

This document will outline the scope of the project to provide a solution for gardeners to learn more about the plants they wish to grow & improve their yield.

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Use Cases

Actors to determine actions for:

- | | |
|--|--|
| 1. General system user (no special access) | 6. Gardener – Community (Chore Member) |
| 2. Community Composter (non-member) | 7. Gardener – Community (Gardener) |
| 3. Gardener – Community (Member) | 8. Gardener – Community (Apprentice) |
| 4. Gardener – Community (Supporter) | 9. City Admin – Community Lead |
| 5. Gardener – Community (Team Member) | 10. System admin |
| | 11. Volunteer Developer |

ACTOR	ACTION	How Critical? (H, M, L)	UC Diagram (miro)	UC Diagram (IMG)
	Provides clear warnings if user tries to access locations they cannot and how they can (if it's possible)	Low		
	If trying to access a part of the system that requires location information but only has USDA zone information, provides clear notice that a default location in their USDA zone will be chosen to provide potential responses for their true location.	Medium		
	The system monitors the weather (or periodically checks weather API) to provide warnings & suggestions for mitigating inclement weather risks.	Low	here	here
	System utilizes USDA zone to suggest certain plants during particular times of the year based on their location.	High	here	here

ACTOR	ACTION	How Critical? (H, M, L)	UC Diagram (miro)	UC Diagram (IMG)
	System utilizes USDA zone for user's location to calculate first and last frost dates.	High	here	here
	System utilizes first and last frost dates to calculate estimated planting dates based on specific plant data.	High	here	here
	System provides reminders to plant based on user's preferred plants, their location, and related frost dates.	Medium	here	here
	System provides a way to filter plants based on user selection criteria (e.g.: color, seeding date, etc)	High	here	here
	System provides historical weather to show average hot/cold & precipitation for each month.	Low	here	here

ACTOR	ACTION	How Critical? (H, M, L)	UC Diagram (miro)	UC Diagram (IMG)
	System provides a secure way for community garden groups to easily track their progress and know when / where additional help may be needed in the garden.	High	here	multiple
	System provides an easy way to add, edit, or delete plants for a particular user.	Medium	here	here
	Provides free resources to help gardeners have better crops.	Low	here	here
	The system provides an area with affiliate links to additional resources. (e.g.: fish emulsion, hoop houses, etc)	Low	here	here
	The system is extended by ensuring that inactive accounts effectively turn off all permissions except general system user permissions.	High		
	Track apprentice program action completion dates.	Medium	here	multiple

ACTOR	ACTION	How Critical? (H, M, L)	UC Diagram (miro)	UC Diagram (IMG)
general system user	Cannot access any community-specific training, materials, or special information that only members or specific teams can see UNLESS they are also a member of that community.	High	here	here
general system user	Searches for information on a specific plant.	High	here	here
general system user	Searches for information a plant's companion plants.	Medium	here	here
general system user	Searches for plants based on specific criteria (e.g.: color, size, benefits, etc)	Medium	here	here
general system user	Provides feedback or reports an error	High	here	here
general system user	Provides current location to pull USDA zone information & suggested plants currently in the database that are within range of that zone	High	here	here
general system user	Stores user specific data that can be retrieved later.	High	here	here

ACTOR	ACTION	How Critical? (H, M, L)	UC Diagram (miro)	UC Diagram (IMG)
general system user	Saves and/or sends file to backup user's local data (no login or security options needed)	Low	here	here
general system user	Utilizes login option of the system to create an account that syncs their user data.	Medium	here	here
general system user	Views current local weather conditions checked daily on first system access of the day OR on manual refresh via weather API	Low	here	here
general system user	View suggestions for upcoming protection planning based on weather predictions checked daily on first system access of the day via weather API	Low	here	here
general system user	Create, edit, delete plants for their personal (local) account.	Medium	here	here

