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ONLINE FARM MANAGEMENT SYSTEM

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ABSTRACT:

An interactive from farmers -to-buyer web application is an online service that links producers with consumers directly, cutting out the middlemen. Without using intermediaries or distributors, the approach enables farmers to sell their goods directly to consumers.

Usually, the online system gives farmers a place to display their goods along with details about them, like their origin, agricultural methods, and certificates. Following that, customers can search the website and make purchases of the items they are interest in. With the purpose of assisting customers in making wise selections regarding their purchases, the site may also incorporate elements like reviews and ratings.

An online farm management system can help to foster greater openness and trust between producers and their customers, which is one of its key advantages. Buyers may make educated decisions regarding the quality and protection of the goods they are purchasing by receiving information on the agricultural methods. In addition, farmers might profit from rising sales and profits.

KEYWORDS: Farmers, Buyers, HTML, JavaScript, CSS, MYSQL, Xampp Server, php my admin.

2.INTRODUCTION:

Farmers are capable of marketing their fruit and vegetables and farm products to customers directly through online farm-to-buyer marketplaces. Since buyers have showing eager in buying fresh, regional food directly from producers, these platforms have grown in popularity.

The ability of farm-to-buyer websites to help small-scale farmers gain access to a broader market and boost their revenues is one of their main advantages. With the support of these platforms, farmers may market their goods to consumers who live outside, expanding their client base and revenue.

Online farm management website provides consumers with a practical option to acquire freshly, increased products from farmers. Removing the middlemen can frequently result in better rates for consumers. Permission to make digital or hard copies of all or part of this work for personal or classroom use is granted without fee if copies are not made or distributed for profit or commercial advantage and that copies bear this notice and the full citation on the first page. Copyrights for components of this work

A web programme called Farmer E-Marketplace will assist farmers in developing agricultural marketing strategies that will raise their level of success and their standard of life. Farmers will be able to view orders placed and associated information on their accounts through the Marketing Centre. Farmers will be able to sell fresh produce through the administration. By way of the mid-market committee

- Developing Web Agriculture Management System is to help framers.
- The farmers can sell their products in online, and the customers can buy the products.
- To get to more benefit using this web Application rather selling their products in market.

3.METHODOLOGY:

1) Describe the needs of the user: Identify the requirements of the service's producers and customers. This will cover the kinds of data they desire, the degree of precision needed, and the presentation style that should be used.

2) Develop system objectives: Clearly define the system's goals, such as enhancing farmers' access to markets, giving customers access to fresh, locally produced food, or lowering food waste.

3) Choosing the right software: To design and launch the system, just use appropriate resources and platforms. They could be mobile application, internet platforms, or platforms for experience in web.

4) Create the user interface: Make an interface that is simple to use and browse. Make certain that the platform is usable on a variety of gadgets and take into account the needs of consumers with varied degrees of online learning.

5) Create the website: Create a website that displays the goods or services provided by farmers, enables customers to buy and pay, and offers details on supply and picking choices.

6) Connect the web - based farm management software with this other system Integrate the database with these other system applications, including such online payment, shipping companies, and inventory control systems.

7) Employ techniques for gathering and analysing data: Decide on the method for data collection and analysis, such as survey, analysis, or consumer feedback. Provide criteria for information quality and guarantee security and privacy.

8) Analyse and enhance the structure: Do user evaluations to verify the system and pinpoint any flaws. Adapt your strategy in response to user and stakeholder feedback.

9) Instruct users: To guarantee that farmers and consumers can take full use of the system, give them training and support. This could entail writing user manuals, setting up workshops, or providing online tutorials.

10) Expanding the system's reach to much more consumers and farmers is possible after it has been verified and improved. This could entail extending the system to include new regions, collaborating with other organisations, or starting marketing initiatives.

4. Requirements gathered from community:

Farmers:

- Easy-to-use interface for managing and selling like fruits and vegetables.
- Option to upload photos of the fruits and vegetables and livestock.
- Option to share farm information with buyers.
- Mobile compatibility to allow farmers to access the system from anywhere.

BUYERS:

- Real-time Visibility into the farmers products.
- Access to detailed information on the quality and sustainability of the farmer products.
- Option to place orders and track delivery status.
- Integration with e-commerce platforms for easy payment and delivery.

