AGRICULTURE RESOURCE MANAGEMENT SYSTEM

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ABSTRACT:

The e-marketplace has emerged as an efficient and important vehicle for transactions in the e-commerce industry and academia and industry alike have recognized trust as a central factor enabling e-commerce. We need to design and implement a system that will check both buyers and sellers so that both parties will have trust in one another when transacting. Our project operates an online marketplace for consumer-to-consumer sales, particularly targeting users in emerging markets, with a view to providing a safe, reliable and efficient way for consumers to buy and sell goods. The agricultural application provides its users with information about the nearby available products like plants, seeds, pesticides, agricultural machinery. Sometimes, these products may get abide due to surplus purchase. Collaterally, there are some people who may require the same quantity of products. The main features of this application includes information retrieval facilities and marketing from anywhere in the form of obtaining statistical information about fertilizers, pesticides, seeds, and plants.

INTRODUCTION

Modern agricultural equipment's make farmers work more efficient and easy. As a part of which there are some organizations that are set up to help those farmers who are in need of such equipment’s, where the organization owns the equipment's and rent those on request of farmers at liable amounts. At present, farmers need to travel to a place to borrow all the essential needs, which is a tiresome and not a cost effective work. So a smart digital farming is listed as the highest ranking technology opportunity in the latest Global Opportunity report in terms of its expected positive impact on society. Agriculture yet forms the backbone of Indian economy and there is always a need of supporting and improving it. As a part of which some of Indian NGO's are with an initiative of supporting the farmers by facilitating them with the modern agricultural equipment's on rental basis. We aim at developing an application that farmers can use to get their equipments on rent and also check the availability and renting. Surplus purchase of agricultural products leads to wastage sometimes it gives loss to the farmers.
Our application will help the farmers to solve this problem. By selling their excess products to other people who have stipulation of the same product. The application will have both seller and buyer interfaces where a single person can sell his products at the same time he can buy the products if he wants to.

Since 2003, the South Korean government has been pushing for an agricultural machinery rental business through the Agricultural Technology Center to ease farmers’ burden from purchasing agricultural machinery and to promote the mechanization of farming. The agricultural machinery rental business is being operated with a focus on one- to three-day short-term rentals of machinery, such as seeders, sowers, and reapers, for sectors with inadequate mechanization of operations. Starting in 2014, government-subsidized agricultural machinery rental businesses are being operated autonomously throughout 140 counties and townships, with an average inventory of 200 agricultural machines. The number of farmers renting agricultural machinery has continuously increased year by year, and by collectively using such machinery, farmers have been able to dramatically reduce the cost of operating farms.

IMPLEMENTATION

The main aim of design engineering is to generate a model which shows firmness, delight and commodity. Software design is an iterative process through which requirements are translated into the blueprint for building the software. The set of fundamental software design concepts are as follows.

Test cases and Test Report

<table>
<thead>
<tr>
<th>S.No</th>
<th>Input</th>
<th>Output</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>Test case 1</td>
<td>The user gives the input in the form of a registration for a new user.</td>
<td>An output is predicted as the register for the user is successful.</td>
<td>The result is that the user has to register. Therefore the test case 1 is passed successfully.</td>
</tr>
<tr>
<td>Test case 2</td>
<td>The user gives the input in the form of user login</td>
<td>An output is predicted as the login for the user is successful.</td>
<td>The valid user is successfully login Therefore the test case 2 is passed successfully.</td>
</tr>
</tbody>
</table>
Test case 3 | Check admin login with invalid data | Login of admin should be rejected. | The result is that the admin was the invalid user. Therefore, the testcase passed successfully. 
Test case 4 | Check Users registration module. | The user can successfully log into the site from the site. | The result is that the user was successfully registered. The testcase passed successfully. 
Test case 5 | Check logout module. | The home page should be displayed by logging out of that account. | Home page will be displayed. The testcase passed successfully. 

Implementation is the carrying out, execution, or practice of a plan, a method, or any design, idea, model, specification, standard or policy for doing something. As such, implementation is the action that must follow any preliminary thinking in order for something to actually happen. Many preparations are involved before and during the implementation of the proposed system.

Node.js is an open-source, cross-platform, back-end, JavaScript runtime environment that executes JavaScript code outside a web browser. Node.js lets developers use JavaScript to write command line tools and for server-side scripting running scripts server-side to produce dynamic web page content before the page is sent to the user’s web browser. Consequently, Node.js represents a “JavaScript everywhere” paradigm, unifying web-application development around a single programming language, rather than different languages for server-side and client-side scripts.

RESULTS
CONCLUSION
The present study gives a clear idea on how to sell or buy the unused products in agriculture. In this Agrirevender app we mainly focus on two points one is reselling the agriculture products and the other is to buy the products. In order to sell the product user gives necessary information of the product like price, quantity, item name, etc., and post the product into the website likewise if a user wants to buy the product he searches for the product and buys it. The conducted experiments showed that a good performance had been achieved with overall accuracy around 70% for both. In Future accuracy of the same can be improved with the help of improved techniques. With the use of the proposed model, we are able to check the nearby products which are available and can sell or buy the product to the one needed. So that it reduces the time for the farmers. This app can help those who are in need. The same system can be implemented with cloud storage of large amounts of data where it can maintain all the details for farmers for future purposes.

References
[2] https://www.agriapp.co.in/