An android based disease identification system for farmers in Sri Lanka

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Agriculture is one of the major industries in Sri Lankan economy. However, the farmers in Sri Lanka face many problems with respect to information delivery from agricultural experts to rural farmers. There is no proper mechanism to obtain the agricultural information for their farming activities. One of the main issues they faced is lack of available information on identification of diseases/pests and treatments for them. Nowadays, we can see that most of the farmers are using smart phones and also few mobile-based applications are available for some aspects of agriculture, for example, to view and receive market prices and news in agriculture. In this study, we have proposed an android based disease identification system to help farmers as well as Agriculture Instructors (AIs). Through this system, farmers can identify the disease or pest attack in their farm and also suitable control methods and its usage based on the disease/pest. The interfaces of the mobile-based application are designed by considering the user-friendliness of its interfaces. The developed prototype system is validated internally using sample data and also checked the user satisfaction by getting the feedbacks from domain experts. The system was refined based on the feedbacks. This application is now available in English language and we have planned to develop it in Sinhala and Tamil languages in future.

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