

Ideation Phase

Brainstorm & Idea Prioritization Template

Date	19 September 2022
Team ID	PNT2022TMID32702
Project Name	Project -Crude oil price prediction
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

CRUDE OIL PREDICTION

🕒 10 minutes to prepare
🕒 1 hour to collaborate
👥 2-8 members

In this session we aim to achieve a good base for beginning our project. With clear understanding of the task in hand, the next step would be to collectively put in our thoughts/ imagination and end with a proper feasibility study.

Ground Rules

- Be Creative
- Rule out every possible ideas and improvements
- Make your points clear and purposeful
- Don't hesitate. (Every point is noteworthy)
- Arguments are good ALA it lands beneficial
- Have various perspectives towards the problem

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Define your problem statement

Share the top 3 brainstorm questions that you created and let the group determine where to begin by selecting one question to move forward.

🕒 5 minutes

PROBLEM 1

How might we predict the crude oil price?

PROBLEM 2

How might we train the AI?

PROBLEM 3

How might we get the accurate result?

Step-2: Brainstorm, Idea Listing and Grouping

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Brainstorm as a solo

Have each participant begin in the "solo brainstorm space" by silently brainstorming ideas and placing them into the template.

🕒 10 minutes

Ramabathren L

supply is predicted from past production data and reserve data.	Uses ARIMA model	Future values are predicted as a linear combination of previous oil prices and the associated errors
An autoregressive neural network (ANN) is a non-linear model in which future prices are expressed	Applies Autoregressive tree or ensemble learning, a non-linear model in which future prices are expressed as a non-linear function of lagged prices in the series.	Future prices are expressed as a non-linear function of lagged prices in the series, in contrast to linear modeling in ARIMA.

Ragul K

Requires high speed network.	We propose a contemporary and innovative method of predicting crude oil prices using the artificial neural network (ANN)	Knowing the evaporative nature of crude oil.
High level testing must be carried out	Setting indicators of models/ algorithms according to datasets	Presenting statistical analysis of generated forecasts

Henry Jones P

More samples of data should be trained for better results	Systematic and Efficient Algorithm Should be followed	Simulating crude oil prediction
If the results are not appropriate, adjustment of indicators or training data size	Comparative analysis of result	Index Selection and Data preprocessing

Vijay Paul Raj S

Make sure the stakeholders know how the system works	AI should be trained such a way to predict the crude oil price	Use powerful algorithm to get trained from various datasets
Provide accurate result of prediction	Identify the incremental learning algorithm methods for each algorithm	Uses past values but also takes into account any seasonality patterns with Seasonal model

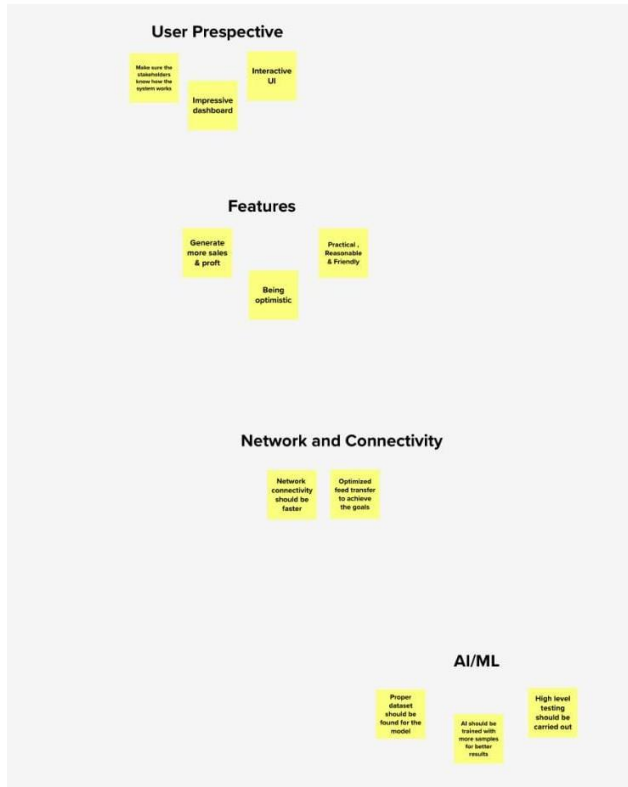
Step-3: Idea Prioritization

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Brainstrom as a Group

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



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

