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Web Based Farming App

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Abstract–*We make the direct link between the vendors and farmers through which farmers should sale their production directly to vendors without any commission agent. A push towards higher productivity will require an information-based decision-making agricultural system. Farmers must be get information at the right time and place. Farming systems are defined by the patterns in time and space in which producers grow their crops; the management decisions regarding the inputs and production practices used; the management skills, education, and objectives of the producer; the quality of the soil and water; and the nature of the landscapes and ecosystems within which production takes place. It is a web based application.*
Keywords: *degradation, depletion, sustainability*

I. Introduction

We've come to a time in civilization when raw materials and resources are becoming ever more scarce. When we take into consideration the pollution, increased emissions, soil degradation and water depletion, we know the sustainability challenges that loom in the horizon are real.[1]

Spreading agricultural related information to farmers in the poorest communities are made easier with the help of cloud computing, integrated IT systems, online education and proliferation of mobile phones. One of the benefits of such connectivity and information flow is that it helps farmers make better land management decisions. For example, it can enable soil condition to be monitored in conjunction with weather information in order to better plan the planting and harvest season. Similarly, Geographical Information Systems can be used to provide pre-emptive information on pests and animal diseases so farmers can respond accordingly to the level of risk. Optimizing the use of fertilizer, seeds and water can also be done by utilizing mobile and cloud computing technologies. This helps farmers save money while reducing consumption.[3]

II. Literature Survey

Sr. no	Title	Existing System	Present System
1.	The Impact of Cell Phones on Grain Markets	Agricultural science for development	ICTs and Agricultural Innovation
2.	Opportunities to Mobilize Agricultural Science for Development	Increasingly ubiquitous connectivity along value chains	Increasingly accessible data and information
3.	A rural case study in Peru	Education and mobile telephony	Determinants of effective use of mobile phones

III. Methodology

There are different types of models used by a software team to do their work systematic i.e. step by step. The original process models have certainly given a guideline or roadmap for the whole software development process or software engineering.

These process models are properly structured so that at least structure of the process can be understood. The different models are:

1. Water fall
2. Incremental
3. RAD
4. Prototype
5. Spiral

We have chosen the Water fall model for the development of our project.

IV. Analysis / Experimental Results

a. Apriori Algorithm :

