KISAN BUDDY

A PROJECT REPORT

Submitted by,

Mr. MOHAMMED ISMAIL	**20211CSE0784**
Mr. SHAIK AKRAM	**20211CSE0783**
Mr. BANDI RAGHAVENDRA	**20211CSE0762**

Under the guidance of,

Dr. VAIRAVEL CHENNIYAPPAN

in partial fulfillment for the award of the degree of

BACHELOR OF TECHNOLOGY

IN

COMPUTER SCIENCE AND ENGINEERING

At

PRESIDENCY UNIVERSITY

BENGALURU

JANUARY 2025

PRESIDENCY UNIVERSITY

SCHOOL OF COMPUTER SCIENCE AND ENGINEERING

CERTIFICATE

This is to certify that the Project report **"KISAN BUDDY"** being submitted by "MOHAMMED ISMAIL, SHAIK AKRAM, BANDI RAGHAVENDRA" bearing roll number(s) "20211CSE0784, 20211CSE0783, 20211CSE0762" in partial fulfillment 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.

20/11/2025

Dr. VAIRAVEL CHENNIYAPPAN
Assistant Professor
School of CSE
Presidency University

20/11/25

Dr. ASIF MOHAMMED H.B
Asso. Prof& HoD
School of CSE
Presidency University

Dr. L. SHAKKEERA
Associate Dean
School of CSE
Presidency University

Dr. MYDHILI NAIR
Associate Dean
School of CSE
Presidency University

Dr. SAMEERUDDIN KHAN
Pro-Vc School of Engineering
Dean -School of CSE&IS
Presidency University

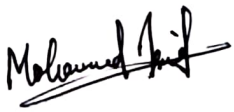
PRESIDENCY UNIVERSITY

SCHOOL OF COMPUTER SCIENCE AND ENGINEERING

DECLARATION

We hereby declare that the work, which is being presented in the project report entitled **KISAN BUDDY** 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. VAIRAVEL CHENNIYAPPAN, Asst. Prof, School of Computer Science and Engineering, Presidency University, Bengaluru.**

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

NAME	ROLL NO	SIGNATURE
MOHAMMED ISMAIL	20211CSE0784	
SHAIK AKRAM	20211CSE0783	
BANDI RAGHAVENDRA	20211CSE0762	

ABSTRACT

The Kisan Buddy project is a mobile application designed to empower Indian farmers by addressing critical challenges such as limited market access, outdated market prices, and inefficient trade systems. With agriculture being the backbone of India's economy, improving farmers' accessibility to real-time data and optimized trade mechanisms is essential for sustainable growth. Despite existing applications, research highlights significant gaps, including a lack of real-time market updates, user-friendly interfaces, and robust decision-making support. Kisan Buddy bridges these gaps by leveraging Firebase Authentication for secure login and registration, Firebase Realtime Database for seamless data management, and Firestore for structured, scalable data storage. The app offers features like real-time mandi price updates, personalized cost estimation, and intuitive navigation to nearby mandis through Google Maps integration. Methodologically, the application integrates advanced mobile technologies, ensuring offline functionality and multilingual support to cater to the diverse needs of Indian farmers. Early testing has demonstrated improved decision-making, market transparency, and accessibility, fostering better economic outcomes. By addressing issues such as market inefficiencies and digital literacy barriers, the app aligns with the United Nations' Sustainable Development Goals, particularly those related to economic growth and reduced inequalities. Kisan Buddy represents a transformative solution, combining innovative technology with user-centric design to enhance agricultural productivity and profitability. This research underscores the potential of digital tools in revolutionizing rural livelihoods, offering a scalable and adaptable framework for improving the socio-economic conditions of farmers in India. The findings highlight its ability to bridge existing gaps and its role in advancing sustainable agricultural practices.