Ideation Phase
Brainstorm & Idea Prioritization Template

Date	**27 April ,2023**
Team ID	NM2023TMID16367
Project Name	AI enabled Car parking using Open cv
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.

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

Step-2: Brainstorm, Idea Listing and Grouping

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Brainstorm

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

🕐 **10 minutes**

shammikumar

To create an AI-enabled car parking system using OpenCV, you will need to	Collect a dataset of images of parking spots, both occupied and vacant	Train a machine learning model on this dataset to identify vacant parking spots

Ramprasad

Increased efficiency: AI-enabled car parking systems can help drivers to find a vacant parking spot more quickly, which can save them time and frustration

Reduced traffic congestion: AI-enabled car parking systems can help to reduce traffic congestion by reducing the amount of time that drivers spend searching for a parking spot

Improved air quality: AI-enabled car parking systems can help to improve air quality by reducing the amount of time that vehicles are idling while searching for a parking spot

Janarthnan

Cost: AI-enabled car parking systems can be expensive to install and maintain

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Privacy concerns: Some people may be concerned about the privacy implications of using AI-enabled car parking systems

Kishore kumar

Reduced traffic congestion: AI-enabled car parking can help to reduce traffic congestion by making it easier for drivers to find vacant parking spots. This can lead to shorter commutes and less pollution.

Increased efficiency: AI-enabled car parking can help to increase the efficiency of parking lots by reducing the amount of time that drivers spend searching for vacant spots. This can lead to increased productivity and reduced costs for businesses

Improved customer satisfaction: AI-enabled car parking can help to improve customer satisfaction by making it easier for customers to find parking. This can lead to increased sales and repeat business

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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**

some ideas for AI-enabled car parking using OpenCV:...

• Use OpenCV to identify parking spots in a parking lot. This can be done by using image processing techniques to detect the edges of the parking spots.	Use OpenCV to track the occupancy of parking spots. This can be done by using object detection techniques to identify cars in the parking spots.	Use OpenCV to guide drivers to available parking spots. This can be done by using image processing techniques to identify the location of available parking spots and then displaying this information to the driver	Use OpenCV to provide feedback to drivers about their parking. This can be done by using image processing techniques to identify the position of the car in the parking spot and then providing feedback to the driver about how close they are to the edge of the spot

additional ideas that can be implemented using AI and OpenCV

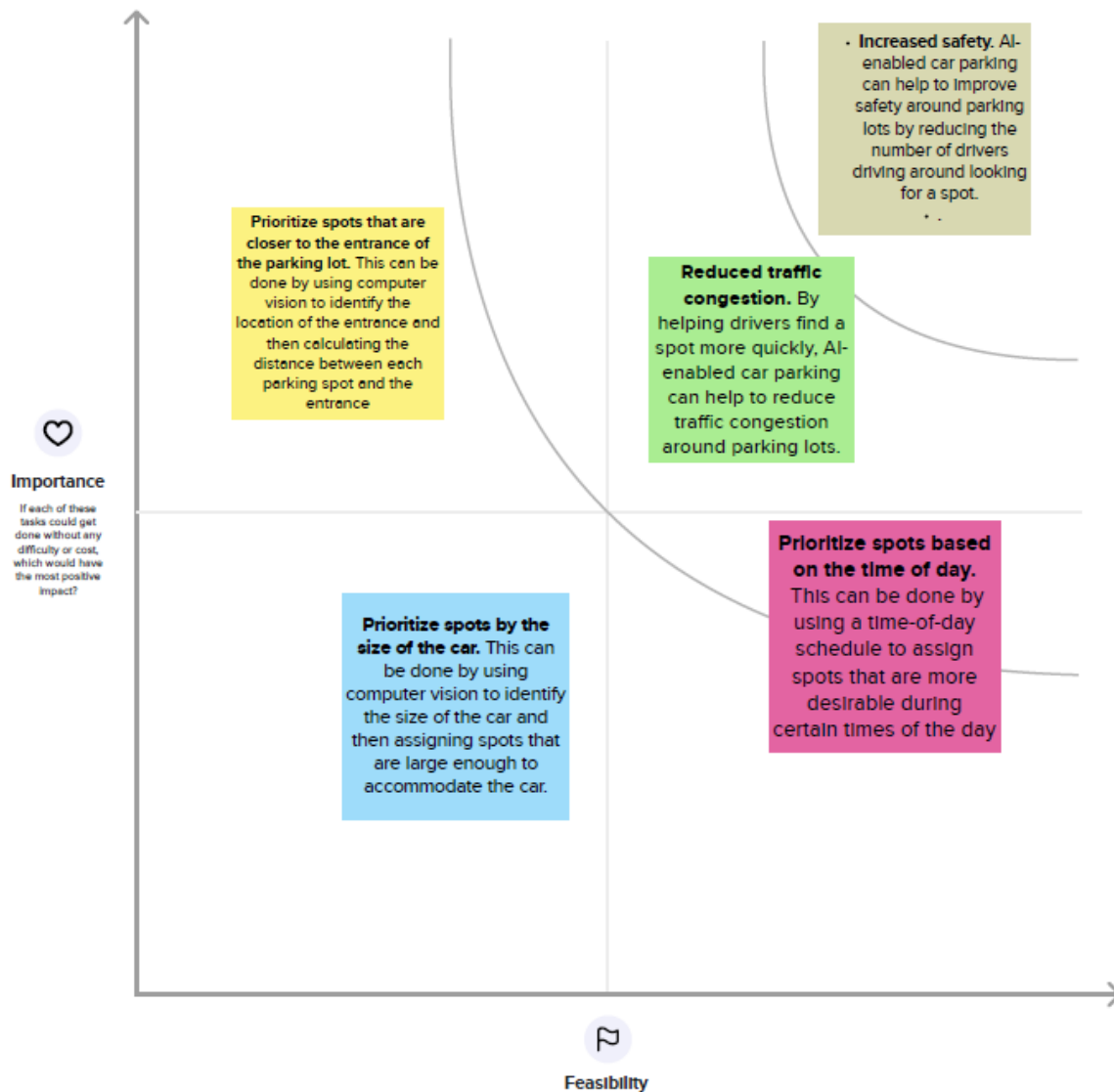|		
Use AI to predict the number of available parking spots in a parking lot. This can be done by using historical data to train a machine learning model to predict the occupancy of parking spots.	Use AI to optimize the layout of a parking lot. This can be done by using machine learning techniques to identify the best way to arrange the parking spots in a parking lot to maximize the number of available parking spots	Use AI to create a virtual parking assistant. This can be done by using a chatbot or virtual assistant to provide information about parking to drivers. For example, the virtual assistant could provide information about the location of available parking spots, the cost of parking, and the best way to get to the parking lot.

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Step-3: Idea Prioritization

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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?

Prioritize spots that are closer to the entrance of the parking lot. This can be done by using computer vision to identify the location of the entrance and then calculating the distance between each parking spot and the entrance

· **Increased safety.** AI-enabled car parking can help to improve safety around parking lots by reducing the number of drivers driving around looking for a spot.
· .

Reduced traffic congestion. By helping drivers find a spot more quickly, AI-enabled car parking can help to reduce traffic congestion around parking lots.

Prioritize spots by the size of the car. This can be done by using computer vision to identify the size of the car and then assigning spots that are large enough to accommodate the car.

Prioritize spots based on the time of day. This can be done by using a time-of-day schedule to assign spots that are more desirable during certain times of the day

Feasibility

Team ID: NM2023TMID16367

Team lead: shammikumar T

Team member1: janarthnan G

Team member2: Ramprasad r

Team member 3: Kishore Kumar J