



Portal for Farmers through smart planning and initial investigation

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Abstract: : Currently, there are many sites that provide information and educate farmers on use of technology to get maximum produce. Others sell farm inputs to farmers and others are basically for agricultural research. These help farmers produce the best quantity and quality but they do not provide market for these maximum products. Online Farmers Portal is primarily engineered towards availing market to both small scale and large scale farmers all the time. It will also enable farmer to meet the best buyer as they can provide both minimum and maximum price.

Keywords: System planning and initial investigation ,Information Gathering, Applying analysis tools for structured analysis Feasibility study

INTRODUCTION

Agro Culture is the farmer system where they can plan, monitor and analyze the activity of the farmers production system. It manages farmer operation with one system and organizes data in one place. It helps smart farmers become even smarter. This creates in partnership with growers and buyers. It inspire farmer to produce and buyers to consume fresh goods. Agro Culture System will make better connection among Farmers and Buyers ensure quality food. Standardize and increase efficiency of agro culture process. It is focused on studying the existing system of agro culture in and to make sure that the peoples are getting quality fresh goods. This is also will produce:

- Less effort and less labor intensive, as the primary cost and focus primary on creating, managing, and running a secure quality food supply.
- Increasing number of buyers as individuals will find it easier and more convenient to buy goods.
- Easy management

For the development of project the designing of database was done on PHPMYADMIN, back end was coded in basic PHP and for frontend we used the same basic PHP codes. → Software methodologies are concerned with the process of creating software – not so much the technical side but the organizational aspects. Several software development approaches have been used since the origin of information technology.

II. RELATED WORK

A framework is a standardized set of concepts, practices, and criteria for dealing with a common type of problem, which can be used as a reference to help us approach and resolve new problems of a similar nature. The aim of framework is to provide a common structure so that developers don't have to redo it from scratch and can reuse the code provided. In this way, frameworks allows us to cut out much of the work and save a lot of time. Data collection plays an important role in a projects succession and also it plays an inevitable role in the timely completion of the project. The data in the project includes contact information of the clients and their respective

feedbacks/complaints which is stored in a database. To assure safety, only the admin has proper access to the information provided by the clients. Primary data are the first hand data. The necessary information was collected from day to day observation, problems, instructions of supervisor. Queries and personal discussion with the staff of the organization.

III. PROPOSED SYSTEM

System Analysis is a detailed study of the various operations performed by a system and their relationships within and outside of the system. Here the key question is- why all problems exist in the present system? What must be done to solve the problem? Analysis begins when a user or manager begins a study of the program using existing system. During analysis, data collected on the various files, decision points and transactions handled by the present system. The commonly used tools in the system are Data Flow Diagram etc.

Training, experience and common sense are required for collection of relevant information needed to develop the system. The success of the system depends largely on how clearly the problem is defined, thoroughly investigated and properly carried out through the choice of solution. A good analysis model should provide not only the mechanisms of problem understanding but also the frame work of the solution. Thus it should be studied thoroughly by collecting data about the system. Then the proposed system should be analyzed thoroughly in accordance with the needs.

System analysis can be categorized into four parts.

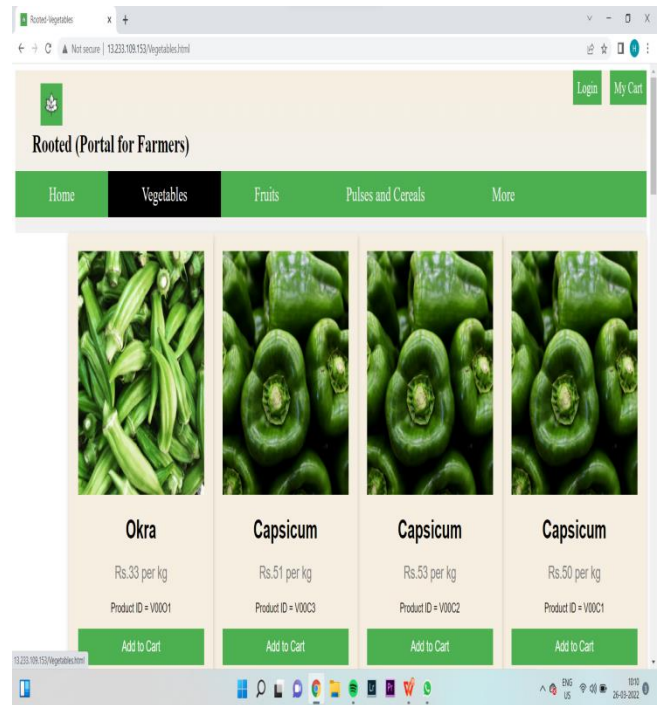
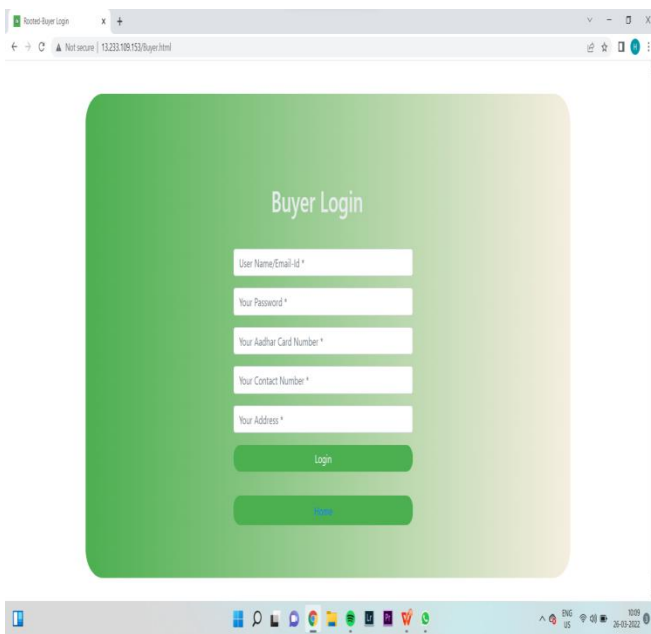
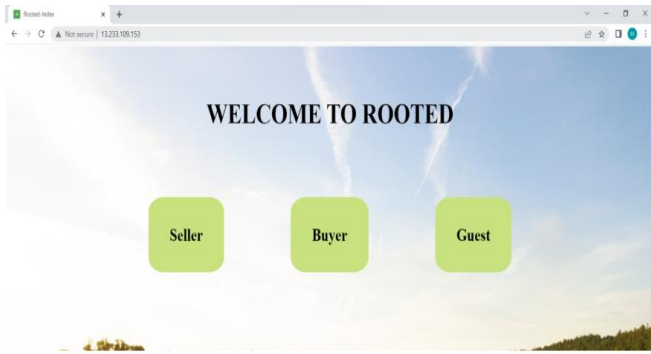
- System planning and initial investigation
- Information Gathering
- Applying analysis tools for structured analysis
- Feasibility study
- Cost/ Benefit analysis.

