

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 Farmer-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

Keywords: Android, Mobile Application, Mobile Computing, Smartphone, Google Web Services, Database.

INTRODUCTION

As we may find many applications related to engineering which is beneficial for the betterment of society. In the technology world where people use smartphones to accomplish their daily tasks like shopping, bill payment more etc.

The idea behind this project is to incorporate the features into people's lives so they buy the food directly from the farm so that the farmer gets profits directly. In India we follow a supply chain of agricultural products which becomes indirect for the retaining farmer. 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 according

to customer and sell. Since the farmer will deal directly with the consumer, the prices of the products supplied by the farmer to the consumer will be affordable to the consumer, which will benefit both the farmer and the consumer. Some can save money and the farmer will get the extra profit he deserves.

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.

OBJECTIVE

The main objective of the project is to connect farmers and customers across the country so that they can get together and will be beneficial for both ends. The objectives of the project are:

Connecting farmer to the Customer via the application. Providing knowledge to the farmers by means of government schemes available.

Providing seed information and product information to farmer Providing helpline number

Providing transport facility for the customer who bought a product from the

farmer. Phone call option for Farmer and broker.

Crop details entered by the farmers are stored in the database. Providing crop of list to user for sell and farmers contact details.

Broker can add product details in bulk quality.

All details like Brokers list, Crop list for sell, Broker contact, Farmer contact gets store in company account.

PROPOSED SYSTEM

- An Android application that helps Indian rural farmers sell their produce in different city markets. This is a computerized approach to good and clear marketing. Farmers will get a unique interface where they can get everything that farmers cannot take advantages

of. Therefore, he does not get maximum profit from the current system.

METHODOLOGY

The main goal of this project is to create application which is android that will help Indian rural farmers to sell their products in different urban 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.

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

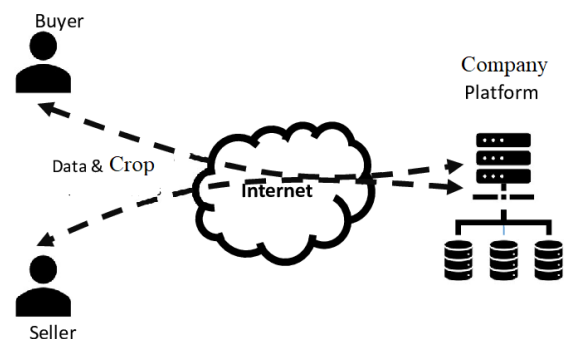


Fig-Proposed System

Attributes

- Reliability: Reliable system in 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

APPLICATIONS

- The main application of this project is designing a android application which help to farmers for sell the product directly without intermediate.
- Using this system farmer directly sell their product and do not take any person as intermediate that's why farmer get more profit.
- Providing knowledge to the farmer by means government scheme available.

LITERATURE SURVEY

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: Women's safety app in the mobile application.

The usage of sensible phones equipped with GPS navigation units has been 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 communicate the user's location to the Registered 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.

3. 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.

ADVANTAGES:

1. Time complexity is very low.
2. System is user friendly
3. Providing helpline number
4. Phone call option for farmer and broker.

MATHEMATICAL MODELLING:

- Let S be the system and it consist of following:
- $S = \{I, P, O\}$
- where,
- I= Input,P= Process,O= Output
- $O = \{01, 02, \dots, On\}$
- $Su = \text{Success cases}$
- Emergency helpline number where farmer or broker can contact.
- Providing transport facility for the customer who bought a product. from the farmer.
- Providing seed information and product information to farmer.
- $Fc = \text{Failure Condition Fail to call emergency helpline number and fails to add or buy product.}$
- Problem is solvable, it is NP-Complete.

CONCLUSION

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.

REFERENCES

[1] <https://www.google.com/amp/s/yourstory.com/>

mystory/the-use-of-mobile apps-in-the-field-of-agriculturez9xc57jhai/amp

[2] Surabhi Mittal, Gaurav Tripathi, "Role of Mobile Phone Technology in Improving Small Farm Productivity", *Agricultural Economics Research Review*, Vol. 22 pp 451-459,

[3] Pranav Shriram, Sunil Mhamane, *Android App to Connect Farmers to Retailers and Food Processing Industry*".

[4] Anupam Barh, Maruthamuthu Balakrishnan, *Smart phone applications: Role in agri-information dissemination*".

[5] Shitala Prasad¹, Sateesh K. Peddoju² and Debashis Ghosh³, "Agro Mobile: A Cloud-Based Framework for Agriculturists on Mobile Platform" *International Journal of Advanced Science and Technology* Vol.59, (2013), pp.41-52

[6] M. V. Bueno-Delgado, J. M. Molina-Martinez, R. Correoso Campillo, P. Pavón Mariño "Ecofert: An Android application for the optimization of fertilizer cost in fertigation" *Computers and Electronics in Agriculture* www.elsevier.com/locate/compag