Team UNITED



VISION CUE

HMC Case - Challenge



Challenge

Ambulance Traffic Light Control

The idea behind this case is to find an innovative way to reduce the time which is taken by the ambulance from the point it picks the patient to the desired location (Hospital)

Potential Solution

Proposed Solution

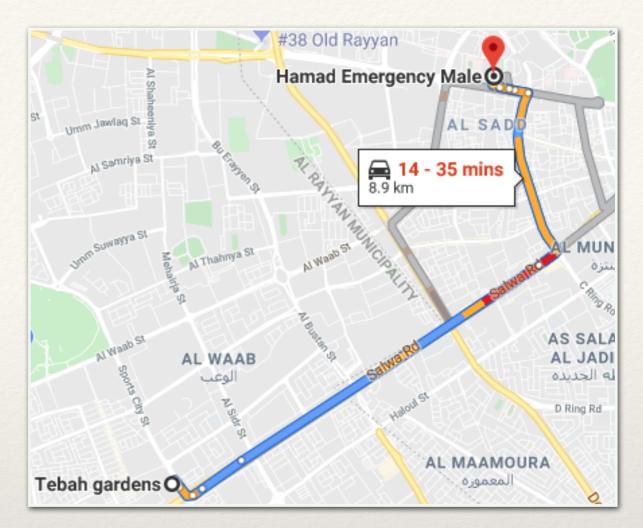
VISION CUE

Picture beside shows the time taken from Tebeh Gardens to Hamad Male emergency on a regular day traffic.

Time taken by an ambulance before the VISION CUE.

Time taken by same ambulance after the VISION CUE

Vision Cue will not only reduce the traffic light crossing time for the ambulances but will reduce the total travel time by 50-60%.



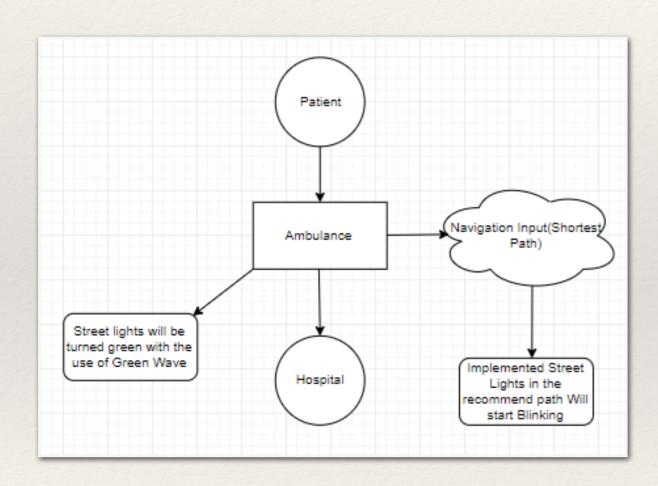


What is VISION Cue?

It's a proposed solution for high traffic using special gps/antenna that will give signals or cue to street lights/light-poles/lanelight and give car-driver awareness that ambulance is on its way so they plan to give away upfront rather than be too close the ambulance and cannot move.



DESIGN



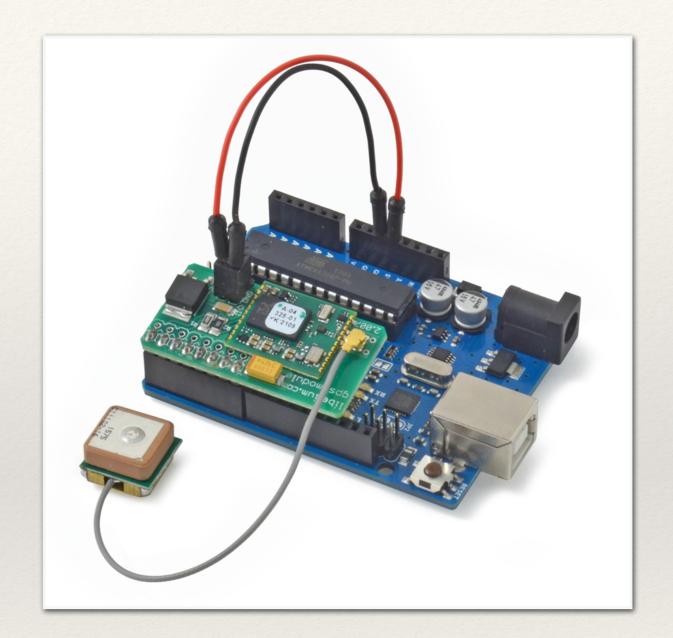
Functional Scope / Overall Architecture Design

- As the patient is picked by the ambulance, the respondent will enter / choose the end location in the navigation system.
- Once the location is selected, the shortest part (distance wise) will pop up on the screen.
- As soon as the path pops up, the implemented street lights on the chosen path will start blinking and as the ambulance reaches near the lights the intensity will increase, by which means people will know the Ambulance is on its way and they will leave clear the path in advance.
- Once the ambulance reaches the Traffic lights, they will switch the lights to green with the help on Green Wave equipped devices.
- The design will not only reduce the traffic light crossing time but the full journey time significantly.

Using special navigation system

DEVELOPMENT

The development of the system will be phased out with the base architecture ready for display. It will need coordination with the GPS map providers and different stakeholders such as emergency responders of MOI, HAMAD HOSPITAL etc.



TEAM MEMBERS

The team at the moment has two members:

Ella and Obaid

- * Ella is an ex banker who will be the lead coder, design architecture and development.
- * Obaid who is a project manager will take care of the ideation, marketing and business development.