In our existing system the recording of user’s information is done manually, So taking more time for searching the information of the users. Another major disadvantage is that preparing the list of members that viewed any user’s information takes more time. So, after conducting the feasibility study I decided to make the agro culture System to be computerized.

Weeks Tasks	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10
Coding									
System Design									
Requirement Analysis									
Testing & Debugging									
Installation									
User Training									
Application Development									

IV. RESULTS AND FUTURE WORKS

This Mobile Application provides facility to connect end user with local government authorities . It saves time as it allows number of users to register complaint at the same time , so no need to wait for the registration of complaint . It is automatically generated by the server. Administrator has a privilege to create, modify and delete the complaints which are solved. User can register, login and give complaint with his specific id, and can track it as well.



V. USABILITY

The links are provided for each form. The user is facilitated to view and make complaints in the application. Validations are provided in each field to avoid inconsistent or invalid entry in the databases. Some forms consist of Hyper Links, which provides further details. Reports screen contains text boxes and drop down lists, so that reports can be produced. Application will allow only valid users to access the system.

VI. NAVIGATION

Our solution is very easy to implement and at the same time very easy to scale. We use central cloud shared database hence it makes it easier to apply Machine Learning technologies in identifying which route is having maximum possibilities of potholes or which road has maximum number of complaint register so administration can take action on the concerned road contractor. Our mobile application also uses GPS service so we can track exact location. We use modern day Machine Learning to run various analysis on the Data collected for providing better user experience. Our cross platform application is a smart user interface with the key features such as camera feature to detect the pothole, GPS location tracker so that we can send the exact location to the concerned authorities.

VII. CONCLUSION

After a series of testing and debugging, the project was ready for projection and is believed that it will achieve the goals that it is designed to get, which is to vote in ease. Consumes a long-time for development of web application. ●Research and analysis cost to determine the actual need in real world.

●Implementation of application in the server and cost associated with the space in server. 2.4.3 Data Conversion Another cost associated while implementing this web application is the data conversion. The previously used software database must be stored and backup such that there will be no loss in implementing a new web application which consumes time as well as money. 2.4.4 Operational Feasibility The system is operational feasible as the system can be operate by normal users with basic computer skills without any additional trainings. We have developed this system with the willingness and ability to create, manage and operate the system which is easy for the end users to operate it.

VIII. REFERENCES

- [1] Pothole farming: Conservative farming in drought-hit Zimbabwe (telanganatoday.com)
- [2] PressReader.com - Digital Newspaper & Magazine Subscriptions
- [3] <https://towardsdatascience.com/building-a-realtime-pothole-detection-system-using-machine-learning-and-computer-vision-2e5fb2e5e746>
- [4] <https://medium.com/swlh/pothole-detection-with-opencv-b9b91f1a824a>
- [5] https://docs.opencv.org/3.4/da/d22/tutorial_py_canny.html
- [6] Pothole drainage: managing wetlands | The Western Producer
- [7] <https://arxiv.org/ftp/arxiv/papers/2107/2107.06356.pdf>
- [8] G. Bee, "Mask R-CNN - Practical Deep Learning Segmentation in 1 hour," Udemy, May 2020. [Online].
- [9] <https://agrevolution.in/solution-for-farmers>
- [10] pothole_card_final_english.pdf (bakerinstitute.org)
- [11] Fairness for Farmers | National Farmers Union (nfu.org)
- [12] Top 10 Agricultural Mobile Apps for Farmers in 2022 (krishijagran.com)
- [13] Best Government Schemes and Programmes in Agriculture for Farmers (krishijagran.com)
- [14] <https://krishijagran.com/agriculture-world/how-farmers-can-get-rs-50000-per-hectare-for-organic-farming-under-paramparagat-krisi-vikas-yojana/>
- [15] <https://agrevolution.in/solution-for-farmers>