FARMER'S APP

Ms. ILFA FIDA.AP

Ms. NAHEEDA.M

Ms. NAJIYA NAZRIN.P

Ms. RIYANA.N

Mr. RAHIB B.

P.G. Department of Computer Science, KAHM Unity Women's College

Manjeri, Malappuram District, Kerala, India

ABSTRACT

Farmers are the backbone of any country, in fact, the main proportion of the Economy is covered by the farming sector. There are varieties of farming apart from customary farming people now peregrinate to poultry farming, cattle farming, bee farming, etc.

As time changes and the population increases expeditiously, the farming business is also growing at a pace, as people are becoming more health-conscious therefore eating more healthy food. Recently dairy products are in huge demand not even in pizza and burgers of the market but also for the personal diet regime of the people they are demanding more and more dairy products which include cheese, butter, etc. Also People are tend to eat more chemical free and fresh foods like vegetables and meat. But many of the food items that have been selling for years in our markets are not healthy and fresh at all. The main reason behind this is in order to get profit from their business retailers are often spray chemical in food which is really bad for our health. If we introduced this system, it can be useful to users in a way that they can eat fresh and chemical free food. This system predict that which crop is best for their land based on the features. Also, it may encourage young people towards farming if they make enough profit from their farming.

1 INTRODUCTION

Farming is the Prime Occupation in India in spite of this, today the people involved in farming belongs to the lower class and is in deep poverty. The Advanced techniques and the Automated machines which are leading the world to new heights, is been lagging when it is concerned to Farming, either the lack of awareness of the advanced facilities or the unavailability leads to the poverty in Farming. Even after all the hard work and the production done by the farmers, in today's market the farmers are cheated by the Agents, leading to the poverty. Agro- marketing

ISBN Number : 978-93-340-1632-1

would make all the things automatic which make easier serving as a best solution to all the problems.

E-farming will serve as a way for the farmers to sell their products across the country just with some basic knowledge about how to use the website. The site will guide the farmers in all the aspects, the current market rate of different products, the total sale and the earned profit for the sold products, access to the new farming techniques through e- learning and centralized approach to view different government's agriculture schemes including the compensation schemes for farming. Getting availed to the required information related to the markets and different products can be made possible through the SMS facility provided by the system.

2. SYSTEM STUDY AND ANALYSIS

2.1. Preliminary Investigation

System study is done in order to understand the problem and emphasize what is needed from system. The information requirements of the user for their competitive world requires such a system. The various techniques used in this phase are Observations, Interviews and Discussion. A complete understanding of software requirements is essential to the success of a software development effort. System Analysis refers to an orderly structured process for identifying and solving problems using computer.

It is the most essential part of the project development. It is the process of the gathering and interpreting facts, diagnosing problems and using the information to recommend improvements to the system. Training, experience and common sense are required for the collection of the information needed to do the analysis.

2.2. Existing System

In the current scenario, Farmer harvest his crops and sell it to a retailer and retailer increases the price of the product. Farmer only get small amount of profit from his product sometimes the profit will be none. And from increasing the productivity farmer tends to use more fertilizer and pesticides it may cause fertility loss in soil in long term. And there may not enough knowledge for farmers in this. By this system farmer can decide that which crop give more profit and productivity from their land.

2.3. Proposed System

By this system we can solve most of the problem that we face in existing system. User can directly purchase products from farmer. Farmers can interact with agricultural officer in any case of doubts in use of fertilizer and pesticides. Farmers can view if they are eligible for subsidy and other supports from government.

Advantages of Proposed System

Access to information: A farmer's app can provide farmers with information on weather patterns, crop diseases, pest management, soil health, market prices, and other important information that can help them make informed decisions about their farming practices.

Increased productivity: By providing farmers with access to real-time information, a farmer's app can help them optimize their crop yields and increase their productivity. This can help farmers grow more crops in less time and with fewer resources, leading to increased profits.

Improved communication: A farmer's app can provide a platform for farmers to communicate with each other, as well as with agricultural experts and government officials. This can help farmers share information, collaborate on projects, and access support and resources more easily.

Cost savings: A farmer's app can help farmers save money by providing them with information on cost-effective farming practices, as well as by helping them access government subsidies, loans, and other financial support.