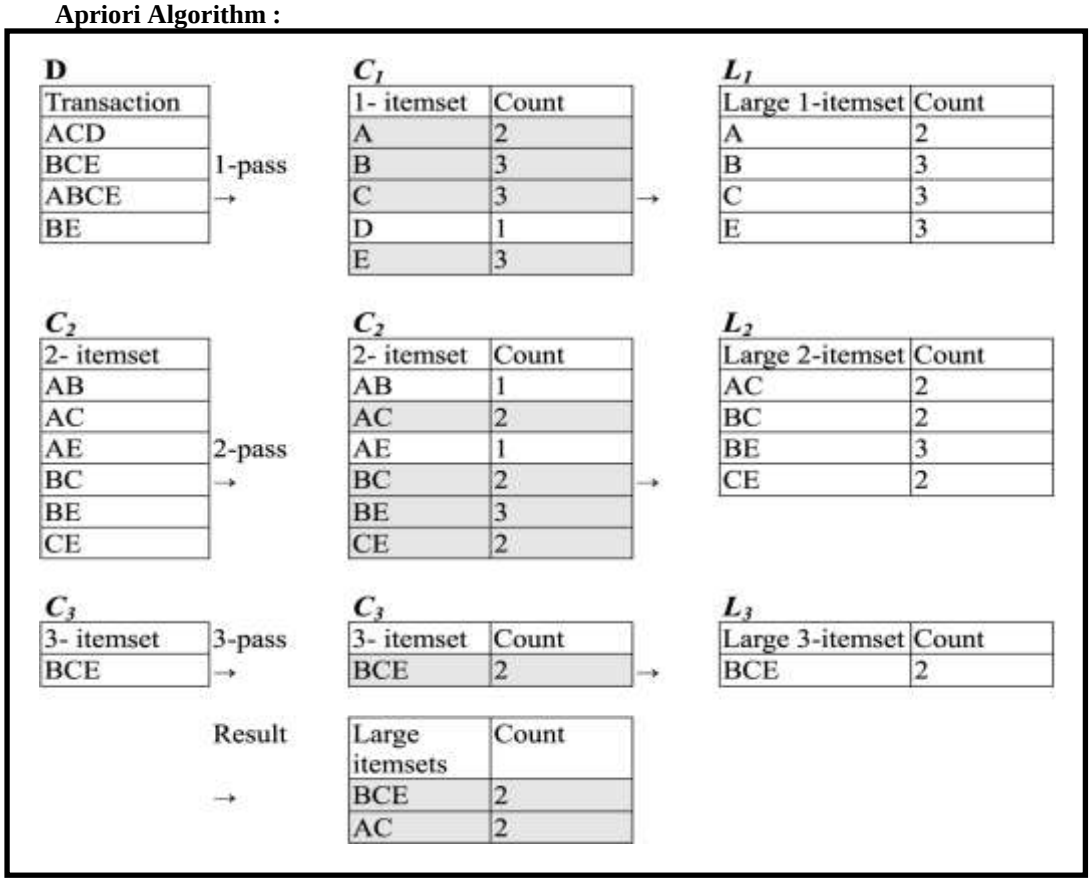


Fig 2. Working of Apriori Algorithm

Apriori is a seminal algorithm proposed by R. Agrawal and R. Srikant in 1994 for mining frequent item sets for Boolean association rules. The name of the algorithm is based on the fact that the algorithm uses prior knowledge of frequent item set properties. Apriori employs an iterative approach known as a level-wise search, where *k*-item sets are used to explore (*k*+1) -item sets.

First, the set of frequent 1-itemsets is found by scanning the database to accumulate the count for each item, and collecting those items that satisfy minimum support. The resulting set is denoted *L*1.Next, *L*1 is used to find *L*2,the set of frequent 2-itemsets, which is used to find *L*3, and so on, until no more frequent *k*-item sets can be found. The finding of each *L k* requires one full scan of the database.

To improve the efficiency of the level-wise generation of frequent item sets, an important property called the Apriori property, presented below, is used to reduce the search space.

Apriori property: *All nonempty subsets of a frequent item set must also be frequent.*

The Apriori property is based on the following observation. By definition, if an item set *I* does not satisfy the minimum support threshold, *min sup*, then *I* is not frequent; that is, *P* (*I*) <*min sup*. If an item *A* is added to the item set *I*, then the resulting item set (i.e., *I UA*) cannot occur more frequently than *I*. Therefore, *I* U*A* is not frequent either; that is, *P* (*I UA*) <*min sup.*

