

# CREATING A RESPONSIVE LANDING PAGE USING FIGMA TOOL!!

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# OUTLINE

- Problem Statement
- Proposed System/Solution
- System Development Approach
- Algorithm & Deployment
- Result
- Conclusion
- Future Scope
- References

# PROBLEM STATEMENT

- Many people are interested in growing their own plants, but face challenges such as limited knowledge of plant care, difficulty in managing time for watering and maintenance, dealing with pests, and selecting the right plants for specific environments. Additionally, urban gardeners often struggle with limited space, poor soil quality, and access to adequate sunlight. The problem is how to create sustainable, easy-to-maintain gardens that thrive in diverse environments while minimizing resource use and maximizing productivity.”
- This could serve as a foundation for various solutions in gardening, from automated watering systems to better soil management techniques or space-efficient garden designs

# PROPOSED SOLUTION

## Smart Irrigation and Monitoring Systems:

- Use IOT (Internet of Things) devices to monitor soil moisture, temperature, and sunlight. This data can help automate irrigation, ensuring plants get the right amount of water without over- or under-watering.
- Set up mobile apps that notify gardeners when specific plants need attention based on real-time data.

## Vertical Gardens and Space Optimization:

- Implement vertical gardening systems to maximize space, especially in urban areas with limited room for traditional gardening.
- Use modular planter boxes that can be rearranged based on plant needs, sunlight, and space.

# SYSTEM APPROACH

## Component Identification

**Plants:** Select suitable plants based on climate, soil type, and intended use (ornamental, edible, etc.).

**Soil:** Understand the soil type, structure, and nutrient content to inform planting and amendment strategies.

1. Water: Assess available water sources and irrigation methods.

Sunlight: Analyze sunlight patterns to determine optimal planting locations.

Pests and Beneficial Organisms: Identify potential pest issues and natural predators to manage them sustainably.

## 2. System Design

Garden Layout: Design the garden layout to maximize space and light. Consider raised beds, vertical gardens, or container gardening for limited spaces.

Plant Arrangement: Implement companion planting techniques to enhance growth and deter pests. Group plants with similar water and sunlight needs together.

Soil Management: Develop a soil amendment plan that includes compost, organic matter, and fertilizers to improve soil health and fertility.

## 3. Resource Management

Water Conservation: Implement drip irrigation systems or rainwater harvesting to optimize water use. Use mulch to reduce evaporation and maintain soil moisture.

Nutrient Cycling: Establish a composting system to recycle organic waste back into the garden, enriching the soil and reducing waste.

Energy Use: Incorporate solar-powered garden tools and lighting to minimize energy consumption.

#### 4. Monitoring and Feedback Loops

**Data Collection:** Use sensors or manual observations to monitor soil moisture, temperature, and plant health.

**Adaptive Management:** Adjust gardening practices based on collected data and feedback. For instance, modify watering schedules based on weather forecasts or soil moisture levels.

#### 5. Integrated Pest Management (IPM)

**Preventive Measures:** Encourage biodiversity and use companion planting to deter pests naturally.

**Monitoring:** Regularly inspect plants for pests and diseases. Use traps or pheromone lures as necessary.

**Control Strategies:** Employ natural pest control methods (e.g., introducing beneficial insects like ladybugs) before resorting to chemical treatments.

# TECHNIQUES & DEPLOYMENT

## ★ Technique strategies

### Soil Preparation:

Testing Soil: Use a soil test kit to check pH and nutrient levels.

Amending Soil: Add organic matter (compost, peat moss) to improve soil structure and fertility.

Tilling: Turn over the soil to aerate and mix in amendments.

### Plant Selection

Native Plants: Choose plants that are well-adapted to your climate and soil conditions.

Companion Planting: Pair plants that benefit each other (e.g., tomatoes and basil) to enhance growth and deter pests.

## ★ Deployment Strategies

### Planning:

Design Layout: Sketch out your garden layout, considering sunlight, water access, and plant heights.

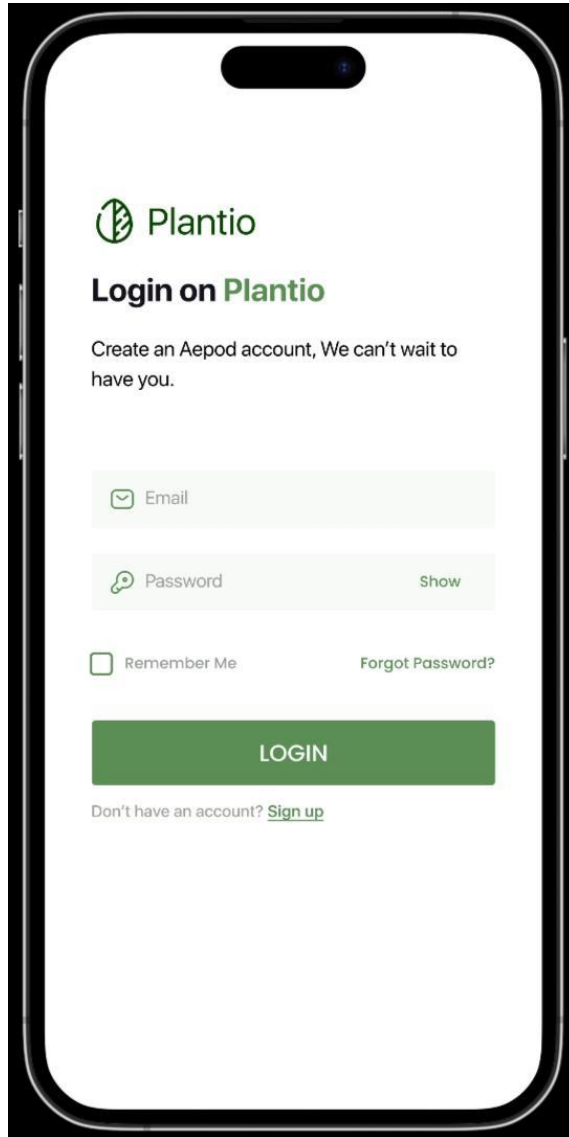
Seasonal Planting Schedule: Plan when to sow seeds or transplant based on local frost dates.