Sustainability: A farmer's app can promote sustainable farming practices by providing farmers with information on organic farming, water conservation, and other environmentally friendly practices. This can help farmers reduce their impact on the environment and preserve natural resources for future generations

3. FEASIBILITY STUDY

A feasibility study is a preliminary study undertaken to determine and document a project's viability. The results of this study are used to make a decision whether to proceed with the project. If it indeed leads to a project being approved, it will, before the real work of the proposed project starts, be used to ascertain the likelihood of the project's success. It is an analysis of possible alternative solutions to a problem and a recommendation on the best alternative. It, for example, can decide whether an order processing be carried out by a new system more efficiently than the previous one. The feasibility study proposes one or more conceptual solutions to the problem set for the project. The conceptual solution gives an idea of what the new system will look like. They define what will be done on the computer and what will remain manual. It also indicates what input will be needed by the system and what outputs will be produced. These solutions should be proven feasible and a preferred solution is accepted.

The feasibility study environment enables all alternatives to be discussed and evaluated. This phase starts with an identification of the main characteristics of the required system. During this stage it is important to collect information as much as possible about the software package that might meet the specification from as many sources as possible.

Normally, the central endeavor of a feasibility study is a cost benefit analysis of various alternatives. It can be defined as a systematic comparison between the cost of carrying out a service or activity and the value of that service or activity. The main benefits are qualitative than quantitative.

Technical Feasibility

This involves questions such as whether the technology needed for the system exists, how difficult it will be to build, and whether the firm has enough experience using that technology. The assessment is based on an outline design of system requirements in terms of Input, Output, Fields, Programs, and Procedures. This can be qualified in terms of volumes of data, trends, frequency of updating etc. in order to give an introduction to the technical system.

The system requires normal configuration computer system that are commonly available. The software requirements are Python and Android, Windows 8 or higher versions of OS. Thus proposed system is technically feasible.

Operational Feasibility

This analysis involves how it will work when it is installed and the assessment of political and managerial environment in which it is implemented. People are inherently resistant to change and computers have been known to facilitate change. The new proposed system is very much useful to the users and there for it will accept a broad audience.

The proposed system offers:

- Greater user friendliness
- Better output which can be easily interpreted.
- Higher speed.
- Meets the requirements of the organizations.

Economic Feasibility

This involves questions such as whether the firm can afford to build the system, whether its benefits should substantially exceed its costs, and whether the project has higher priority and profits than other projects that might use the same resources. This study presents tangible and intangible benefits from the project by comparing the developments and operational costs. The technique of cost benefit analysis is often used as a basis for assessing economic feasibility. This

system needs some more initial investment than the existing system, but it can be justifiable that it will improve the quality of service.

Legal Feasibility

Determines, whether the proposed system conflicts with legal requirements. E.g. a data processing system must comply with the local Data Protection Acts.

Schedule Feasibility

A project will fail if it takes too long to be completed before it is useful. Typically this means estimating how long the system will take to develop, and if it can be completed in a given time period using some methods like payback period.

Schedule feasibility is a measure of how reasonable the project timetable is . given our technical expertise, are the project deadlines reasonable? Some projects are initiated with specific deadlines. You need to determine whether the deadlines are mandatory or desirable.

4. PROJECT PLANNING AND SCHEDULING

4.1. Project Planning

For the successful completion of every project there must have a detailed scheduling. The software development has different participating steps. First of all, we have done the requirement analysis phase. For this, we visited different sites which helped us to continue our project, visited different business websites and we discussed with my friends and project guide.

After collecting the requirements, a detailed study of preliminary investigation has done.

After the analysis phase the requirement is divided into modules. The design document is divided into modules. The document is created, which includes data flow diagrams, ER diagrams etc.

As the next step, the actual development of the system takes place. The design representations are translated into the codes. Documentation of codes are done by providing an explanation of how procedures are used. Documentation is essential to test the program and carry on maintenance once the application has been installed.

And then the testing is done. Once a system has been developed it is very important to check if it fulfills the customer requirements.

Implementation of the system means putting up system on users' side. Like any other system there is an aging process. Therefore, the system requires periodic maintenance for software or hardware.

5. SYSTEM REQUIREMENT SPECIFICATION

5.1. Introduction

A software requirements specification (SRS) is a description of a software system to be developed, laying out functional and non-functional requirements. (Non-functional requirements impose constraints on the design or implementation, such as performance, engineering requirements, quality of standards, or design constraints). The specification may include a set of use cases that describe interactions the users will have with the software. The software requirements specification document enlists enough and necessary requirements that are required for the project development. To derive the requirements, we need to have clear and thorough understanding of the products to be developed or being developed. This is achieved and refined with detailed and continuous communications with the project team and the customer until the completion of the software.