ACTOR	ACTION	How Critical? (H, M, L)	UC Diagram (miro)	UC Diagram (IMG)
general system user	Can submit plant suggestions for the main system that volunteer developers are able to approve and get automatically updated in the system.	Medium	here	here
general system user	Able to track what plants were planted where and when.	Low	here	here
general system user	Able to see a history of the plants they have planted & their related data, including but not limited to amount of shade.	Low	here	here
general system user	Saves plants as favorites.	High	here	here
Any user that is more than just a general system user	Extra roles with their respective permissions extends the system.	High	multiple	multiple
Community Composter (non-member)	Includes all general system user actions & access is based on a unique community ID	High	here	here
Community Composter (non-member)	Views all expected compost turning options in the community garden, including date, time, and contact for help.	Medium	here	here

ACTOR	ACTION	How Critical? (H, M, L)	UC Diagram (miro)	UC Diagram (IMG)
Community Composter (non-member)	Turn on/off notifications about composting opportunities	Medium	here	here
Gardener – Community (member)	Includes all general system user actions & access is based on a unique community ID	High	here	here
Gardener – Community (member)	Includes all Gardener – Community (Apprentice) actions.	High	here	here
Gardener – Community (member)	Manages visibility in relation to other community gardener members within their unique community.	High	here	here
Gardener – Community (member)	Receives all general community garden notifications based on a unique community ID	High	here	here
Gardener – Community (member)	Posts in unique community bulletin a date with timeframe they are seeking help from others in the community. Can also indicate if it helps specific teams.	Low	here	here
Gardener – Community (member)	Turn on/off notifications about other community gardeners seeking help.	Low	here	here

ACTOR	ACTION	How Critical? (H, M, L)	UC Diagram (miro)	UC Diagram (IMG)
Gardener – Community (member)	Access to monthly workday list of things that need to be done in the community garden.	Medium	here	here
Gardener – Community (member)	Add to monthly workday list things that need to be done in the community garden.	Medium	here	here
Gardener – Community (member)	Edit items they added to the workday list.	Medium	here	here
Gardener – Community (member)	View all items in the workday list.	Medium	here	here
Gardener – Community (member)	Access community announcements.	High	here	here
Gardener – Community (member)	Review data about their own tracked hours for teams or chores.	Low	here	here
Gardener – Community (member)	Turn on/off ability for other community garden members to see what teams or chores they are assigned to.	High	here	here
Gardener – Community (member)	View who is on what team or chore, if they allow themselves to be seen.	Low	here	here

ACTOR	ACTION	How Critical? (H, M, L)	UC Diagram (miro)	UC Diagram (IMG)
Gardener – Community (member)	Turn on/off ability to be seen by other community members. (Does not apply to City admins.)	High	here	here
Gardener – Community (member)	Access to community's private apprentice training program	High	here	here
Gardener – Community (member)	Turn on/off ability for assigned mentor (if they have one) to view progress in apprentice training program.	High	here	here
Gardener – Community (member)	Mark when completed tasks within the apprentice training program.	Medium	here	here
Gardener – Community (member)	Watch or review any community garden specific materials	Medium	here	here
Gardener – Community (member)	View all available compost turning dates & times	Low	here	here
Gardener – Community (member)	Turn on/off notifications about composting opportunities.	High	here	here
Gardener – Community (member)	View all in person training announcements provided by mentor team.	Low	here	here

ACTOR	ACTION	How Critical? (H, M, L)	UC Diagram (miro)	UC Diagram (IMG)
Gardener – Community (member)	Create announcement of any class they are giving the community would enjoy – including date, time, and location.	Low	here	here
Gardener – Community (member)	Notifies Mentor team of plot release & updates available plots	Low	here	here
Gardener – Community (member)	Notifies Mentor team of plot request	Low	here	here
Gardener – Community (Supporter)	Includes all Gardener – Community (member) actions	High	here	here
Gardener – Community (Supporter)	Checks for any special events at the community garden people provide notice of.	Low	here	here
Gardener – Community (Supporter)	Views available plots	Low	here	here
Gardener – Community (Supporter)	Create plot support request gardeners can reach out to	Low	here	here
	Notifies plot owner of support request / release	High	here	here
Gardener – Community (Team Member)	Includes all Gardener – Community (member) actions	High	here	multiple

