

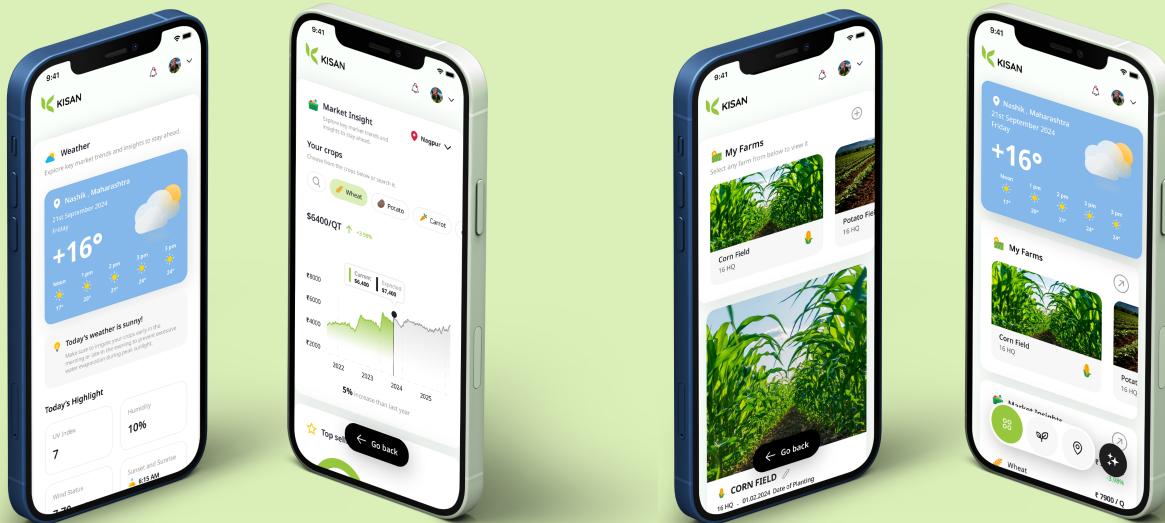


Empowering Farmers with Smart, Simple Solutions

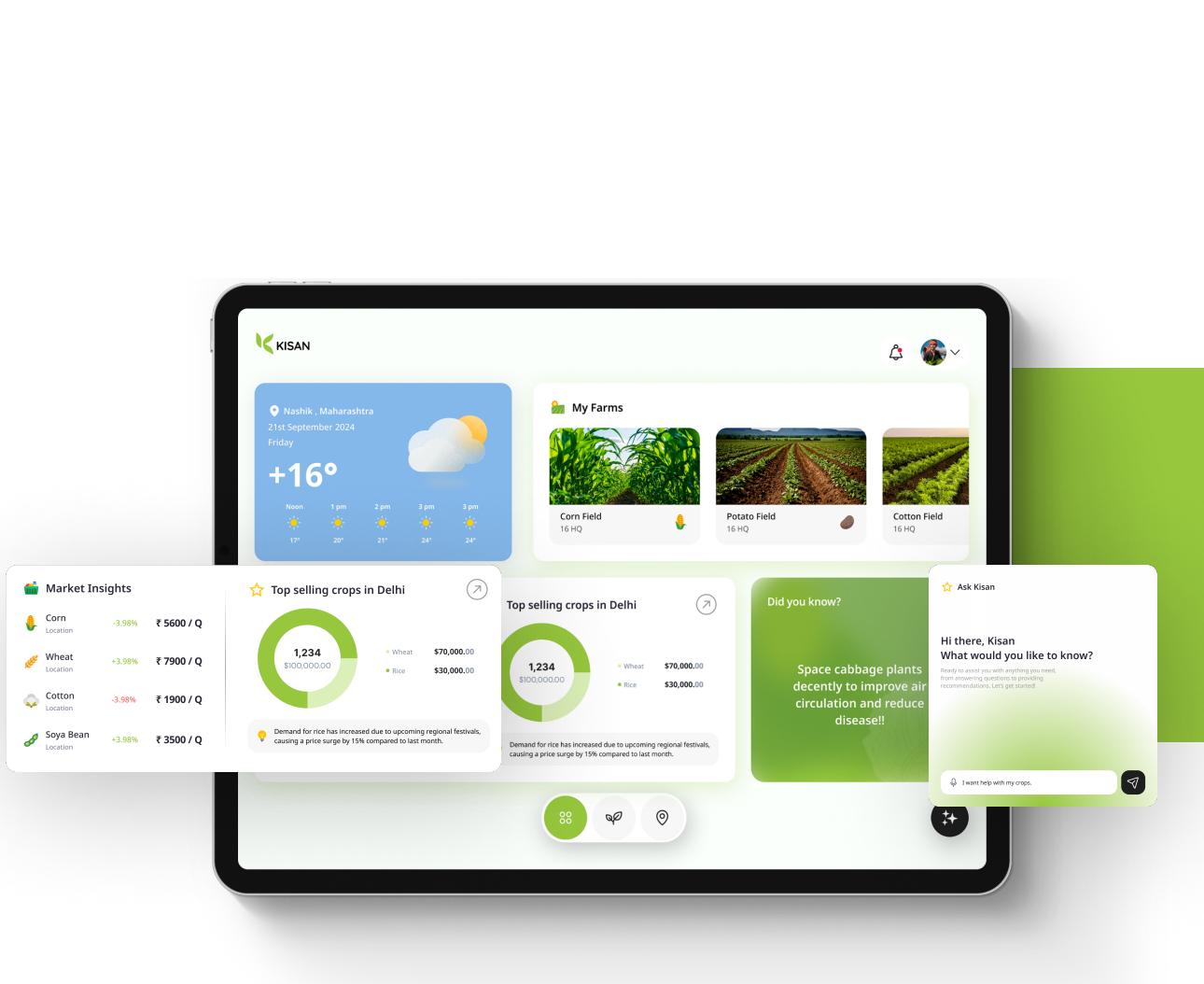
Smart

Data-Driven

Sustainable



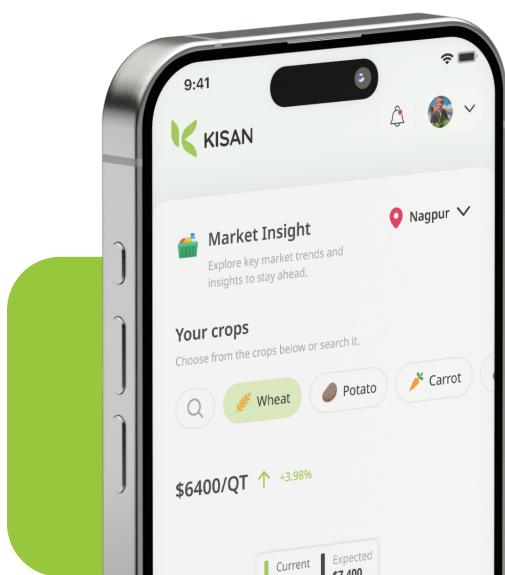
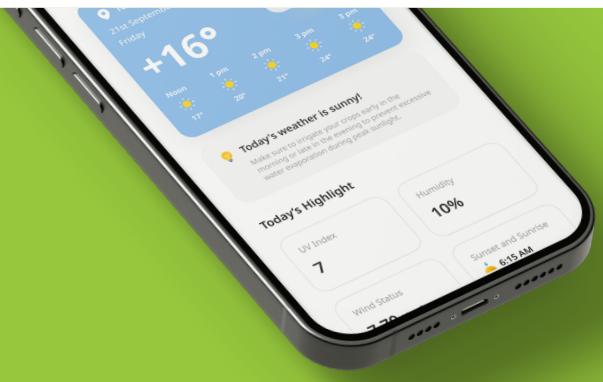
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Kisan is a comprehensive platform designed to empower farmers by simplifying their journey toward sustainable growth. Through advanced AI, intuitive design, and data-driven insights, Kisan bridges the gap between traditional farming practices and modern technology.

Weather Forecasting & Alerts

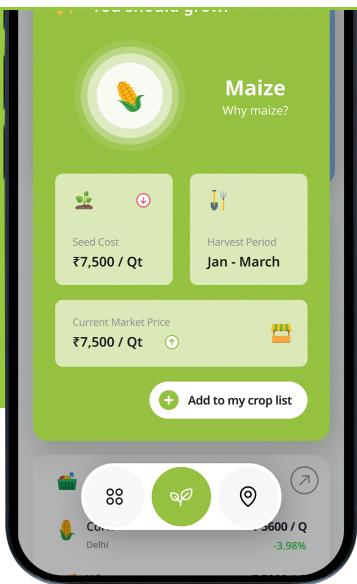
Stay prepared with real-time, location-based weather updates to optimize your farming activities and avoid surprises.



Real-Time Market Insights

Stay updated on crop market prices and trends to make informed selling decisions.