5. Project objectives based on Requirements gathered from Community:

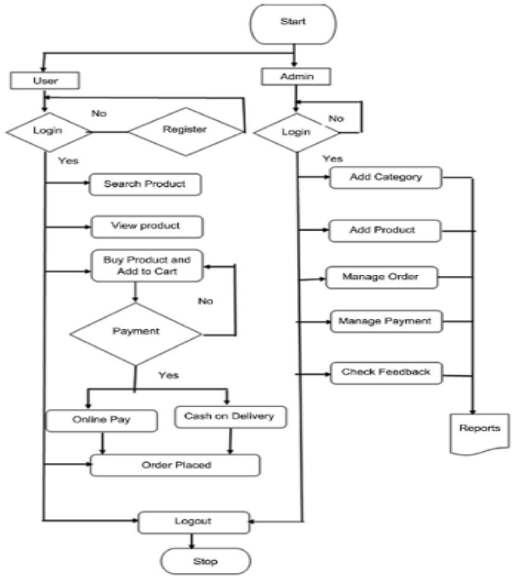
o to provide qualitative foods to the buyers.

o Implementing an online farm management system.

o to inspire farmer to produce quality goods and supply to the buyers.

o Eco friendly farming system.

6. Workflow Diagram



7. Front end and back-end Information of web application.

Front End:

(HTML, JavaScript, CSS)

Farmers and Customers technology like HTML, CSS, and Java scripting are utilised to design and style the organisation, appearance, and functionality of online pages. Server-side technologies like PHP, MySQL, and phpMyAdmin are used to build dynamic websites and control datasets.

HTML:

Web sites are often created using the scripting language HTML (also known as Hypertext Markup Language). A web page's structure and content are provided by HTML, which defines components including headers, sentences, pictures, hyperlinks, and buttons.

CSS:

The appearance of Web pages or Xml files is described using the style sheet language known as CSS (also known as Cascading Style Sheets). The layout, colours, fonts, as well as other graphical media of a website page are defined using CSS.

JavaScript:

Web sites can be it became and reactive by using the computer language JavaScript. Produce greater, decline buttons, and picture slides are just a few of the features made possible by JavaScript.

BACK END:

(PHP My Admin, Xampp Server, MY SQL)

PHP My Admin:

Interactive web sites are made using PHP (Hypertext Markup language), a computer programming language. Handling form data, communicating with databases, and creating dynamic content are all operations that are carried out using PHP.

MY SQL:

A database server called MySQL is often used to data stores on a computer. MySQL is employed to maintain and access data from databases, including user and product information.

Xampp Server

Apache, MySQL, PHP, and Perl are all part of the bridge web server solution known as XAMPP. Before publishing web pages to a live server, it is employed to evaluate and create them locally using XAMPP.

8. Use case scenario of farmers and buyers' community on the website.

FARMER:

Register

Sign in.

View

Add crop.

View Product

Update the price.

View order.

Log out.

BUYER:

Register

Sign in.

View

View products.

Add to cart.

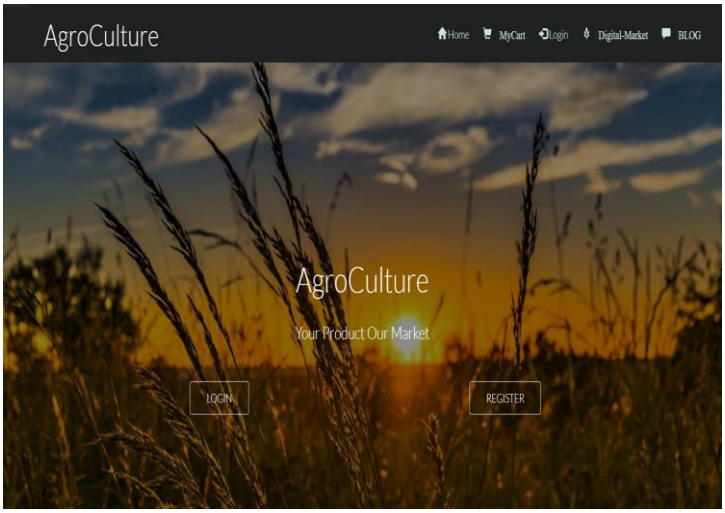
Buy the product.

Log out.

9.Software implementation of website.

