

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

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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 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. 🌈 Encourage wild
- ⌚ Defer judgment. 🎧 Listen to others.
- 👤 Go for volume. 📊 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

#rainfall

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

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Step-2: Brainstorm, Idea Listing and Grouping

1

1. Brainstorm

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

⌚ 10 minutes

Pradeep

- | | | | | |
|-------------------------|---------------------------|---------------------|---|-------------------------|
| Use humidity level | Web Deployment with Flask | Web Repeat | Collect rainfall data | Implement Decision Tree |
| Wind Gust strand trends | Devise one specific | Worst Speed morest. | Train models with Random Forest & XGBoost | |

Nikhila

- | | | | |
|-----------------------------|----------------------------------|-------------------------------|--------------------------------|
| Get Weather API | Min / Max rainfalls | Gathering with Base Sed, data | Min / Max Temper data on Flask |
| Bent for initialized chates | Train & Deploy ML Model on train | Collect Weather Corfetions | Reker collection data |

Poojasri

- | | | | |
|--|--|-------------------------------------|----------------------|
| Scikit learn for training the ML model | Standardize, on an meesuring valceoforus | Sadecode train & copy scandede sara | Flask Us shesop data |
| Standardize and norming features | | | |

2

Group ideas

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

⌚ 20 minutes

Weather Features

- | | | | | |
|---------------|-----------------|----------------|---------------------|-------------------------|
| Min Temp | Max Temp | Rainfall. data | Train Random Forest | Try XGBoost |
| Humidity apnl | Wind Gust Speed | Collect data | Train Gather data | Implement Decision Tree |

Data Collection

- | | | | | |
|---------------------------|--------------------------------|------------------------|----------------------|----------------------------|
| Collect Weather data | Train Beta Mata Train8 | Gather Telesite stons | Min X Max Tammodize, | Exotic Hocn ecacalize data |
| Gather local Weather data | Fidn-tune model hyperparamters | Flask UI Bootstrap CSS | Entstation 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. |

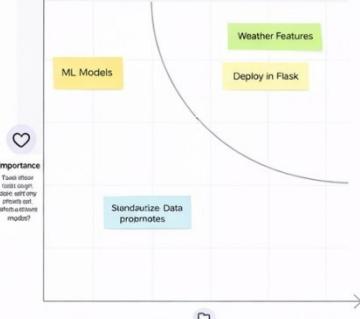
3

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 (IOM) matrix



Tip: Look for ideas that offer high importance with its

⌚ An ideas eering high on both is a great candidate for your project!

⌚ You can move sticky notes on the grid.

Step-3: Idea Prioritization

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3. Prioritize

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

⌚ 20 minutes

