

# **KuruKshetra-25(Hackfest)-**



- Team ID -T 130
- Problem Statement Title - Crop Planner(Urban Grow)
- Domain/Theme - Open Innovation
- Team Name - Neural Ninjasss
- Team Leader Name - Harshal Walhe

# Proposed Solution

**Problem:** Urban dwellers lack guidance and resources for gardening due to limited space & knowledge.



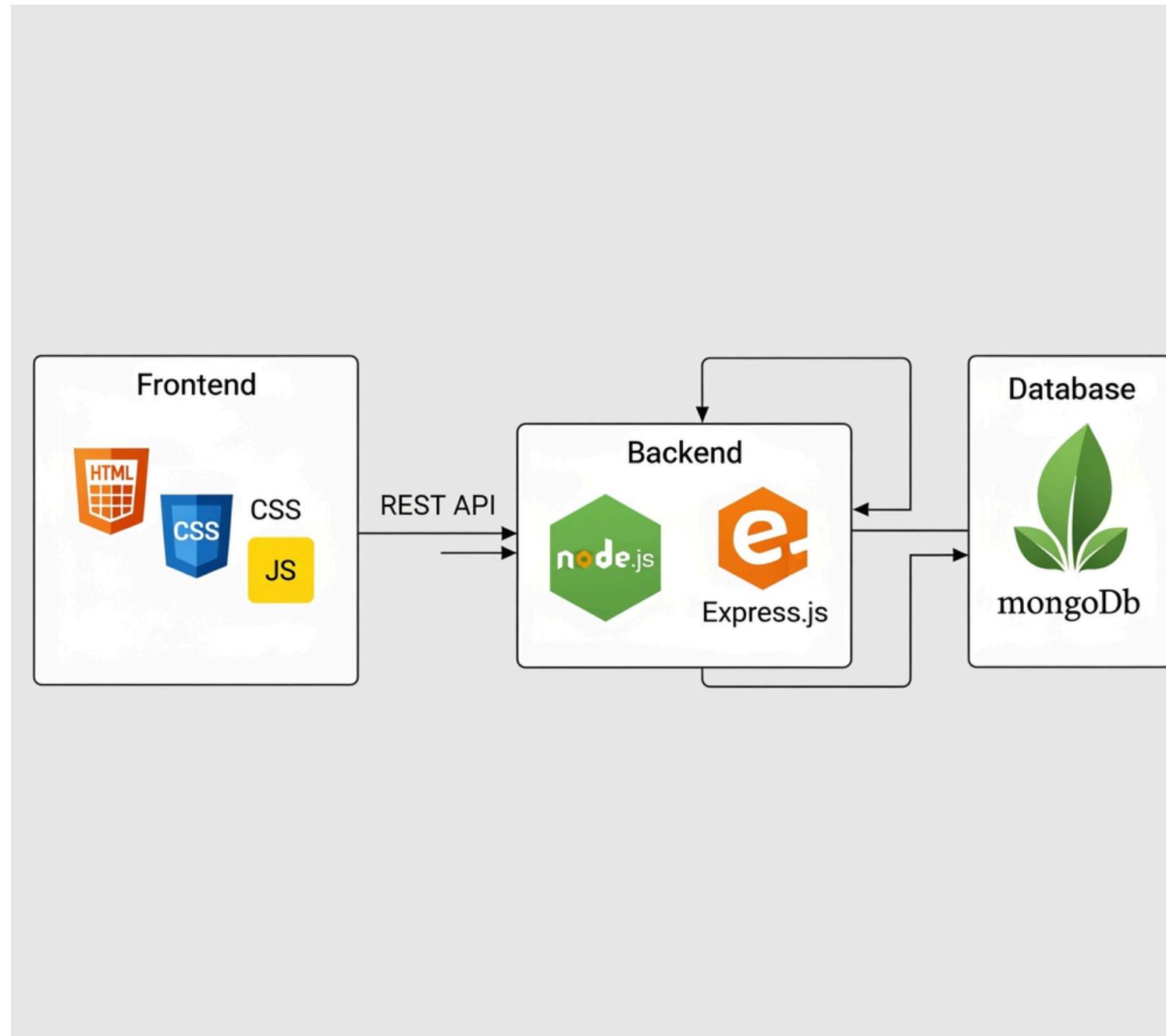
- **Solution:**

- **Interactive Planner (Balcony/Terrace gardening suggestions)**
- **Knowledge Hub (gardening guides)**
- **Community Marketplace (exchange plants, seeds, tools)**
- **Progress Report (track plant growth & gardening success)**
- **Blogs (share tips, experiences, and stories)**
- **Backend with MongoDB (save plans, user data, listings)**

# Process flow diagram



# Methodology used



📌 Requirement Gathering – Collect what users need (balcony gardening, marketplace, blogs, etc.)

