List of acronyms

WASN	Wireless Ad-hoc Sensor Network
TCP	Transmission Control Protocol
HTTP	Hypertext Transfer Protocol
SDK	Software Development Kit
IP	Internet Protocol
API	Application Programming Interface
AVD	Android Virtual Device
RAM	Random Access Memory
GPS	Global Positioning System
GSM	Global System for Mobile Communication

Abstract

Over the last couple of years wireless communication has become of such fundamental importance that a world without it is no longer imaginable for many of us. Beyond the established technologies such as mobile phones and WLAN, new approaches to wireless communication are emerging; one of them are so called ad hoc and sensor networks.

Ad hoc and sensor networks are formed by autonomous nodes communicating via radio without any additional backbone infrastructure. Typically, if two nodes are not within mutual transmission range, they communicate through intermediate nodes relaying their message, that is the communication infrastructure is provided by the devices themselves. In view of the great potential of ad hoc and sensor networks in a variety of application scenarios such as disaster relief, community mesh networks, monitoring and surveillance, or data gathering, it is not surprising that there has recently been a flurry of research activity in the field.

Mobile phones are an underutilized resource for connecting low-power wireless sensor networks (WSN) to the Internet. WSNs typically expend most of their battery power on data transmission. Mobile phones carried by the public could use to collect and send those collected information over to base station via long distance transmission on mobile phone. In this case phone battery power usage will not be a problem since mobile user will always take care of that. As well as when compared to the power consuming by the phone will be far greater than that of mobile sensor and the data transmission.