It either smart phone or an embedded vehicular

It is a hybrid architecture since it is a mix of centralized and distributed system. The system architecture composed of the central server and a software stackrunning on an on board device in each participating vehicle. the vehicles withthis software stack implemented on either smart phone or an embedded vehicularsystem. this software stack responsible for traffic data reporting and forshowing alternative routes to user. vehiclesare contain a gps receiver and can communicate with the help of internet.

Here use two type of communication. the vehicles communicatewith the server through internet to report local traffic density and to receive the global trafficdensity in the road network. VANET used to communicate between the vehicleswhich are closely located , for determining the traffic data received from theserver and for implementing rerouting strategy. Using the traffic reports from vehicle, the server build anaccurate and global view of road traffic network. the network contain differentroads as directed graph with each edge equivalent to road segment. trafficdensity depend on edge capacity.

a road segment exhibit sign of congestion whenthe traffic density greater than a particular threshold value then the serverupdate the map with congestion and send to the vehicles which reported recentlyto the server and the vehicles which are close to the congestion location. The notified vehicles distribute the new map and informationsin their regions with a limited number of hops to avoid excessive flooding andeventually information from the other vehicles , the vehicle whose current pathis towards congestion spot, it locally compute a new route to destination. The main advantages of our system are1. rerouting path computation burden of

server is reduce dueto computation done in each participating vehicle. so achieve better scalabilityand reduce server work load. Therefore here when there exist a sign o congestion on theroad, vehicles compute alternative routes and at the same time reroute thevehicle to new route. 2. it provide more security and protect the privacy ofuser. it is very important for a system to wide acceptance. since path omputationis done in vehicle, the origin and destination like location related datas donotshare to server. so it provide security. also protect the identity of vehicleswhen reporting congestion to server