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E-Farming an Interface for Indian Farming

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Abstract - ***Today the mobile phone is used and in that most are the smart phones. Android is the mobile operating system used in smart phone, most of android applications are freely available for user. The use of smart phone is increase in every sector. So in this we use Horticulture concept and Android is used for a Farmer Helping Service system that will provide the detail information of fruits, vegetables to the farmers. And this information will also provide information in audio form also. This system can provide information using android smart phone from anywhere and anytime without using internet and at free of cost. It is very useful to Maharashtra Farmer because they will get information in Marathi Language just by typing number from the mobile keypad. An illiterate person can also easily operate the system.***

Keywords: *Android, Horticulture, Marathi Language, Smart phones.*

1. INTRODUCTION

Some problems are identified after completing incentive study of this topic.

1. Various website provides Horticulture information related to fruit, flowers and vegetables. But all the information is in English Language and in Text form. That why Maharashtra illiterate farmers are not able to take advantage of these services.

2. If some literate farmer want to access website, but then a laptop or personal computer is mandatory.

3. Using mobile phone, some farmer can access website, but then also constant internet services is required.

4. IFFCO kisan Sanchar Limited (IKSL) and Routers Marker Light (RML) are agency are present that provide agriculture information via SMS and Call. But they take money for the usage of their services and also don't work where mobile tower is not available.

So this application is more beneficial for farmer our application solution for all problems which is in problem statement. This application also gives additional features like Government Notification, Bank notification about loan but for notification network is must for user.

1.1 Existing System

There is no as such an existing system which uses the previous data from farmer under certain criteria and tries to analyze the previous history, so based on that it work. E-mandi is one application which under banner of Indian Government it showing up the rates of crops all over and giving an idea about rate of crops to all farmer using that application.

1.2 Proposed System

We are going to develop e-farming application that fulfill all needs of the farmer and give the solution. We have multiple sections like login for farmer/people to use it on their own way. As per requirement of our application who will using the application via mobile phone i.e. an android phone .Next section there is web panel from this the government agency and bank committee will login and feed up their important data and information. In this application we also included another one feature Weather Forecasting which help to farmer to take prediction and get fruitful result and work according to weather. Our main goal is to help the farmer which is in trouble and give him to user friendly application.

2. SYSTEM DESIGN

In this system we implement some modules for Farmer

2.1 Modules

1. Farmers Registration & Login:
Every farmer has to register into this application and use the same credentials for login. Once they login they get an option of different features to use inside the mobile application as well as through web

2. Farmers Loan Panel:
Farmer login has a different set of features in it, they can view the complete loan details from start to end the complete description and calculation as what to pay and how much is been paid, pending dues and deadline etc.

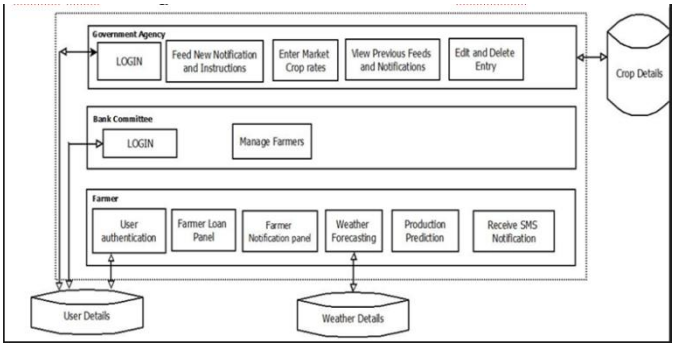

Fig -1: System Architecture

3. Weather Forecasting & Crop rates
Using the api and plugins which are available, we can work on showing weather information and crop rates details at different areas and cities.

4. Production Prediction
This is one of the important module where it does the prediction based on certain criteria like weather condition, soil and crops to grow so based on these histories system will analyze weather it can be fruitful for the farmers to go ahead with same structure or not. So there will be an option for all farmers to feed in their own experience about past so that system uses those values and information and work on it to suggest for future prediction.

5.Goverment bodies Login
They will have a different login credential to login into the application. Once they login into it through a web panel there are option to feed in the new notification and instruction which gets the list of farmers whose EMI to be given next in recent days.

3. SYSTEM REQUIREMENT SPECIFICATION

3.1 Hardware Requirement

a] Process : Pentium IV
b]Hard Disk : 40GB
c]Monitor : 15VGA Color
d]RAM : 512 Mb.

3.2 Software Requirement

a] Operating system : Windows
b] Front-End : PHP, Android
c] Back-End : MySQL
d] Programming Language : Java, .Net

4. ADVANTAGES

1) Shows the various rates of crops to farmer at instance so that they can sell their products at high marginal rates.
2)It can help them with a future prediction of crops to be grown.

6. APPLICATION

In Smart phones.

7. CONCLUSION

An interface e-farming to accessing the agricultural information from the global repository of internet and the local repository has been proposed in this paper. The proposed interface is able to overcome the digital and language confinement of the Indian farmers by employing the multiple modes of interaction techniques. The empirical evaluation through large diversified users reveals that the e-farming interface adequately caters the need of the user. It also be concluded that the proposed interface is very much usable, applicable in the desired context. At the current stage the e-farming interface is limited to access the agricultural information in the context of Indian languages. However, it can be extended toward the agricultural context of any country in the world, which proves that the approach is generic.

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