ACTOR	ACTION	How Critical? (H, M, L)	UC Diagram (miro)	UC Diagram (IMG)
Gardener – Community (Team Member) <i>Communications Team</i>	Create community announcement that all unique community members will get notified of when they next open the system. (Archives found in a single location with a time limit for storage.)	High	here	here
Gardener – Community (Team Member) <i>Compost Team</i>	Create, edit, or delete compost event. Notifies Compost Supporters, compost team members, & other community gardeners who have this turned on.	High	here	here
Gardener – Community (Member)	View who is assigned upcoming deliveries to where. Self-assign for delivery if empty.	Low	here	here
Gardener – Community (Team Member) <i>Delivery Team</i>	Add their name to a delivery timeslot that is not already taken.	Low	here	here
Gardener – Community (Educator)	Builds out training content & ensures proper access as required.	High	Multiple diagrams	Multiple Diagrams
Gardener – Community (Team Member) <i>Mentor Team</i>	Assign mentor to mentee (only 1 mentor to 1 mentee)	Medium	here	here

ACTOR	ACTION	How Critical? (H, M, L)	UC Diagram (miro)	UC Diagram (IMG)
Gardener – Community (Member)	View assigned mentor & turn on/off their ability to see progress.	High	here	here
Gardener – Community (Team Member) <i>Mentor Team</i>	Review their assigned mentee's apprentice training progress (if they have shared with their mentor)	Medium	here	here
Gardener – Community (Team Member) <i>Mentor Team</i>	Create, edit, or delete own training announcements for required trainings for apprentice graduation that all members can see.	Low	here	here
Gardener – Community (Team Member) <i>Plot Team</i>	View plot requests	Low	here	here
Gardener – Community (Team Member) <i>Plot Team</i>	Approve plot requests	Low	here	here
Gardener – Community (Team Member) <i>Plot Team</i>	Create / remove plot availability announcements	Low	here	here
...		
Gardener – Community (Chore Member)	Includes all Gardener – Community (member) actions	High	here	here

ACTOR	ACTION	How Critical? (H, M, L)	UC Diagram (miro)	UC Diagram (IMG)
Gardener – Community (Chore Member)	Track time spent on their chore or team.	Low	here	here
Gardener – Community (Gardener)	Includes all Gardener – Community (member) actions	High	here	here
Gardener – Community (Gardener)	Views available plots	Low	here	here
Gardener – Community (Gardener)	Complete plot request for ownership	Low	here	here
Gardener – Community (Gardener)	Requests release of plot, which alerts another team to complete the process	Low	here	here
Gardener – Community (Gardener)	Create plot support requests to alert supporters if they are needed.	Low	here	here
Gardener – Community (Apprentice)	Includes all Gardener – Community (member) actions	High	here	here
Gardener – Community (Apprentice)	Includes all Gardener – Community (Supporter) actions	High	here	here
Gardener – Community (Apprentice)	Views available plots	Low	here	here
Gardener – Community (Apprentice)	Complete plot request for ownership	Low	here	here

ACTOR	ACTION	How Critical? (H, M, L)	UC Diagram (miro)	UC Diagram (IMG)
Gardener – Community (Apprentice)	Requests release of plot, which alerts another team to complete the process	Low	here	here
Gardener – Community (Apprentice)	View personal progress within apprentice training program.	Medium	here	multiple
Gardener – Community (Apprentice)	Receive notification of in-person training announcements for required trainings for apprentice graduation. It will be in their announcements section, but if they are missing that option in their progress it will also be a banner reminder to check training requirement item in announcements.	Medium	here	here
City Admin – Community Lead	Includes all Gardener – Community (member) actions	High	here	here
City Admin – Community Lead	Includes all Gardener – Community (Team Member - Communications) actions	High	here	here here

ACTOR	ACTION	How Critical? (H, M, L)	UC Diagram (miro)	UC Diagram (IMG)
City Admin – Community Lead	View all community garden members of their assigned community.	High	here	here
City Admin – Community Lead	Assigns teams & chores to their community gardeners.	High	here	here
City Admin – Community Lead	Mark community garden members as inactive – this means they are effectively back to general system user only.	High	here	here
City Admin – Community Lead	Edit anything in the workday list for their specific community	Medium	here	here
City Admin – Community Lead	View apprentice training program progress of any community garden member in their assigned community.	Medium	here	here
System admin	Includes all general system user actions	High	here	here
System admin	Includes all Gardener – Community (Educator) actions	High	here	here
System admin	Creates city admin accounts	High	here	here
System admin	Manages all accounts	High	here	here

ACTOR	ACTION	How Critical? (H, M, L)	UC Diagram (miro)	UC Diagram (IMG)
Volunteer Developer	Uses GitHub & GitHub Actions to improve the code behind the app, including but not limited to approvals of plants to the database	High		
Volunteer Developer	Writes & utilizes unit tests to ensure proper working system with at least 80% of testing covered.	High		

The next few sections will be to provide the use case diagrams of different users and roles.

