

## PSCS\_281\_Mobile App for Direct Market Access for Farmers

Batch Number:ISE\_18

Under the Supervision of

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# Problem Statement Number: PSCS\_281

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**Organization :** Ministry of Agriculture and Farmers Welfare

**Category :** Software

**Problem Description :** Farmers frequently encounter significant barriers in accessing local and broader markets, resulting in lower income and financial insecurity.

- Farmers face difficulties accessing markets which drives down their income.
- Reliance on middlemen reduces profit margins and market reach.
- Direct access between farmers and buyers is limited.



# Content

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- Problem Statement
- Objectives
- Background and Related work for title Selection
- Analysis of Problem Statement
- Innovation or Novel Contributions
- Git-hub Link
- Timeline of the Project
- References



# Problem Statement

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- Problem :-

Farmers face limited market access due to poor transport, infrastructure, and reliance on middlemen, which reduces their income.

Lack of timely market price information and transparency causes farmers to get unfair prices.

Many farmers have low digital literacy, poor internet access, and limited capacity to use technology platforms.

- Solution :-

A mobile app connecting farmers directly to consumers and retailers to cut out middlemen.

Real-time market price updates, secure digital payments, and transaction management features.

User-friendly design with local language and voice support to include farmers with low literacy.

- Impact :-

Mobile applications increase farmers' income by providing direct access to markets, reducing reliance on intermediaries, and improving price transparency.



# Problem Objectives

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- Eliminate intermediaries to enable fair pricing.
- Empower farmers with direct market communication.
- Facilitate seamless digital transactions.
- Support multi-language and voice assistance.
- Provide real-time market and weather insights.



# Literature Review & Related Work

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- Market challenges for farmers.
- Role of mobile/digital platforms in direct access.
- AI-driven pricing and logistics solutions.
- Secure payment integrations enhancing trust.



# Proposed Solution and Features

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- User-friendly interface for product listing and management.
- Real-time price negotiation.
- Secure digital payments (UPI, wallets, bank transfers).
- AI-driven price recommendations and market insights.
- Integrated logistics and delivery tracking.
- Multilingual and speech-enabled accessibility.
- Rating and review system for trust and transparency.



# System Architecture

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- Frontend tech (Android, Kotlin).
- Backend (Firebase, Node.js, AI/ML modules).
- Payment gateways and blockchain for secure transactions.
- Logistics and delivery APIs for optimized routing.





# Challenges and Future Enhancements

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- Internet connectivity and digital literacy issues.
- Offline modes, expanded logistic networks.
- AI-powered crop demand prediction.
- Value-added services and sustainability focus.



## Github Link

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<https://github.com/Shalini0828/Mobile-App-for-Direct-Market-Access-for-Farmers>

