Secure and Trusted vehicular cloud

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Abstract

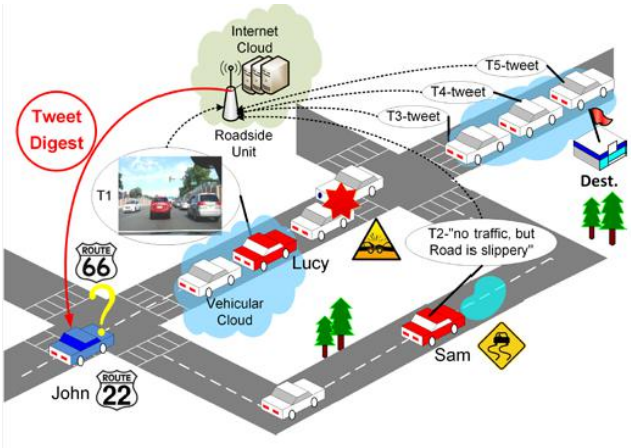
In vehicular cloud and other social vehicular navigation systems,images and other information are collected from crowd sourced datas. They are collected from diff erent users ,they are filtered and combined to form traffic digest.Drawback of vehicular cloud and crowd sourced data are while collecting information from the users it doesn't checks the trust worthy of that information. So I would like to add security features to ensure trust of the information collected from the users.It can be done by comparing the current GPS location of the user and location embedded in the images or alerts send by the user.In my project while starting the application camera opens and image of the road want to be captured and send to the server. Within a gap of few minutes camera will open automatically to capture image,image can be compared with the stored image to ensure the trust of the data.During shake of device emergency message can be send with captured image. On the server side Checking the distruptions of the user by analysing the shake frequency and slow down of the system.If it occurs give notication to user as there are some distruptions.

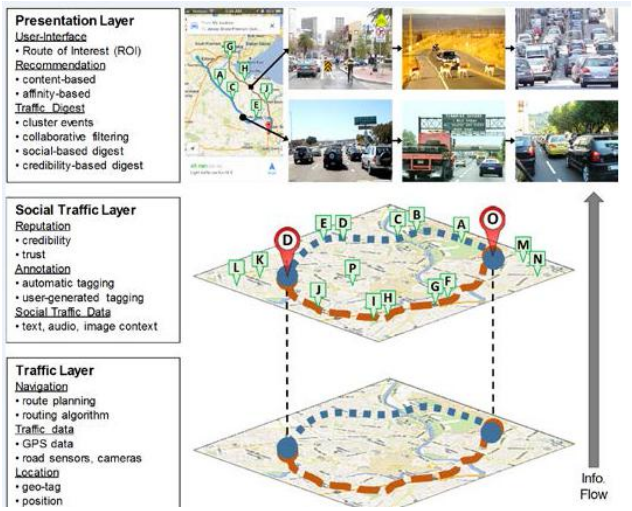
1. Introduction

In social navigation system, people and vehicles can share crowd sensed data to enhance the driving experience.It can use vehicular cloud service for route planning, where users can share traffic images. Traffic image sharing system is called Social Vehicle Navigation (SVN). In this NaviTweets are filtered, reffined, and condensed into Traffic Digest. These digests can provide more pertinent and reliable information about the road situation. Main problem with the existing system is that It Doesn't checks the trustworthy of the data send by the user.It doesn't give any incentives to encourage users.

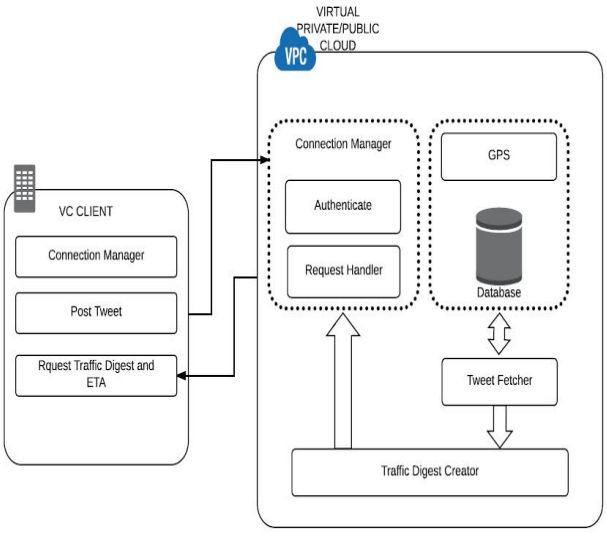
1.1. Existing System.

