

Automatic Plant Watering System Using Arduino

A Capstone Project

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ABSTRACT

Information Technology is beneficial to the people. It can make the work mode easier and faster. Some technology is much reliable to the office works. It manipulates information and can be the data holder to build an information. Today, gathering data into Management Information System is common in any agencies in the government, one is the Department of Agriculture.

The researchers main objective of this study was to monitor information of livestock and poultry. It provided an android application as front-end and a web-based application for the back-end.

The system was developed using XAMP Server, Android Studio, Adobe Dreamweaver and PHP. The waterfall model was utilized in the study which contained requirements analysis, requirement documentation, system design, development and testing, and implementation.

Through this, the surveyor operated the android mobile phone and enter the data from the residents. It displayed all the results being gathered by the surveyor. The information gathered in the android phones were uploaded and saved in the database. They generated reports through an automated quarterly chart and through a comprehensive bar graph. The data from android phone were connected to the server.

Based on the result of the study, the researchers conducted test runs in one of the barangays in Dumingag. They conducted it in Barangay Caridad, where the school is located to ensure that the objectives were met. The system works well, according to its functions. Some people in the barangay including the barangay captain said that the system is very important.