1

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

2

Brainstorm

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

10 minutes

Sayad Pervez B

- Using camera to measure visibility
- cloud server calculates speed for every point in map
- using open weather api to get data on weather
- automatic traffic diversions
- sign color change based on environmental lighting conditions

Ulagaraja J

- Camera attached to every traffic sign to monitor traffic
- Schools timings set to road signs
- Camera monitors road quality and speed is assigned based on road quality
- Lane mapper so emergency vehicles can easily pass through traffic
- Remote view capability to plan route

Yuvashree R

- AI based image processing to detect rain/ wet roads
- School and hospital zones dynamically set road signs speed
- vehicle based speed and lane display
- accident detection and diversion
- Timer displaying how much time for traffic to clear out

Yuvasri M

- AI based algorithms to predict weather from images
- every sign post measures surrounding traffic
- emergency vehicles passage and alerts
- Dynamic traffic sign capable of allowing peds to cross the road
- Fun things to display during red light traffic

3

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.

20 minutes

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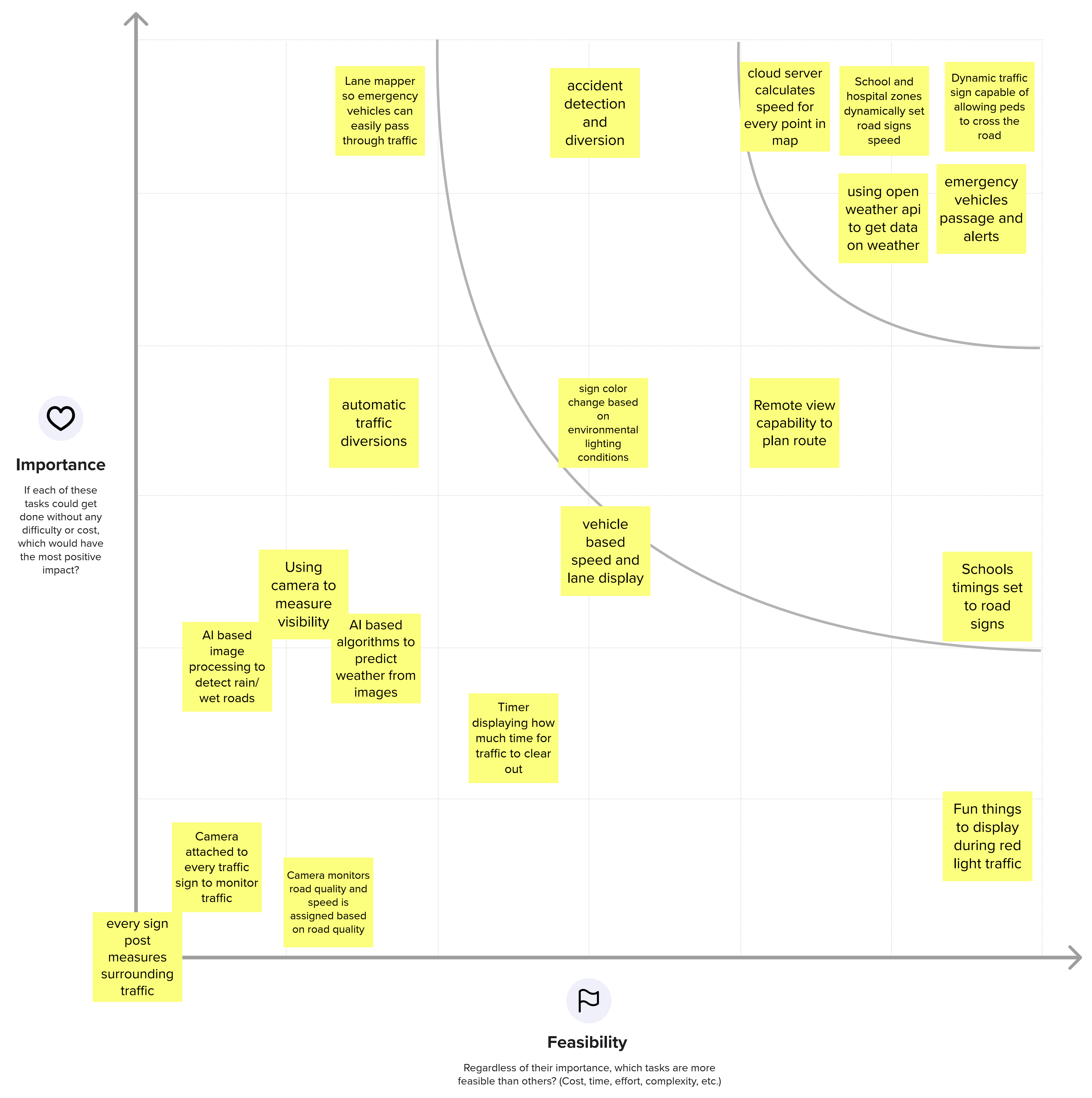
4

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



Importance

If each of these tasks could get done without any difficulty or cost, which would have the most positive impact?

Feasibility

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

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