

Ideation Phase


Brainstorm & Idea Prioritization Template

Date	06 May 2023
Team ID	NM2023TMID15707
Project Name	Smart City waste Management System with connected trashcans
Maximum Marks	4 Marks

Brainstorm & Idea Prioritization :

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

Template




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

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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.

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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

There have always been cases of overflowing trash from the bins, causing havoc in the surroundings. With the presence of this waste management system, the user is alerted when the trash can is full, so as to take necessary action. The bin status is sent to a web app through the cloud, which makes real-time monitoring a possible case for the users.



Key rules of brainstorming

To run an session and productive session

🗨️ Stay in topic.

💡 Encourage wild ideas.

⏸️ Defer Judgment.

👂 Listen to others.

🗣️ Go for volume.

👁️ 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 use a sticky note and hit the pencil switch to sketch (or to start drawing).

SRSABARI

Implement sensors in trash cans to monitor their fill levels in real-time. This data can be used to optimize waste collection routes and prevent overflow.

SHARUKESHAN

Utilize GPS and data analytics to create optimized collection routes for waste management trucks, reducing fuel consumption and improving efficiency.

VEDANAYAGAM

Develop smart trash cans with built-in motion and indicators to guide users in proper waste segregation, ensuring recyclables and non-recyclables are separated correctly.

SRUTHIE

Create a user-friendly mobile app that provides information on waste disposal guidelines, nearby recycling centers, collection schedules, and enables citizens to report overflowing or damaged trash cans.

Integrate a gamified system where residents earn points or rewards for properly sorting and recycling waste. This encourages active participation and fosters a sense of community responsibility.

Install smart recycling bins with sensors to automatically sort recyclable materials such as plastic, paper, glass, and metal, making recycling more convenient and efficient.

Utilize data analytics to identify waste generation patterns, assess the effectiveness of recycling programs, and make informed decisions to improve waste management strategies.

Launch comprehensive public awareness campaigns to educate residents about the importance of waste management, proper disposal practices, and the environmental impact of their actions.

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 filter, browse, organize, and categorize related ideas as they evolve through time.

Evaluate the feasibility of implementing each idea, considering factors such as technological requirements, infrastructure, and resource availability. Consider the cost of implementing each idea and weigh it against the expected benefits and long-term cost savings.

Assess the potential impact each idea can have on improving waste management practices, reducing environmental impact, and enhancing public health and safety. Evaluate the feasibility of implementing each idea, considering factors such as technological requirements, infrastructure, and resource availability.

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.

