

Review Paper on an Android Application for Farmers to Solution of their Problems and for Selling Products

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Abstract: *The Virtual Fruits Market app provides a platform for Indian farmers to directly connect with end users and supply their produce with a fair and consistent price. This will ensure that farmers receive a better profit for their produce, while end users can benefit from lower prices and higher quality products from the farmers themselves. Additionally, the app also provides access to experts to provide solutions to the farmers, thus allowing them to make better informed decisions and maximize their profits. The app also ensures that the solutions provided are unique and of the highest quality. The Virtual Fruits Market app is therefore a beneficial tool that provides a win-win situation for both farmers and end users.*

Keywords: Android application, Android platform, Virtual Fruits Market app, Quality products, Expert access.

I. INTRODUCTION

The agriculture sector is one of the most crucial sectors in India, and it is no secret that farmers have long been grappling with issues such as inconsistent pricing and a lack of direct access to end-users. However, the Virtual Fruits Market app has emerged as a game-changer for farmers and end-users alike. This innovative platform provides a direct connection between farmers and end-users, ensuring that farmers receive fair and consistent pricing for their produce while end-users benefit from high-quality products at lower prices. Moreover, the app also provides access to expert solutions for farmers, enabling them to make informed decisions and maximize their profits. With its unique and high-quality solutions, the Virtual Fruits Market app is a valuable tool that creates a mutually beneficial scenario for all parties involved. Overall, The Virtual Fruits Market app is a revolutionary tool that has the potential to transform the Indian agriculture sector. By facilitating direct connections between farmers and end-users, providing fair and consistent pricing, and expert solutions, the app empowers farmers and promotes sustainable agriculture practices

II. LITERATURE SURVEY

Android application for farmers to solution of their problems and for selling products: [1] As mobile devices are supporting more and more of our daily activities, it is vital to widen their battery up-time as much as possible. As per a report by the Wall Street Journal, it has been found that nearly 90% of smartphone users experience anxiety related to low battery levels. Our objective is to comprehend the impact of Android usage patterns, app selection, operating system versions, hardware specifications, and user behavior on the longevity of battery life.,Hugo Matalonga,Bruno Cabral, Fernando Castor, Marco Couto Rui Pereir Simao Melo de Sousa and Joao Paulo Fernandes [2]Monitoring And Controlling Smart Hidroponics Using Android and Web Application, Hydroponics is the shifting the focus towards meeting the nutritional requirements of plants, farmers can now use water as a medium to grow crops, bypassing the need for soil.

Nutrition and water play an important role for hydroponic plants. This hydroponic system has the advantage that it can be used to overcome the problem of an increasingly narrow land shortage. The most important thing in A hydroponic planting system involves closely monitoring the nutrient levels and pH content of the water to meet the plant's specific requirements. It is critical to maintain these levels to ensure optimal growth, Ivan Sheva, Muhammad

Firdaus [3] Integrated Framework for Farmer Centric Agriculture Applications Using IoT Architectures, IOT Knowledge bases of new technological trends in agriculture can help farmers in real time to increase the productivity of whole chain of agriculture processes. It is possible to enhance the efficiency of the agriculture industry through the use of evolving technologies such as IoT. By linking farmers, knowledge bases, experts, sensors, actuators, markets, and other factors, timely suggestions and automation can be achieved in specific areas of agriculture, J.S.Sunil, R.Charitha, P.Kalpana, Dr.Raja Vara Prasad [4] Digital Market : E-Commerce Application For Farmers, The concept of a digital market pertains to a specialized platform that aims to connect farmers, merchants/markets, government entities, and end-users, serving as a bridge to overcome the existing gap between them. This approach will not only keep farmers in the loop with the latest market trends but also enable broader awareness of the dynamic market conditions. Farmers face numerous challenges, one of which involves the difficulty of earning a profitable return on their investment of time and resources. There exist different reasons like sea-son limitation, crop life due to which farmer get very limited amount of time to stud the market conditions. To ensure that farmers receive fair prices for their crops and products, it is essential to conduct a thorough study of the current market trends in the agriculture sector. However, this can be a time- consuming and challenging process, especially for farmers who have limited time and resources. Traditionally, farmers have had limited access to potential buyers, which has restricted their options for selling their products. To overcome these challenges, it is important to introduce new marketing methods that enable farmers to sell their crops and products at every stage of the marketing chain. This includes selling to merchants, markets, and even directly to end-users, providing farmers with multiple options to choose from. By embracing these new marketing strategies, farmers can improve their access to potential buyers and secure better prices for their crops and products., Mrs. Manisha Bhende, Ms. Mohini S. Avatade ,Mrs. Suvarna Patil,Mrs.Pooja Mishra ,Ms. Pooja Prasad , Mr. Shubham Shewalkar [5]KrishiAI - An IoT and Machine Learning based Mobile Application for Farmers, Determining which crop is to be grown; whenthe soil needs more waterand fertilizers; and if the crop is infected by pests are well understood with the help of IoT sensors and the use of Machine Learning models, Sanika Vikas Chavan,Devashish Manoj Gopalani ,Raghav Rajendra.