Here is the software implementation of total website of online farm management system of two communities (Farmers and Buyers)

Website Photo (Agroculture)



FARMER:

Farmer Register Page Photo

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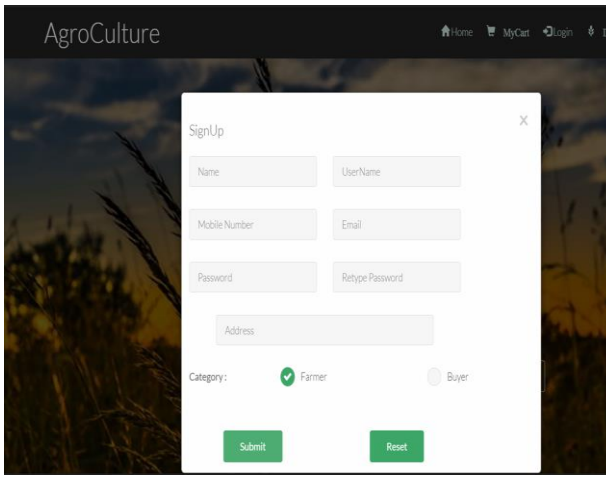
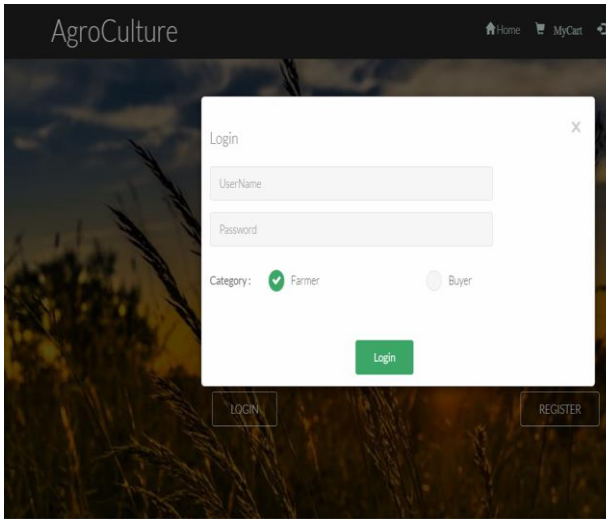
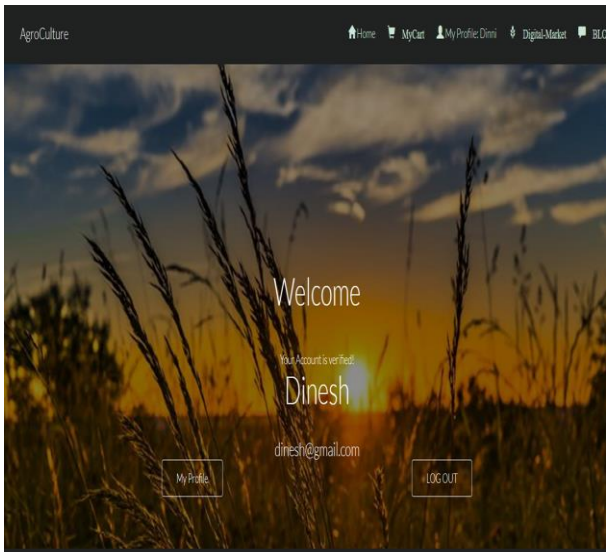


