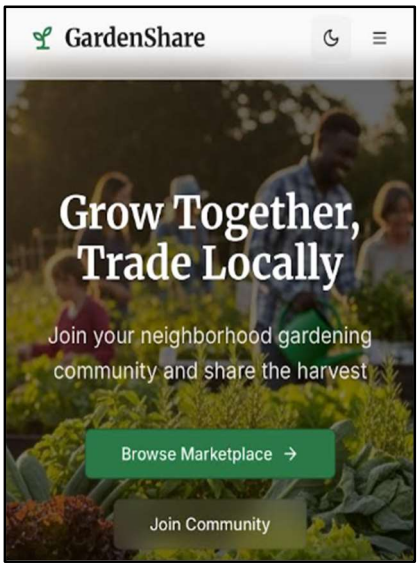
GardenShare

Ashley Kennedy

AUTHOR:
Ashley Kennedy



Technical Field

This community-focused agriculture trading application was developed utilizing a cloud based integrated environment called, Replit. This includes geospatial services, real-time data synchronization, and secure user management.

Background Information

GardenShare is a community based AI application that connects neighbors with home grown sustainable food from small towns to large cities fostering education and appreciation for healthy living.

Prior Art

Within Apple's application store, I found the following similar applications:

1. AI Farmer: Within this application you can ask general questions about farming and AI will produce a response.

2. PictureThis: Within this application you can take a picture of a plant and the app will give you plant care instructions and identification.

Both applications mentioned above have features that I would like to incorporate with my project. What makes my innovation different than the ones mentioned above is community engagement through produce sharing.

Within google.com, I entered “apps that promote community food growth” into the search engine. Google provided a list of potential applications. Two that were highlighted were**:**

1. Community Food navigator: Connects local food growers to build networks for community driven food solutions. While this app has a similar message it doesn’t have the same vision, which is connecting communities together through food growth and sharing.

2. Olio: This application aligns with my vision of connecting communities together through produce donations. Olio also offers areas for household items donations and services. Olio does not offer advice on food growth or virtual farmers markets. Olio’s slogan is, “Don’t buy it, don’t bin it, Olio it”, I thought that was clever.

When searching ERIC (Peer-Reviewed Journals), I used “community food growth” as my search text and found two peer reviews that aligned with my innovation project (below).

1. Evaluation Land-Based Learning as a Pedagogical Approach.

2. Stepping Up to the Challenge: Human Services Students Help Their Community in a Time of Need.

What I liked about these peer reviews is it highlighted an educational piece through schools and colleges. It was recommended to me to look into school based agriculture programs for use through community hours. Both peer reviews touch on the educational piece:

When doing general searches within uspto.gov, I first searched for “community food growth”. When doing a general scan of potential matches, I could not find anything similar to GardenShare.

The second verbiage I used to search was, “Virtual Farmers Market”. Within this search I noticed a website called “eartheasy”. Eartheasy has a similar message that I would like to mirror which is sustainable living, better quality of life and a lower cost of living.

Problem Statement

Most people depend on the grocery store for their produce. But what happens when there are supply chain issues and you can’t source the vegetable you want? Or what if those supply chain issues increase the cost of your favorite fruit? A lot of these scenarios can leave you wishing you had your own garden, but what if you don’t have a green thumb or even space for a garden? With GardenShare, each home in a community will receive guidance on how to grow and harvest

produce. There will also be features that connect you with your neighbors to trade produce via a virtual famers market. The goal is that every home in your community has at least one produce bearing plant/tree/shrub that they can share amongst their community. Ultimately limiting the need to depend on grocery stores while connecting you with your neighbors.

In a booming application development market projected to exceed hundreds of billions by 2025, this platform can increase positive neighborly connections, enhance food security and promote sustainability. While some apps are readily available to assist with agriculture education, this will be the first app of its kind to introduce simple patio gardening to communities in an effort to share homegrown produce and herbs.

Project Description

Summary: An application that brings communities together through neighborhood food growth called GardenShare. The application will have features that educate and assist with growing and harvest techniques. As well as virtual farmers markets that encourage produce trades and donation options.