III. PROBLEM STATEMENT OF SYSTEM

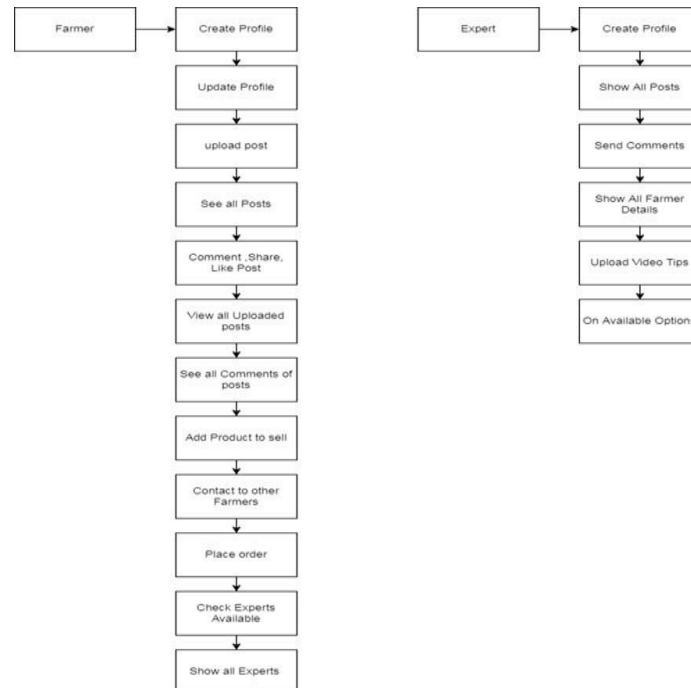
The problem the Virtual Fruits Market app aims to address is the lack of a direct and fair connection between Indian farmers and end users, leading to low profits for farmers and high prices for end users. The app aims to provide a platform for farmers to directly connect with end users, receive fair and consistent prices for their produce, and access expert solutions to maximize their profits. The goal is to create a win-win situation for both farmers and end users and improve the overall quality and affordability of produce in the market. Furthermore, the app promotes transparency in the supply chain by providing end users with information about the source and quality of the produce they are purchasing. This enhances trust between farmers and end users, leading to increased sales and profits for farmers, and affordable, high-quality produce for end users.

IV. IMPLEMENTATION DETAILS OF MODULE

The proposed system contains following:

4.1 Pre-processing

Research about the project may have involved conducting research into the current state of the fruit market in India, the challenges faced by farmers, and the needs of end users. The project team may have created a detailed plan outlining the app's features, functionality, and user interface. The app's design may have been created, including the user interface and user experience (UI/UX) design. Select appropriate programming languages and software tools



4.2 Building the KNN Model

Virtual Fruits Market app, a KNN model could potentially be used for predicting prices or demand for certain fruits based on historical data. However, this would require collecting and preprocessing relevant data, defining the specific problem statement, and selecting appropriate features to train the model. Similarly, the KNN model can be used to make recommendations to farmers on which fruits to grow based on end users' preferences and historical purchase data. This could involve training the model on a dataset that includes information on end users' preferences, such as the most commonly purchased fruits, and using this data to make predictions on which fruits will be in demand in the future.

4.3 Working

Virtual Fruits Market app works by providing a platform for Indian farmers to directly connect with end users. This allows farmers to sell their produce at a fair and consistent price, ensuring that they receive a better profit for their products. At the same time, end-users can benefit from lower prices and higher quality products by purchasing directly from the farmers themselves. In addition to the marketplace platform, the app also provides access to experts who can provide solutions to the farmers, allowing them to make better informed decisions and maximize their profits. These solutions are unique and of the highest quality, ensuring that farmers are provided with the best possible support.

V. CONCLUSION

In conclusion, the Virtual Fruits Market app offers a solution to the long-standing problem of a lack of a direct and fair connection between Indian farmers and end users. In conclusion, the Virtual Fruits Market app, with its innovative use of the KNN algorithm, offers a solution to the long-standing problem of a lack of a direct and fair connection between Indian farmers and end users. The app provides farmers with a direct platform to connect with end users, receive fair prices for their produce, and access expert solutions to maximize their profits. The use of KNN algorithm promotes transparency in the supply chain, enabling end users to make informed decisions about the quality of the produce they are purchasing. This app promotes trust, sustainability, and mutual benefits for both farmers and end users

REFERENCES

- [1]. T. W. Hutabarat, "Mirisnya Menjadi Negara Pengimpor," Juli 2012. [Online]. Available: <http://blogberbagi.blogspot.com/2012/07/indonesia-negaraagraris-omdo.html>. [Accessed 7 Januari 2017].

- [2]. Direktorat Pangan dan Pertanian, "Studi Pendahuluan Rencana Pembangunan Jangka Menengah Nasional Bidang Pangan dan Pertanian 2015 - 2016," Direktorat Pangan dan Pertanian Kementerian Perencanaan Pembangunan Nasional, Jakarta, 2013.
- [3]. G. Wen, F. Zetian, L. Daoliang, Y. Longyong, X. Jian and Z. Xiashuan, "AgriInfo: an Agricultural Information System Based on a Call Center in China," *New Zealand Journal of Agricultural Research*, pp. 797-806, 2007.
- [4]. H. B. Santoso, C. Malvin and R. Delima, "Pengembangan Sistem Informasi Pendataan Petani dan Kelompok Tani," in *Seminar Nasional Sistem Informasi Indonesia*, Sanur, 2017.
- [5]. R. Delima, H. B. Santoso and J. Purwadi, "Development of Dutatani Website Using Rapid Application Development," *International Journal of Information Technology and Electrical Engineering*, vol. 1, no. 2, pp. 36- 44, 2017.
- [6]. R. Delima, F. Galih and A. Wibowo, "Development of Crop and Farmer Activity Information System," *Researchers World*, vol. VIII, no. 4, pp. 180 - 189, October 2017.