ANDROID IMPLEMENTATION TO FARMING: A FARMER FRIENDLY APPROACH

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ABSTRACT

As of 2011, India had a large and diverse agricultural sector, accounting, on average, for about 16% of GDP and 10% of export earnings. India's arable land area of 159.7 million hectares (394.6 million acres) is the second largest in the world, after the United States. Being this much extensive also several cases of farmers' suicide is reported. In 2014, the National Crime Records Bureau of India reported 5,650 farmer suicides. The highest number of farmer suicides was recorded in 2004 when 18,241 farmers committed suicide. The root cause of suicide is not to get proper outcomes of their crop materialistically. This causes immense problem for poor farmers and lead to suicide. Agriculture plays a vital role in India's economy. Over 58 per cent of the rural households depend on agriculture as their principal means of livelihood. The share of primary sectors (including agriculture, livestock, forestry and fishery) is estimated to be 20.4 per cent of the Gross Value Added (GVA) during 2016-17 at current prices. Farmers are in very bad situation in India due to marketing policies and this can be totally solved by directly connecting them with the purchasers or at least wholesalers bypassing the mediators. Our project is an approach to help farmer to get correct pricing, information's, weather report using satellite. Best feature of our project is its 100% implementation possibility. All data used in our projects are from reliable and tested sources which we have collected after verification. If the system is approved we can implement it and provide the services to the farmers for their welfare.

Keywords: *Agriculture, Live pricing, Real time, Free cost.*

1. Introduction

In this project, we introduce and provide detailed information on an Android based multilingual app, "***Farmer Support***" which targets to provide solution/suggestion to the farmers for their main problem of selling the products in market to genuine person. Daily updates and requirements from shops will be taken and uploaded on the blog this will be reflected to the farmers. Farmers can use this system to sell their products directly to the person who needs that and get the price without any middle men. Even we have added live telecast of weather condition and satellite view so farmers can get benefited of the current weather condition Real time weather information is taken by the app from accuweather.com [5] and it helps them to know about happenings and weather forecast.

Fig.1.1- Main Blog Homepage

An extensive database has been made by integrating information from various sources to provide suggestion for crop cultivation at a regional level. We use google blog server and design pages for the project creation and for android app we use android studio software.

2. EXISTING SYSTEM

Traditional Kisan (Farmers) Apps and Toll free numbers

Several schemes were launched by the government to help the farmers to get the correct price of their crops but everything failed as it was not reaching the farmers directly. Toll free numbers are always busy and most of the times the results are not updated and verified. Kisan apps only provide the crop related queries and cropping details etc. There is no system to find the buyer who can give best pricing for their crop.

2.1 Drawbacks

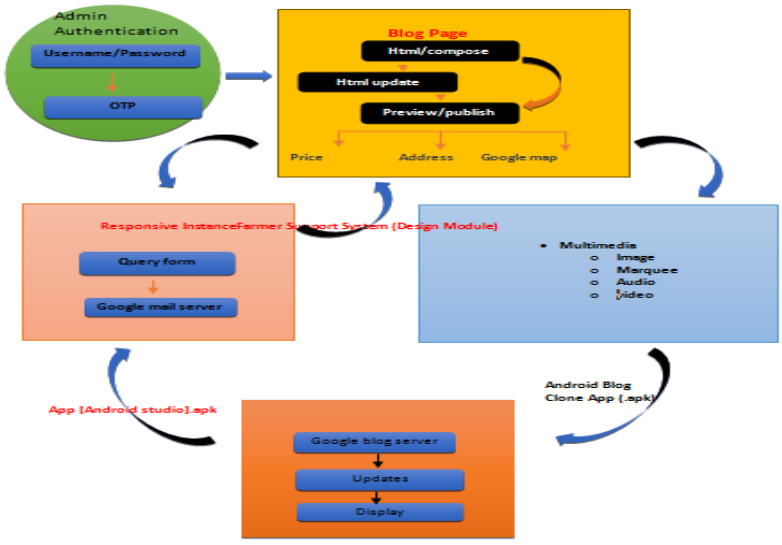
1. Most of the times the results are not updated
2. Kisan apps only provide the crop related queries and cropping details etc.
3. There is no system to find the buyer who can give best pricing for their crop.
4. No direct reach of services to customer.
5. Middlemen take most of the profit.

