

## **ABSTRACT**

Emergency services are a service provided an organization to ensure public safety. In the world of telecommunications, these services generally are grouped into three : police, firefighters, and ambulance. In telecommunications site, these services didn't use features which the server can identify the location of user who sends an emergency message, and inform the user's location to the existence of related parties.

Practically, emergency services are still using conventional method. When users make a call, the emergency services will ask for user's location then check the position of the user. It will takes time remembering the emergency services must ensure the user's accurate position to avoid the worst such as lost. This position identification feature is a service that provides specific information regarding the location of the user by exploiting the geographical position on mobile devices.

In this final project, will be designed information system on the emergency services to determine the existence of a user when the user sends an emergency message. This information system is supported by the Geographic Information System (GIS). The results of the design and implementation of the GIS will be connected with the position identification feature so that the position of the user, either at rest or moving, can be mapped in longitude and latitude coordinates. Be expected, this system can provide user's position information for emergency services.

**Keywords :** Geographic Information System (GIS), emergency services