

Ideation Phase

Brainstorm & Idea Prioritization Template


Date	05 May 2023
Team ID	NM2023TMID16858
Project Name	AI Enabled Car Parking Using Open CV
Maximum Marks	

Brainstorm & Idea Prioritization:

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.

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

Template



Brainstorm & idea prioritization

AI enabled car parking using open CV

🕒 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

The team consist of 4 member(VenuGopal V, Shylin A, Rameesh S, Shijo MJ) Brainstroming ideas about the project are discussed among the team members

B

Set the goal

The goal is to improve the accuracy of finding the best parking slot for the vehicle

C

Techniques used

Image processing
Deep learning algorithms
Open CV

[Open article](#) ➔

1

Define your problem statement

This project is to design and implement a smart parking system that uses AI and computer vision technologies to detect and monitor available parking spots in real-time.

🕒 5 Minutes

PROBLEM

The problem is to develop a deep learning model that can accurately identify a parking slot

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.

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 (switch to select) icon to start drawing!

VenuGopal V

Install a CCTV camera in the car parking area

By using CCTV camera and open CV to detect the empty slot in parking area

Open CV detect the empty parking slot.

If the parking slot is empty it will indicate as green color else it will indicate as red color

To manage the parking slot. We have to develop one parking application.

Shijo M

It help the car drivers to park the car without any human intervention

Install camera and sensor to guide the drivers to park the car to the empty parking slot

This system uses camera sensor and gps to locate the car drivers to the empty slot in the car parking ground

The system can also retrieve the car when the driver is ready to leave.

Is it useful for public

Ramesh S

Is there any alternative model

Is it hard to use

Will it work in all platforms

Can we improve its accuracy

Will it take more time to identify the parking slot

Shyjin A

Will it take more storage space

can this application used for drivers

By using this application we can book parking slots

The system can then drivers to the nearest available parking spot

will it work accurately

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 and 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 ideas as themes within your mural.

Classify and identify the parking lot

Find an empty slot and mark it as a green colored box.

Find an occupied parking space and mark it in red.

This system uses camera sensor and GPS to locate the car drivers to the empty slot in the car parking ground

By using CCTV camera and open CV to detect the empty slot in parking area

Open CV detect the empty parking slot.

To manage the parking slot. We have to develop one parking application.

By using this application we can book parking slots

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.