6. Toll free support mostly remains unavailable.
7. At most crop related queries can only be solved.
8. There is no system for farmers to meet directly the buyers and if they try most of the crop gets decomposed due to today.

3. PROPOSED SYSTEM

Our proposed system is an android and blog based system. We convert, whole blog into an android app using Android Studio system tool. Whatever updates or changes will be done in the blog it will reflect on the android app within 3 seconds. Website can be used instead of blog but website domain and builder needs to be purchased. Our approach is 100% free of cost system for farmers. We update the information like purchaser information, price per kg, address, contact number of purchaser, Google map location link etc. Even any information or warnings like tsunami, cyclone, etc can be updated as warnings to all farmers in no time.

3.1 Proposed System Layout



3.2 Description

Our system provides implementation on an Android and blog based multilingual app, "***Farmer Support***" which targets to provide solution/suggestion to the farmers for their main problem of selling the products in market to genuine person. Daily updates and requirements from shops will be taken and uploaded on the blog this will be reflected to the farmers. Farmers can use this system to sell their products directly to the person who needs that and get the price without any middle men.

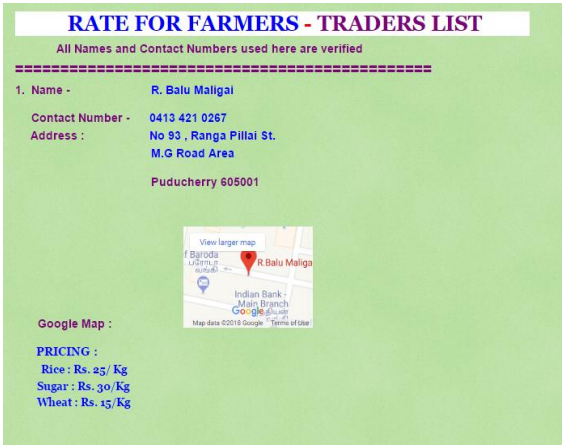
Even we have added live telecast of weather condition and satellite view so farmers can get benefited of the current weather condition Real time weather information is taken by the app from accuweather.com and it helps them to know about happenings and weather forecast.

3.3 Features of our project

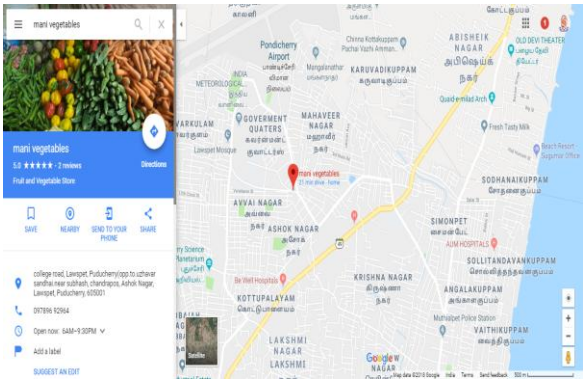
1. Live Information Updates in 3 seconds

Description : This is the homepage for the blog with main information and contact form.