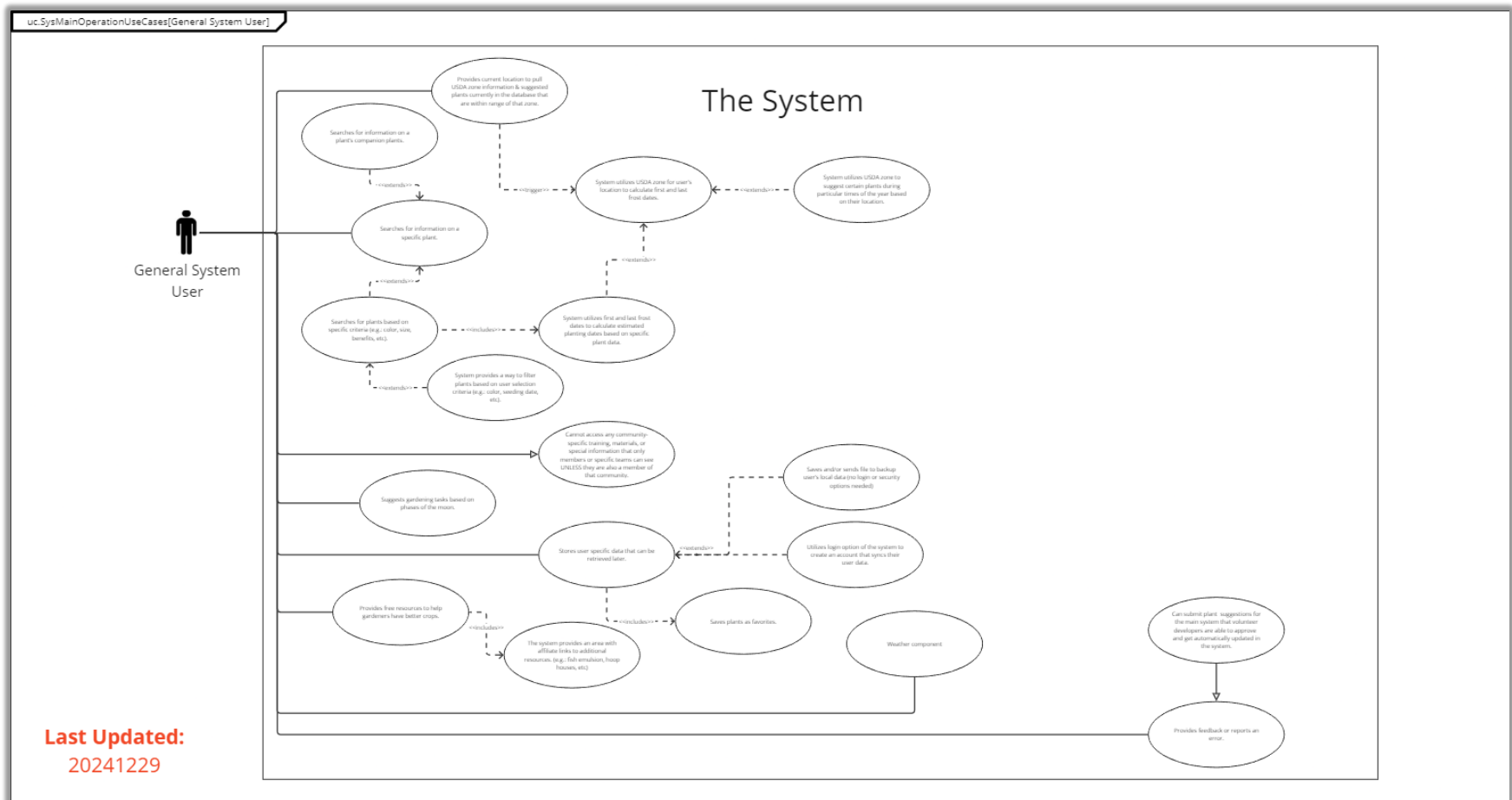
Use cases were originally identified because they were one or more of the following:

- High-level use cases & high priority
- Sub-use cases *included* in high level user case
- Special cases *extending* other use cases

Due to the limited time with this class, the rest of the use cases were added in where it made sense until the entire list was updated and represented.

