“ANDROID BASED APP TO PREVENT CROP DISEASES IN VARIOUS SEASONS”

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Abstract – Our paper is based on android app system. The system shown in paper is basically used to save farmers money and save time. In this project we are developing a android application for agriculture. Here we are giving the information of short duration of crops in different seasons. Where, when and which fertilizers, pesticides and herbicides are used to save various crops from various diseases.

Key Words: App.

1. INTRODUCTION

To maintain a continuous growth in Agricultural system of India, we are going to develop an Android Application for crops which are used in various seasons. Now a day’s climates are varying rapidly so that various diseases are increasing. Due to increasing number of diseases farmers getting more loss in such types of short duration crops.

To avoid such diseases there are no information source to get all information on single phone. So we are going to make one Android App for such farmers who using the smart phones. Now a day’s number of people using the smart phone with Android Operating System. Android Operating System is one of the most popular and most used Operating System.

In this Project Android based app to prevent crop diseases in various seasons. We are designed the number of crops information and also which crop will be selected in the various seasons and which are the diseases will be on this crop. Also Given the information about what type of fertilizers and herbicides are used to save various crops from various diseases.

To make farmers secure by giving them proper information regarding seasonal diseases and to increase the productivity of short duration crops, we are designing this Android application.

2. Android App system

In computer programming, Eclipse is an integrated development environment (IDE). It contains a base workspace and an extensible plug in system for customizing the environment. Eclipse is written mostly in Java and its primary use is for developing Java applications, but it may also be used to develop applications in other programming languages through the use of plugging, including: Ada, ABAP, C, C++, COBOL, Fortran, Haskell, JavaScript, Julia, Lasso, Lua, NATURAL, Perl, PHP, Prolog, Python, R, Ruby (including Ruby on Rails framework), Scala, Clojure, Groovy, Scheme, and Erlanger. It can also be used to develop packages for the software Mathematical. Development environments include the Eclipse Java development tools (JDT) for Java and Scala, Eclipse CDT for C/C++ and Eclipse PDT for PHP, among others.

Figure 1: Eclipse software symbol

3. Architecture:-

Android operating system is a stack of software component which is roughly divided into five sections and...
four main layers as shown in below in the architecture diagram.

![Architecture Diagram](image)

**Linux Kernel:**

At the bottom of the layer is Linux – Linux 2.6 with approximately 115 patches. This provides basic system functionality like process management, memory management, device management like camera, keypad, display etc.

**Libraries:**

On top of Linux Kernel there is a set of libraries including One – Source Web browser engine WebKit, well known libraries libc, SQLite database which is useful repository Storage and sharing application data, libraries to play and record audio and video, SSL libraries responsible for internet security etc.

**Application Framework:**

The Application Framework layer provides many higher – level services application in from of the java classes.

**Application:**

You will find all android application at top layer. You will write your application to be installed on this layer only.

4. System concept

The proposed framework for Indian farmers is to assist them in their agricultural needs. The proposed system helps farmers in all manners, that is, in education, weather forecasting, crop analysis and understanding it more clearly.

**Level 1:** Design basic block diagram of project.

**Level 2:** Creating data base of no of crops.

**Level 3:** Design Application on Eclipse Software.

**Level 4:** Demonstration on Android supported phone.

![Block Diagram](image)

4.1 Description of block diagram:

In the block diagram the first page will be the title of the project will given and when farmer will be the use the Smartphone for the crop information this will be the first page on the mobile display.

When this page will be open user touches the mobile display there will be the list of the crops will be given. Then user will be select anyone crop of them and also select the period for that crop.

When the user will be selecting crop and period of that crop on next page there will be given the information of how to plant this crop and which diseases will be occurring on that crop.

On next page there will be the given the information how to protect from this crop and which pesticides and herbicides will be used for that crop.
4.2 System Architecture of present idea

![Flowchart of present idea](image)

**Figure 4.** Flowchart of present idea

4.3 System Architecture of future scope

![Flowchart of future scope](image)

**Figure 5.** Flowchart of future scope

5. Desired output

![Desired Output](image)

**Figure 6.** Desired Output

6. CONCLUSIONS

The availability of agricultural information directly in a farmer’s hand without him being dependent on neighbors or zamindars or even waiting for a SMS response from the mKisan portal like schemes, will enable the farmers to take better decisions in short time. This will not only foster greater productivity but will improve a farmer’s life reducing stress and also instilling zeal to learn new technology which is essential in this era of Digital Revolution. Some other areas of agriculture whose information is frequently required by farmers are about seeds and fertilizers, the loan schemes, etc.

The application currently is offered in 1 Indian regional language (Marathi) but agricultural data from web services is only in English. In future it should be in more regional languages.
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