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Online Farm-Product with Efficient and High Utility Service

Praveen G[1], Roshan Romanse[2], Vigneshkumar S[3], Dr. Roselin Mary., Ph.D[3]

Student, B.E. Computer Science and Engineering, Anand Institute of Higher Technology, Chennai, India[1-3]

Professor - CSE, Anand Institute of Higher Technology, Chennai, India[4]

Abstract: This Paper presents the design of an e-agriculture model for the selling and buying of the agricultural products. The products are of high quality and trade value. Generally, through E-commerce, users can browse, compare and select the product items that they like in a more convenient manner, which brings great facility to the Ecommerce users. The main concept is that no intermediator act as a buyer or seller. The price of the product can be fixed only by the product owner. Another important feature of this model is that the product owner (i.e. the farmer) can get a solution for their queries. They can upload the image of an infected product to know about the type of disease that it has and also can get feedback for its cure. The owner can also feed in the information about the agricultural land to get a suggestion on which crop suits the best for that particular type of land. The agricultural information system provides its users and researchers to get online information about, the crop, statistical details and new tendencies. The trends of the crops act so that these will be pretty important to the users who access to this via the Internet.

Keywords: Online Trading, Weather Prediction, Online feedback and Soil Testing.

I. INTRODUCTION

The project presents novel aspects used in the traceability systems for guarantee Agricultural safety and quality. In the agricultural fresh consumer products, the traceability line is long and swift cause the products do not make processed are prone an accelerated decomposition. For this reason, do traceability to the Agricultural product from the growing plant (seedling) to production is very important. Several agricultural products as the fruits have a low conservation time postharvest, one`s days or a couple's weeks according to the product. The internal traceability might estimate those living periods of products after the harvest according to the behaviour the seedling shown. The process of trace seedlings guarantees the best features in the agricultural product regarding quality and yield. The product market with quality and security standards wins space indoor and external trade. In the traced products the price is upper and the demand is significant in Europe countries. In all traceability system, the internal traceability is a crucial stage the supply chain of agricultural products. The monitoring registers the seedling in the production line, searching it standardize the process of agriculture good practice and land use in the agriculture supported by technology. It will match the uploaded image with the original crops and then find solution to the uploaded image according to the health of the crops. The seller can view the result page. Seller will add the details of the item. The seller can update the details of the item. All the information regarding the delivery (like, address or mobile number and etc.,) will be updated to the intermediate. There is a language feature so, that the user of this website can view it in their comfortable language. Another feature is provided to sort and give a ordered view to the buyer based on analysing the previous reviews where the product with top review is prioritized first.

II. EXISTING SYSTEM

In the existing system, there are some intermediator agent's. The old systems had proposed only in the way of intension to get profits by intermediator. Due to this, producer supposed to meet huge loss. Weather prediction and Soil testing haven't included in this model. Many online shopping users are not willing to give their ratings on product items after the purchase, as the quality and price of the product does not satisfy the customer expectations.

III.SYSTEM ARCHITECTURE

PROPOSED SYSTEM:

In the proposed system, buyers and sellers can directly register in the site and sell/buy the product, otherwise they can contact with the seller directly. Buyers can use the site and register with it and buy the products online. The seller can fill the registration form and get his credentials. All the details of the product will be uploaded by the seller. Seller will fix the rates of the products. The seller can view the result page. Seller will add the details of the item. The seller can

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update the details of the item. All the information regarding the delivery (like, address or mobile number and etc.,) will be updated to the intermediate. There is a language feature so that the user of this website can view it in their comfortable language. Another feature is provided to sort and give a ordered view to the buyer based on analysing the previous reviews where the product with top review is prioritized first. The query processing module is very useful for the owners to easily get the required expert information. A soil test commonly refers to the analysis of a soil sample to determine nutrient content, composition, and other characteristics such as the acidity or pH level. As soil nutrients vary with depth and soil components change with time, the depth and timing of a sample may also affect results.

