

Ideation Phase

Brainstorm & Idea Prioritization Template

Date	19 February 2026
Team ID	LTVIP2026TMIDS62229
Project Name	Exploratory Analysis of Rain Fall Data in India for Agriculture
Maximum Marks	4 Marks

Brainstorm & Idea Prioritization Template:


Brainstorming for the *Rainfall Prediction using Machine Learning* project was conducted in a collaborative and open environment where all team members actively contributed ideas. The session encouraged creative thinking and allowed the team to explore multiple realworld problems that could be solved using Artificial Intelligence and Data Science.

Instead of immediately focusing on one solution, the team first generated a wide range of project ideas such as Stock Market Prediction, Crop Disease Detection, Heart Disease Prediction, and Weather-based Forecasting Systems. Every idea was discussed without restriction, ensuring that innovation and practicality were both considered.

The team prioritized volume over immediate evaluation during the initial stage. This helped uncover different approaches, including various machine learning algorithms, datasets, and deployment strategies. Out-of-the-box suggestions were welcomed, and members built upon each other's ideas to refine potential solutions.

Reference: <https://www.mural.co/templates/brainstorm-and-idea-prioritization>

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



Rainfall Prediction Project Brainstorm & idea prioritization

Use this template for brainstorming your Rainfall Prediction using Machine Learning project. Encourage creative thinking to explore various weather prediction ideas, features, and machine learning methods.

- 10 minutes to prepare
- 1 hour to collaborate
- 2-4 people recommended

1 Before brainstorming

A little bit of preparation goes a long way for brainstorming. Here's what to set up, and think about before starting.

10 minutes

- Team gathering**
Decide who should participate in the session and an invite. Share weather data insights beforehand.
- Set the goal**
Discuss the weather prediction focus and related machine learning approaches.
- Prepare the tools**
Organize notebook, whiteboard, and online resources for brainstorming.

Key rules of brainstorming

- Stay on topic.
- Defer judgment.
- Go for volume.
- Encourage wild.
- Listen to others.
- If possible, be visual.

2 Define your problem statement

What rainfall prediction challenge are you aiming to tackle? Frame your problem as an **How Might We** question.

5 minutes

How might we accurately predict rainfall using weather data?

Key focus areas for brainstorming

- Weather features to include
- ML models to test (Random Forest etc.)
- Data sources & pre-processing
- Deployment as web app

Key rules of brainstorming

- Stay on topic.
- Defer judgment.
- Go for volume.
- Encourage wild.
- Listen to others.
- If possible, be visual.

Step-2: Brainstorm, Idea Listing and Grouping

1. Brainstorm

Write down any ideas related to predicting rainfall that come to mind.

10 minutes

Pradeep

Use Humidity level	Web Deployment with Jupyter	Web Rspool	Collect Rainfall data	Implement Decision Tree
Wind Gust strength trends	Dataset of spatio-temporal	Worst Spatio-temporal	Train models with Random Forest & XGBoost	

Nikhila

Get Weather API	Min / Max Normalized	GoogleT with Rainfall data	Ming: Max, Temp data on Flask
Best fit to imbalanced classes	Train & Deploy ML Model on train	Collect Scatter Collections	Booker collection data

Poojasri

Scikit learn for training the ML model	Standardize, min on an imbalanced dataset	Scalable train & deploy on cloud	Flask UIs, streamlit data
Standardize and normalize features			

2 Group ideas

Take turns sharing your ideas while clustering similar or related notes into labeled sets.

20 minutes

Weather Features

Mix Temp	Max Temp	Rainfall data
Humidity level	Wind Gust Speed	Collect data

ML Models

Train Random Forest	Try XGBoost
Train Gather data	Implement Decision Tree
Scikit Speed	

Data Collection

Collect Weather data	Train Data, Meta Trans	Gather Feature stores	Min x Max Tammodis	Exotic: Hiran localize data
Gather local Weather data	Fine-tune model hyperparameters	Flask UI, Bootstrap CSS	Enstation Tree	

Deployment

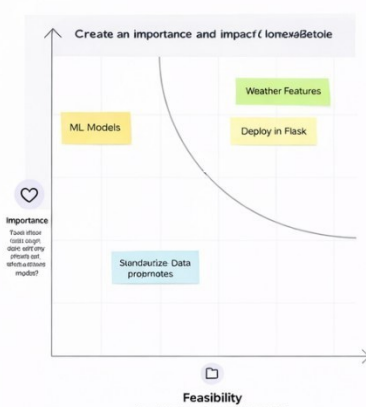
Train & deploy in Flask	Create interactive UI in Flask
Create interactive UI in Flask	Visualize probability of rain
Deploy as Flask web app	Clean are Flask web app.

3. Prioritize

Rate ideas on importance and feasibility to decide which to focus on for Rainfall Prediction project.

20 minutes

Create an importance and impact (importance)



Importance

Feasibility

Tip: Look for ideas that offer high importance with it's An idea scoring high on both is a great candidate for your project! You can move.... sticky notes on the grid.

Step-3: Idea Prioritization

3

3. Prioritize

Rate ideas on importance and feasibility to decide which to focus on for Rainfall Prediction project.

⌚ 20 minutes

