Ideation Phase
Brainstorm & Idea Prioritization Template

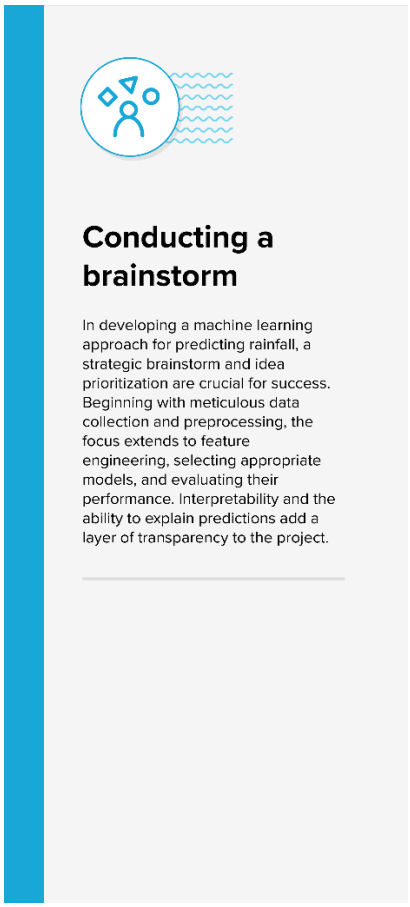
Date	19 November 2023
Team ID	591569
Project Name	Machine Learning Approach for Predicting the Rainfall
Maximum Marks	4 Marks

Brainstorm & Idea Prioritization:

In developing a machine learning approach for predicting rainfall, a strategic brainstorm and idea prioritization are crucial for success. Beginning with meticulous data collection and preprocessing, the focus extends to feature engineering, selecting appropriate models, and evaluating their performance. Interpretability and the ability to explain predictions add a layer of transparency to the project. Deployment and accessibility are paramount, involving the creation of user-friendly interfaces and seamless integration options. Prioritization emphasizes data quality, feature engineering, robust model selection, interpretability, deployment, and a commitment to continuous improvement through feedback loops. This structured approach ensures a comprehensive and effective solution for predicting rainfall through machine learning.

Link:
https://app.mural.co/t/project7866/m/project7866/1700412563949/57faf25035564f7d694d48c6e6420842fdadd735?sender=ude4d8d19c014ec7af2502383

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



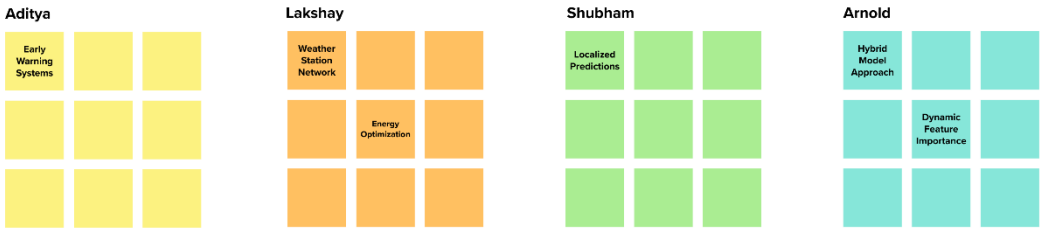
Step-2: Brainstorm Solo

2

Brainstorm solo

Have each participant begin in the "solo brainstorm space" by silently brainstorming ideas and placing them into the template. This "silent-storming" avoids group-think and creates an inclusive environment for introverts and extroverts alike. Set a time limit. Encourage people to go for quantity.

10 minutes



Step-3: Brainstorm as a Group

3

Brainstorm as a group

Have everyone move their ideas into the "group sharing space" within the template and have the team silently read through them. As a team, sort and group them by thematic topics or similarities. Discuss and answer any questions that arise. Encourage "Yes, and..." and build on the ideas of other people along the way.

TIP

You can use the **Voting session** tool above to focus on the strongest ideas.

15 minutes

Idea 1

Develop an adaptive machine learning model that dynamically adjusts its predictions based on changing atmospheric conditions. This model integrates real-time satellite imagery, atmospheric pressure readings, and historical data to identify patterns indicative of sudden weather shifts. The system would trigger alerts when the model detects significant deviations from the predicted rainfall, allowing for timely warnings and adaptive decision-making.

Idea 2

Create a machine learning model focused on predicting urban flood risks based on rainfall patterns. The model would consider factors such as topography, drainage systems, and land usage to assess the vulnerability of different areas. The system could provide local authorities with real-time alerts and recommendations for flood risk management, allowing for proactive measures such as road closures or emergency response planning.

Step-4: Idea Prioritization and deciding focus

4

Decide your focus

Give each person two icons to vote which idea should your team focus on.

5 minutes

Aditya

Lakshay

Shubham

Arnold

After you collaborate

A brainstorm like this typically results in a handful of promising ideas that you can carry forward and act upon.

Quick add-ons

A **Cluster related ideas**
Look for patterns or similarities in the standout ideas. Could any be combined together to form a stronger concept? Cluster similar ideas and label each cluster with a theme.

B **Vote on the most promising ideas**
Narrow your focus to only the strongest few ideas by holding a **Voting Session**. Give each person 2 votes

Keep moving forward

2x2 Prioritization matrix
Build shared understanding and make collective decisions for moving ideas forward.
Open the template →

Storyboarding
Show existing and/or future consumer experiences through the act of sketching.
Open the template →

Pre-mortem
Harness the collective experience and wisdom of the team, before the project even starts.
Open the template →