💻 Frontend Development – Build the user interface (HTML, CSS, JS)

⚙️ Backend Development – Build server APIs (Node.js, Express.js)

🗄️ Database Setup – Store data (MongoDB – users, blogs, plans, reports)

🔗 Integration – Connect frontend with backend

🚀 Deployment – Run the app and make it live

# Solution Concept and Feasibility



 **Feasible with existing technologies (Node.js, MongoDB, JS)**

 **Scalable to larger smart city projects**

 **Future-ready:**

**IoT Sensors – Soil, light & water monitoring in real-time.**

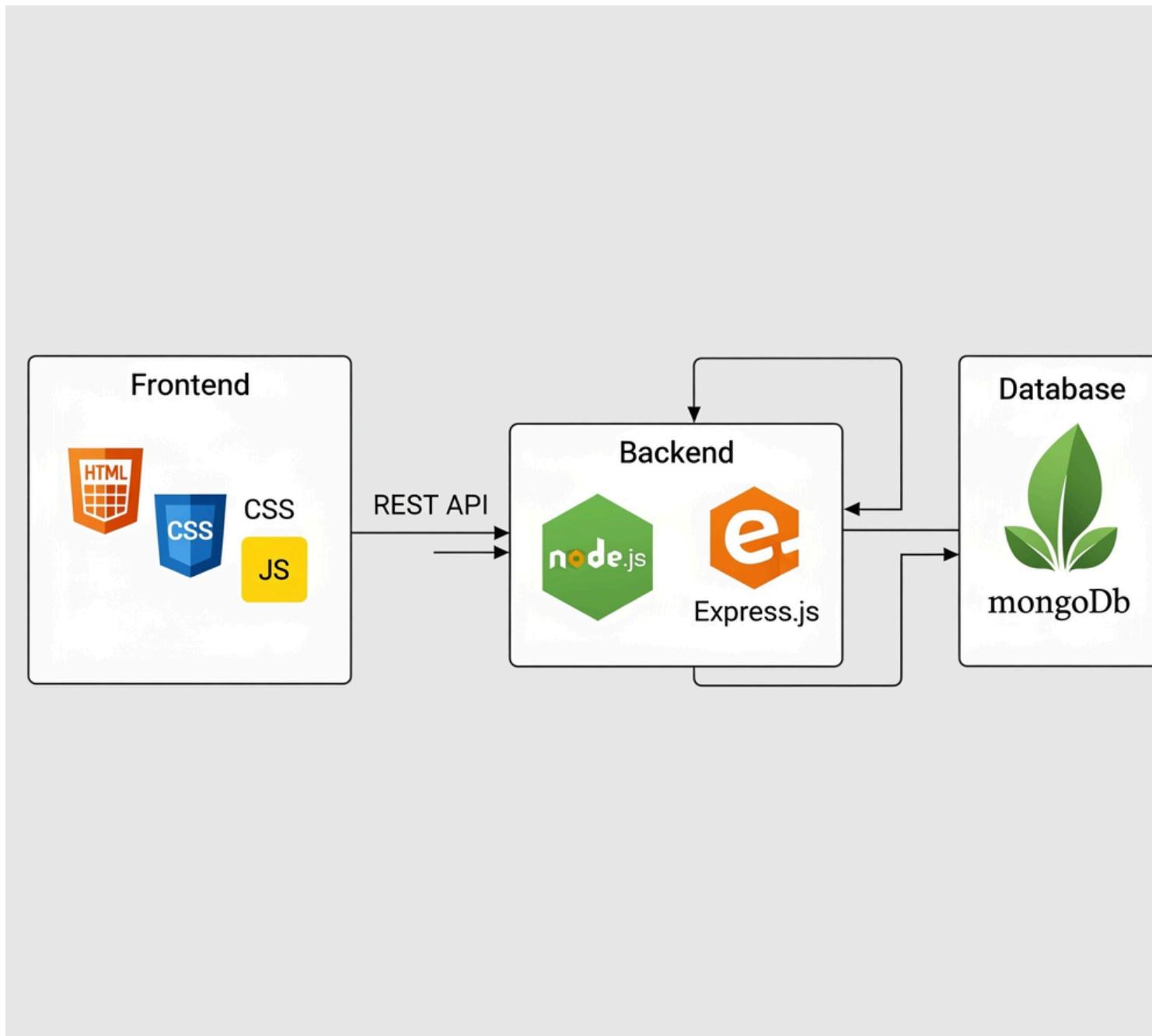
**AI-based Disease Detector – Users upload plant photos , system detects plant diseases and gives remedie.**

