Ideation Phase
Brainstorm & Idea Prioritization Template

Date	19 september 2022
Team ID	591837
Project Name	Online Payments Fraud Detection using ML
Maximum Marks	4 Marks

Brainstorm & Idea Prioritization Template: Brainstorming offers an unrestricted and transparent setting that stimulates team members to engage in the innovative thought process that culminates in problem resolution. Volume is valued more than quality, unconventional ideas are welcomed and expanded upon, and cooperation is encouraged among all participants in order to foster a wealth of creative solutions.

If your team isn't in the same room as you, use this template to let them shape concepts and let their imaginations run wild during brainstorming sessions.

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

Need some inspiration?

See a finished version of this template to kickstart your work.

Open example →

→

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**

A **Team gathering**
Define who should participate in the session and send an invite. Share relevant information or pre-work ahead.

B **Set the goal**
Think about the problem you'll be focusing on solving in the brainstorming session.

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

Open article →

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Define your problem statement

"In the rapidly growing landscape of online transactions and digital commerce, the prevalence of fraudulent activities poses a significant threat to the security and trust of users and businesses. The challenge is to develop an effective and scalable AI and ML-based system for online fraud detection that can identify and prevent fraudulent transactions in real-time. The system should be capable of analyzing diverse data sources, detecting patterns indicative of fraudulent behavior, and adapting to evolving fraud tactics. The goal is to enhance the overall security of online transactions, minimize financial losses, and foster a secure and trustworthy digital environment."
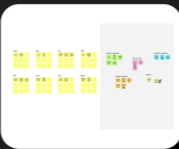
PROBLEM
ONLINE FRAUD DETECTION

Key rules of brainstorming
To run an smooth and productive session

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

Brainstorm

Write down any ideas that come to mind that address your problem statement.

🕐 10 minutes

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 and break it up into smaller sub-groups.

🕐 20 minutes

TIP
You can select a sticky note and hit the pencil [switch to sketch] icon to start drawing!

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

MV.SRINIVAS

- Develop a system architecture that facilitates real-time monitoring of online transactions for potential fraud.
- Implement mechanisms for seamless integration of the machine learning model into the online transaction system, enabling continuous monitoring and analysis.
- Ensure that the system can generate timely alerts for potential fraudulent activities, allowing stakeholders to take immediate action.

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- Define key metrics for evaluating the performance of the fraud detection system, including precision, recall, F1 score, and any additional relevant metrics.
- Establish a framework for assessing the system's effectiveness in real-world scenarios, considering factors like false positives, false negatives, and overall accuracy.
- Propose strategies for continuous improvement, such as regular model retraining, feedback loops, and adaptation to emerging fraud patterns.

K.SAKETH

- Identify and collect relevant data sources for online fraud detection, including transaction history, user profiles, device information, and any additional contextual data.
- Develop a strategy for preprocessing the collected data to ensure it is clean, normalized, and ready for analysis.
- Explore techniques for handling imbalanced datasets, ensuring the model is trained on a representative sample of both legitimate and fraudulent transactions.

D.PRANASVI

- Investigate and select appropriate machine learning algorithms for fraud detection, considering factors such as sensitivity to different fraud patterns and computational efficiency.
- Implement the chosen algorithms to develop a robust machine learning model capable of identifying patterns indicative of fraudulent behavior.
- Design a training pipeline that includes features like cross-validation and hyperparameter tuning to optimize the model's performance.

- Develop a robust machine learning model capable of analyzing transactional data to identify patterns associated with fraudulent activities.
- Implement real-time monitoring and detection mechanisms to promptly identify and respond to potential fraud in online transactions.
- Explore and integrate various data sources, including transaction history, user behavior, device information, and other relevant features, to enhance the accuracy of fraud detection.
- Design a system that can adapt to changing fraud patterns and continuously improve its performance through iterative learning.

- Minimize false positives to avoid inconveniencing legitimate users while ensuring high precision in identifying fraudulent transactions.
- Provide a user-friendly interface for monitoring and managing fraud detection alerts, enabling quick and informed decision-making by stakeholders.
- Evaluate the system's performance using relevant metrics, such as precision, recall, and F1 score, to ensure its effectiveness in real-world scenarios.
- Consider scalability and efficiency in the deployment of the solution to handle the increasing volume of online transactions
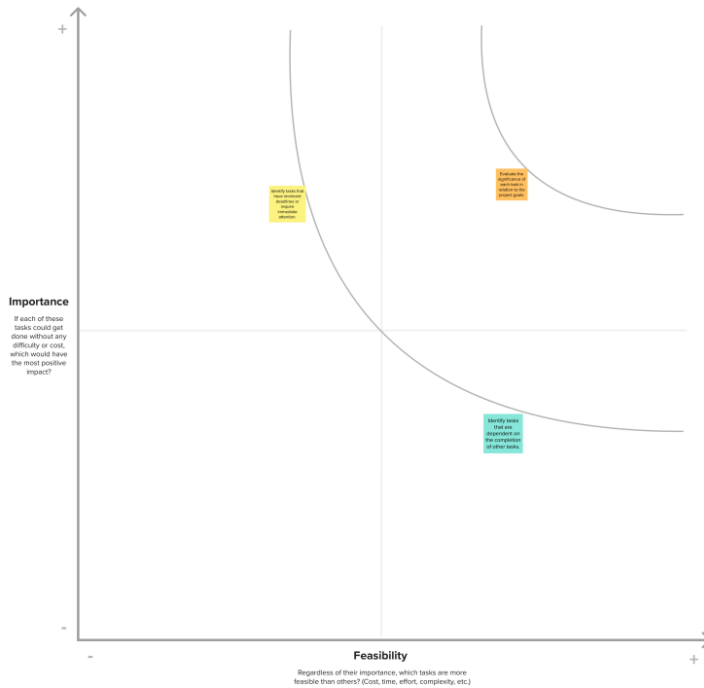
4

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

Importance

If each of these tasks could get done without any difficulty or cost, which would have the most positive impact?

Identify tasks that have immovable deadlines or require immediate attention.

Evaluate the significance of each task in relation to the project goals.

Identify tasks that are dependent on the completion of other tasks.

Feasibility

Regardless of their importance, which tasks are more feasible than others? (Cost, time, effort, complexity, etc.)

After you collaborate

You can export the mural as an image or pdf to share with members of your company who might find it helpful.

Quick add-ons

Share the mural
Share a view link to the mural with stakeholders to keep them in the loop about the outcomes of the session.

Export the mural
Export a copy of the mural as a PNG or PDF to attach to emails, include in slides, or save in your drive.

Keep moving forward

Strategy blueprint
Define the components of a new idea or strategy.
Open the template →

Customer experience journey map
Understand customer needs, motivations, and obstacles for an experience.
Open the template →

Strengths, weaknesses, opportunities & threats
Identify strengths, weaknesses, opportunities, and threats (SWOT) to develop a plan.
Open the template →