### Resource Management:

Assess and allocate resources like water, tools, and labor efficiently.

Consider sustainable practices, such as composting and using native plants that require less maintenance.

# RESULT



The image shows a mobile app interface for Plantio. At the top is the Plantio logo, which consists of a green leaf icon and the word "Plantio". Below the logo is the title "Login on Plantio" in bold. Underneath is a subtitle: "Create an Aepod account, We can't wait to have you." The form contains two input fields: "Email" with an envelope icon and "Password" with a key icon and a "Show" toggle. Below these is a checkbox labeled "Remember Me" and a link "Forgot Password?". At the bottom is a green "LOGIN" button. Below the button is a link: "Don't have an account? [Sign up](#)".

Plantio

### Login on Plantio

Create an Aepod account, We can't wait to have you.

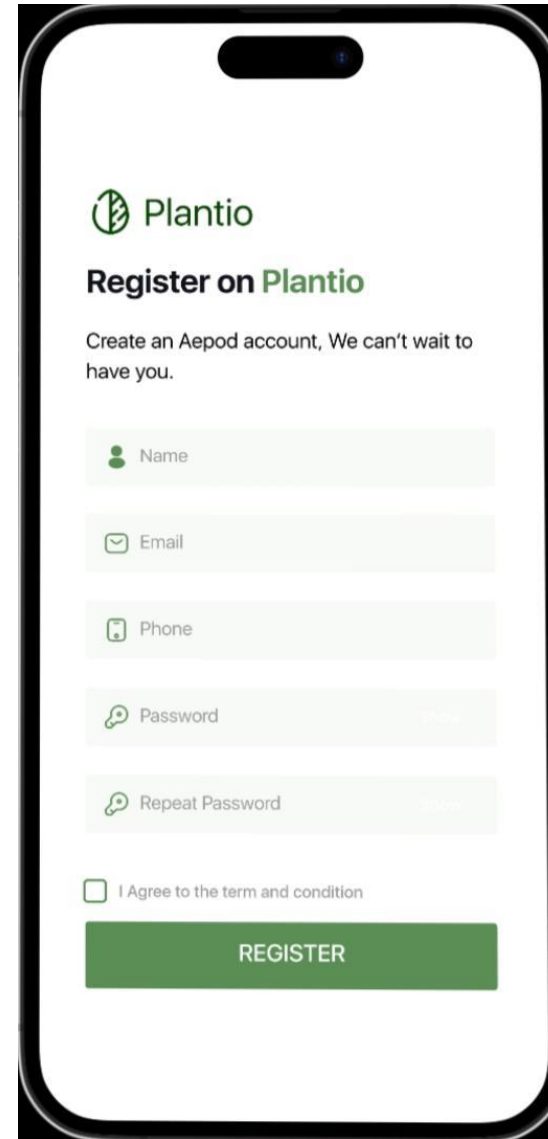
Email

Password Show

☐ Remember Me [Forgot Password?](#)

LOGIN

Don't have an account? [Sign up](#)



The image shows a mobile app interface for Plantio. At the top is the Plantio logo, which consists of a green leaf icon and the word "Plantio". Below the logo is the title "Register on Plantio" in bold. Underneath is a subtitle: "Create an Aepod account, We can't wait to have you." The form contains five input fields: "Name" with a person icon, "Email" with an envelope icon, "Phone" with a phone icon, "Password" with a key icon and a "Show" toggle, and "Repeat Password" with a key icon and a "Show" toggle. Below these is a checkbox labeled "I Agree to the term and condition". At the bottom is a green "REGISTER" button.

Plantio

### Register on Plantio

Create an Aepod account, We can't wait to have you.