5.2. Purpose

The main purpose of the project is to help the fully or half blind persons to live like a normal person .The life of a blind is very difficult compared with others. They can't walk alone on a street or a path. They cannot purchase anything itself. But the proposed system solves this limitation of a blind person. This system helps to identify obstacles in blinds path. So, the blinds can avoid it. The system provides a barcode reader to help the blind to purchase

5.3. Scope

1) Crop management: Farmers could use the app to track crop growth, record planting and harvesting dates, monitor irrigation and fertilization schedules, and identify pest and disease outbreaks**.**

2) Market information: The app could provide farmers with real-time information on market prices for crops, helping them make informed decisions on when to sell their produce.

3) Weather information: Farmers could use the app to access weather forecasts, allowing them to plan their operations accordingly and mitigate the risks of weather-related damage.

4) Financial management: The app could help farmers track their expenses and revenue, and assist with financial planning and budgeting.

5) Communication and collaboration: The app could serve as a platform for farmers to connect with other farmers in their area, exchange information and tips, and share resources.

6) Education and training: The app could provide farmers with educational resources and training on various topics related to farming, such as crop rotation, soil management, and sustainable practices.

Overall, the scope of a farmers app would depend on the specific needs of farmers in the region where the app is being developed, as well as the features and functionality that the app developers choose to include.

6. FUTURE ENHANCEMENT

There are a variety of ways in which a farmer's app could be enhanced in the future, depending on the specific needs of farmers and the goals of the app. Here are a few potential ideas:

Integration with IoT devices: The use of Internet of Things (IoT) devices can help farmers gather data about their crops and livestock in real time. By integrating with IoT sensors and devices, a farmer's app could provide farmers with up-to-date information about things like temperature, humidity, soil moisture levels, and more.

Predictive analytics: With access to a large dataset of farming-related data, a farmer's app could use predictive analytics to provide farmers with insights about when to plant crops, when to expect a harvest, and when to expect weather-related risks.

Crop management tools: A farmer's app could include a variety of tools to help farmers manage their crops. This could include features like tracking the growth of plants, monitoring the use of pesticides and fertilizers, and predicting yield.

Marketplace: A farmer's app could include a marketplace where farmers can buy and sell goods, including crops, livestock, and equipment. This could help farmers connect with potential buyers and sellers, and provide a platform for farmers to manage their sales and purchases.

Weather forecasting: Weather plays a critical role in farming, and a farmer's app could include weather forecasting tools to help farmers plan their work around expected weather patterns. This could include features like alerts for extreme weather events, long-term forecasts, and historical weather data.Community forums: A farmer's app could include community forums where farmers can connect with one another to ask questions, share advice, and discuss issues related to farming. This could help create a sense of community among farmers, and provide a platform for knowledge-sharing.

Data visualization: A farmer's app could include data visualization tools to help farmers understand and interpret data about their farms. This could include charts and graphs that show trends over time, maps that show crop yields by region, and other visualizations that help farmers make sense of their data.

These are just a few potential ideas for how a farmer's app could be enhanced in the future. The specific features and functionality of such an app would depend on the needs of farmers and the goals of the app.

11. CONCLUSION

In conclusion, a farmer's app has the potential to be a valuable tool for farmers, providing them with access to real-time data, predictive analytics, crop management tools, marketplaces, weather forecasting, community forums, and data visualization. By enhancing the app with these features, farmers can better manage their crops and livestock, make more informed decisions, and connect with other farmers. The success of a farmer's app, however, depends on its ability to meet the needs of farmers, provide reliable and accurate information, and be user-friendly. Overall, a farmer's app has the potential to revolutionize farming and improve the lives of farmers around the world.

BIBLIOGRAPHY

Books

1. W. Zhao, R. Chellappa, P.J. Phillips, and A. Rosenfeld, “Face Recognition: A Literature Survey,” ACM Computing Surveys, vol. 35, pp. 399-459, 2003.
2. Willian Jordon, “Python Django Web Development: The Ultimate Django web framework Guide for Beginners”, Kindle Edition.
3. Zigurd Mednieks, “Programming Android: Java Programming For the New Generation Of Mobile Devices”, Second Edition.
4. Walter Shields, “SQL QuickStart Guide: The Simplified Beginner's Guide to Managing, Analyzing, and Manipulating Data with SQL”

Links

1. https://stackoverflow.com/questions/25193275/run-code-after-rendering-django
2. https://developer.android.com/studio
3. https://docs.opencv.org/trunk/db/d28/tutorial_cascade_classifier.html