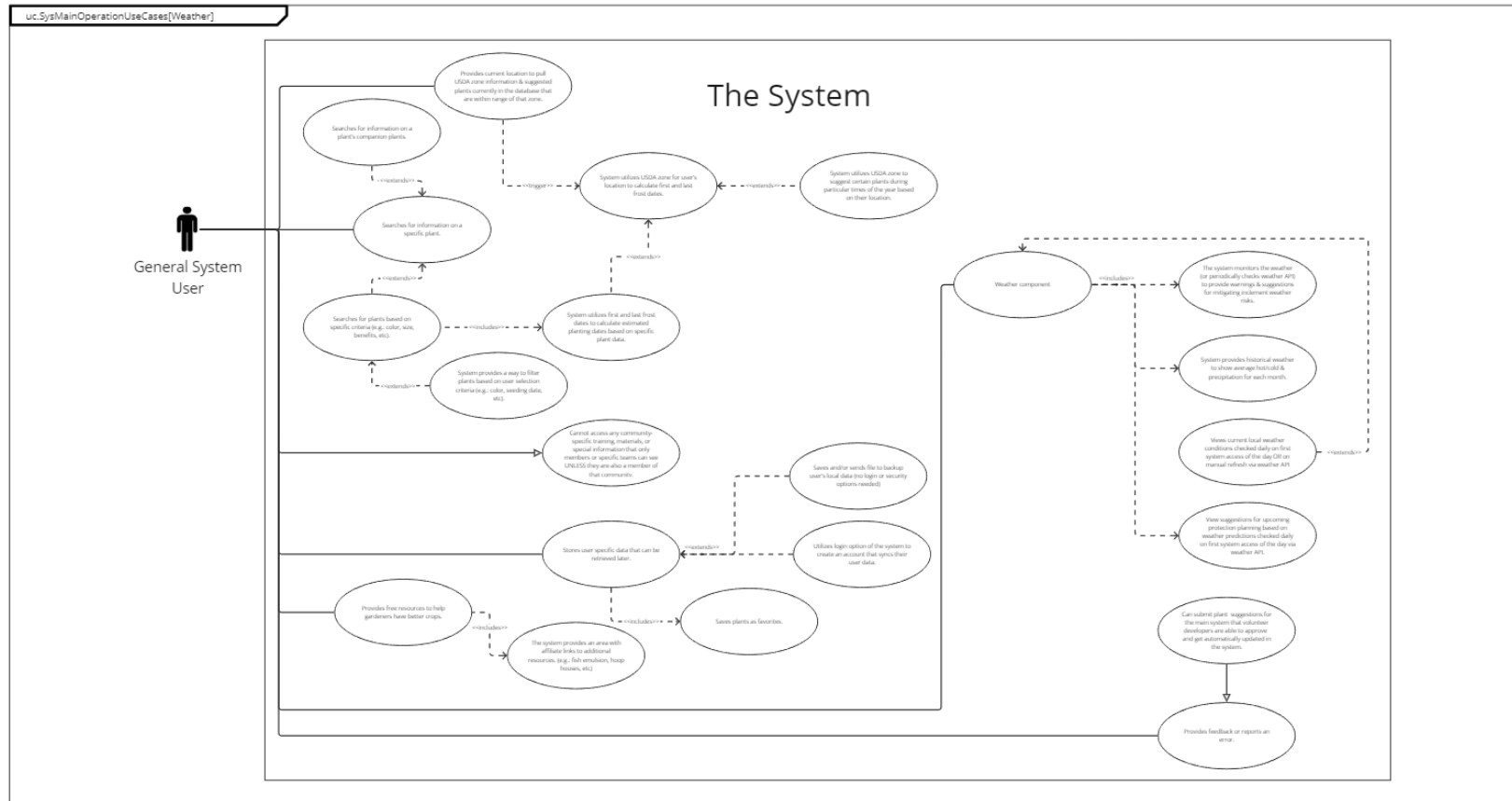
Use Case Diagram – General System User

Here is the use case diagram for the specific