Brief: GardenShare will give each member of the community tools to produce their own produce. The application will provide educational techniques via AI and location-based features to assist with planting and harvesting food. Say you live in a colder climate, the app will teach you how to grow items based on your geographical location and will provide expertise for a successful harvest. Or if you live in an apartment and have limited space, the app will help with that. The goal is for every member in the community to have at least one produce bearing item that they can share amongst the community. This will promote home grown sustainable food within neighborhoods.

Innovation Claim

In use, this application will bring neighborhoods and communities of all types together through food growth and sharing. GardenShare will encourage sustainability while bringing back communication and positive engagement within communities.

Usage Scenario

GardenShare is intended for everyone. From apartment living to suburbs or manufactured home communities, everyone can use this app. My intent is for a nonprofit based application that is free for everyone. My ultimate vision is for every house, apartment, tent (whatever you're living in) to have a produce bearing item that creates a better community. Imagine driving through your community being met with beautiful trees, bushes and shrubs that everyone can benefit from.

Evaluation Criteria

- Technical Performance
    - Responsiveness and speed

    - Stability and reliability
    - Scalability
    - Data Integrity
- AI Decision-Making Quality
    - Accuracy of recommendation
    - Relevance and contextualization
    - Actionability of insights
    - Predictive capability
    - Learnability and adaptation
- Economic and Operational Impact
    - Cost savings
    - Time efficiency
    - Resource optimization
    - Yield and quality improvement
    - Reduction in learning curb
- Environmental and Social Impact
    - Sustainable practice promotion
    - Biodiversity enhancement
    - Food security and local production
    - Educational Outreach
    - Community engagement

Objectives and Tasks Associated with the Project

Objective 1 – Complete Application Prototype

a. Add AI feature for growth and harvesting recommendation

b. Incorporate geographical location feature

c. Finishing touches on virtual farmers market

c. AI recipe suggestions based of local produce and herb availability

d. Showcase your recipe and tag your source

Objective 2 – SIP Presentation

a. Solidify mission and vision statements

b. Develop tagline

c. Generate grocery store prices comparisons

d. Add heavy emphasis on human interaction component (getting to know neighbors again)

