

# MATCH- MOBILE AUTO-INSURANCE CLAIM AND HELP SYSTEM

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## ABSTRACT

The project is about to develop a mobile application using the platform independent technologies. It supports all the types of platform like android, windows etc. When it comes to vehicle accidents, people are stressed out and overstrained, even if it is just a car body damage and no one is hurt. They often lack adequate and immediate assistance and may worry about the lengthy and paper-based loss report to their insurance carrier. At the same time, it is crucial for insurance companies to receive early and detailed case circumstances in order to decrease costs and assist customers with value-added services. We proposed to build a mobile application MATCH to meet the said objectives. MATCH will provide an easy mechanism to capture images of the damaged vehicle and immediately submit the first intimation report to the insurance company from a Smartphone. It will also display a map showing the nearby hospitals and towing assistance services along with their contact numbers. This application will be most useful in future to reduce the human effort and to claim using a single click from the application.

**KEYWORDS:** Cloud Computing, Mobile application, Assistive Technologies, Emergency Response, Claims Management, GPS, Google Map, Shortest Path Algorithm.

## INTRODUCTION

Minor car accidents are unacceptable and emotionally stressful events. Often people lack comfortable benefit in terms of immediate services like the arrangement of a towing service or support with the loss report to their insurance company.

The outlined customer relation is complemented by the business relation where insurance companies face many problems in terms of data quality, media breaks, and delayed loss reports, which lead to both high operational costs and loss rates. As of today, insurance

companies use dedicated action systems to manage the overall claims management business process. However, available claims management systems are poorly, if at all, incorporate with the physical world of insured objects and persons they are supposed to manage. This means, insurance claims are reported via traditional channels such as phone, letter, online services and are then keyed in by insurance personnel.

The contribution of this paper is the development of an inventive mobile application for a novel application domain together with the proposal of required enabling technologies. Based on the concepts for mobile auto-insurance claim and help system described in next section, the practical contribution of this paper is a standard implementation that shows how mobile phones can be integrated with claims management enterprise systems in order to assist people after car accidents. As the technical contribution of this work is the development of the required enabling technologies such as the integration architecture that allows for a direct and indirect communication between mobile phones and business applications based on Mobile Application.

A leading general insurance service provider wanted to provide a matchless experience to its auto insurance customer during any unfortunate incident of automobile accident. Apart from ensuring speedier claim process, the key objective was to provide immediate help in towing the vehicle and/or medical assistance. We proposed to build a mobile application MATCH to meet the said objectives.

MATCH will provide an easy mechanism to capture images of the damaged vehicle and immediately submit the first intimation report to the insurance company from a Smartphone. It will also display a map showing the near by hospitals and towing services along with their contact numbers.

## LITERATURE SURVEY

Mobile technology can help save money, mitigate risk, and increase productivity. It can also attract new customers and retain current policyholders. Ever more powerful data networks, mobile devices, and application software solutions are being packaged into attractive products that promise fast, hard-dollar ROI. and top-tier mobility vendors ensure that today wireless solutions are more affordable, easier to use, and quicker to deploy.

Insurance companies know that they have to do a better job of managing risk, controlling expense, and creating new products. Mobile solutions should be an integral part of achieving these initiatives.

- **Vehicle Location:** Embedded GPS functionality tracks driver location on both a real-time and historical basis, and typically refreshes this information every 15 minutes (or more often, if needed). Geo-fencing defines a virtual geographic area, and emits an alert if boundaries are crossed.
- **Vehicle Diagnostics:** In-vehicle devices use sensors to collect a wide range of diagnostic data including information on tire pressure, engine idling, RPMs, odometer readings, mileage, and fuel efficiency. These data can be summarized and retrieved in report form.
- **Driver Performance Analytics:** Devices can also collect information on individual driver performance, such as speeding, hard braking, acceleration, and swerving.

Instant Office Solutions essentially provide an office in a box that allows field agents to establish a fully connected mobile command center as needed. In many cases, these mobile

office centers are created in response to emergency situations, allowing agents to work on-site (often outdoors) with customers to speed up the creation and processing of claims. The all-in-one instant office package typically includes a cellular network router, Wi-Fi and Ethernet connections, and signal enhancement equipment. The goal is to provide instant, secure, reliable network connectivity for mobile devices and also for any necessary peripherals such as fax machines, VoIP (voice over IP) telephones, etc. Vehicle Area Networks turn any company car into a mobile wireless hub. M2M technology creates a dependable Wi-Fi signal in and around the vehicle, providing the field agent with Internet access and secure, remote data exchange with company systems. The high-quality VPN supports a range of devices and peripherals, including smart phones, laptop computers, tablets, and other mobile hardware. Mobile applications are integrated with existing backend systems, and the vehicle area network instantaneously allows agents to fill out forms, upload photos and documents to support claims, review customer data, and look up any necessary data on site. For field workers, this type of reliable connectivity whether the car is on the road, at a customer site, or at other company or partner locations allows full productivity and effectiveness, no matter where they are required to do business.