actor: **General System User**



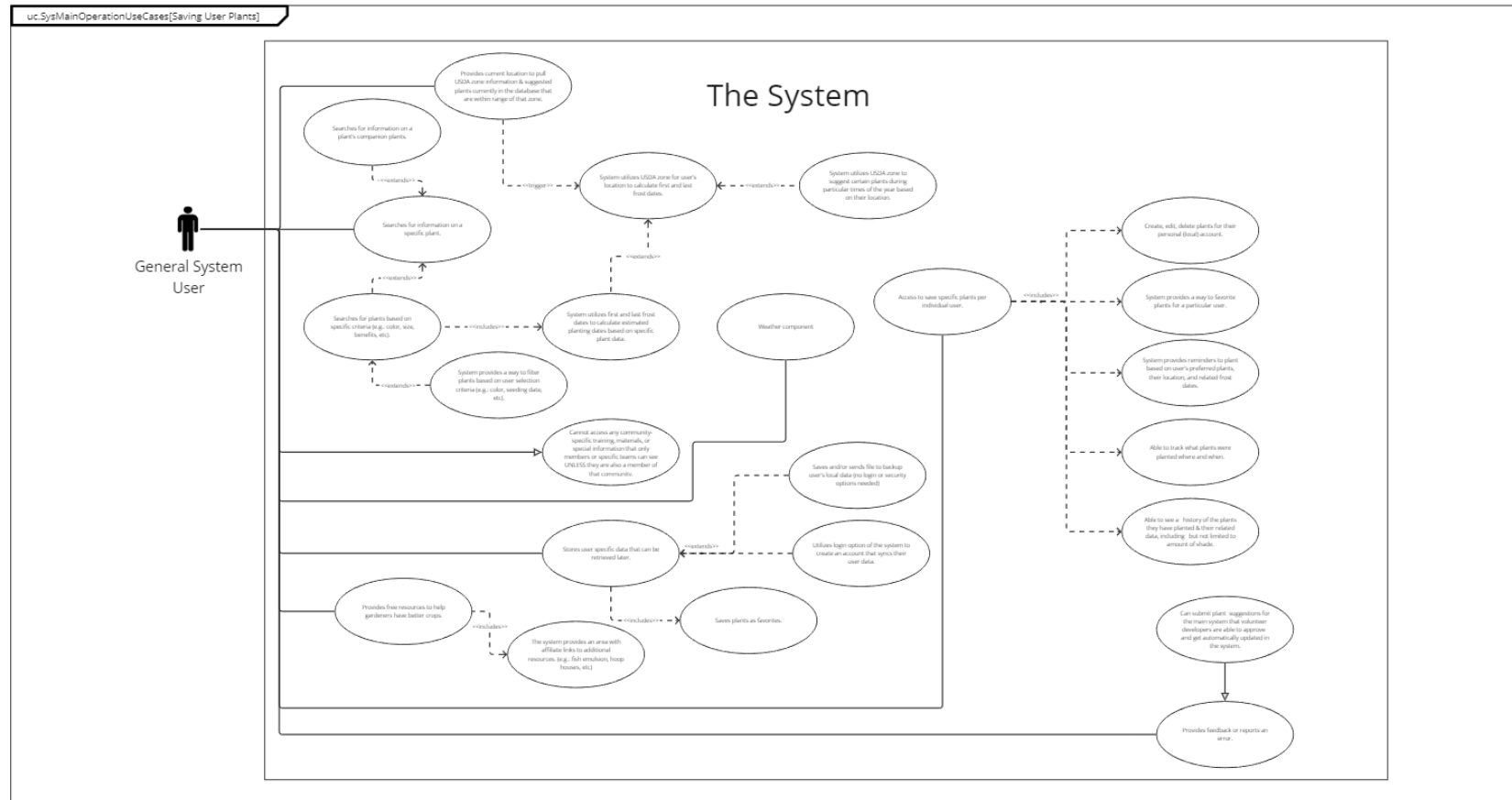
Use Case Diagram – General Use Weather Component

