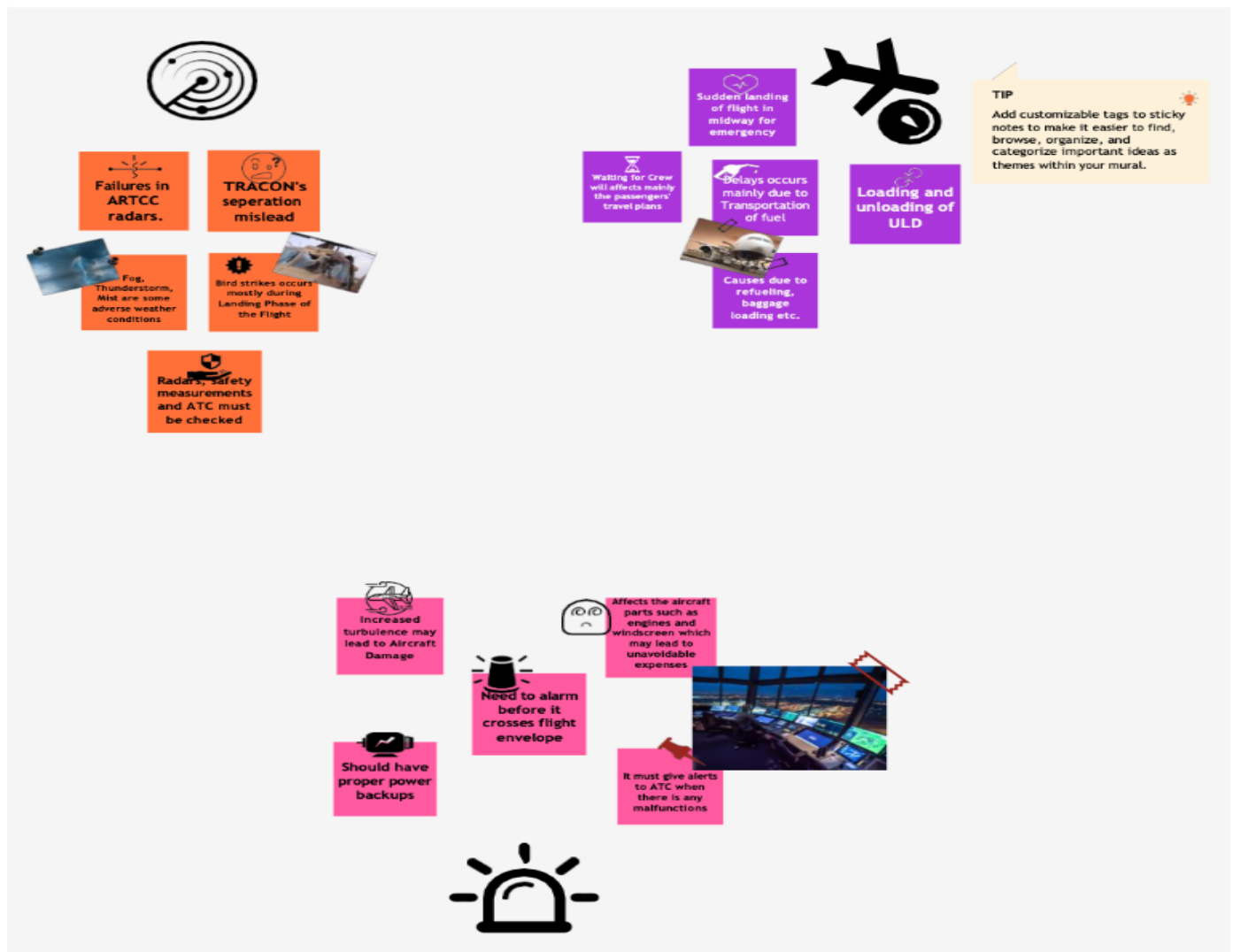
GROUPING IDEAS:

3

Group ideas

Take turns sharing your ideas while clustering similar or related notes as you go. In the last 10 minutes, give each cluster a sentence-like label. If a cluster is bigger than six sticky notes, try and see if you can break it up into smaller sub-groups.

🕒 20 minutes



Step-3: Idea Prioritization

4

Prioritize

Your team should all be on the same page about what's important moving forward. Place your ideas on this grid to determine which ideas are important and which are feasible.

🕒 20 minutes

