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Android-Based Innovative Agriculture Using java

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Abstract
Farmers have many problems; they will cultivate crops and other agricultural products in their fields. They want to sell their products at market price but because they do not know, they will sell their huge quantity of products to locally available brokers and customers will contact the brokers directly as this will result in loss of customers. A lot of money, they are being cheated, the farmers know that they are selling the products to the brokers for a small amount of money, but since the farmers are not aware, we decided to make an application which will allow them to sell their produce directly to the Farnon-broker customers. Consumers can contact farmers directly, farmers can sell their produce directly to consumers for retail or wholesale sale depending on the number of their products, this application is needed to know all these problems and to inform the farmers. The choice to create an environment that allows any type of farmer to buy or sell their agricultural produce
Keyword*: Android, Mobile Application, Mobile Computing, Smartphone, Google Web Services, Database.*

I. Introduction

As we move into the modern age of technology, we may find many applications related to engineering to be very beneficial for the betterment of society. This is the world of technology where people use smartphones to accomplish their daily tasks like shopping, paying bills, managing work, and much more. The idea of this project is to incorporate its features into people's lives so that the food they buy can be purchased directly from the farm so that the profits can reach the farmers directly. Because in India we follow the supply chain of agricultural products which becomes very indirect for the farmers which keeps the farmers poor and the middlemen get profit which eventually makes them rich. So we can use this application to break the supply chain of indirect sales so that the farmer can be directly connected to the customer and sell accordingly. Since the farmer will deal directly with the customer, the prices of the products offered by the farmer to the customer will be affordable to the customer, which will help both the farmer and the consumer. Some can save money and the farmer will get the extra profit he deserves. Agriculture is the main occupation of a large part of the Indian population. 60-70% of the Indian population is dependent on agriculture for their livelihood.

The main task for farmers is to obtain information and manage the quantity of data and the complexity of the process of inaccurate farming. Crop life cycle details, seeds, crop selection, crop processing, weather, pesticides, fertilizers, etc. Data for agriculture are available from many sources like newsletters, print media, audio and mobile, TV, internet, visual aids. Etc. But the structure and format of the data are different. Therefore, it is extremely difficult for farmers to get accurate information and know the various information distributed from different sources. Sometimes translating data from one format to another requires several manual steps to transfer the data. Increasing crop production is followed by a direct growth in the Indian economy and vice versa. To modernize the lives of farmers, farmers need to be provided with excellent technical solutions. Many techniques and methods are being developed to support agricultural routine activities. In the field of agriculture, mobile apps can be the best option to boost agricultural production in the country. Due to a lack of knowledge, new inventions in agricultural technology do not reach the farmers easily. They do not know the source from which they can get valuable information. Therefore, no farmer fails to get the potential production rate. Therefore, it is necessary to develop a user-friendly system from which the required information will be available to the farmers. Smartphone technology is creating many new opportunities for farmers. Farmers are easily able to access various agricultural applications on their smartphones, which are becoming more and more important in times of financial crisis that they did not have before.

II. LITERATURESURVEY

1. Paper Name: Krishi Ville – Android-based Solution for Indian Agriculture
   This paper describes a mobile-based application for farmers which would help them in their farming activities. We propose an android based mobile application – Krishi Ville which would take care of the updates of the different agricultural commodities, weather forecast updates, agricultural news updates. The application has been designed considering Indian farming.

2. Paper Name:

The safety of girls could be a concern of accelerating urgency in the Republic of India and different countries. The first issue within the handling of those cases by the police lies in constraints preventing them from responding quickly to calls of distress. These constraints embrace not knowing the situation of the crime, and not knowing the crime is happening at all: at the victim's finish, reaching the police assuredly and discreetly could be a challenge.

To assist with the removal of those constraints, this paper introduces a mobile application known as WoSApp (Women's Safety App) that gives ladies a reliable thanks forplacing associate emergency decisions to the police. The user will simply and discreetly trigger the vocation perform by shaking her phone, or by expressly interacting with the computer program of the applying via an easy press of a push on the screen. A message containing the geographical location of the user, additionally as contact details of a pre-selected list of emergency contacts, is straight away sent to the police. This paper describes the application, its development, and its technical implementation.