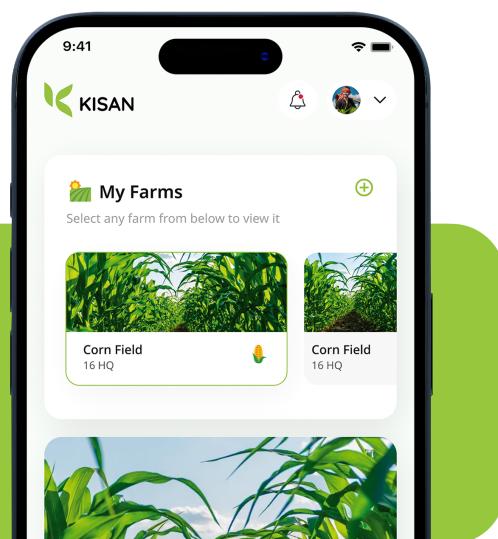
Personalised Crop Recommendations



Get personalized guidance on the best crops to grow based on your farm's conditions, ensuring maximum yield

Farm Management Simplified

Effortlessly manage farms with a single intuitive platform to track crops, monitor soil health, and record activities.



The **Kisan** platform leverages data from diverse sources to provide farmers with actionable insights. By integrating JSON and CSV datasets, government APIs, weather services, and Google data, we ensure recommendations are accurate, relevant, and personalised.

Real-Time Data Adjustments:

The platform dynamically adjusts crop recommendations and market insights based on user inputs, such as soil type, crop history, and location.

Personalised Insights:

Farmers receive tailored recommendations that consider weather conditions, market trends, and sustainability practices to maximize yield and profitability.

Unified Data Aggregation:

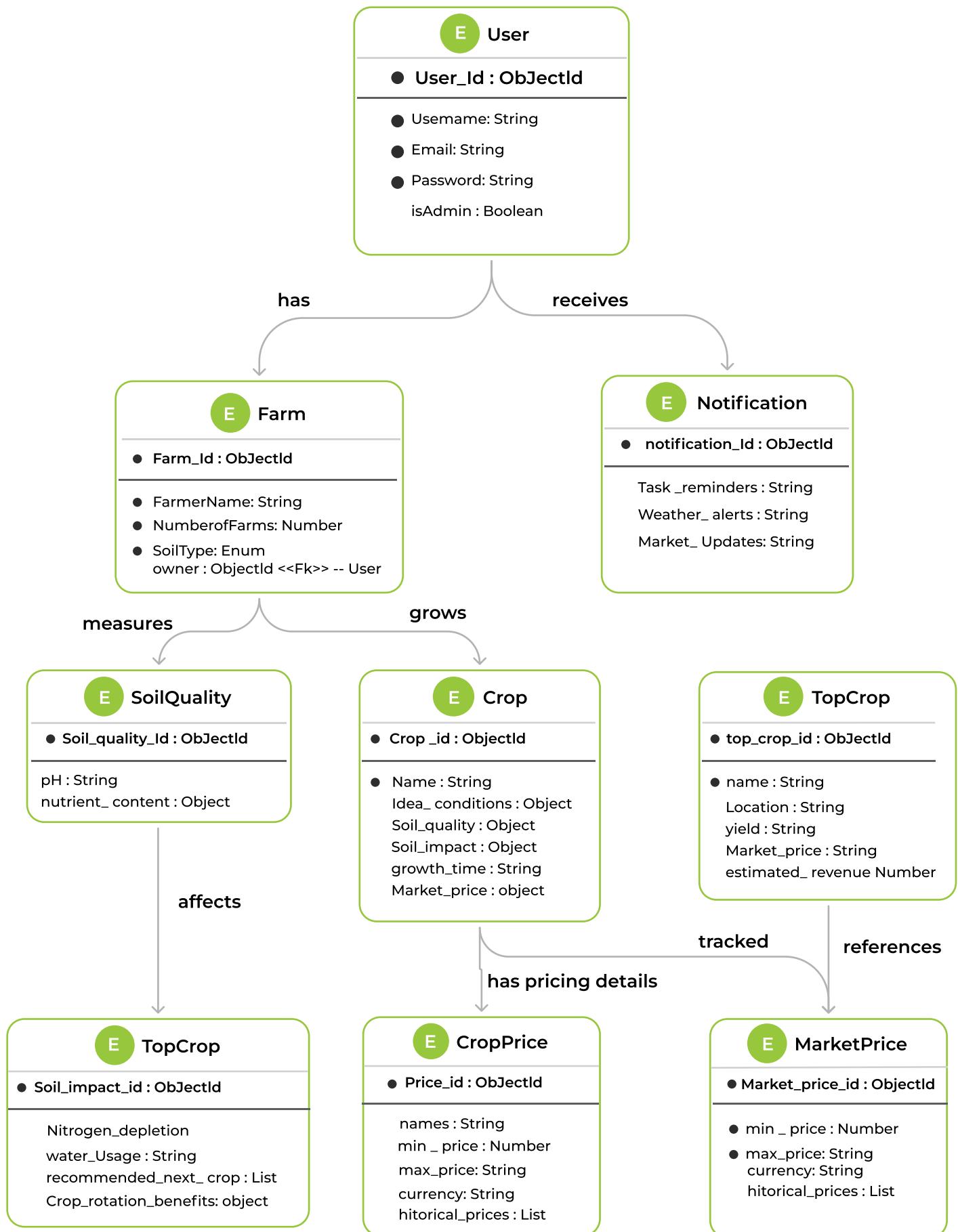
Information from multiple sources is merged into a single dataset, allowing seamless integration of weather updates, pricing trends, and crop suggestions.