Name

Email

Phone

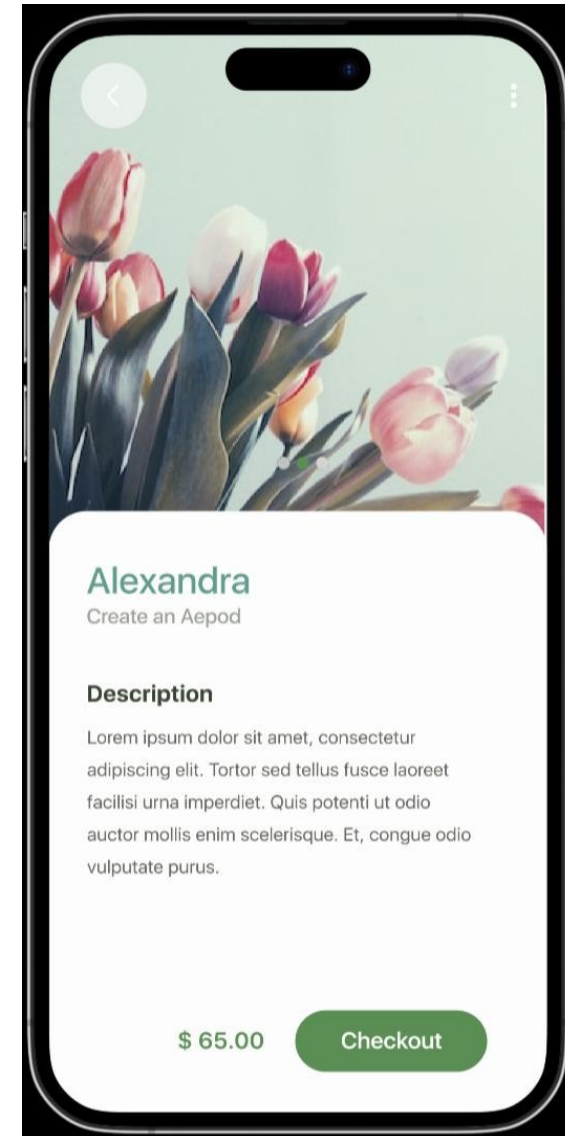
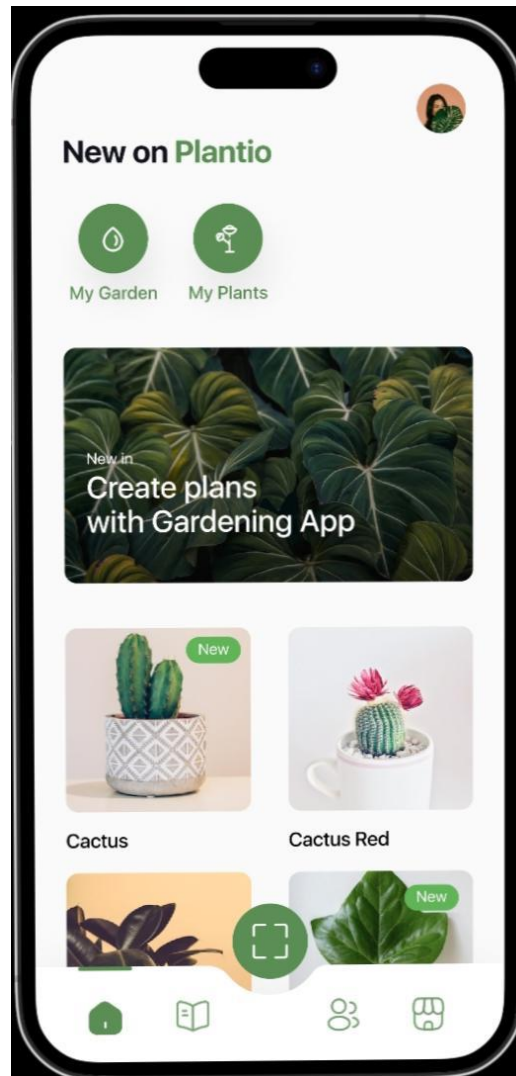
Password Show

Repeat Password Show

☐ I Agree to the term and condition

REGISTER





# CONCLUSION

- In conclusion, successful gardening requires a combination of techniques, careful planning, and ongoing maintenance. By understanding the unique needs of plants, preparing the soil effectively, and implementing sustainable practices, gardeners can cultivate a thriving ecosystem that not only provides food and beauty but also contributes to environmental health. Whether through traditional methods or innovative approaches, gardening fosters a deeper connection to nature and encourages mindfulness. Embracing these principles allows gardeners to adapt to changing conditions, support biodiversity, and enjoy the many rewards that come from nurturing the earth

# FUTURE SCOPE

## 1. Sustainable Practices:

**Permaculture:** Increasing emphasis on sustainable design principles that mimic natural ecosystems will promote resilience and biodiversity.

**Organic Gardening:** A growing demand for chemical-free produce will encourage more gardeners to adopt organic practices.

## 2. Vertical and Urban Gardening:

**Urban Agriculture:** As urban populations rise, vertical gardens and rooftop farms will become more prevalent, maximizing space and increasing food accessibility.

**Hydroponics and Aeroponics:** Soil-less growing methods will gain traction for their efficiency and ability to produce food in limited spaces.

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# REFERENCES

<https://www.figma.com/design/fxpABirKS52Baikva4EX7j/Suthishna-kumar?node-id=0-1&node-type=canvas&t=uy0itaGI9Z9YRD6v-0>



**THANK YOU**