Geo-Spatial Knowledge Contest-2016 (GKC 2016)

Intelligent Traffic Management

Creative Introduction of the topic or backdrop.

Since the population is growing, traffic is also growing simultaneously, more people brings more vehicle and more vehicle will bring more traffic and chaos. What can be solution for that well we can't limit the people from buying vehicle that will be insane, so many times I wonder what can be done to improve our traffic management system, parking problems which arrive due to randomly parking vehicles in city or village or town. Then here comes an idea of "**Intelligent Traffic Management**".

Technology used

The whole Intelligent Traffic Management will be depending on digital systems, we will requiring and mobile application(Android development, Xcode(IOS)), QR code generator, and a distant scanner. For each and every vehicles two unique QR code will be generated, one for distant scanner and other for the nearest scanner that is Mobile device
Now, How its work.,
Every new vehicles when passed from their respective RTO, they will be provided with their unique QR code of two mentioned sizes, that code consist information about the owner depending on privacy setting that will be applied according to the scanner.

$$Minimum\ QR\ code\ Size = \frac{Scanning\ Distance}{Distance\ Factor} \times Data$$

Application:

1. Solve issues related to random parking (no need to announce in public)
Brief:
       suppose a person had parked his vehicle in no parking zone, which will create huge traffic on road, so how intelligent traffic management will help, any regular person with an intelligent traffic management app will scan the QR code of that car and will select the option for parking problem the system will automatically put a message on particular vehicle owner registered number, even after messaging the vehicle is not moved then a call has been made with an recorded message to owner.

       disadvantages:
1) country like India, it is very much possible that user register through different name with different person's mobile number.
   solution: At every month the owner has to update their number through scanning their respective QR code and can update their mobile number, of not then below given application will help him to do that.

2. Solves issue related to speed, or breaking traffic rules
Brief:
       Suppose a vehicle is driving above speed limit, our scanner will scan distant QR code, and found that the car is overspeed and will message to nearest RTO officer information regarging car number, color etc and they will watch for car to arrive and fine him accordingly, after scanning repective officer will scan the code to confirm.
       Now how above mentioned disadvantage will be solved over here, if owner has not updated their number then similar message will be generated and RTO officer will change the number

under their survillence.

PROS and CONS of Intelligent Traffic Management

Pros:
1) Technology never do corruption.
2) Reduces man power for officer.
3) Solve the problem of buying car with someone else name using black money
4) make an record for owner and help income tax department to manage black money problem.

Cons:
1) it will create some problem for person who already owned a car, but solution do exist for that
     solution: every car owner will be provided time limit till then they have to visit their nearest RTO office and collect their particular QR code. after that if car found without code that will be notified and equivalent fine will be charged.

Conclusion:

Intelligent traffic manager will surely change the way we look world and drastically improve traffic problem in the country, with little more effort and will we can change the world digital in digital India scheme. This will help government to fight against fraud people, and developing country.

References:

1) Wikipedia link: https://en.wikipedia.org/wiki/QR_code
2) QR code link: http://www.qr-code-generator.com/

Images:

25 x 25 Modules
27 Characters
"Normal" Web URL

41 x 41 Modules
102 Characters
Google Maps URL

57 x 57 Modules
240 Characters
vCard Contact Details