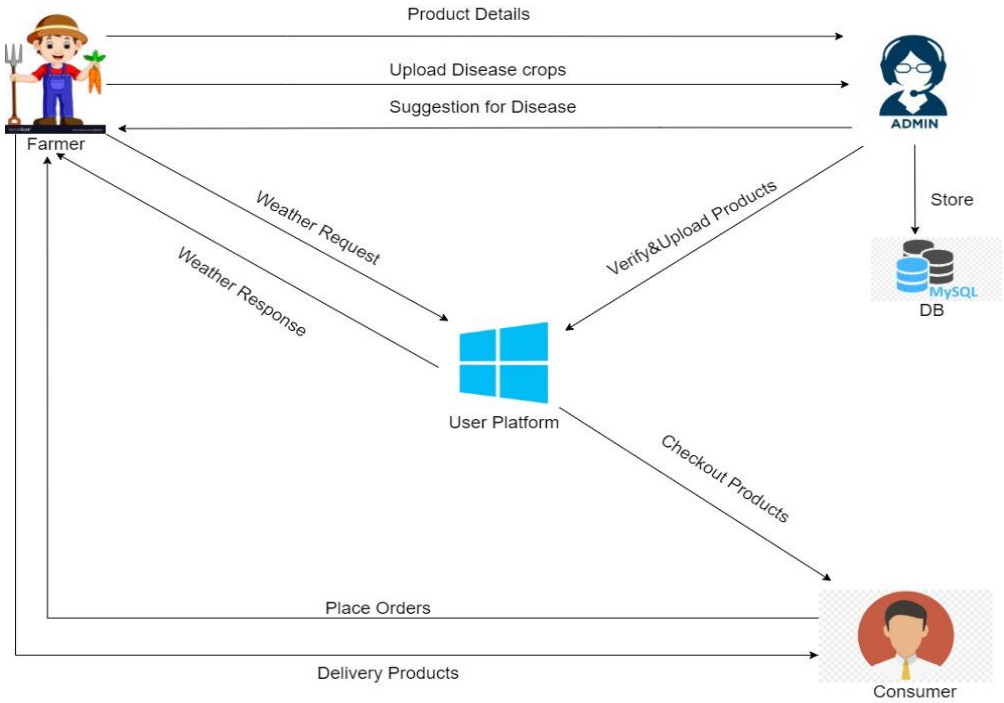

Fig .1 Architecture Diagram

IV. MODULES

1. User authentication module
2. Farm product upload and verification module
3. Healthy crops module
4. Weather prediction module
5. Cart and checkout module

1. User Authentication Module:

Every user gets authenticated by providing their credentials in the login form. Users' needs to register with relevant details that are needed to provide an account. User is authenticated based on their credentials and no user can suppose to provide false credentials for login.

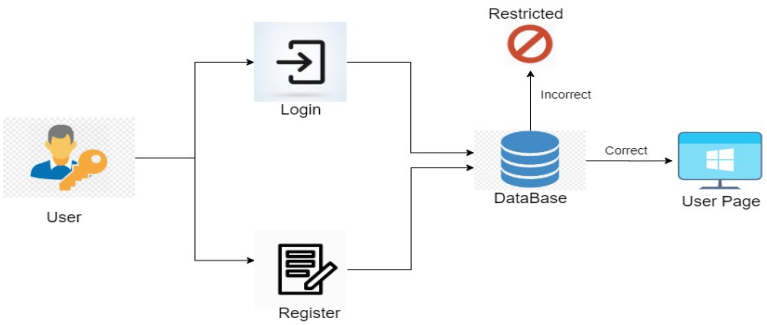

Fig.2 User Authentication Module

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2. Farm Product Upload and Verification Module:

This module is used by the admin to verify the product meets the expected quantity. That admin have a particular identification for example user name and password. The process of this module registers the farm product from farmers. The support vector machine algorithm has been used for implementing these modules and its seems to be a simple algorithm that every machine learning expert should have in his/her arsenal. Support vector machine is highly preferred by many as it produces significant accuracy with less computation power.

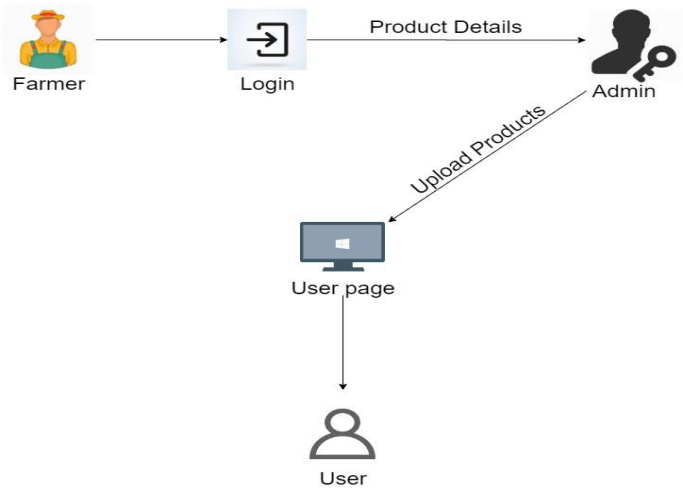

Fig.3 Farm Product Upload and Verification Module

3. Healthy Crops Module:

It will match the uploaded image with the original crops and then find solution to the uploaded image according to the health of the crops.Here,Edge detection algorithm used to match the uploaded image with already infected crops images to find out the disease of the crops.