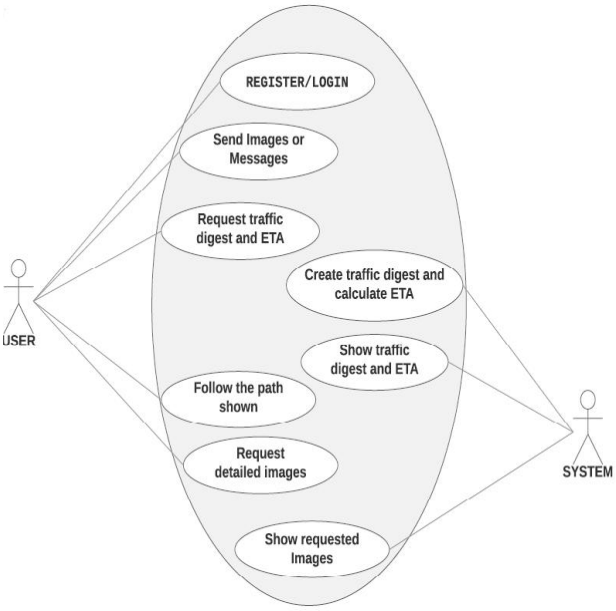
Waze [1] is an example of a navigation app that functions by anonymously pulling GPS data and, at the same time, providing an interface for drivers to push detailed traffic reports.Conventional ways of reporting traffic conditions have mainly been through the police, transportation officials, drivers on phones, and traffic reporting companies.





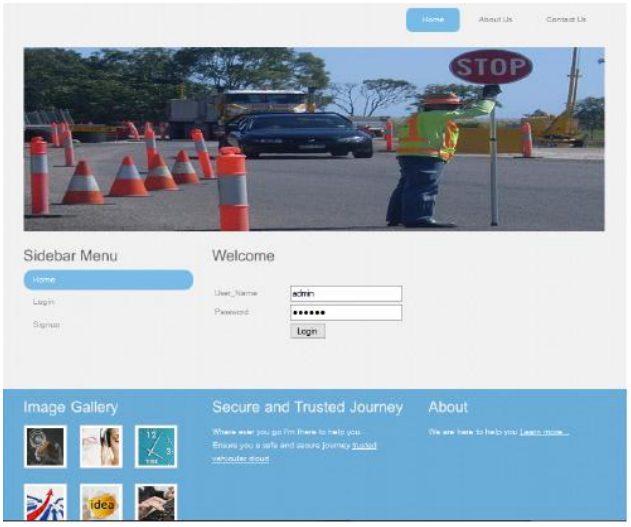
1.2. Architecture





1.3. Server Side

Works on the server side are Registration and Authentication of the admin,View feedback,Add important places, Send Notification, view Emergency messages, View spot complaints and also check the distruptions of the user by analysing the shake frequency and slow down of the system. If it occurs give notification to user as there are some distruptions.



1.4. User Side

Works on the android side are,Registration and authentication of the user,During shake of device emergency message can be send with captured image.

1.5. Conclusion

In this work, As vehicles gain the ability to act as mobile sensors that carry useful traffic information, people and vehicles are sharing sensing data to enhance the driving experience. This paper describes a vehicular cloud service for route planning, where users collaborate to share traffic images by using their vehicles on-board cameras.This paper present the architecture of a collaborative traffic image sharing system called Social Vehicle Navigation (SVN), [2]which allows drivers in the vehicular cloud to report and share visual traffic information called NaviTweets. A set of NaviTweets is then filtered, refined, and condensed into a concise, user-friendly snapshot summary of the route of interest, called a Traffic Digest.Drawback of this paper is that while collecting information from the drivers it doesnt checks the trust worthy of that information. So I would like to add security features to ensure trust of the information collected from the drivers.This can be done by comparing GPS information of the image or data with the information send by the users.Also we could include some mechanisms as incentives for tweeters, such as likes or points, our implementation to properly incentive drivers

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