

### Define your problem statement

Design Intelligent Wirelessly connected smart road signs capable of displaying different speeds for different weather conditions, traffic and route traffic through the quickest and safest possible way.

→ 5 minutes

## PROBLEM

Rain makes brakes inefficient and leads to accidents

### PROBLEM

Fog reduces visibility and increases the probability of accidents

### PROBLEM

School Zone flags slow down traffic even when schools are closed/ operating

### PROBLEM

Road quality varies over time but static road signs don't

### PROBLEM

Traffic diversion requires human intervention



### Brainstorm

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

10 minutes

## Brindha P

measure

visibility

### cloud server calculates camera to speed for map

# every point in

### change based automatic traffic diversions lighting conditions

## Bavithra N

Camera

attached to

timings set every traffic to road sign to monitor signs traffic Lane mapper

Remote view so emergency vehicles can capability to

Schools

Camera monitors

road quality and

speed is

assigned based

on road quality

vehicles

passage and

alerts

easily pass plan route through traffic

weather api

to get data

on weather

### Al based School and image processing to detect rain/ wet roads

hospital zones dynamically set road signs speed

Anciya

displaying how

much time for

traffic to clear

out

accident detection and diversion

# Ezhil Mugisha N

/
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Al based algorithms to predict weather from images

measures surrounding traffic

Dynamic traffic Fun things sign capable of allowing peds to cross the

to display during red

light traffic

every sign

post

### Group ideas

Take turns sharing your ideas while clustering similar or related notes as you go. In the last 10 minutes, 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.



Timer

displaying how

much time for

traffic to clear

out

Using

camera to measure

visibility

Al based

image

detect rain/

wet roads

every sign

post

measures

surrounding

traffic

processing to

using open weather api to get data on weather

Camera

attached to every traffic sign to monitor

traffic

Al based

predict

weather from

images

Camera monitors

road quality and

speed is

assigned based

on road quality

algorithms to

Remote view capability to plan route

> change based lighting conditions

vehicle

based

speed and

lane display

Lane mapper

so emergency

vehicles can

easily pass

through traffic

emergency

vehicles

passage and

alerts

accident

detection

and

diversion

automatic

traffic

diversions

School and

road signs

speed

to cross the road

Schools hospital zones timings set dynamically set to road signs

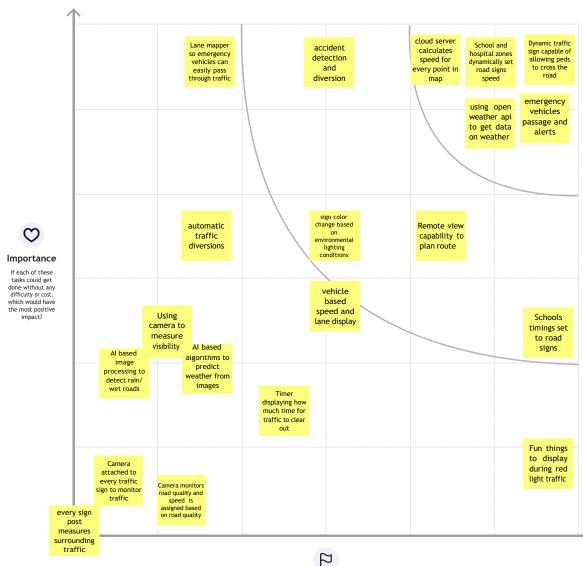
light traffic

Dynamic traffic

Fun things sign capable of to display allowing peds during red 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.





Regardless of their importance, which tasks are more feasible than others? (Cost. time, effort, complexity, etc.)