Relevancy for Farmers:

The data-driven approach ensures farmers make informed decisions, preserving soil quality and supporting sustainable farming practices.

This structured data utilization ensures Kisan delivers a precise, efficient, and impactful farming experience.

Database Structure



Project Timeline

Week 1-2

- User Research & Persona Development
- Research APIs & Initial Setup

We define the scope of work to outline project objectives, deliverables, timelines, and resources needed. This ensures clarity, alignment and accountability among team members, ultimately facilitating efficient project execution and successful outcomes.

Week 3

- User Flow Creation

Week 3-5

- Backend Routes, API Integration, and Database Setup

Week 4-6

- UI Kit Development & Wireframing

Week 6-7

- Frontend Structure and API Integration

Week 7

- High-Fidelity Prototyping

Week 8-12

- Testing, Feedback, and Final Implementation

Week 10-12

- Frontend Structure and API Integration

Design

Development

User Insights

Through surveys and interviews with five farmers, we identified key challenges like unpredictable weather, limited market price access, and complex farm management. Farmers emphasized the need for simple, accessible tools to streamline their work.

These insights shaped Kisan as an all-in-one platform with real-time weather updates, localized market insights, and farm management tools. Regional language support ensures it's accessible to all farmers.

"I often struggle to plan my crops with unpredictable weather patterns."

- Shubham

"I need tools that are simple and easy to use, especially in my regional language."

- Bijay

Fear: Farmers fear unpredictable weather conditions, fluctuating market prices, and unforeseen challenges in crop management.

Confusion: Farmers often struggle to navigate the complex landscape of agricultural tools and resources.

Insecurity: Farmers feel insecure about their ability to compete in the market and achieve consistent crop yields.

Overwhelm: Balancing farm management, crop planning, and market strategies can feel overwhelming.

"Having clear and accurate market prices would help me sell my produce more confidently."

- Ramlal

Competitive Analysis



KISAN



MANDI



AgroStar



Crop Recommendation	✓	✗	✓	✓
Market Price	✓	✓	✗	✗
Weather	✓	✗	✗	✗
Tips	✓	✓	✓	✓
Chat bot	✓	✗	✗	✗

