Abstract

The objective of the paper is to propose a context aware mobile service deployment model to deliver the needed information to the farmers in planning their agricultural activities. The application developed based on this model utilizes the GSM networking of mobile devices to bring the details to the farmers using location awareness features. A context aware service deployment model for information retrieval is achieved and the various contexts can be updated in the mobile servers. The information regarding the agriculture like nature of fertile lands, healthy seeds, proportion of fertilizers and pesticides are made available to the farmers that will enable them to take correct decisions in their pre and post harvesting activities. Since the literacy rate of farmers is low in developing countries, a special GSM device is emulated so as to reduce the number of interactions between the farmers and the services through visual buttons only. The emulated GSM based mobile phone with only a few specific buttons for the fundamental information like soil details, healthy seeds, favorable climatic conditions and suitable harvesting period. This information is made available to them at reasonable cost.
without heavily forcing them to interact with the agricultural experts. The model is implemented using J2ME using Eclipse IDE with HTTP server.

Reference


Index Terms

Computer Science

Information Systems

Key words

Location awareness

Agricultural Information System

Context Awareness

Distributed Database

Device Emulation