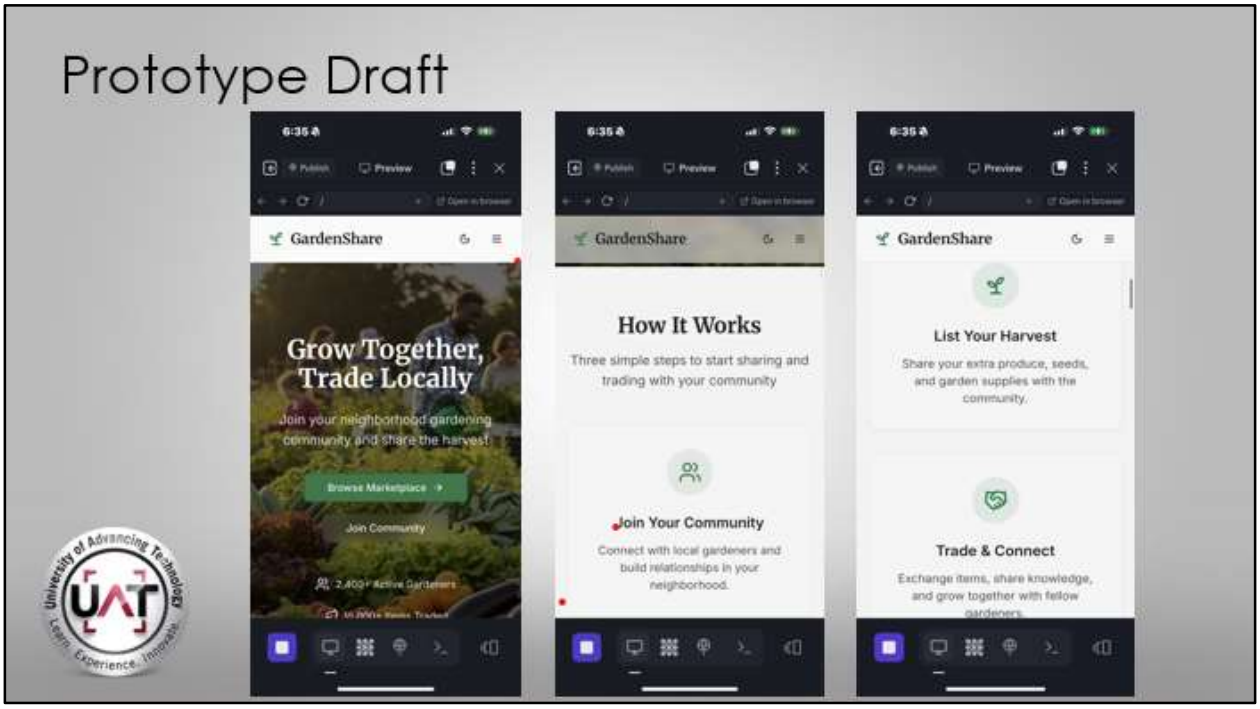
Objective 3 – Application Completion

a. Present final project to SMEs

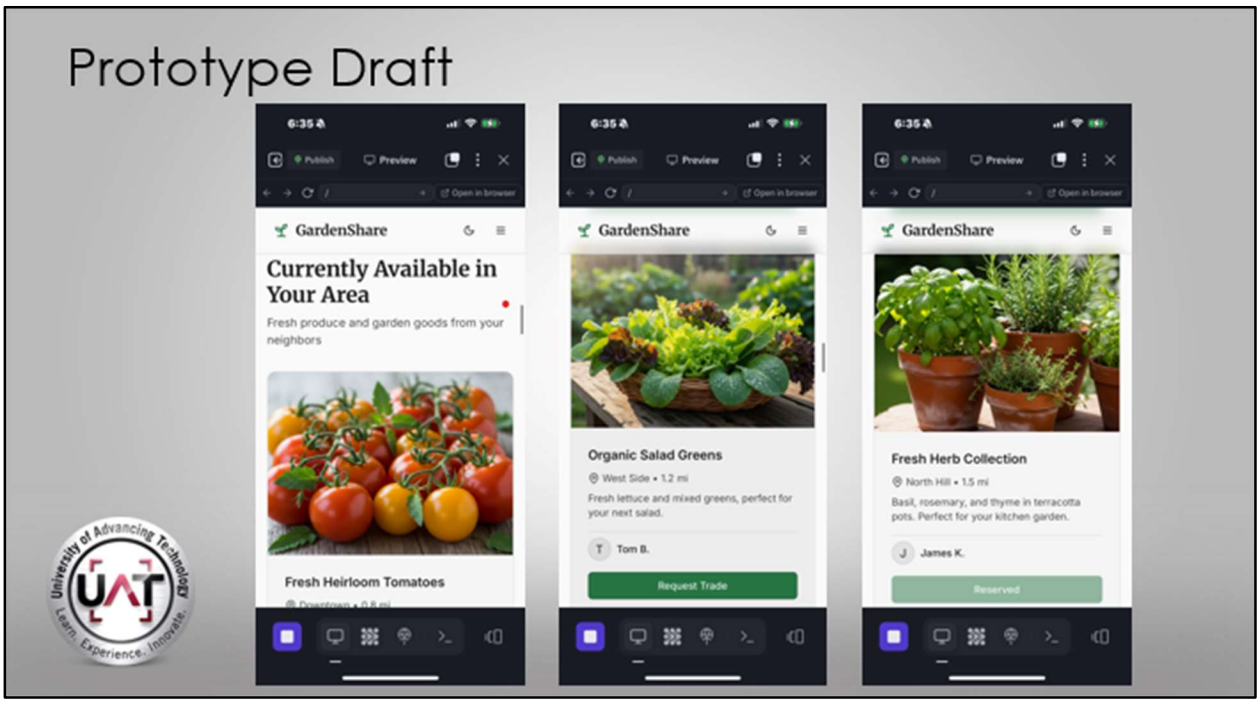
b. Potential soft launch of application

