DEFINITION PROBLEM

We have designed this **"Be a smart farmer with us.."** to help the farmers to improve their farming techniques. We have developed this software by analyzing the requirements of the farmers & the problems of the existing farming system. Proposed software is helpful for that farming.

This system is designed using "JAVA" as front-end & "MYSQL" as back-end tool.

SCOPE OF SYSTEM

Scope of system will define the boundaries of the system.

I. Master Maintenance:
Maintaining the detailed information regarding the customer, customer data.

II. Advices:
Give advices as per customer's and crop's requirements .
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NEED OF SYSTEM

- In this system, we store record of customer.
- To maintain the farmers information.
- To reduce extra work of farmers.
- To notify the farmer about their daily work for improvement of their crop .
- To give all information of crop to the farmer .
- To give more profit to the farmer in less efforts .

PROPOSED SYSTEM

- **In this system we will keep information about all the customers and their land with crop's.**
- **It helps to farming very easily and more effectively.**
- **Various report is generated by the system are designed according to the farmers need. This would enable the ministry for making various analysis and take effective measures for better Customer satisfaction.**
- **The system is proposed to reduce the time wasting process of farmers to search for new farming techniques by visiting other places and also after that farmer didn't get 100% information about that technique .**

SYSTEM REQUIREMENT

Technologies and tools used in project are as follows -

Technology used:

Front-End
- JAVA

Back-End
- MYSQL

Environment requirement:

The environment requirement consists of requirements as follows for this   system: -

Hardware Requirements: -
1)Computer
2)Hard Drive :256GB
3)RAM :1GB
4)Processor: Pentium4 or above
5)Printer: Any Type of Printer

Operating System: -
Linux,
macOS,
Windows.

FACT FINDING TECHNIQUES

To study the system, we need to find the facts. Facts expressed in quantitative form can be termed as data. Success of any requirement investigation availability of accurate and reliable data. The specific methods used for collecting data are called fact finding technique.

We have used four fact finding techniques in the process of system analysis.

- Interview.
- Questionnaire.
- Record review.
- Observation.

Interview

The interview is the best method for producing the qualitative information like opinions, policies and subjective description of activities and problems. so, we used this technique frequently in the system analysis.

The interviews were unstructured. We choose some people in the organization who were either the decision makers or user in some activity related to the project. This helped us to understand all the stages involve in any activity.

Questionnaires

The use of Questionnaires allows us to collect information about various aspects of a system from large number of users.

We use this technique in intermediate and final phase of the project. First, we prepared questionnaire to get some basic information about the current farming method. We could find out the work structure of farmer and it's techniques. In the final phase, we used questionnaires to get some review data that was missing after all observation. Question asked were both open ended and close ended which were related to user interaction with current system, updating and rules for record maintenance, report generated by current system, notifications, complications in the system as per the user.

Record review

Many kind of records and reports can provide valuable information about user's . In record reviews, we examine information that has been recorded about the users. This was the most beneficial technique for us while making our database. We perform this technique at the beginning of the study as introduction.

Observation

We paid at attention to the newly arrived techniques and the handling of queries in the existing techniques. Observation helped us in the finding out actual way of working apart from the ideal or desire.

FEASIBILITY STUDY

Before recommending a system, it is investigated that whether it is possible to develop the requested system. The important outcome of the preliminary investigation is the determination that the system requested is feasible for the user or not. There are three aspects of feasibility study. These three aspects can be listed as follow:

Technical Feasibility

In this type of feasibility study, System developer must check whether it is possible to develop the requested system with the available requirements. Besides we must check the availability of the other resources like the manpower, software, hardware, etc.

We have used all already existing end easily available technical resources for the development of 'Stationary management' such as java programming language (Open Source) So, what we intended to do was technically feasible.

Economic Feasibility

To prepare a system most important aspect is whether we can afford it or not? In this type of feasibility study, cost benefit analysis is done. It is checked to see if there are sufficient benefits from the system to make the cost involved acceptable.

We have used all the open source resources such as java programming language and freely available Third party API's so cost incurred is negligible.

Operational Feasibility

In this type of feasibility study, we consider operational implementation of the system. It is checked that whether it is feasible to the user to operate the software or will the user resist? Thus, the computerized proposed system is said to be operationally feasible if the users of the system can understand the system correctly, that is the user should have the capacity of analyzing the system. The system should also take care of the user acceptance and satisfy business rules.

This software will be of immense use to the people who have low vision, reading disabilities or take delight in relaxing and listening to an audio than reading long documents. As the application provides a user-friendly GUI, it's possible for any person to handle our application without in-depth knowledge of computers.

DATA DICTIONARY

1. Customer Table

Field Name	Data Type	Constraints
Cust_id	Integer(10)	Not null(PK)
Cust_name	Varchar(30)	Not null
Cust_phno	Varchar(30)	Not null
Cust_add	Varchar(30)	Not null
Cust_date	Date	Not null

2.Customer Table

Cust_land	Varchar(30)	Not null
Cust_waterSourse	Varchar(30)	Not null
Cust_waterOutlets	Varchar(30)	Not null
Cust_crop	Varchar(30)	Not null

3.Owner Table

Field Name	Data Type	Constraints
O_name	Integer(10)	Not null
O_add	Varchar(30)	Not null
O_phno	Varchar(30)	Not null

4. Service Table

Field Name	Data Type	Constraints
S_no	Int(10)	Not Null(PK)
S_type	Varchar(30)	Not null
S_name	Varchar(30)	Not null
S_price	Int(10)	Not null
S_dsc	Varchar(30)	Not null

5.Bill Table

Field Name	Data Type	Constraints
Cust_id	Int(10)	Not Null(FK)
Bill_no	Int(10)	Not null (pk)
S_type	Varchar(30)	Not null
S_name	Varchar(30)	Not null
S_price	Int(10)	Not null
S_qnty	Int(10)	Not null
S_tot	Int(10)	Not null
Fnl_tot	Int(10)	Not null
Bill_date	Date	Not null

INPUT OUTPUT SCREENS

- **Login Screen**

- **Forgot Password Screen**

- **Information Screen**

- **New User Screen**

- **Customer Screen**

- **Services Screen**

- **Payment Screen**

- **Report Screen**

TESTING

As the "**Be a smart farmer with us..**" system, there are various types of test methods we need to apply for the application test. In general practices, there are two types of test methodologies that need to be used for database testing.

Two Types Of Testing: -

- Black Box Testing
- White Box Testing

FUTURE ENHANCEMENT

This system is improved in future by adding following things -

- More security provides for users information.

- This system will be modified for multi-user system.

- More service provided to customer.

CONCLUSION

The software Be a smart farmer with us.. id developed for our farmer brothers who take more than enough efforts but can't get required or expected profit.

This software will make sure that the farmers will get their expected profit margin as well as it will reduces their efforts and will help farmers or warn farmers about unexpected or unwanted natural disasters.

I hope that Be a smart farmer with us.. fulfills all basic requirements for farmers and helps them to improve their farming techniques.

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