3. Paper Name: Women's safety app in the mobile application.

The usage of sensible phones equipped with GPS navigation unitshasbeen hyperbolic speedily from three-D to over two hundredths within the past 5 years. Hence, a wise phone may be used with efficiency for private safety or numerous alternative protection functions, particularly for ladies. This paper presents Saver, a private safety application developed for sensible phones of the golem platform. This app may be activated with one click once the user feels she is at risk.This application communique the user's location to the Regis-´ tired contacts for every few seconds within the style of message. Thus, it acts as sort of a lookout following behind the person until the user feels she is safe. The key options of this application area unit alongside the user's location, one among the registered contacts gets a decision. Also, the registered contacts and GPS location area unit are saved from time to time in exceeding information.

4. Paper Name: Applications of Smartphone-Based Sensors in Agriculture: A Systematic Review of Research

Smartphones have become a useful tool in agriculture because their mobility matches the nature of agriculture, the price of the device is highly accessible and their computing power allows them to create a wide variety of practical applications. Moreover, nowadays smartphones are equipped with a wide variety of physical sensors which make them a promising tool to assist in various farming activities.This paper systematically reviews the smartphone applications mentioned in the research literature that use smartphone built-in sensors to provide agricultural solutions. The initial 1,500 articles identified by the database search were screened based on exclusion criteria and then reviewed throughout the text, resulting in 22 articles being included in the review.Applications are classified according to their agricultural functions. The reviewed articles describe 12 agricultural applications, 6 agricultural management applications, 3 information systems applications, and 4 extension service applications. GPS and cameras are the most popular sensors used in reviewed papers.

III. Procedure methodology

The main objective of this project is to create an Android application that will help Indian rural farmers to sell their products in different city markets. This is a computerized approach to good and clear marketing. Farmers will get a unique interface where they can get for themselves everything that farmers cannot take advantage of. Therefore, he does not get maximum profit from the current system.

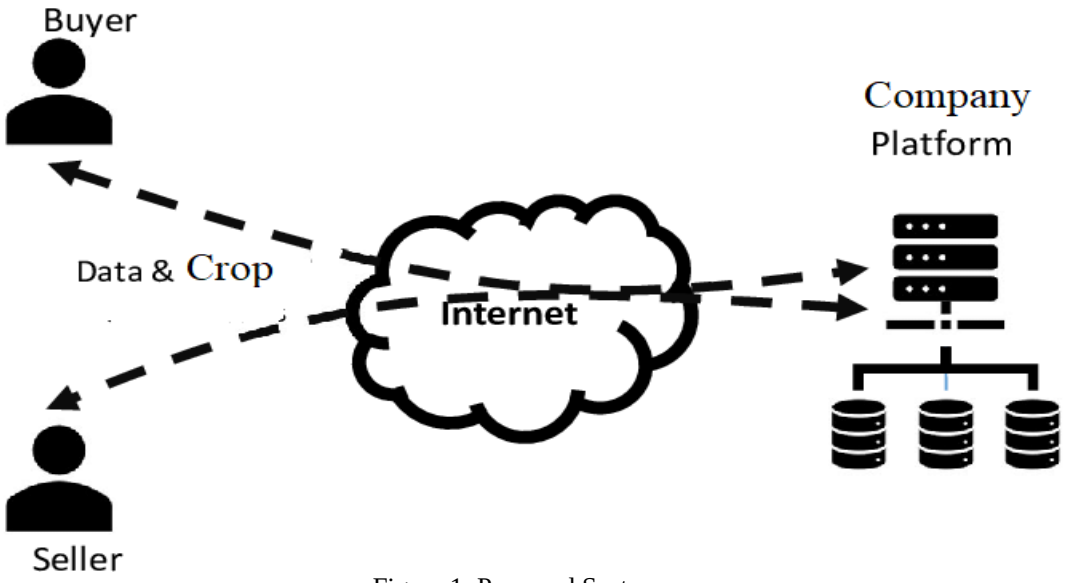

Figure 1: Proposed System

It is NP-Complete-A class is assigned to NP (non-deterministic polynomial-time) class if it is solvable in polynomial time by a non-deterministic Turing machine.

Attributes

- Reliability: Reliable systemin every context.
- Availability: The system is freely available for users. Every farmer uses this system.
- Portability: The system is portable and can be installed on any android smartphone.
- Performance: The application performs faster under 4 GB of RAM. However, to run the application is 1GB is the basic requirement.
- Security: The system is more secure than the other environment because the system is developed by java.
- User Friendly: Hole system is simple and friendly to the user.
- Robustness: System robust when internet connection speed is high

IV. **Result/Discussion**

In this, we have used some simple database and mic options to record the details of farmers' products. To make this application more user-friendly, we've added additional features to the system, including phone call options, login, and regional languages. The products have a good relationship with the farmers, save their money and make a profit and help the farmers to get their proper profit.

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