2. Real-time Live Pricing (All information's are from genuine suppliers)

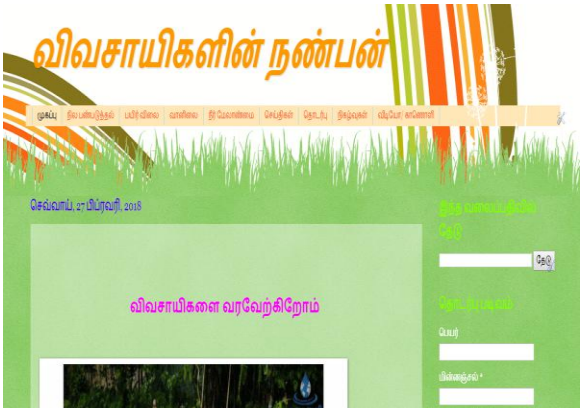


3. Live traders location



4. Plant medicinal and educational videos

5. Multilingual Pages



6. Trade shows

7. Dynamic Weather information live satellite

3.2 Advantages

1. 100% free of cost and direct implementable system to the society.
2. Zero input maximum output approach.
3. Genuine pricing for farmers which can be monitored by anyone.
4. Real-time warning / alert system.
5. Any forgery (or) misconduct can be reported from app directly.

5. SOFTWARE ENVIRONMENT

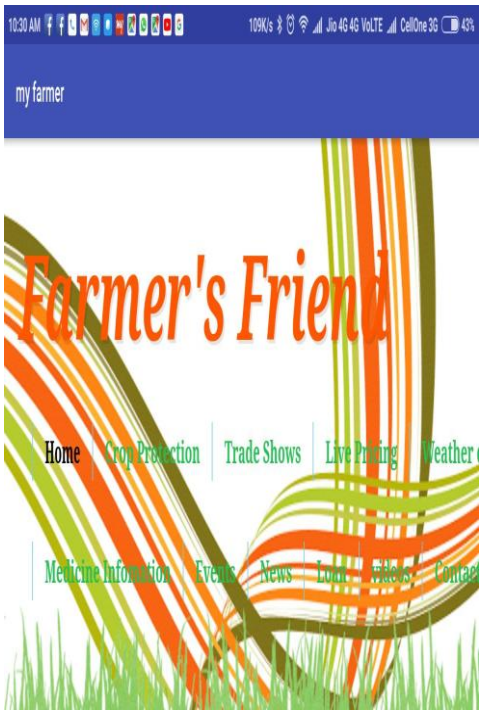
5.1 Android Studio V3.0.1

Android Studio is the official integrated development environment (IDE) for Google's Android operating system, built on JetBrains' IntelliJ IDEA software and designed specifically for Android development. It is available for download on Windows, macOS and Linux based operating systems. It is a replacement for the Eclipse Android Development Tools (ADT) as primary IDE for native Android application development.

5.2 Google Blog

Blogger is a blog-publishing service that allows multi-user blogs with time-stamped entries. It was developed by Pyra Labs, which was bought by Google in 2003. Generally, the blogs are hosted by Google at a subdomain of blogspot.com. Blogs can also be hosted in the registered custom domain of the blogger (like www.example.com).A user can have up to 100 blogs per account. All such blogs had (or still have) to be moved to Google's own servers, with domains other than blogspot.com allowed via custom URLs. Unlike WordPress.com, Blogger allows its users to use their own domain free of charge, while WordPress.com charges around $13 to use a custom domain. Blogger cannot be installed on a web server. One has to use DNS facilities to redirect a custom URL to a blogspot domain.

6. RESULTING APP INSTALLATIONS IN PHONE



Note: Hereafter any modification on blog will reflect automatically on android application.

8. CONCLUSION

Thus we created a real-time implementable system for farmers to get the correct pricing of their products. The name Blog Droid comes with the hybrid combination of our proposed approach of android and hardware implementations. We design the whole project on google web server and convert the website into android app so that the farmers can use it without going to a particular page . The system is totally free of cost and runs free lifelong. It is also equipped with the features like live pricing, satellite view, weather forecast, form, and agricultural expos. Additional features like disease of plants and solutions makes it best for agricultural usage. As the system is already advanced much enhancement is not required but online SMS linkage can be done so information can be sent through SMS also in case of emergency like thane or Chennai flood. If required live chat option can also be added so farmers can chat directly with the customer care representatives for their queries and support.

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