Description of Design Prototype

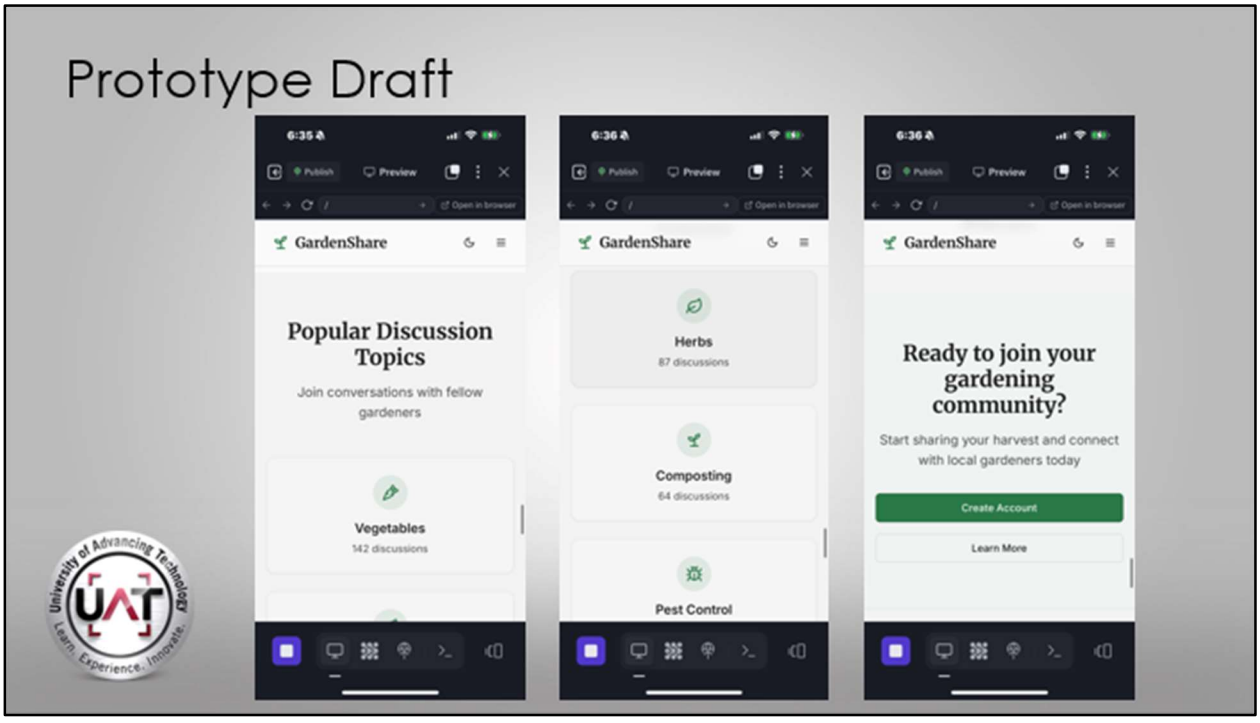
The application's home page focuses on Garden Share's objectives and how it works:



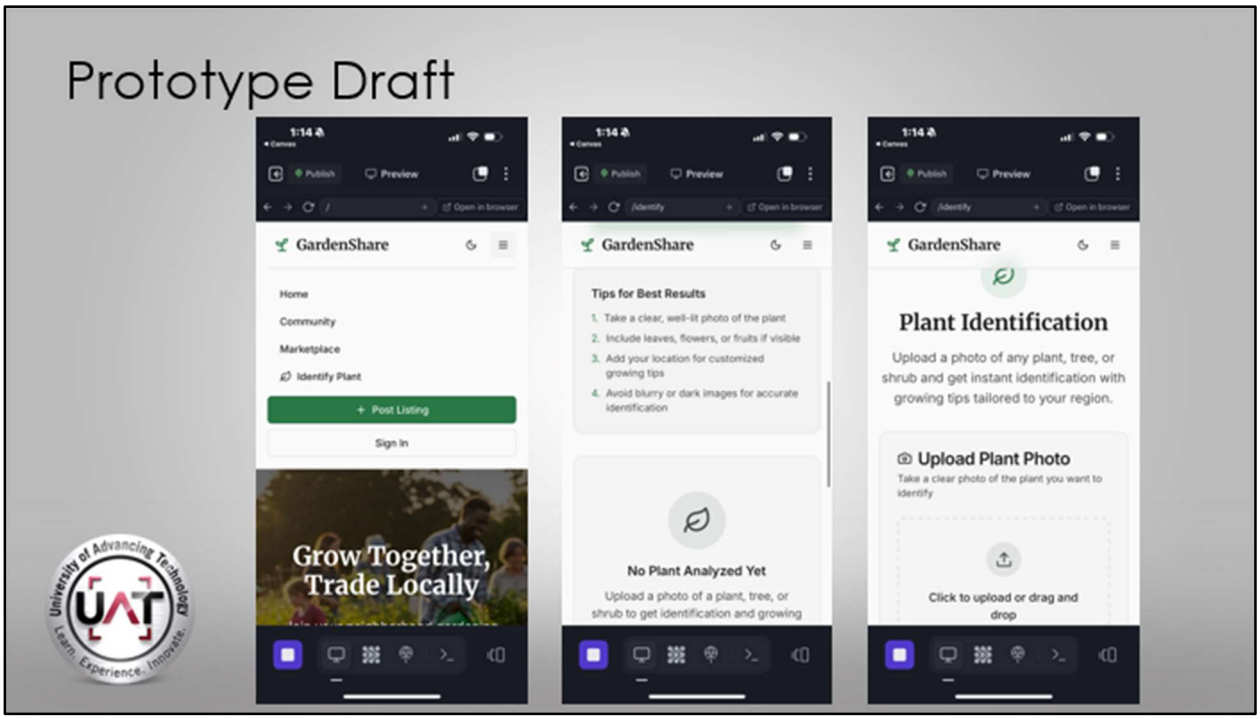
The application’s victual’s farmers market is user friendly and visually appealing. It tells you who has what available.



There are areas for communication. For example, there are popular discussion topics members can join such as vegetables, herbs, pest control and compositing.



The application also features an AI feature that assists with growing and harvesting.



Evaluation Plan

I intend to for this application to be a nonprofit based organization. However, I do understand there will have to be sponsors, advertisers and/or donations for it to operate. In order to appeal to financial backers, my evaluation criteria will be based off the number of active users, session durations, retention rate and feature engagement. All while focusing on evaluation criteria mentioned above (Technical Performance, AI Decision-Making Quality, Economic and Operational Impact and Environmental and Social Impact)

Project Completion Assessment

Not completed yet, would like to test amongst small group w/in community.

Appendices

Appendix A. AiFarmer application screenshot, Apple Store. Retrieved October 3, 2025 from utilizing the search function within the application store (file name tbd).

Appendix B. Picture this application screenshot. Apple Store. Retrieved October 3, 2025 from utilizing the search function within the application store (file name tbd).

Appendix C. Community Food Navigator (home page). Retrieved October 3, 2025 from https://communityfoodnavigator.org/community-practices/ (file name tbd).

Appendix D. Olio (home page). Retrieved October 3, 2025 from https://olioapp.com/en/

Figure 5. ERIC. Evaluation Land-Based Learning as a Pedagogical Approach. Retrieved October 3, 2025 from https://eric.ed.gov/?q=community+food+growth&id=EJ1446982 (file name tbd).

Appendix E. ERIC. Stepping Up to the Challenge: Human Services Students Help Their Community in a Time of Need. Retrieved October 3, 2025 from https://eric.ed.gov/?q=community+food+growth&id=EJ1396338 (file name tbd).

Appendix F. USPTO. “Community Food Growth” search. Retrieved October 3, 2025 from https://www-search.uspto.gov/WWW-search.html (file name tbd).

Appendix G. USPTO. “Virtual Farmers Markert” search. Retrieved October 3, 2025 from https://www-search.uspto.gov/WWW-search.html (file name tbd).

Appendix H. Eartheasy.com. “Our Mission” section. Retrieved October 3, 2025 from https://eartheasy.com/our-mission/ (file name tbd).

Appendix I. https://neighborgrows.com, official domain created by project lead (file name tbd).