MobileMap: A collaborative application to support emergency situations in urban areas

Abstract

One of the problems affecting fire departments in Latin America is the lack of a strong infrastructure to overcome their communication problems. Because these organizations are mainly volunteer and receive minimal support from government agencies, most existing solutions are not applicable for them. This article presents a low-cost mobile groupware application, which may be used in emergency situations to overcome the firefighters' communication problems. The tool, named MobileMap, allows exchanging textual and graphical information using mobile devices. Therefore, this solution complements the frequently over-used radio communication systems. This tool was evaluated in a simulated and a real scenario; the obtained results are highly encouraging.

Keywords

Collaboration, Urban areas, Fires, Collaborative work, Mobile communication, Computer science, Government, Collaborative software, Disaster management, Personal digital assistants.