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# Dynamic E-Retailing of Agricultural Products using Blockchain Technology

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**ABSTRACT:** The agricultural sector is being impacted by e-commerce, as customers often have to travel long distances to get products and quality is not always ensured. Our project aims to help farmers and customers by creating a computerized platform for buying and selling agricultural products across the country. The website will provide farmers with access to new farming techniques, market rates, total sales, and earned profits. E-farming will allow farmers to sell their products nationwide with just basic website knowledge. The project will use block-chain technology, a decentralized and public digital ledger, to securely record transactions across multiple computers. This website will serve as a unique and secure way to perform agro-marketing and enable users to purchase desired products instantly through online payment.

**KEYWORDS:** Agricultural sector, E-commerce, Long distances, Quality assurance, Computerized platform, Buying and selling, Decentralized, Public digital ledger, Secure transactions, Agro-marketing, Online payment, Instant purchase.

## I. INTRODUCTION

Sharing economy is disrupting industries including agriculture with the help of technology and mobile devices. Platforms like Airbnb, Uber, and eBay offer sharing economy services allowing people to exchange goods or provide paid services. C2C-PT has emerged in agriculture enabling direct exchange between farmers and consumers. Increased usage of smartphones and the internet has made C2C-PT in agriculture increasingly popular. Sharing economy services are projected to rise, which can transform agriculture by promoting sustainability and efficiency in the supply chain while eliminating intermediaries.

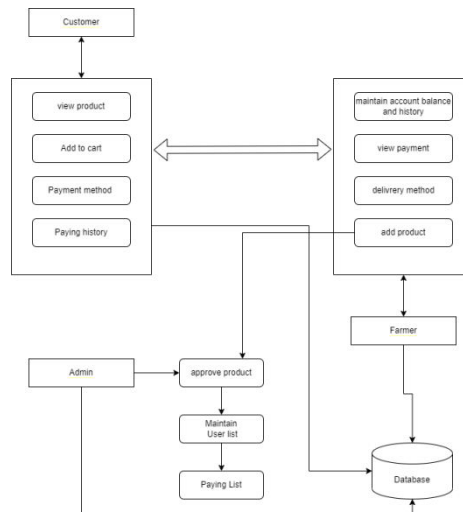
## II. RELATED WORK

1. "Agricultural Product Trading Using Blockchain Technology" by S. Babu and S. Vetrivel. This paper proposes a blockchain-based e-commerce system for the trading of agricultural products. It includes features such as smart contracts, supply chain tracking, and transparent transactions.
2. "Blockchain Technology for Agricultural Supply Chain Management: A Literature Review" by G. V. N. Ravi Kumar and P. V. G. D. Prasad Reddy. This paper provides a comprehensive review of the application of blockchain technology in agricultural supply chain management.
3. "Smart Contracts for Agricultural Supply Chain Management: A Case Study" by S. S. Sahu, S. S. Dash, and S. K. Sahoo. This paper presents a case study of a blockchain-based smart contract system for agricultural supply chain management.
4. "A Blockchain-Based Traceability System for Agricultural Products" by T. R. Ngo, N. T. Huynh, and D. T. Nguyen. This paper proposes a blockchain-based traceability system for agricultural products.
5. "Blockchain Technology for E-Commerce in Agriculture" by B. Adhikari, A. Srivastava, and A. Roy. This paper explores the potential of blockchain technology for e-commerce in agriculture.



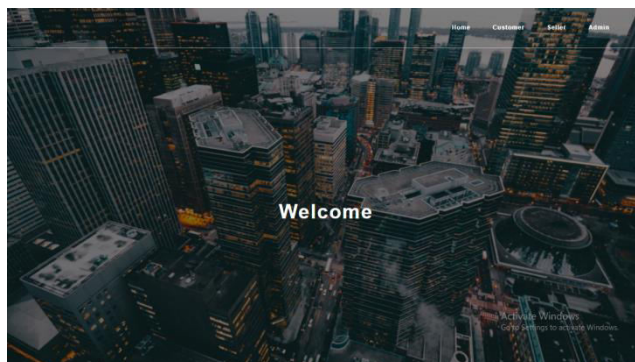
### III. METHODOLOGY

The proposed methodology for this e-commerce project in the agricultural sector aims to create a centralized platform using technology that connects farmers and customers across the country. The website will act as a one-stop-shop for farmers to sell their products and for customers to purchase agricultural products online, providing convenience and removing the need for travel. It prioritizes the welfare of farmers by equipping them with access to new farming techniques, market rates, and sales information to make informed decisions leading to greater profitability. The website also facilitates direct communication between farmers and customers, enhancing profitability, and allowing agro-marketing with basic knowledge of the website. This project will revolutionize the agricultural sector by providing a secure and unique platform that benefits both farmers and customers by streamlining the process of buying and selling agricultural products and facilitating direct communication.