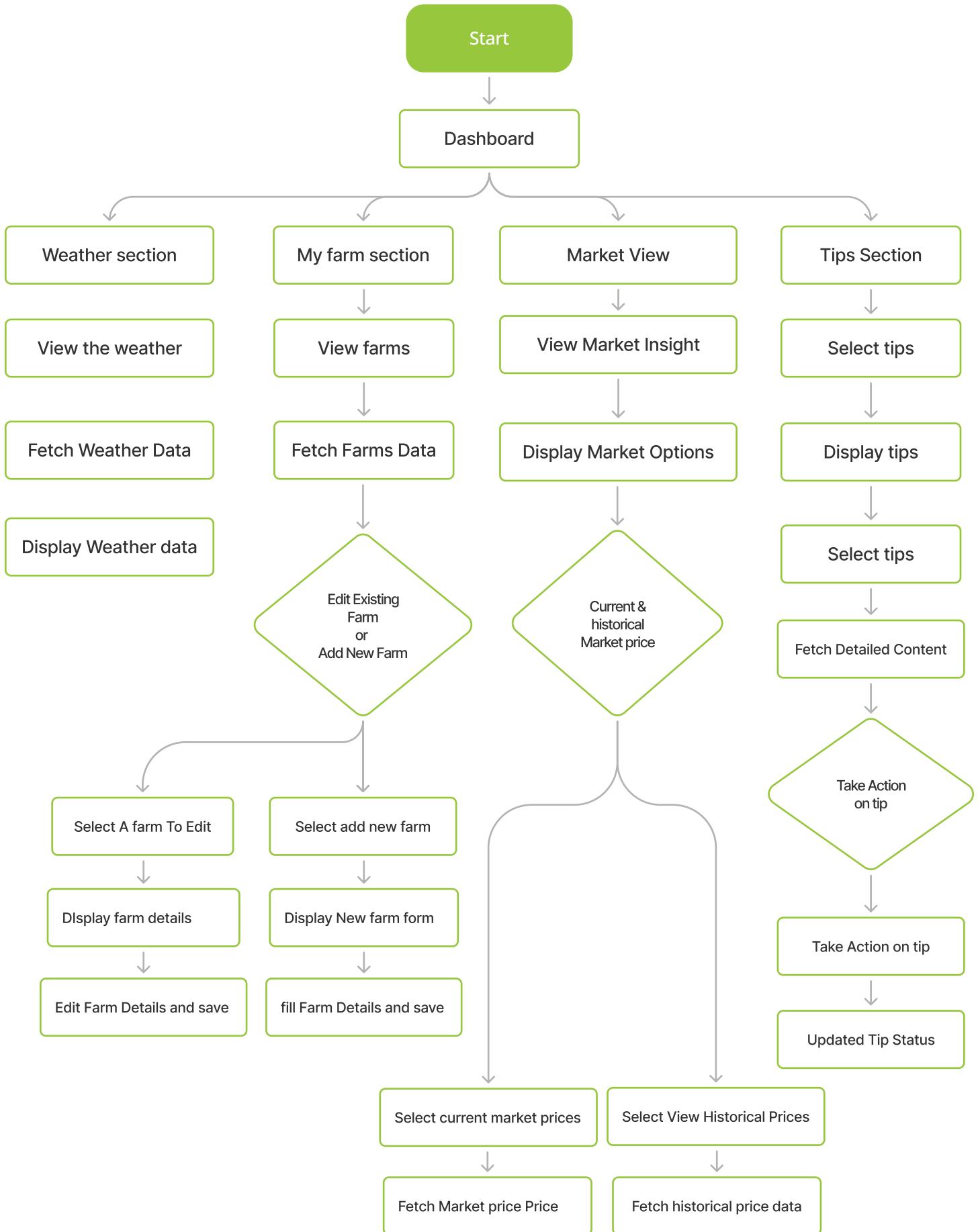
Our analysis highlights **Kisan's** distinct advantages over competitors like Gramophone, Krish-e, and DeHaat in the AgriTech space

Let's know why!



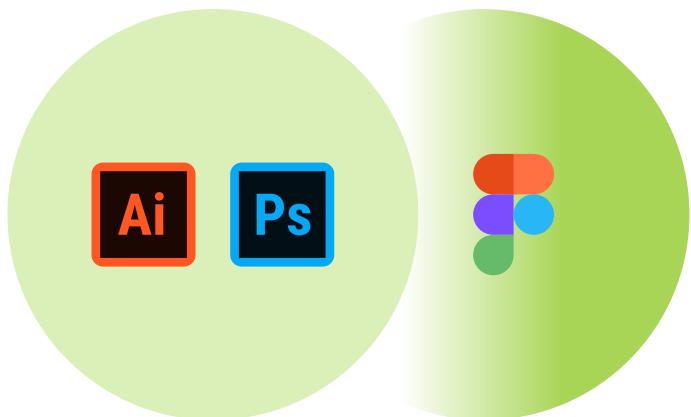
Crop Recommendation	AI-driven, personalized in real-time	Basic marketplace focus; no crop advice	General agronomy support; lacks data-driven insights	Personalized; lacks real-time updates
Weather Updates	Real-time, integrated with recommendations	Basic info, no integration	Weather updates without integration	Basic, not deeply integrated
Market Price Insights	Interactive dashboard with trends	Marketplace listings only	Lacks detailed market analysis	Market prices but no interactive tools
Technology Integration	Advanced APIs (AI, Google Maps, Translation)	Basic marketplace only	Hybrid of digital and in-person support	Centralized model, limited integration
Strengths	Real-time insights, AI personalization, comprehensive data	Strong marketplace for transactions	Good advisory network	Centralized access to inputs
Weaknesses	-	Lacks advanced data insights	Limited real-time insights	No in-depth market analysis

Kisan stands out by offering real-time, AI-driven insights that integrate weather, soil, and market data.



Design Software

For the **Kisan** project, we utilized Photoshop for creating and refining visuals, Illustrator for crafting scalable vector designs like icons and logos, and Figma for wireframing, prototyping, and real-time collaboration. These tools streamlined the design process, enabling us to deliver a cohesive, visually engaging, and user-centric interface tailored to meet farmers' unique needs.



Tech Stack

Frontend

Built with React.js for modular design, Vite for fast builds, Tailwind CSS for styling, and ApexCharts.js for interactive data visualizations.



VITE



HTML



CSS

Backend

Powered by Node.js for efficiency, MongoDB for data storage, and Firebase for real-time updates.



