MOBILE APP FOR DIRECT MARKET ACCESS FOR FARMERS

A PROJECT REPORT

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Under the guidance of,

Dr. N THRIMOORTHY

in partial fulfillment for the award of the degree

of

BACHELOR OF TECHNOLOGY

IN

COMPUTER SCIENCE AND ENGINEERING

At

GAIN MORE KNOWLEDGE
REACH GREATER HEIGHTS

PRESIDENCY UNIVERSITY BENGALURU
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PRESIDENCY UNIVERSITY

PRESIDENCY SCHOOL OF COMPUTER SCIENCE AND ENGINEERING

CERTIFICATE

This is to certify that the Project report "**MOBILE APP FOR DIRECT MARKET ACCESS FOR FARMERS**"being submitted by"RAYALA CHERUVU KARTHIK, JATIN THAPA, BALA MADHUSUDHAN, YATHAM SAI UDAY KIRAN REDDY " bearing roll numbers "20211CSE00137, 20211CSE0048, 20211CSE0138, 20211CSE0189" in partial of the requirement for the award of the degree of Bachelor of Technology in Computer Science and Engineering is a bonafide work carried out under my supervision.

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DECLARATION

We hereby declare that the work, which is being presented in the project report entitled "**MOBILE APP FOR DIRECT MARKET ACCESS FOR FARMERS**" in partial fulfillment for the award of Degree of **Bachelor of Technology in Computer Science and Engineering**, is a record of our own investigations carried under the guidance of **Dr. N THRIMOORTHY**, **ASSISTANT PROFESSOR**, **School of Computer Science Engineering, Presidency University, Bengaluru.**

We have not submitted the matter presented in this report anywhere for the award of any other Degree.

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ABSTRACT

This project presents a fully functional Android application designed to bridge the gap between farmers and consumers through a digital marketplace tailored to the Indian agricultural ecosystem. The application offers two distinct login interfaces—one for farmers and another for consumers—ensuring personalized user experiences. Farmers can add produce to their inventory with real images and set prices intelligently using a dynamic pricing model. This model leverages real-time government data and machine learning to recommend optimal prices based on crop type, location, and seasonal trends. Additionally, farmers receive crop yield predictions through a weather forecasting API, helping them choose the most suitable crops for plantation during different seasons like Rabi and Kharif. The interface also provides data-driven insights on crop trends, including the most profitable and frequently grown crops, and maintains a complete history of their sales and transactions.

On the consumer side, the application facilitates location-based discovery of available produce, enabling users to filter commodities by type, area, and price. Consumers can view a real-time commodity pricing dashboard similar to the farmer's, aiding in informed purchasing decisions. A searchable transaction history helps track their purchases effectively. This project integrates features such as smart inventory management, dynamic pricing with AI support, weather-based crop prediction, and interactive data analytics to empower both farmers and consumers, thereby contributing to transparency, profitability, and efficiency in the agri-market.

Keywords:

Android Application, Agriculture, Farmer-Customer Interface, Dynamic Pricing, Machine Learning, Weather API, Crop Prediction, Market Analysis, Inventory Management, Real-Time Data, Agri-Tech, Mobile Commerce, Smart Farming.