# Use cases & Description



- 🏡 **Urban Residents – Plan balcony/terrace gardens**
- 👤 **Community Members – Share/sell/trade plants & seeds**
- 👤 **People – Learn sustainable gardening**
- 🏙️ **Smart Cities – Promote greenery & reduce carbon footprint**

# Technology stack used



💻 **Frontend – HTML, CSS, JavaScript**

⚙️ **Backend – Node.js, Express.js**

🗄️ **Database – MongoDB Compass**

🔧 **Tools – GitHub, VS Code**

🤖 **AI Assistants – ChatGPT, DeepSeek AI**

# Constraints

- 🌐 **Internet Dependency** – Users need stable internet to access planner, marketplace, and blogs.
- 🌟 **Image-based Disease Detection** – Still in development; accuracy depends on dataset & AI model training.
- 🗄️ **Data Storage Limits** – MongoDB Atlas free tier has limited storage & query performance.
- 👤 **User Adoption** – Success depends on active participation in marketplace & blogs.
- 🔒 **Security** – Need to ensure safe authentication, protect user data from leaks/hacks.
- 📱 **Device Compatibility** – Mobile optimization required for better user experience.
- 🤖 **AI Integration Cost** – Using ChatGPT / DeepSeek AI for large-scale predictions may add costs.



# Plan Your Perfect Terrace & Balcony Garden

Get personalized planting recommendations based on your space, sunlight, and location

[Start Planning](#)

## How It Works

**Garden Assistant**

Hello! I'm your gardening assistant. How can I help you today?

What are easy vegetables to grow?  
How often should I water my plants?

Type your question... [Send](#)

## Local Marketplace



## Growing Together, Every Day

UrbanGrow is a community of plant enthusiasts helping each other cultivate green spaces in urban environments

## Garden Planning Assistant

Create your perfect garden with personalized planting recommendations based on your specific conditions and preferences.

### Tell Us About Your Garden

What would you like to grow?

-- Select Plant Type --

Where will you be growing?

-- Select Container Type --

Water Availability

-- Select Water Availability --

Current Season

-- Select Season --

Gardening Experience Level

-- Select Experience Level --

Sunlight Availability

-- Select Sunlight Level --

Space Type  
Select your space type

Dimensions (feet)  
e.g., 10x15

Your Location

**Location Services Active**  
We're using your location to provide climate-specific recommendations

**Detected Location**  
Address: Haveli, Pune District, Maharashtra, 412105, India  
Region: Unknown City, India  
Timezone: Asia/Calcutta

**Coordinates**  
Latitude: 18.673454  
Longitude: 73.889488  
Accuracy: < 15 meters

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What are easy vegetables to grow?  
How often should I water my plants?

Type your question...

## Our Story

UrbanGrow began as a simple idea during a 24-hour hackathon where our team wanted to create something that would help urban gardeners connect and share their experiences. What started as a basic website with just a plant diary feature has evolved into a comprehensive platform for plant enthusiasts. Over time, we've added numerous features based on community feedback. Our platform now includes a thriving marketplace where users can buy, sell, and trade plants and gardening supplies. We've implemented a progress tracking system that lets gardeners document their plant's growth journey with photos and notes. The blog section has become a knowledge hub where both beginners and experts share their experiences, tips, and tricks. Our community features allow users to connect with nearby gardeners, join local gardening groups, and participate in plant swap events. Every feature we've added has been designed with one goal in mind: to make urban gardening more accessible, enjoyable, and successful for everyone, regardless of their space constraints or experience level.

## Search for Plant Growing Videos

Enter plant name... [Search](#)

Try: potatoes, tomatoes, carrots, or strawberries

Potatoes Tomatoes Carrots Strawberries Herbs Succulents

We'll provide climate-specific recommendations based on your location.

[Detect via GPS](#) Enter city or address [Set Location](#)

## Climate Information for Your Location

8°  
25.6 °C  
Current Temperature

77 %  
Humidity

9.12 km/h  
Wind Speed

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