Firebase



Node JS



Mongo DB

Frontend libraries

Utilized React.js, Tailwind CSS, and ApexCharts.js for a seamless, responsive, and visually engaging user experience.



React js



Tailwind



Apex Charts

Backend APIs

Integrated OpenAI for AI features, REST API for data flow, Google APIs for advanced functionality, and Vercel for deployment.



Open Ai



Rest API

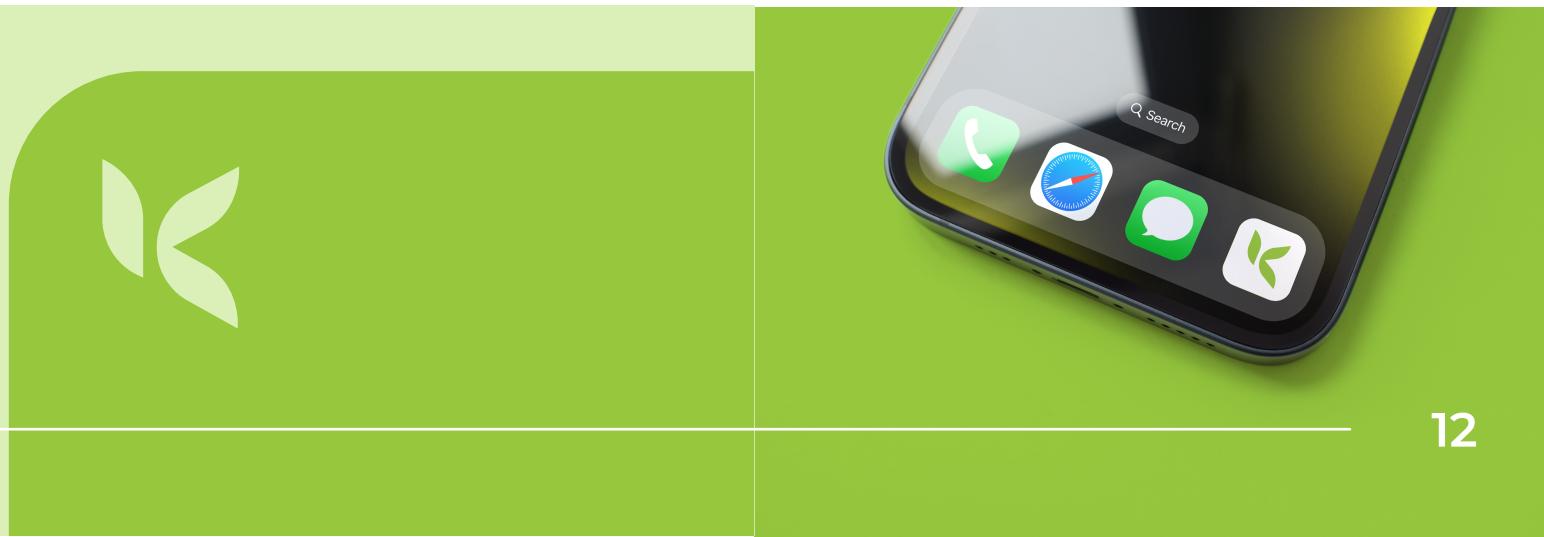


Vercel

Iconography

The Kisan logo, with its two green leaves, symbolizes growth, renewal, and sustainability. The organic shapes represent nature and innovation, and the vibrant green reflects the health and vitality of successful farming.

The logo is designed to be approachable and relevant, tying directly to the values that Kisan stands for—growth, empowerment, and sustainability.



The typeface **Noto Sans** was chosen for its clean and straightforward appearance, making it easy to read across different screen sizes and in various languages. Since our target users come from diverse linguistic backgrounds, this choice ensures that all farmers can access information easily, regardless of their tech skills or language preferences.



Noto sans

Regular Medium Semibold Bold

AbCdEfGhIjKlMn
OpQrStUvWxYz

LOGO

Weather

Explore key market trends and insights to stay ahead.

Nashik, Maharashtra
21st September 2024 Friday

+16° C

Now is a good weather for spraying pesticides.

Today's Highlight

UV Index 7	Wind Status 7.70 Km/hr	Sunset and Sunrise 6:15 AM 6:45 PM
Humidity 10%	Visibility 10 Km	Air Quality 105

Go back

9:41

Nashik, Maharashtra
21st September 2024 Friday

+16°

Now	1pm	2pm	3pm	3pm
17°	20°	21°	24°	24°

My Farms

Wheat Field 15 HQ Potato F 16 HQ

LOGO

Weather

Explore key market trends and insights to stay ahead.