## EXISTING SYSTEM

Existing system for claim insurance is manually checkout and time consuming. From a cost basis you cannot justify hiring the outside expert to retrieve the data on all accident claims. It is not feasible to worth the effort in every case.

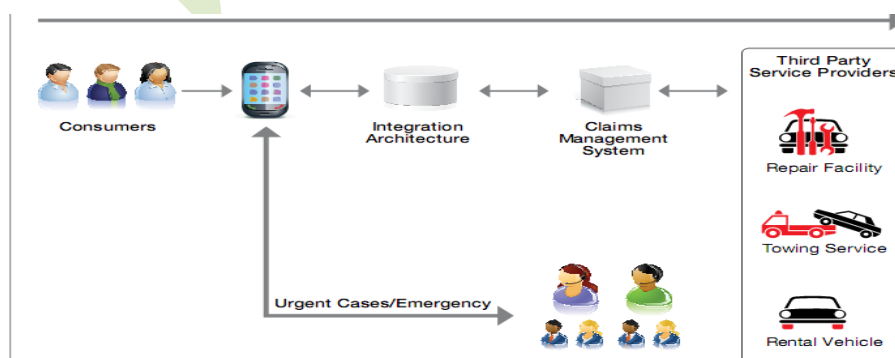
## PROPOSED SYSTEM

The concept of the proposed mobile auto-insurance claim and help system application is based on typical activities in the after issues of a car accident. While the different processes are well-described in literature,

The overall process can be separated into three phases:

1. Claim for insurance.
2. After accident we can provide the help using location based services.
3. Emergency call.

## SYSTEM ARCHITECTURE



**Fig. Mobile Claims Management: Smartphone Apps in Motor Insurance**

While implementing mobile claims solutions, the insurer should also focus on developing a dedicated integration architecture that connects mobile claims solutions with the enterprise claims management system.

## PROPOSED ALGORITHM

Step1:

INITIALIZE  $d[s]=0$  for all  $v \in V \setminus \{s\}$ , where  $s$  as source,  $V$  as set of all vertices.

Do  $d[v] = \infty$ . //set all node's distances to  $\infty$  except  $s$ .

Step2:

Get the current position  $(x_1, y_1)$  of source node from GPS.

Source\_x= $x_1$ ;

Source\_y= $y_1$ ;

Dist=0;

Step3:

$S$  is the set of visited vertices.

Set  $S = \varnothing$  //S is initially empty.

$Q = V$  //Queue initially contain all the vertices.

While  $Q \neq \varnothing$  //while Q is not initially empty.

Do  $u = \text{mindistance}(Q, d)$  //select element of Q with min. distance.

$S = S \cup \{u\}$  //add u to the list of visited vertices.

Step4:

Get the position  $(x_2, y_2)$  of the visited nodes from GPS

Current\_x =  $x_2$ ;

Current\_y =  $y_2$ ;

distance=  $\sqrt{(x_2-\text{source}_x)^2 + (y_2-\text{source}_y)^2}$

Dist= distance + dist

Previous\_x =  $x_2$ ;

Previous\_y =  $y_2$ ;

Step5:

For all  $v \in \text{neighbours}[u]$

Do if  $d[v] > d[u] + w[u, v]$  //if new shortest path found.

Then

$d[v]=d[u] + w[u, v]$  //see new value of shortest path if desired then trackback.return dis.

Step6:

Get the position  $(x_2, y_2)$  of the visited nodes from GPS

Current\_x =  $x_2$ ;

Current\_y =  $y_2$ ;

distance=  $\sqrt{(x_2-\text{source}_x)^2 + (y_2-\text{source}_y)^2}$

dist= distance + dist

Previous\_x =  $x_2$ ;

Previous\_y =  $y_2$ ;

## CONCLUSION

In this project report, we tend to have planned to design completely unique application named MATCH-Mobile Auto-Insurance Claim and Help System Specially design for Android Smartphone. In our project we have analyze various services like help for those people who want to claim for Insurance (E.g. Car Insurance, Medical Insurance) and also track the location where accident is happen And show the nearest hospitals contact list, Ambulance contact list, Police stations contact list to help for victim and save the life. We hope the results will be of some using future study. In this area helping the growing interest and resulting in the invention of new Android Applications.

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