**Abstract**

**MAIN PROJECT – 20MCA246**

**FarmConnect**

***Empowering Agricultural Commerce through Digital Platform***

**Submitted By: Project Guide:**

N Amal Thomson Ms. Meera Rose Mathew

Reg. MCA (S4) B Asst. Professor

2022 – 2024 Department of Computer Applications

Uni. Roll No. AJC22MCA-2065 Amal Jyothi College of Engineering

**FarmConnect**

***Empowering Agricultural Commerce through Digital Platform***

FarmConnect: Empowering Agricultural Commerce through Digital Platform - FarmConnect, powered by Flutter and Firebase, a platform that seamlessly connects farmers and buyers. Browse, select, and purchase the freshest farm products directly from growers/producers.

**Front-End:** Flutter

**Back-End:** Firebase

**Key Modules**

1. Admin

2. Users

a. Farmers

b. Buyers

**Admin:**

FarmConnect provides admin with comprehensive tools for managing user accounts, moderating product listings, facilitating secure transactions, and ensuring a smooth and transparent experience for both farmers and buyers.

**Farmers:**

FarmConnect empowers farmers to showcase their products, receive seasonal cultivation recommendations, manage inventory, fulfil orders efficiently, and access personalized guidance for sustainable farming practices.

**Buyers:**

FarmConnect offers buyers a user-friendly platform for discovering a diverse array of products, placing orders, tracking deliveries in real-time, and engaging directly with farmers for inquiries and product information.

**Functionalities in FarmConnect**

**Admin Module**

1. Login
2. Google Authentication
3. User Management (Enable, Disable)
4. Dashboard
5. Product Approval
6. Facilitate Payment
7. Email Notification (Approval, Rejection, Enable, Disable, Orders)
8. Separate Section for Organic Products
9. Blockchain integration for storing User Data
10. Add Categories and Products
11. Stock Management
12. Provide Agricultural News and Latest Notifications

**Farmer Module**

1. Farmer Registration and Login
2. Profile Management (Reset Password, Update Profile)
3. Dashboard
4. Add Products
5. Payments and Billing
6. Inventory Tracking
7. Order Management
8. Track Products with Low Stock
9. Agricultural News
10. Email Notification (Approval, Rejection, Enable, Disable, Orders)

**Buyer Module**

1. User Registration and Login
2. Profile Management (Reset Password, Update Profile)
3. Dashboard
4. Product Search
5. Cart
6. Wishlist or Favourites
7. Payment
8. Invoice Generation
9. Email Notification (Approval, Rejection, Enable, Disable, Orders)
10. Order Management (Order, Tracking, History)
11. Feedback
12. Rating

FarmConnect stands as a transformative digital platform powered by Flutter and Firebase, uniting farmers and buyers in a seamless and efficient agricultural ecosystem. By providing farmers with tools for showcasing their products and receiving seasonal cultivation recommendations, and buyers with a user-friendly interface for product discovery and secure transactions, FarmConnect revolutionizes the way agricultural commerce is conducted. The integration of data science and machine learning offers valuable insights and personalized recommendations, ensuring sustainable farming practices and promoting growth in the agricultural sector.

**Date: 18/01/2024**