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SMART ONLINE DELIVERY SYSTEM FOR AGRICULTURAL PRODUCTS

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Abstract

E-Agriculture is a platform that helps farmers to sell their products. This will be beneficial to end users who need accurate prices for each item, and all farmers who need clear incentives for their agricultural products. It will improve their daily lives and support the poorest by providing meals to those in need. Several government NGOs work with them to connect with people who have surplus food (food they just wasted) and can donate edible food to NGOs to meet their basic needs, while preventing wastage. This framework / application aims to create a community where all professionals are eliminated and a fixed value of products are sold directly to farmers. Finally, we directly use food waste to support people in difficulty through our non-profit association. Thus, this approach helps end customers to protect their items while building trust between buyers and manufacturers. The rest of the food is distributed among the oppressed through NGOs.

Keywords— Agricultural product, food delivery, consumer, NGO, web application

INTRODUCTION

India is predominantly a rural country and most people work in agriculture. The sad truth is whether we call it a country of farmers or not, Indian farmers are generally overlooked despite the fact that the food we need is available everywhere on farms and thanks to the hard work of farmers, because today nothing is not very valuable for their improvement. To overcome this, mechanical sense is of great help.

The main objective of the framework is to meet the needs of farmers and give them economic independence. Farmers can promote their products using online gardening. This will benefit end users who need a fixed price per item, and all farmers who need clear incentives for their rural products. Also, it will help people in need to obtain food from this stage through an administrative organization, while shoppers who wish to share their surplus food to avoid food waste can do so at this stage. stage. As described in this article, the objective of this information science-based online store framework is to help farmers sell agricultural products to customers who need to purchase agricultural products frequently through a simple and user-friendly app. Improve farmer-buyer relationships by accurately determining the value of items and offering direct, fresh delivery of produce to specific distances. As described in this article, the goal of this online store framework is to help farmers use information science programs to sell agricultural products to customers who need to buy agricultural products in a way consistent with a simple and straightforward application. Further develop farmer-buyer relationships by accurately estimating project estimates and offering new direct shipments of produce over specified distances.

OBJECTIVES OF THE SYSTEM

Various objectives of the proposed system are as follows:

- Implementation of the system using a web application provides product information to producers and end users.
- To implement a system with a data server available 24/7 to end users.
- Implement platform-independent applications that work in all environments.

RELATED WORK

Proposes [1] cell phone based no food squander stock association is for the metropolitan Districts city with choice for correspondence including advantageous and web improvements for squander food stock association and reaction. This could help for quick and valuable to give food to people who need it.

- Using a web application to complete a structure that offers thing information to farmers and end buyers.
- Data servers will be used to complete the structure, which will be accessible to end clients. 7 days consistently
- To make a phase freethinker program that can run in any environment.

In [2] A thing structure was been made for supporting cafes and food development affiliations. Clients can make individual or get-together requests through the web interface. The menus, eateries, clients, and orders can be coordinated by the heads. The development association was kept up with by the Android application.

Proposed Structures [3] targets orchestrating was to plan a Modernized Food Transport System to conquer this issue. The new proposed framework structure contains hiding lines that are drawn on the bistro ground and they interface all tables to the kitchen filling in as an organizing track; a robot that is in a state of congruity with the referencing framework will serve. Right when clients put in their sales through the referencing framework, the construction will send the requesting to the kitchen. Right when the dish is ready, a sign will be shipped off the robot then robot will then, give it to the particular table and return to the kitchen and give an investigation message to the referencing framework as a certificate of transport.

As per [4] an entire blockchain-based farming and food (Agri-Food) inventory network arrangement It takes utilization of the fundamental qualities of blockchain and shrewd agreements, and it's totally finished on the Ethereum blockchain network. Although blockchain guarantees the unchanging nature of information and records in the organization, it misses the mark concerning tackling a few major questions in store network the executives, for example, the dependability of the gatherings in question, exchanging methodology responsibility, and item recognizability. Thus, a reliable framework that ensures recognizability, trust, and conveyance components in the Agri-Food store network is required.

As per [5] Edgence (EDGe + Knowledge) is proposed to act as a blockchain-empowered edge-processing stage to keenly oversee enormous decentralized applications (dApps) in IoT usecases1. To stretch out the scope of blockchain to IoT-based dApps, Edgence takes on ace hub innovation to interface with a shut blockchain-based framework to this present reality. An expert hub contains a full hub of the blockchain and an insurance, and is sent on an edge haze of versatile edge registering, which is helpful for the expert hub to utilize assets of the edge cloud to run IoT dApps.

As per [6] presents HCloud, a believed JointCloud stage for IoT frameworks utilizing server less registering model. HCloud permits an IoT server to be executed with various servers less capabilities and timetables these capabilities on various mists in view of a timetable strategy. The arrangement is determined by the client and incorporates the expected functionalities, execution assets, inertness, cost, etc. HCloud gathers the situation with each cloud and dispatches waiter less capabilities to the most reasonable cloud in view of the timetable approach.

As per [7] present the idea of a decentralized characterized administration trade stage where the arrangement suppliers can progressively offer and solicitation administrations in an independent shared design. Cost and choice to trade administrations are set during activity time in light of grouping arrangements as per business goals.

