

Sugar Cane Management Using Android Application

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Abstract-The sugar cane management system is the system which is proposed for avoiding the corruption occurred at the sugar factory. Every sugar factory is the part of the country to manage the records related to tens of hundreds of the farmer records (least at around 10,000 to over 50,000), who also happen to be the owner in form of being the share-holder of the factory. At time it is experienced that the records related to farmers are maintained at a couple of different department and requires integration of the same through the entire business process of the factory. This makes the task complicated and manually handling of the same affects the functionality. Sugar cane being a crucial but perishable input for a sugar factory.

Our strength that the proposed solution can be integrated with any standard ERP solution managing the sowing, growing, cutting, transportation of the sugar cane is as crucial for a sugar factory as could be the framing of state-policy as well as the mercurial market. This becomes more critical in the view of the dependency of the farmers on rain making it a completely cyclical business. We create system which will generates the farmers and land database, cane plantation information survey of cane maturity and availability, seed and fertilizer supply, sampling program, harvesting, cutting resource management and transport schedule etc.

Keywords: Corruption, farmers and land Database, android application.

I. INTRODUCTION

The whole system is a part of a revival process of the existing system. The objective of the system is to provide the sugar factories with an outline of solution and breakdown of the proposed strategy for new system implementation. The proposed system presents the factories having existing system with understanding of the requirements and what is required to make this critical project a resounding success for both the organization. Sugar industries, particularly the co-operative industries, have been going under tremendous challenges over two decades. The challenges stem from 2 fronts: changes in the state policies and the second come from technological advancements. This new system is the most crucial technology that has come handy to help the sugar factories. The actual execution and the project methodology with the time-lines, deliverables and the responsibilities of the team have been delved into greater detail in the subsequent sections of the proposal.

The system is seeking to enhance the true benefits of automation involving various stake holders in the field of human capital management, materials management, and finance and controlling, Cane management, Fertilizers Information and Weigh bridge systems. The key reason identified for seeking a centralized, end-to-end solution is to bring in seamless integration for the various processes being followed at system and to support the growth of the organization.

Goals and Objectives:

The implementation of software aims at replacing all the older legacy systems. The overall goal of the proposed system is to have a centralized control on the overall activities of Cane Management System.

The objectives of the “Sugar Cane Management using Android Application” are as follows:

- To eliminate or reduce the human interaction so as to avoid mistakes in the database.

- A very powerful MIS (Management Information System) can be built using the data captured in the system.
- The use of Google Maps leads to sufficient and efficient access to the total view of our registered cane, harvested cane and remaining cane.
- The Weigh Bridge module aims at total understanding of cane balance at the cane yard and especially on Road Cane Balance.
- To the each Gat officer of his Gat Status regarding registration, harvesting program etc.

1.1 Need:

The need of our project sugar cane management:

- The necessity of developing this software was to eliminate the manual pen and paper work
- The technologies used in this software reduce the bribing system
 The task of slip boy which was not done in the earlier system was now completed as the verification was done

1.2 Literature Survey

We have referred the documentation of the existing system. Those documents are the proposed by the “Krishna Sahkari Kharkhana Ltd. Rethare Bk”.

1.3 Implementation Details

1.3.1 Common System:

Every individual or institution related to sugar factory or industry has to follow the enrollment procedure. Irrespective of the constitution of factory i.e. private or co-operative there are guidelines which are required to follow e.g. command area, circles, villages under command area etc.

1.3.2 Cane Management System:

Harvesting and Transportation is one of the most important activity on which the sugar industry or factory rely on. Also the management or H&T department should be prompt enough to plan and implement harvesting program with Agriculture department.

1.3.3 Cane Development System:

Every sugar factory plans its crushing or season schedule based on the activities that are related to agriculture department. These activities sometimes referred as cane development program. This includes variety, type wise cane registration. Preparing reports for getting crushing license for the season, preparing and controlling the harvesting program based on cane registration for uninterrupted supply of cane throughout the season etc.

1.4 Android Application:

The android application is well developed app for the slip boy. The app is developed so as the slip boy could do his task on his own without any fake information storing in the database. It is synchronized with the cane management system database; it retrieves the farmer information from CMS database with the help of survey number. Later the longitude and the latitude are used to check whether the land really grows cane on it and whether the slip boy has really visited the farmers land for verification

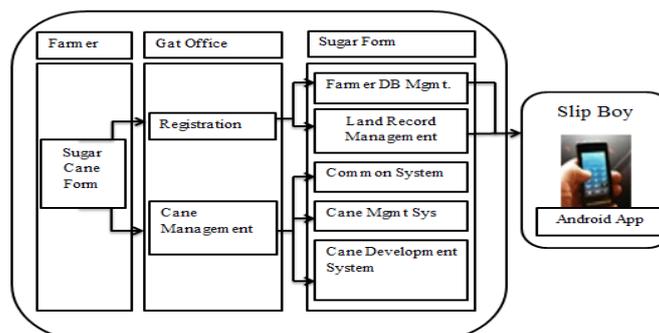


Figure1. Architecture Diagram

II. CONCLUSIONS

Thus, these modules successfully work according to IEEE paper. It can successfully login authorized person to the system and farmer can register his cane. In our work the slip boy can check the list of registration request for new farmer and successfully verify the farmers land and slip boy also updates its information successfully.

In this project in next modules we can implement following idea: To eliminate or reduce the human interaction so as to avoid mistakes in the database. By using android application we can verify that where the slip boy will done his job properly or not it causes the less corruption and bribing. This is main goal of our project.

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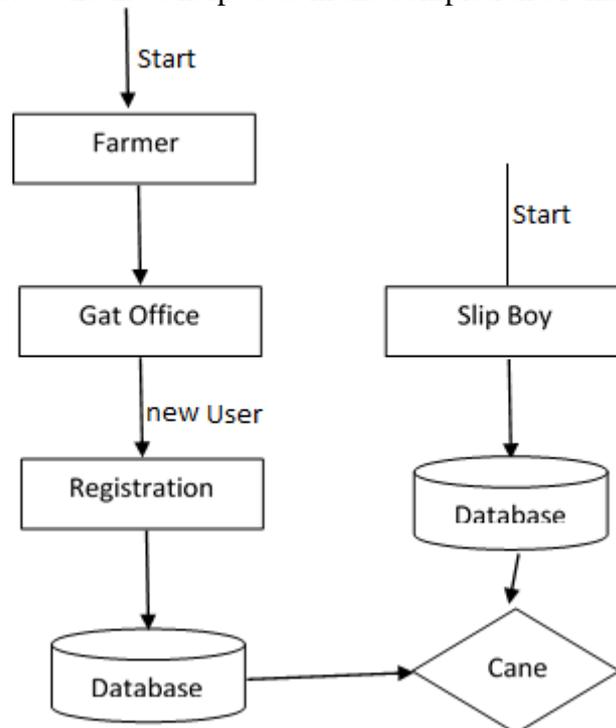


Figure2. Data Flow Diagram of Sugar Cane Management using Android Application.

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