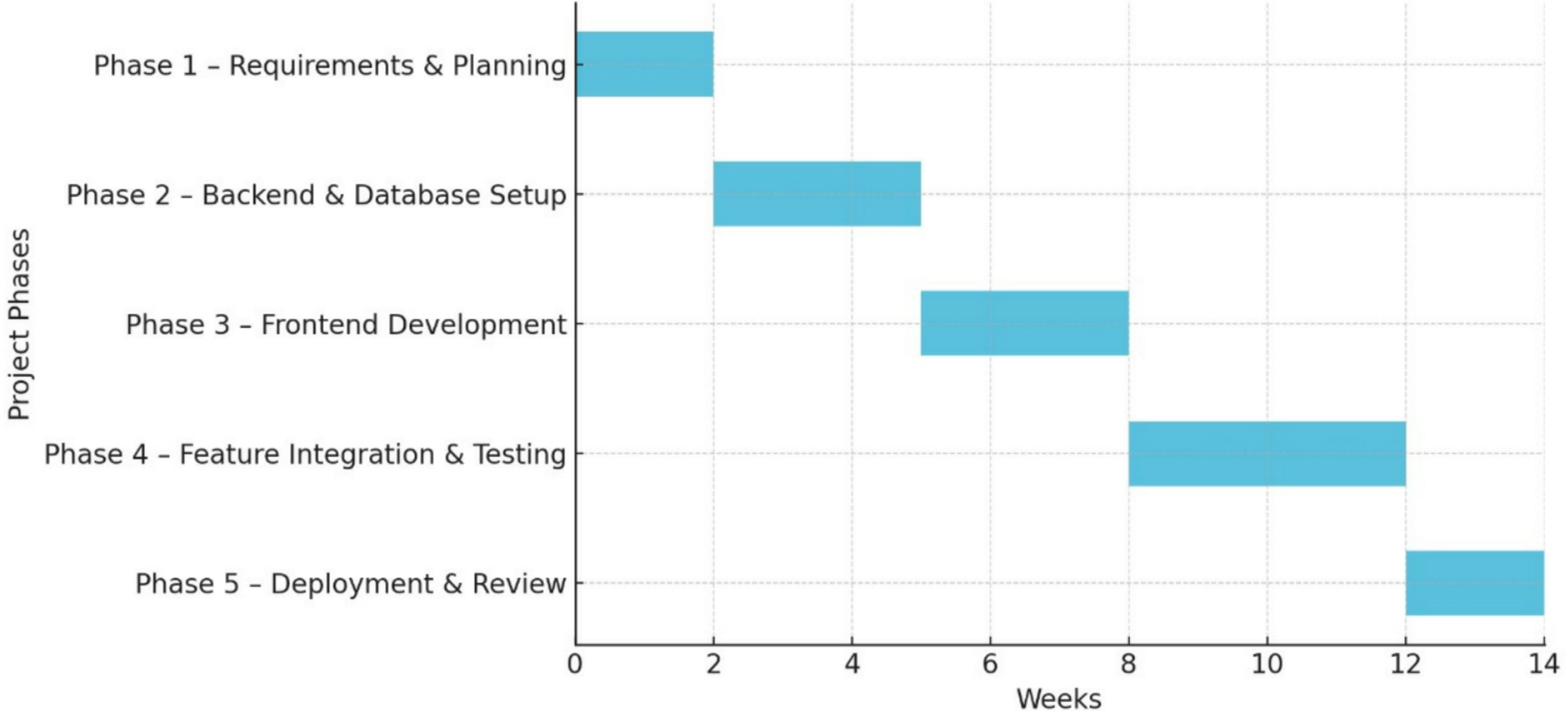


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# Timeline of the Project (Gantt Chart)

Project Timeline - Gantt Chart



# References (IEEE Paper format)

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2. P. Gupta and M. R. Chauhan, "Reducing Middlemen: Mobile Apps for Direct Farmer-to-Consumer Sales," *IEEE Transactions on Agriculture Informatics* , vol. 9, no. 1, pp. 75-82, Jan. 2025.
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# Conclusion

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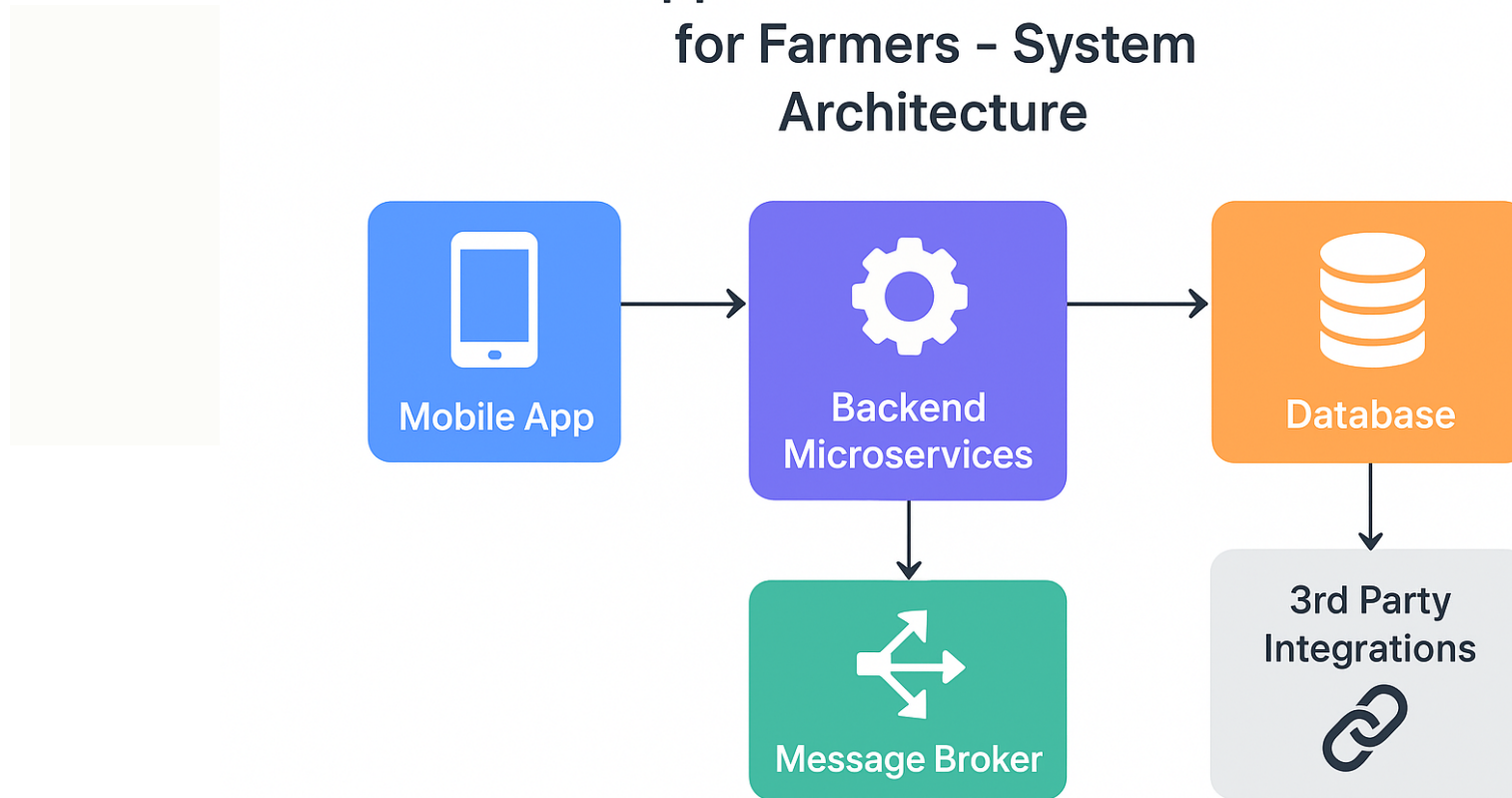
- Mobile app significantly bridges market access gaps.
- Empowers farmers economically.
- Promotes sustainable and direct agricultural trade.



# System Architecture :

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## Mobile App for Direct Market Access for Farmers - System Architecture



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Thank  
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