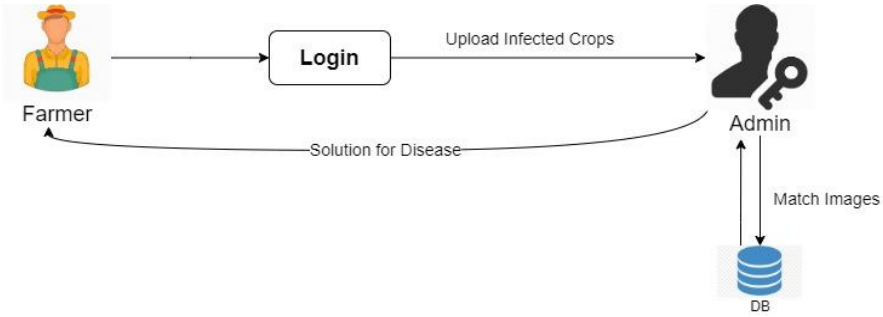

Fig.4 Healthy Crops Module

4. Weather Prediction Module:

The weather condition will be predicted and provided to the users. The farmers make a request for weather reports in the application and the result will be provided to them from the application with the help of an IOT device.

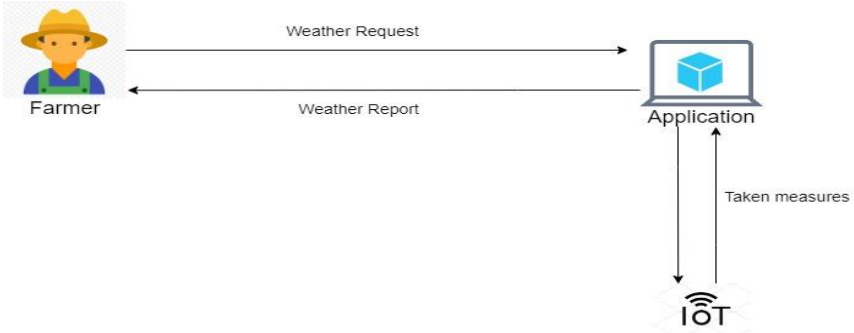

Fig.5 Weather Prediction Module

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5. Cart and Checkout Module:

Checkout page displays the product details like Image, product name, model, quantity, unit price, and total. Quantity can be added in this page if required more than one. Product can be removed in this page, if the customer wants to remove few products. Products are shown along with the weight for facilitating the shipment process. Customer has an option to apply Voucher codes or Coupons to avail the discount. Estimation Shipping & Taxes options are available if the shipping is paid. At the end the customer can go back and continue shopping leaving the checkout page as it is with previous product listing

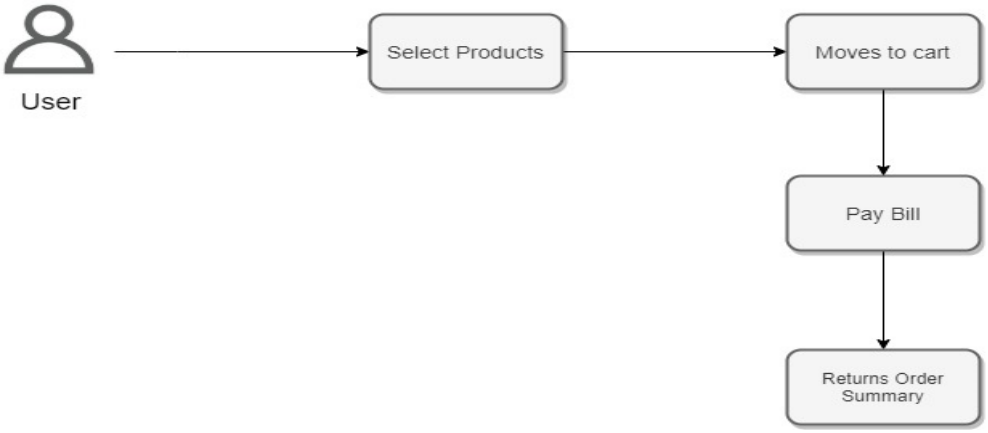

Fig.6 Cart and Checkout Module

V. CONCLUSION

The query processing module is very useful for the owner to easily get the required expert information. A soil test commonly refers to the analysis of a soil sample to determine nutrient content, composition, and other characteristics such as the acidity or pH level. The weather prediction plays major role in this project to prevent the producer from huge loss. The elimination of intermediator concept leads to get all of the profits only by producer. Here, The farmer can get the solution according to the affected crops.So,that we will improve the product quality and profits.

VI. FUTURE ENHANCEMENTS

In future the admin puts some workers to verify and improve the quantity of the products. The admin enable the delivery option if it's required and enhance the products to reach each every customer.

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