Nashik, Maharashtra
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Go back

Market Insights

Corn Delhi	₹ 5600 / Q	-3.98%
Wheat Nagpur	₹ 7900 / Q	+3.98%
Cotton Kolkata	₹ 1900 / Q	-3.98%
Soya Bean Bangalore	₹ 3500 / Q	+3.98%

Top selling crops in Delhi

1,234 \$100,000.00

- Wheat \$70,000.00
- Rice \$30,000.00

Demand for rice has increased due to upcoming regional festivals, causing a price rise by 15% compared to last month.

Ask kAisan

Hi there, Kisan
What would you like to know?

Ready to assist you with anything you need, from simple questions to providing recommendations. Let's get started!

Ask kAisan anything.

Nashik, Maharashtra
21st September 2024 Friday

+16

Cloudy

Now	1pm	2pm	3pm	3pm
17°	20°	21°	24°	24°

Tips

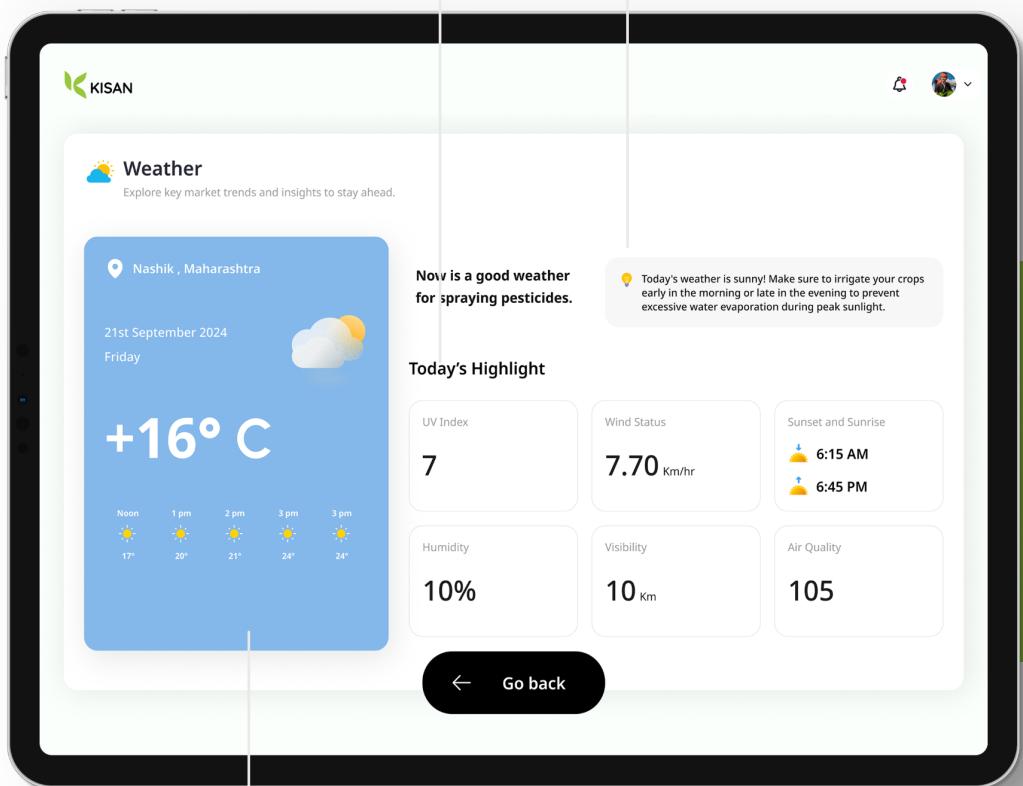
Did you know?

Space cabbage plants decently to improve air circulation and reduce disease!!

Weather Insights

Summarizes critical weather updates like rainfall chances or temperature extremes for the day.

Offers actionable advice based on upcoming weather conditions to help farmers plan effectively.

