KRISHI MARGADARSHI APP FOR FARMERS USING ANDROID TECHNOLOGY

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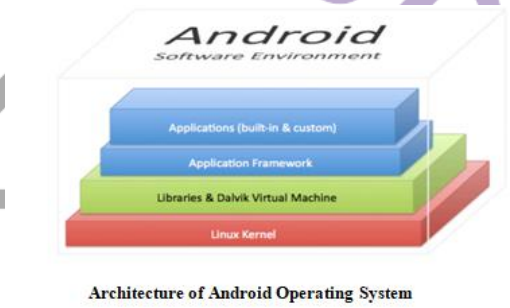
***Abstract*: Agriculture is a backbone of many developing countries; it is a main source of income in many countries even today. There are lots of calamities that affect the agriculture, like weather, rain, soil condition and at last the cost. Since from decades there is a drastic growth in the technology which made advancement in the field of agriculture, But still farmer suffer from the**
Loss due to rates. Aim of this paper is mainly to provide the location based prediction in the rates of many agricultural yields, which helps the farmer to grow the needed crops and make profitable by themselves. This process carried out with the help of Android application and Cloud computing, expected results are computed seems to be approximate.

Introduction:

Many developing countries like India dependent on agriculture as a capital of nations income, Agriculture contributes around 20% of countries profit and around 65% of the total population is employed by this sector. Lot of advancement have been carried out in agriculture sector to improve profit, solve problems of farmers, enhance the productivity, reduce labor power and guide the farmers. Despite the fact that agriculture accounts for as much as a quarter of the Indian economy and employs an estimated 60 percent of the labor force, it is considered highly inefficient, wasteful, and incapable of solving the hunger and malnutrition problems. Despite progress in this area, these problems have continued to frustrate India for decades. It is estimated that as much as one-fifth of the total agricultural output is lost due to inefficiencies in harvesting, transport, and storage of government subsidized crops.



Architecture of Android Operating System

Existing system

Most of the existing application gives information on Agricultural and it is not enough. Some of the Applications are dedicated to the some part or location and restricted to particular location. But there is a absence of mobile application regarding agriculture. Some of applications gives the current rate and it doesn't predict the feature rate. The information regarding soil requirements, climatic condition, manures and fertilizers to be used, seeds quality etc. is available through lot of websites. Farmers are not receiving expected amount of yield. The amount obtained from the crops is not sufficient, loan burden and mediators misguidance. All these reasons are forcing Farmers to kill themselves. unhealthy portion of the plant will be treated without disturbing the healthy portion.

Proposed system

The main motto of the proposed application is to help the farmers By providing information related to agricultural products and predict the future rate of the agriculture product and helps farmer from loss of rate. The proposed application tries to solve most of the problem of farmers by providing related information on the agricultural and horticultural products. The information will be on seeds, soil requirement, climatic requirement, irrigation, sowing, harvesting, yield and market value of the crops for that year. Another important feature of the proposed project is, it allows buyers and farmers to communicate with each other regarding selling and buying agricultural or horticultural products.

Providing information to formers

Language specification

The operating system which is used to develop smart phones and tablets is Android. For executing Java byte code Android uses Dalvik Virtual Machine (DVM). Android is a Linux Kernel based.

Web Service

A Web service is software which can connect any device that is active in the internet to another and establish communication between them. It uses HTTP as common communication protocol. Web service is required to establish communication between Android device and Shop's database to exchange information.

RESTful

REST is called as Representational State Transfer protocol, which is a lightweight Process. It is a set of guidelines for creating web services. REST has following architectural properties-

- Client-server
- Stateless
- Manipulation of the resources
- Self-descriptive messages
- Resource identification.

SOAP

SOAP is a protocol, which act as a bridge between the running application on different operating system, with other programming languages and technologies.

Advantages:

I. The main advantage is our proposed application predict future rate of agriculture product by analyzing previous year data like rate and climate.
II. Main advantage is that there is no action of Mediator.
III. The Farmers will get the information on cultivation of crops.
IV. The information will be on soil requirement, climatic requirement, fertilizer and pesticides, sowing details, irrigation information
V. The information will be on agriculture (Food Grains and Vegetables).

Conclusion: The proposed paper always helps the farmers from the losses and maximizes the profit. At present many researches going on different type of agriculture technology scope. According to this paper the agriculture will become more precise and sophisticated by using application technology. Due to practical difficulties the proposed application of is not fulfilled the expected results. As the technology evolution takes place the farming technology will touches high level of implementation with 100% desired results.

References

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