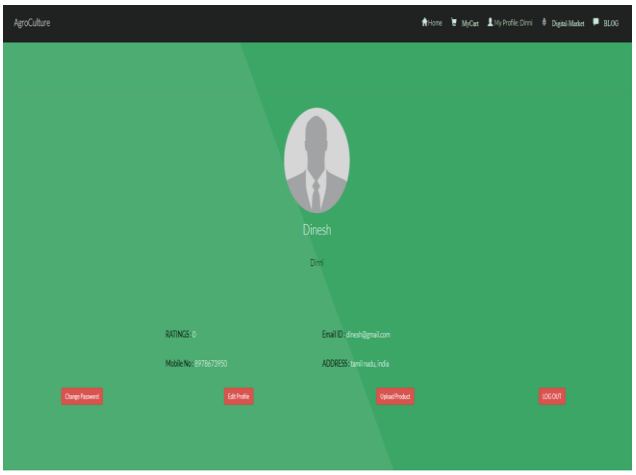
Farmer Login Page Photo



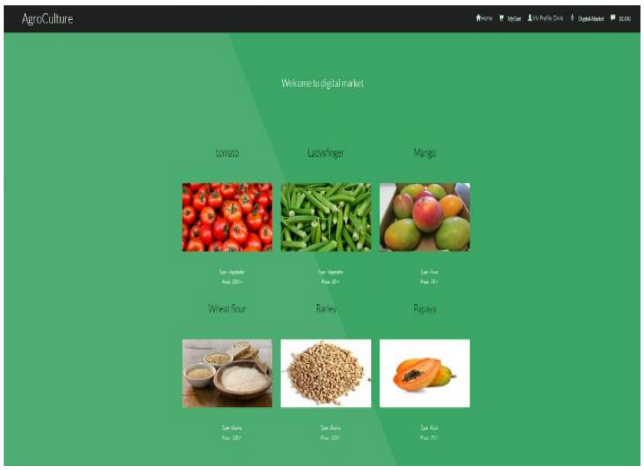
After login Farmer Page Looks Like this



Farmer Page in the website

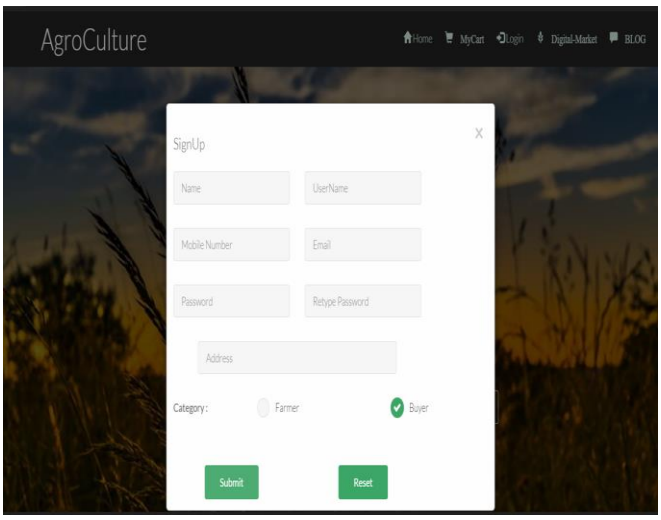


Framer can Upload his all stock like fruits, vegetables, Grains, and he can give his own price.



BUYER (Website Photos)

Buyer Register Photo



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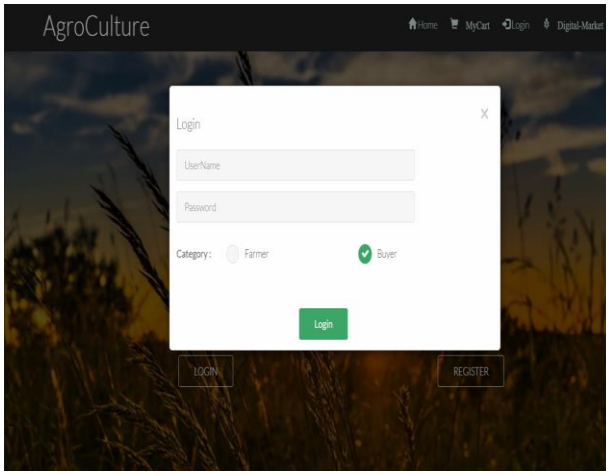
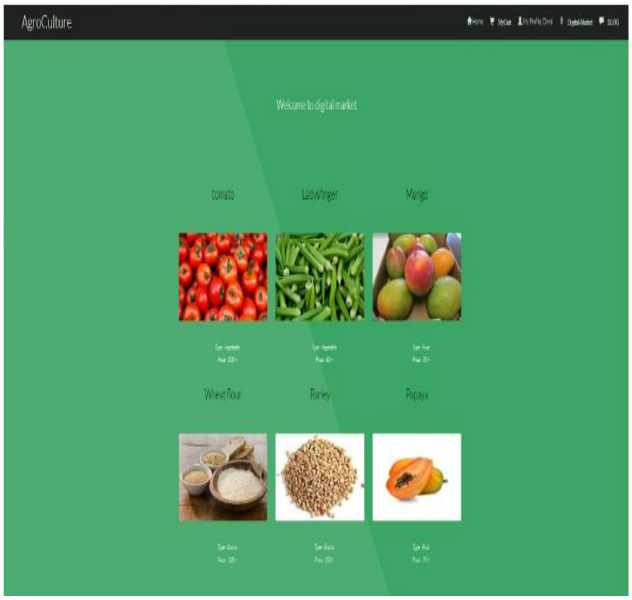
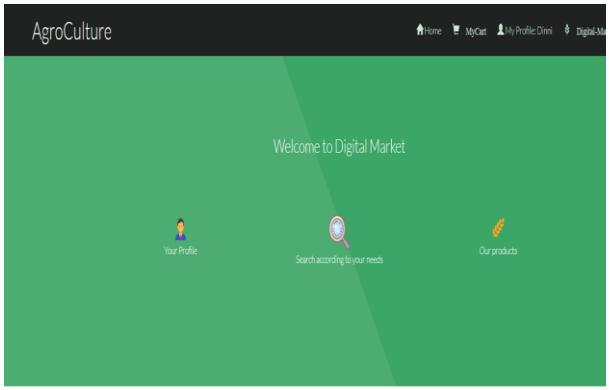
Buyer Login page Photo