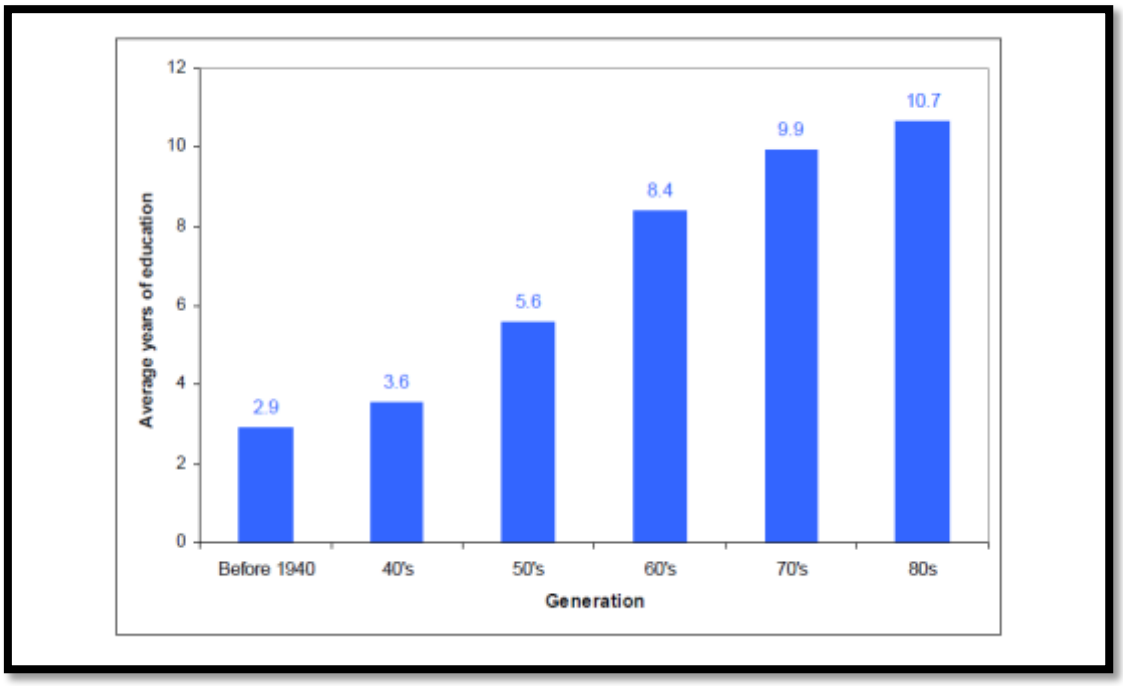
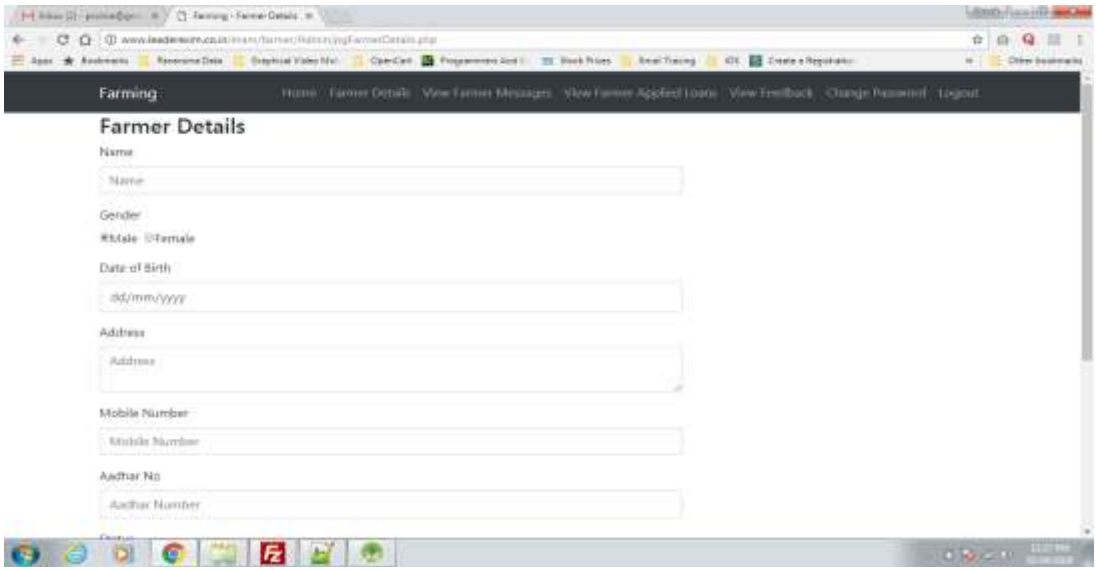


Fig 3. Analysis of Generation



V. Conclusion

This was our project of System Design about "**Web Based Farming App**" Android application based on Java language. The Development of this system takes a lot of efforts from us. We think this system gave a lot of satisfaction to all of us. Though every task is never said to be perfect in this development field even more improvement may be possible in this application. The user can test their soils and crops for farming process and can send feedback to admin.

VI. Future Scope

As in this application admin enters information of farmers in future we can allow farmers to enter their own details. Also for authentication of farmers we can use biometrics in form of form fingerprint or retina. In application we can add farmers facility to see the land location where farming can be done well. In this there is a government schemes in this the admin can add the latest government schemes to be updated to the farmers. In this the vendors can also updated the soil test.

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