

Android Based Accident Guider for Insurance Involvers

K.M. Inaamul Hassan and K. Ihalagedara
Uva Wellassa University, Badulla, Sri Lanka

Introduction

Human beings are subject to encounter many consequences according to socio economic, political, cultural changes which affect their lives. Every human being is in need of security and care throughout the lifetime in order to accomplish their life goals. Hence, currently insurance plays a major role in recovering the discomfoting situations in which humans are affected. There are several types of insurance policies which have been introduced for general public. In terms of insurance policy industry, vehicle insurance is one of the very important areas to manage accidental situations. In current scenario, when an accident occurs, people tend to call the nearest insurance agent, emergency places and garages as well. If the person is not aware of the exact location, he is unable to proceed with the relevant activities. After calling, insurance officer comes to the spot and collects the information manually. Policy holder enters accident details filling a form and hands over it to agent. However, policy holder cannot demonstrate visual representation of accident to the agent if he is far away. Moreover, policy holder encounters difficulties in ascertaining the nearest places, agent, and those contact details and as well filling the incident form. Therefore, mobile applications can be identified as more effective and user friendly in many situations as such and further we can make different applications for different users. Thus, this research was conducted to develop Android, Web and GPS based system to solve these kinds of problems. Policy holders, agents and insurance officers are connected by proposed system. The system facilitates to recognize current location, the nearest wanted places, policy alert, and creation of visual claim report in an accidental situation.

Methodology

Considering the requirements of introducing web based system to facilitate accidental situations, web applications, insurance applications, android applications and current vehicle insurance procedures were studied. Then the project proposal was developed for IT driven solution. Further, diagrams were designed, such as system architecture, flow charts and activity diagrams to clarify the requirements. Database was normalized and ER diagram was drawn. The databases and tables were created by using PHP MyAdmin and web interface was designed by using HTML, CSS and JQuery. Moreover, web application was created by using the technologies such as PHP, MySQL ,JQuery, JavaScript, Ajax and JSON. Android application interface was created by using xml. Android logical control was done by java in android and eclipse platform. The identification of current location was done through GPS and Google map API was used to access map. Data were retrieved from MySQL by Android through JSON and PHP. The system was tested by using several test cases and evaluated by collecting user evaluation comments. System was tested separately as two modules, Android and Web. Finally, integrating the whole system testing and demonstration were completed.

Results and Discussion

System was developed as two modules, Android and Web. Those modules were integrated with external server database. Web module is used by administrator and android module is used by insurance policy holder.

1. Sub administrators details, agent details and news details were maintained by super administrator in Accident Guider web module.
2. Insurance officer details, agents, location details, nearest emergency places details,

nearest garages details, customer details and reports were maintained by agent administrator in Accident Guider web module.

3. Agent administrator assigns representative to report incidents through web module.
4. Insurance policy holder was able to login and access to current location on Google map using GPS, view nearest emergency places and details on Google map, view nearest agent places and details on Google map, view nearest garages places and details on Google map, create incident report, take photos of the vehicle which was met with an accident and send that to server in Android module.
5. Policy holder can be able to send visual claim report to insurance company server through the Android application.
6. Policy holder can be able to have the awareness of remaining policy days and to get historical incident reports.
7. Insurance representative can login and access to current location on Google map using GPS, view nearest emergency places and details on Google map, view nearest places where agents are available and relevant details of agents through Google map, view nearest garages and relevant details on Google map, and accept or reject assigned claim report via Android module.

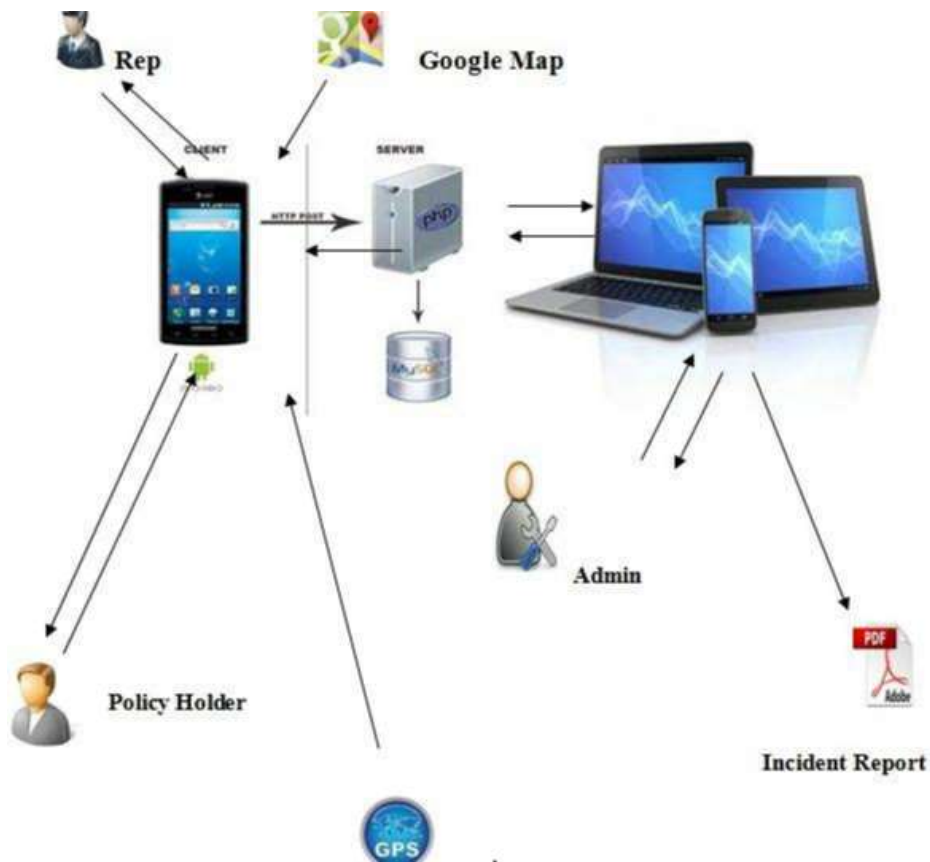


Figure 1. System design architecture.

Conclusions

GPS based system has been identified as a better solution to handle the accidental situations where accident guider can solve the existing problems. The system has achieved goals such as giving faster accident service, delivery service to exact location very quickly and easily, giving details of the nearest wanted places, reducing manual entry of accident details, providing location based services more usefully based on our country, attracting user friendly interfaces, manifesting remainder messages, controlling administration via web application.

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