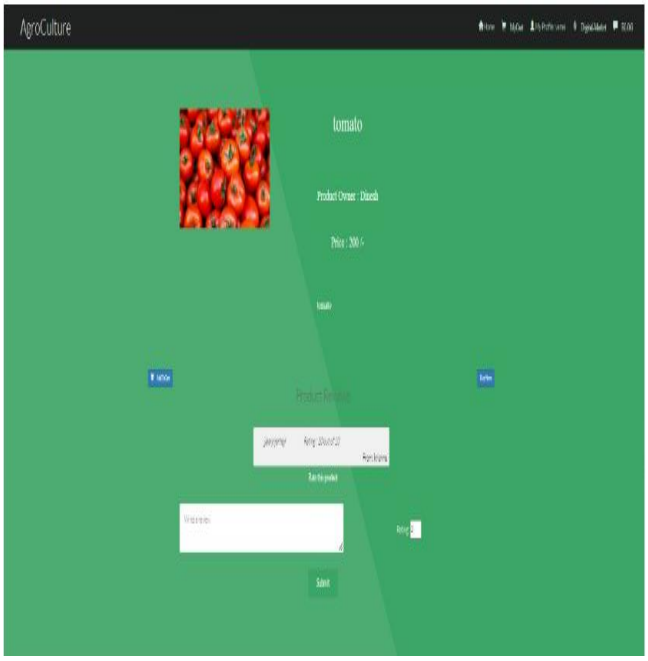


After login buyer page looks like this



Buyer can see all stock like fruits, vegetables, Grains, and he can buy his wanted stock.

Buy now option for buyer that he added to the cart.



These are the total website of Agroculture of online farm management system of farmers and buyers. Total information of website.

10.Testing case of implementation of project.

Table 1: Test case: Testing of the implementation project.

Test case	Test Input	Expected Outcome	Obtain Outcome	F
Farmer Register	Farmer can add his/her profile	Register successfully	Login Successfully	
Admin	Admin can log in to the site to manage	Successfully done	Successfully done	
User	Users can log in to the site for a view.	Successfully done	Successfully done	
Order	Users can order the product	Successfully done	Successfully done	
Payment	Users can make payment	Successfully done	Successfully done	
Cart	Users can add the product to the cart	Successfully done	Successfully done	

11.APPLICATIONS

Efficient and convenient trading:

The platform makes it simple for farming to display their product, making it straightforward for consumers to explore and purchase their food. For both sides, this may result in more effective and convenient commerce.

Direct Communications:

The platform may let farm owners and customers communicate directly, removing middlemen and guaranteeing that the dialogue is straightforward and straightforward.

Wider Market Reach:

Growers may access a larger market outside of their own region by having an internet platform. Farmers may see a rise in revenue and income as a result of this.

Transparent Pricing:

The webpage may aid in promoting cost fairness, which is advantageous to both farmers and consumers. Growers may choose just pricing for their products, and consumers can shop about and evaluate costs to make wise judgements.

Increased Traceability:

Customers may use the web page to monitor the produce's origin and make better informed judgments about just the food they eat. This might help with food tracking and safety.

Feedback ang Reviews:

Customers who use the platform may submit comments and evaluations about the food they have purchased, which can assist farmers raise the calibre of their produce and establish a better brand.

12.Conclusion

In conclusion, an online farmer to buyer website system can be a valuable platform for connecting farmers directly with consumers, allowing for fresh produce to be delivered efficiently and cost-effectively. Such a system can also help farmers increase their profits. However, the success of such a system depends on various factors such as effective marketing, a user-friendly interface, and reliable delivery services. Additionally, it is important to ensure the safety and quality of the produce being sold, and to address any logistical challenges such as transportation and storage. Overall, an online farmer to buyer website system has the potential to benefit both farmers and consumers, and can contribute to the growth of sustainable and locally-sourced food systems.

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