As indicated by [5] a signal based secure connection framework with brilliant home IoT wellbeing gadgets to help older individuals or individuals with exceptional necessities. The system utilizes a decentralized blockchain agreement for putting away the savvy home IoT wellbeing information and client personalities. The system uses off-chain answer for putting away crude interactive media IoT tangible payload and motion information. Utilizing our proposed wellbeing observing system, a brilliant property holder or specialist co-op can make a digital actual space with a protected advanced wallet for every human inhabitant and approved IoT wellbeing gadgets.

SYSTEM ARCHITECTURE

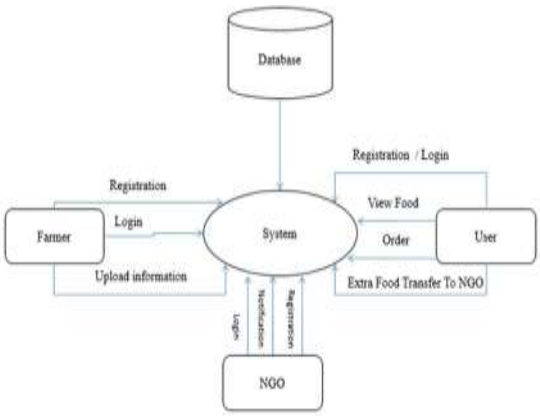


Figure 1: System Architecture

The module is been divided into different modules

- Farmer Module
- User Module
- NGO Function

SYSTEM DESIGN

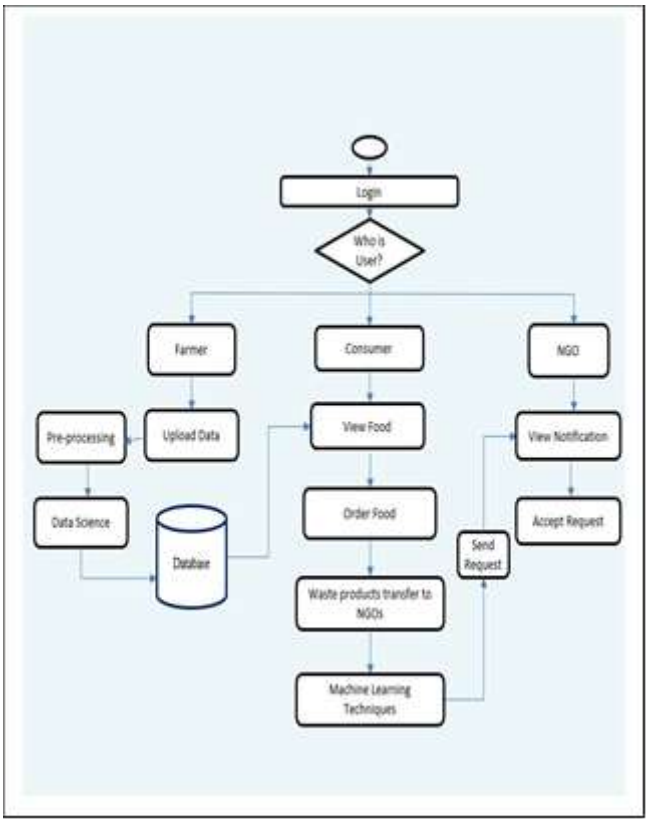


Figure 2: System Design

IMPLEMENTATION OF THE SYSTEM

In this paper, we put forward the Implementation of Direct Delivery of Agriculture Product System from Farmer to Consumer then Processed Food to the NGO using Machine learning techniques “Smart Online Delivery System for Agricultural Products.” Smart Online Delivery System for Agricultural Products is an application which provides all the details to sell/buy the agricultural products online.

In this system we added farmers &consumers for the better and direct communication between them. As of also added NGO for prevention of food wastage. Thus, this system can improve the end customer's confidence on products and establish a trust relationship between consumers and producers. And disposal wastage/extra of food in different functions the rest of the food is distributed to the poor, NGOs.

Here, we have created three options- Buyers, Farmers and NGO in the system whom we consider as end users. The appropriate category can navigate to login/register through the web application that is going to save in the MySQL database server. The system is described as easy to use.

- Step 1: One first login/register through Web application as Buyer/Farmer/NGO by entering few basic details such username, password, mobile number, email id, pan number, company name, etc.
- Step 2: Farmer can upload the images of the product along with the price according to the quantity in the insert product option. Similarly, the buyer can buy the product after reviewing it in his/her page, by entering the quantity of the product he /she required and if there is any product that is near to expiry then the details of these product are mailed to NGOS through the mail id provide by them in the system. Divide the site into two sections: training and testing. SVM Techniques were used to train the Dataset.
- Step 3: Checks the KNN and Random Forest classifier data models. When any product that is near to expiry then the details of these product are mailed to NGOS through the mail id provide by them in the system.

RESULT



Figure 3: Login page



Figure 3: Register Page



Figure 4: Farmers/buyers Portal



Figure 5: Fruits Column



Figure 6: Vegetables Column



Figure 7: Crops Column



Figure 8: NGO Portal

CONCLUSION

Through the proposed approach, we will be able to create an online platform that facilitates the buying and selling of agricultural products, considering costs and safety concerns, as well as providing processed foods of quality to vulnerable groups. To ensure that food or sale produce is not wasted and reaches those who need it, all of this will be done using basic software for consumer farmers, NGOs and hotels/ farmers selling produce.

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