Problem:

There is a shortage of parking spaces in many cities. This can lead to frustration for drivers, as they may have to circle around for a long time to find a parking spot. It can also lead to traffic congestion, as drivers search for parking.

Solution:

A parking space counter can help to alleviate the problem of parking shortages. By counting the number of available parking spaces, a parking space counter can help drivers to find a parking spot more quickly. This can reduce traffic congestion and make it easier for drivers to find a place to park.

Benefits:

A parking space counter can provide a number of benefits, including:

- Reduced traffic congestion
- Increased convenience for drivers
- Improved air quality
- Increased economic activity

The parking space counter project is a feasible and scalable solution to the problem of parking shortages.

The project can be implemented in a variety of settings, including:

- Urban areas
- Suburban areas
- Campuses
- Airports
- Shopping malls

The project has the potential to make a significant impact on the lives of drivers and the environment. By reducing traffic congestion and increasing convenience for drivers, the parking space counter can help to make cities more livable and sustainable.

Empathy map for the parking space counter project:

What do they say?

- "I hate circling around for a parking spot."
- "I wish there was a way to know how many parking spots are available."
- "I'm always worried about getting a ticket."

What do they do?

- Circle around for a parking spot.
- Park in a handicapped spot illegally.
- Park in a fire lane.

What do they think and feel?

- Frustrated
- Angry
- Stressed
- Impatient

What do they need?

- A way to know how many parking spots are available.
- A way to find a parking spot quickly.
- A way to avoid getting a ticket.

The empathy map provides a valuable understanding of the needs and wants of the people who will be using the parking space counter. This information can be used to design a system that is user-friendly and meets the needs of the users.

Here are some additional insights that can be gained from the empathy map:

- Users are frustrated with the current system of finding parking spaces.
- Users are willing to pay for a system that makes it easier to find parking spaces.
- Users are concerned about getting tickets.

The empathy map can be used to inform the design of the parking space counter system. By understanding the needs and wants of the users, the system can be designed to be more user-friendly and effective.

Brainstorming Ideas:

- Use cameras to count the number of available parking spaces. This is the most common approach to counting parking spaces. Cameras can be mounted on light poles or other structures to capture images of parking spaces. The images can then be analyzed to count the number of available parking spaces.
- Use sensors to detect the presence of cars in parking spaces. Sensors can be installed in the ground or in the pavement to detect the presence of cars in parking spaces. This approach is less expensive than using cameras, but it is also less accurate.
- Use a combination of cameras and sensors. This approach can provide the best of both worlds. Cameras can be used to count the number of available parking spaces, and sensors can be used to detect the presence of cars in parking spaces.

The following factors should be considered when prioritizing ideas:

- Feasibility: Is the idea feasible? Can it be implemented with the available resources?
- Effectiveness: How effective will the idea be? Will it achieve the desired results?
- Cost: How much will the idea cost? Is it affordable?

The ideas that are most feasible, effective, and affordable should be prioritized.

Here are some additional considerations that should be taken into account when prioritizing ideas:

- The needs of the users: The system should be designed to meet the needs of the users.
- **The environment:** The system should be designed to have a minimal impact on the environment.
- **The law:** The system should be designed to comply with all applicable laws and regulations.

By considering all of these factors, the best ideas can be prioritized and the parking space counter project can be designed to be successful.