



FarmKart – Direct Farmer to Consumer Marketplace

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Introduction

FarmKart is a web-based application designed to connect farmers directly with consumers.

The project focuses on eliminating intermediaries, ensuring fair pricing for farmers, and providing fresh produce to consumers using modern web technologies.



Problem Statement

Core Problem :

Farmers receive low profit due to middlemen
Consumers pay higher prices
Lack of transparency in traditional markets

Why it matters :

Affects farmer income
Reduces consumer trust
Limits digital adoption in agriculture

Goals and Objectives



Root-to-Route

Enable direct farmer-to-consumer interaction.



Agri-Commerce

Provide online product listing and cart system.

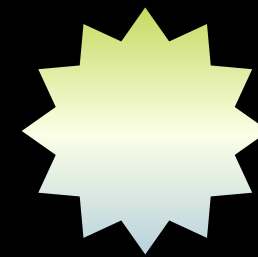


Secure DB Integration

Secure data management using PostgreSQL.

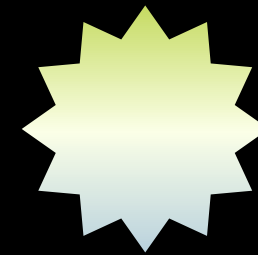
Tools and Methodology

The project follows a modular web development approach using Flask framework and relational database design. Functional testing was performed to validate each module.



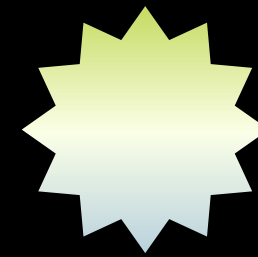
Python (Flask)

Developed the server-side application logic and API routes using flask framework.



HTML,CSS,JavaScript

Designed a responsive and accessible user interface using HTML5 and CSS.



PostgreSQL,pgAdmin

Achited a database schema in postgresQL for secure data storage.

Findings and Results

- Successfully developed a functional farmer-to-consumer web platform
- Farmers can add and manage agricultural products digitally
- Consumers can browse products, add them to cart, and complete checkout
- Role-based access works correctly for farmers and consumers
- Data is stored and verified using PostgreSQL database

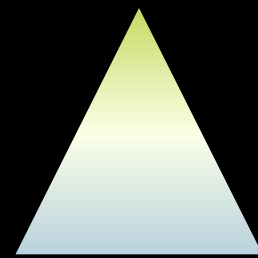
The project achieved its primary goal of enabling direct digital interaction between farmers and consumers while ensuring reliable data handling and system stability.

Key Findings



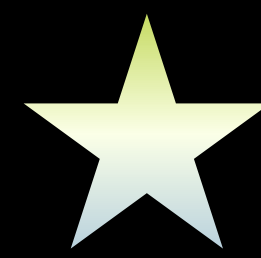
Finding 1

Direct farmer-to-consumer interaction improves transparency and fairness in pricing.



Finding 2

Using PostgreSQL ensures secure, consistent, and scalable data storage.



Finding 3

A simple and responsive UI increases usability for all users.

Conclusion

FarmKart successfully addresses the problem of intermediaries in traditional agricultural markets by providing a direct digital marketplace. The project fulfills its objectives and demonstrates the practical application of web technologies and relational databases in solving real-world problems.



Summary of key points

- ➡ **Problem Identification**
Identified major challenges in traditional agricultural marketplaces.
- ➡ **System development**
Designed and implemented a farmer-centric web application.
- ➡ **Successful Outcome**
Achieved a functional, secure, and user-friendly system enabling direct interaction between farmers and consumers.