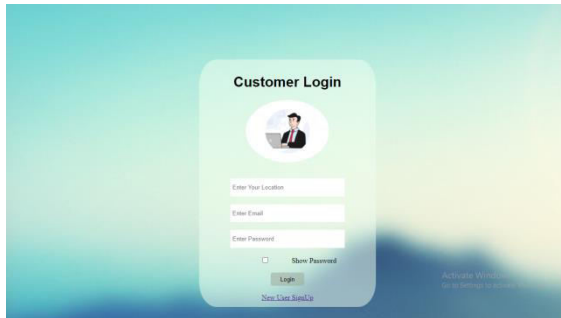
### IV. EXPERIMENTAL RESULTS

Index page:

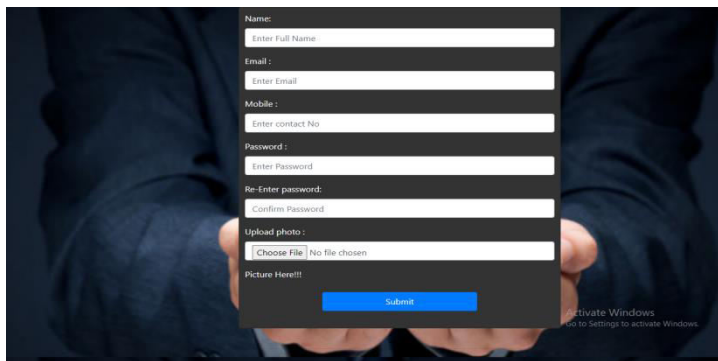




Customer Login page:



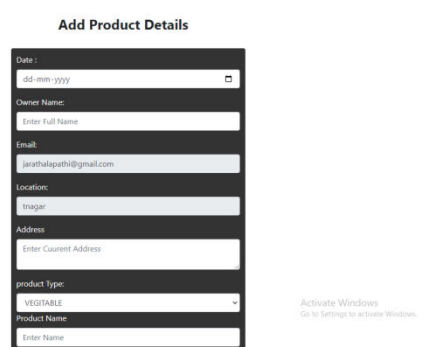
Customer Register Page:



Customer Main page:



Product Add page:





Request page:

PRODUCT NAME	PRODUCT PRICE	ORDER QUANTITY	TOTAL	CUSTOMER	STATUS
<a href="#">Back</a>					

Payment Page:

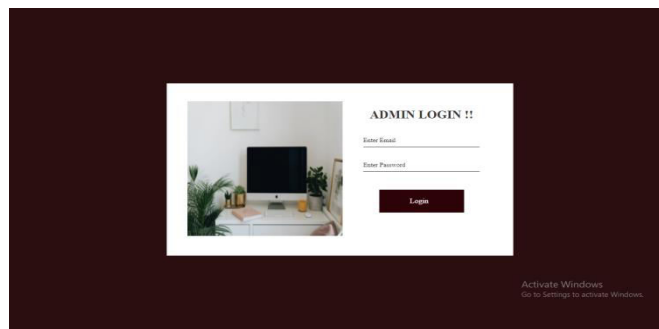
Order Details

S.no	Food Name	category	price	quantity	Payed Type	Customer
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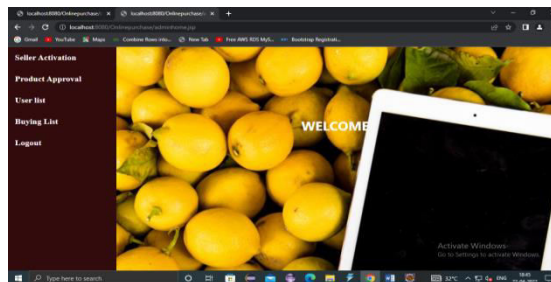
Total Amount: 0

[Print](#)

Admin Login Page:



Admin Main page:



V. CONCLUSION

In conclusion, consumer-to-consumer is a source of communication for companies to Customers, and a way to solve Customers' problems through a community effort. Companies can find out future trends, and can work towards zero complaints by understanding Customer issues, and ensuring Customer problems do not re-occur. consumer-to-consumer is the buying and selling of goods and services, or the transmitting of funds or data, over an electronic network, primarily the internet. These business transactions occur either as business-to-business (B2B), business-to-consumer (B2C), consumer-to-consumer or consumer-to-business.

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