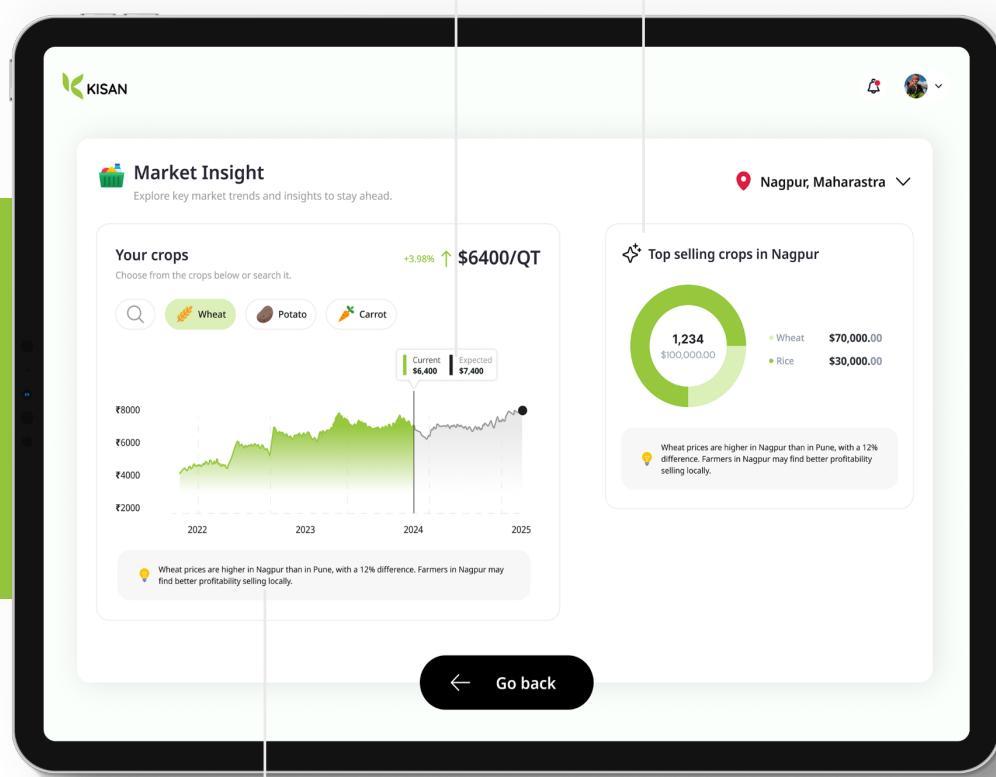


- Interactive widgets display forecasts, wind patterns, and temperature trends for easy, quick access.

Market Insights

Interactive tools display real-time and historical pricing data, enabling easy comparison and analysis.

- Highlights the most profitable crops in a specific region, helping farmers align their produce with market demand.



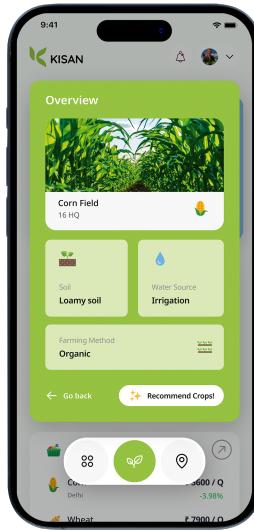
- Suggests optimal times and locations to sell produce based on price trends and demand.

Crop Recommendation



Step 1: Choose Your Farm

Farmers select their farm, allowing Kisan to tailor recommendations based on location, soil, and history.



Step 2: Farm Overview

A detailed farm summary is provided, including soil health, weather patterns, and past crops.



Step 3: Recommended Crops

Personalized crop suggestions are displayed with growth timelines, yields, and market demand for informed decisions.

Stage 1

The business strategy for Kisan focuses on offering the platform free for the first two years to **build** a strong user base through localised outreach and partnerships.

Customer Acquisition

Monetisation

Stage 2

After two years, a minimal subscription fee will be introduced for premium features, alongside revenue from API monetisation and strategic partnerships, ensuring affordability and sustainability.



Falguni Saini

Full Stack Developer

She specialises in the MERN stack, ensuring smooth API development and backend efficiency.

 [in/falguni-saini](#)



Shivam Kumar

Full Stack Developer

He ensures the team delivers innovative, user-centred designs that look great and work seamlessly.

 [in/shivam-kumar](#)



Prabh Singh

Full Stack Developer

He excels in React.js and Node.js, turning complex ideas into functional apps like real-time dashboards.

 [in/prabh-singh](#)



Chitransh Nigam

Full Stack Developer

He leads both the backend and frontend, using his experience in Java and MERN to align our team and ensure app reliability.

 [in/chitransh-nigam](#)

**Mudit Dhangar****PM/ UI UX Designer**

He brings a human-centred design approach, focusing on creating intuitive prototypes and managing a cohesive user journey.

[in/mudit-dhangar](https://www.linkedin.com/in/mudit-dhangar)**Dorsa Ghorbani****UI UX Designer**

She ensures the team delivers innovative, user-centred designs that look great and work seamlessly.

[in/dorsa-ghorbani](https://www.linkedin.com/in/dorsa-ghorbani)**Ali Teimouri****UI UX Designer**

He designs simple effective visual interfaces that make complex data accessible to farmers.

[in/ali-teimouri](https://www.linkedin.com/in/ali-teimouri)**Tomohiro Yamamoto****UI UX Designer**

He is a beginner designer, eager to apply and expand his knowledge of UX and graphic design in real-world projects.

[in/tomohiro-yamamoto](https://www.linkedin.com/in/tomohiro-yamamoto)

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