An Mobile Positioning App Combines Smartphone Short Message Service and GPS

Rung-Shiang Cheng[1] Chih-Chun Yang[1]

[1] Department of Computer and Communication, Kun Shan University,
Tainan 710, Taiwan, ROC
rscheng@mail.ksu.edu.tw, s095002112@g.ksu.edu.tw

Received 22 September 2012; Revised 13 December 20012; Accepted 28 December 2012

Abstract. Recently, mobile computing devices have led to the wide distribution of wireless network. Handheld mobile devices combining wireless multimedia and diverse App with value-added service have created the convenience and personal using experience. This has made App become a driving engine of communication service and changed the cognition of people towards mobile computing and smart life. Location-based service (LBS) enables services to provide smarter user experience, not only orientation recognition, but also positioning services such as PUSH service in aggregated area. Therefore, applications related to positioning are increasing recently. To solve the problem of unable to answer calls for users, this study utilizes Android to develop an Auto SMS reply App which can switch the mobile to vibration or silent mode. When users have fixed schedule or unavailable to answer calls, they can edit message to reply and send this preset message to callers when they can't answer the call, making communication between people easier and diverse.

Keywords: Android；Home Care；Short message service；GPS

Acknowledgement

This research was supported by National Science Council of Taiwan under project number NSC 101-2221-E-168-046.

References

[1] Open Handset Alliance, *http://www.openhandsetalliance.com/*

[2] Android SDK, *http://developer.android.com/sdk/index.html*

[3] Android developers, *http://developer.android.com/index.html*

[4] X. Shu, Z. Du, R. Chen, "Research on Mobile Location Service Design Based on Android," in *Proceedings of WiCom'09*, 2009.

[5] J. Whipple, W. Arensman, M. S. Boler, "A Public Safety Application of GPS-enabled Smartphones and the Android Operating System," in *Proceedings of SMC'09*, 2009.

[6] G. Macario, M. Torchiano, M. Violante, "An In-Vehicle Infotainment Software Architecture Based on Google Android," in *Proceedings of SIES'09*, 2009.

[7] X. Shu, Z. Du and R. Chen, "Research on Mobile Location Service Design Based on Android," in *Proceedings of 5th International Conference on Wireless Communications, Networking and Mobile Computing*, pp. 1-4, 2009.

[8] Sandeep Kumar, Mohammed Abdul Qadeer and Archana Gupta, "Location Based Services using Android (LBSOID)," in *Proceedings of 2009 IEEE International Conference on International Conference on Internet Multimedia Services Architecture and Applications (IMSAA)*, pp. 1-5, 2009.

[9] M. C. Chena, J. L. Chen, T. W. Chang, "Android/OSGi-based vehicular network management system," *Computer Communications*, Vol. 34, pp. 169-183, 2011.

[10] Dashboards, *http://developer.android.com/about/dashboards/index.html*