

LITERATURE REVIEW on PROVIDING SERVICES in EMERGENCY CASES

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Abstract: A number of studies have been done on location based services (LBS) due to its wide range of potential applications. LBS can be used to provide useful information such as tourism guide and roadside assistance to users according to the current locations of them. It is consisted of mobile device, communication networks, service provider and data provider. The enormous trend of crimes happening in country shows the need for fireman and police officers to get reports of emergency cases as fast as it could to be able to act effectively. The finding of review found that international practice indicate that many jurisdictions using similar KPIs (Key performance indicator) of an 8 minutes (7 minutes and 59 seconds) response time for the first responders to attend to a life-threatening incident. Actual response time may vary due to the local road characteristics, traffic lights, congestion, road networks, weather conditions, and visibility.

Keywords: Push and pull, emergency finder, pull LBS model, mobile LBS, Location Based Services

1. INTRODUCTION

Nowadays there are high volumes and emergency cases lead to increase of unsolvable cases nationwide. We purpose the use of Push and Pull Location Based Service Model in experiment of implementation of Location Based Service Environment to lessen the problem by face Police, Fire Fighter and Ambulance service in retrieving accurate information while retrieving high risk area. The Time Taken and the accuracy of information are the problem normally faced by Police, Fire Fighter and Ambulance in emergency case department. It is very difficult to get right information at right time to their mobile phones. We provide the for the smart phone application. Updates on crimes or emergency cases within the users' location are sent upon user's retrieval of Push based on user locations. The application is developed by using Eclipse IDE platform and tested with HTC magic with Android OS. The application flow start from retrieving the location position and the information on the emergency cases will then display according to the date listed. The conceptual design and architecture are designed for Pull and Push Location based services.

A number of studies have been done on Location based services due to its wide range of potential application. LBS can be used to provide useful information such as tourism guide and roadside assistance to users according to the current locations of them. It is consisted of Mobile Devices communication networks, Service provider and Data provider. The hotline number is entertained by several operators that pick up emergency calls and record reports from the callers. Once all the details required are recorded, they channel the report to the correct agencies based on the problem faced by the caller. The callers identity and details like location and emergency details

will be verified and if the call is prank call, the operator will stop from the channeling process to the agencies. This is the normal workflow at the emergency call centre everyday. Time is the critical factor for the rescue of occupants and the application of extinguishing agents to minimize loss. Crimes are solved based on the information channeled to the agencies and how fast the information can be delivered to the agencies targeted. A police officer which is on patrol should be alert to the information provided by the call centre and has to move right on getting the target.

II. LITERATURE SURVEY

A. Work flow of emergency cases.

We tried to focus on simplifying the flow of emergency information flow by utilizing the usage of Pull and Push Location Based Service. A flow for emergency call management. The emergency call work flow was constrained by the number of staff that was able to handle to calls. It was due to the manual system being practiced by the agencies taking the emergency actions which involve much time wasting while on the operations since emergency cases involved life, one of the requirements stated by EMSS (Emergency Medical System Services) at is the 95% of all ambulance response time must be within 20 minutes in the rural areas and within 10 minutes in urban areas. Callers that are urgently much need of help would have to wait on line if the line is busy. As result, criminals will get escaped and a consequence more crime cases can not be solved or need longer time to get solved. As the caller recorded manually at the call centre system, some time the information being communicated to the recipients is not clear and this caused for misunderstanding among the recipients at the emergency centre and also the call centre.

In this research we are trying to optimize the work flow by reducing the process involved and improving the way alert is delivered to the target recipients.

B.How location Based Service Works

Two broad categories of LBS can be defined as triggered and user-requested. In order to get location of the device, the location based service should use real time positioning method.

The special location is widely using the co-ordinate system or being understood as a latitude-longitude-altitude. Latitude is measurement of the angle at the Earth's centre, north or south of the equator while for longitude is a measurement of the angle at the earth's centre, east or west of the prime meridian which runs poles to poles through the Greenwich. The different LBS can be classified under the multiple categories of the person or device oriented, pull vs. push, direct vs. indirect profile among others.

I.Pull Location Based Service

The pull location based architecture need a desired trigger for the request of location based advertising and considered as favorable attitude towards the marketer.

II.Push Location Based Service.

Push location based service is understood if the user in the certain location is pushed the information related to their location currently. As example, if the user is around a cinema, he or she being pushed the information of a hot movie that showing in the cinema and they are attracted but to find that the tickets for the movies have being sent out in the cinema. So the user needs to request for query the result.

Push technology is playing more and more important role in the mobile scenario as it allows new appealing services which force useful information to mobile users such like weather forecast, traffic news and sport news. It allows to establish the connection to the user terminal without direct a action and to deliver contain as soon as possible.

C.Location Based Service Architecture

There are three for a user to get positioning method on the application as reported by which has been explain.

I.The Cellid

The cellid system position the user equipment within the coverage the serving the cell. This information is of very limited value for a large cell, but viable information may be provided for a picocell with a range of about 100meter.

II.Observe Time Difference Of Arrival(OTDOA)

The OTODA system uses frangulation from atleast three base-station to determine geographic position. the distance

from each station is again calculated from Round Trip Time via the User Equipment.

III.Global positioning system

The American Military global positioning system uses satellite signal to determine user location. It is most accurate technology available, typically providing a resolutions of less than ten meter.

III. CONCLUSIONS

The existing of web services is considered as a part of important element for rendering the information for this mobile application prototype:

Emergency Finder. The information will always be updated based on the information feeds from the web based system at the call center site and are retrievable according to the user location based. In this paper we have proposed the usage of push an pull Location Based Service as a basis for architecture of providing emergency location based services.

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