

A Flexible Data Entry System for the Fieldwork

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In recent years, wireless communication network became available in various places and mobile devices, such as smart phones and tablet PCs, get more and more users who can enjoy embedded digital camera, GPS receiver, microphone, accelerometer and more. These users can easily record information in the form of text memos, pictures and status data, anywhere and anytime. Therefore, the contemporary mobile devices can be used as recording tools in the fieldwork. By these devices, users can input field data efficiently. Once equipped with the mobile devices, the current field researchers do not need to bring such devices as digital cameras, voice recorders, and GPS receivers, which were used by their ancestors.

During the fieldwork, the researchers do not usually change the data items to be collected, because these items are pre-determined. However, there should be cases where researchers would like to change the data items during the fieldwork. In this paper, I develop a mobile data entry prototype system that enables modifying survey items during the fieldwork. In this proposed system, iPad users can define survey items, enter field data, and send the collected data via e-mail to user's PC. The proposed system realizes not only the efficient data collection, but flexible fieldwork, where researches can change the pre-determined data items. Four pairs of research teams, each consisting of two graduate students, carried out simulation work, using the proposed system, and generated their evaluation. I discuss the effectiveness of the proposed system as well as the issues to be revisited, based on the results of the simulation work conducted by the graduate students.