

Ideation Phase

Brainstorm & Idea Prioritization Template

Date	13th November 2023
Team ID	PNT2022TMIDxxxxxx Team-592951
Project Name	Car Purchase 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

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.
- Learn how to use the facilitation tools**
Use the Facilitation Superpowers to run a happy and productive session.

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1


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

PROBLEM

How might we streamline the car-buying process and empower potential buyers to make confident and informed decisions by leveraging advanced machine learning algorithms to predict their likelihood of purchasing specific cars based on demographic data and historical purchase patterns?



Key rules of brainstorming

To run an smooth and productive session

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

Step-2: Brainstorm, Idea Listing and Grouping

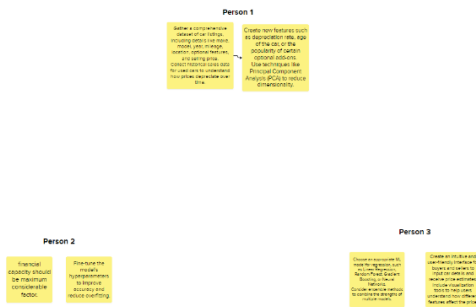
2

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 icon to start drawing!



3

Group ideas

Take turns sharing your ideas while clustering similar or related notes as you go. Once all sticky notes have been grouped, 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

TIP
Add customizable tags to sticky notes to make it easier to find, browse, organize, and categorize important ones as themes within your mural.

Data Collection and Preprocessing

Define a comprehensive dataset of car rental information. This includes car make, model, year, mileage, rental company location, and price.

Create new features such as:

- Age of the car or the location of car.
- Optional add-ons.
- Use techniques like Principal Component Analysis (PCA) to reduce dimensionality.

Demographics

Financial capacity should be a major consideration factor.

Minimize the model's hyperparameters to improve accuracy and reduce overfitting.

User Interface

Choose an appropriate ML model for regression, such as Linear Regression, Decision Tree, Gradient Boosting, or Neural Networks. Consider ensemble methods to combine the strengths of multiple models.

Create an intuitive and user-friendly interface for the app. It should allow users to input car details and rental price, and it should provide recommendations based on their preferences.

Step-3: Idea Prioritization

4

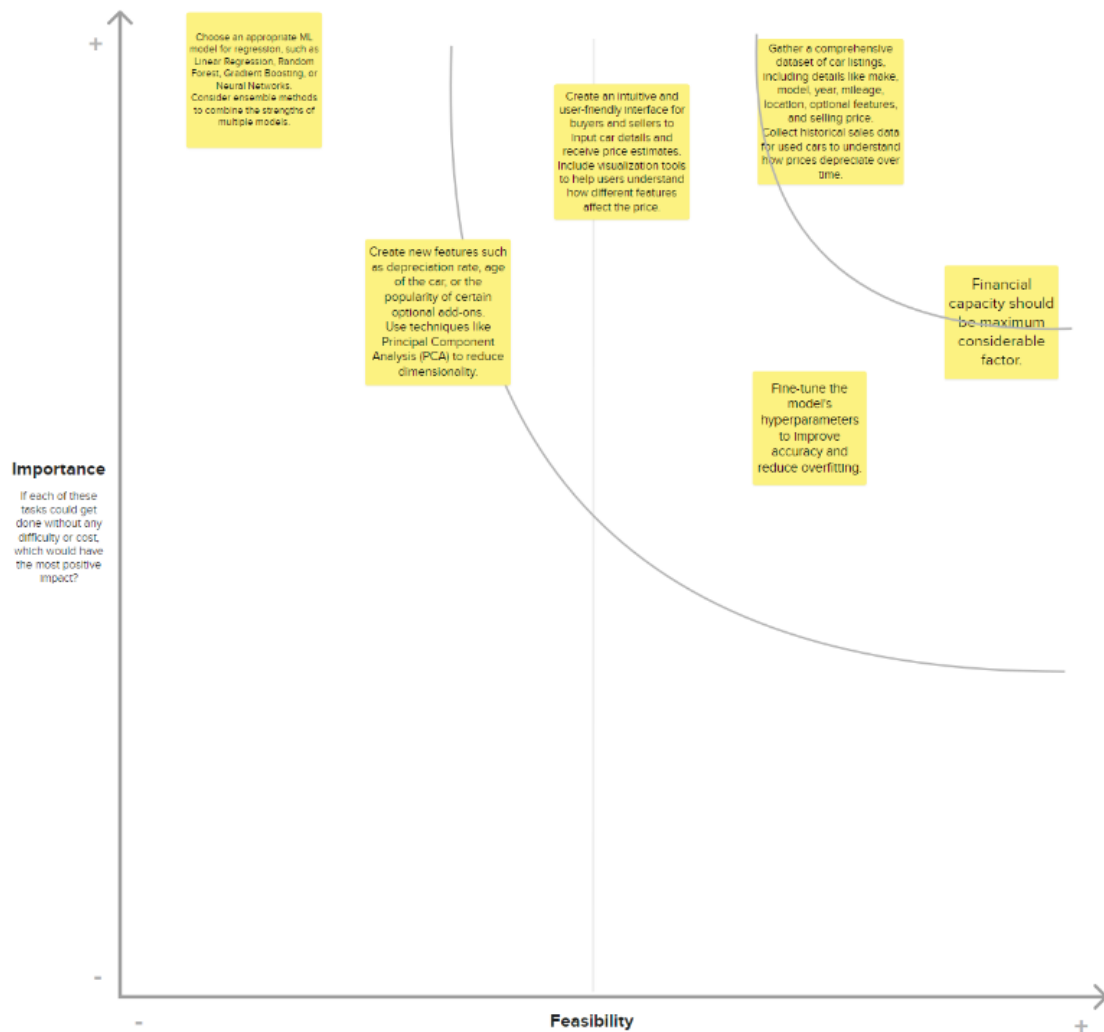
Prioritize

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

TIP

Participants can use their cursors to point at where sticky notes should go on the grid. The facilitator can confirm the spot by using the laser pointer holding the **H** key on the keyboard.



Reference link:

<https://app.mural.co/t/carevaluation0829/m/carevaluation0829/1699001683489/13bff8f250b8bc7560e6062c2606fff3abfeaa14?sender=u20f07e17abb983b8e6139294>