Brainstorm & Idea Prioritization

Team ID: LTVIP2025TMID34101

Project Name: Clean Tech

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Maximum Marks: 4 Marks

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/brainstorm-and-idea-prioritization

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

Problem Statement:

Municipal waste management systems are inefficient due to manual sorting, lack of real-time segregation, and difficulty in handling industrial waste types. Clean Tech seeks to automate and enhance the accuracy of waste classification using transfer learning and deep learning image recognition models.

Step-2: Brainstorm, Idea Listing and Grouping

Scenario 1:

* Automate sorting of recyclables in recycling centers using image recognition.
* Reduce human error and labor by using conveyor belt cameras linked to AI models.

Scenario 2:

* Integrate smart cameras in public bins in smart cities.
* Real-time classification into organic, recyclable, and general waste.

Scenario 3:

* Use AI models to monitor factory waste.
* Identify hazardous and recyclable materials to improve compliance and sustainability.

Step-3: Idea Prioritization

* Priority 1: Smart city waste bins (high impact, scalable, improves cleanliness).
* Priority 2: Recycling center automation (medium complexity, labor-saving).
* Priority 3: Industrial waste classification (complex but high ROI in regulationcompliance).