Here is the use case diagram for the specific internal system component: **Weather**



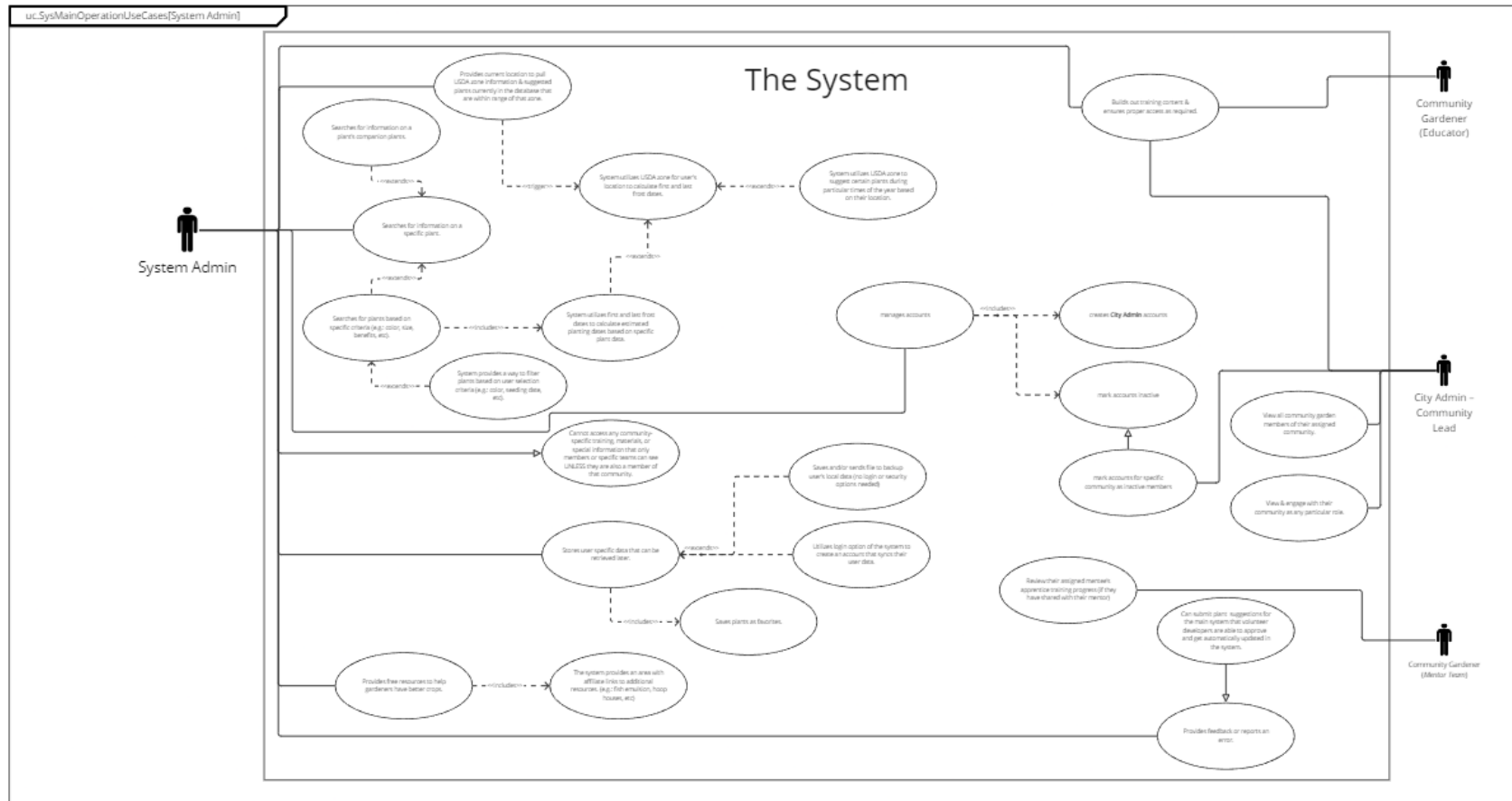
Use Case Diagram – General Use Saving Plants Component

Here is the use case diagram for the specific internal system component: **Saving Plants Component**



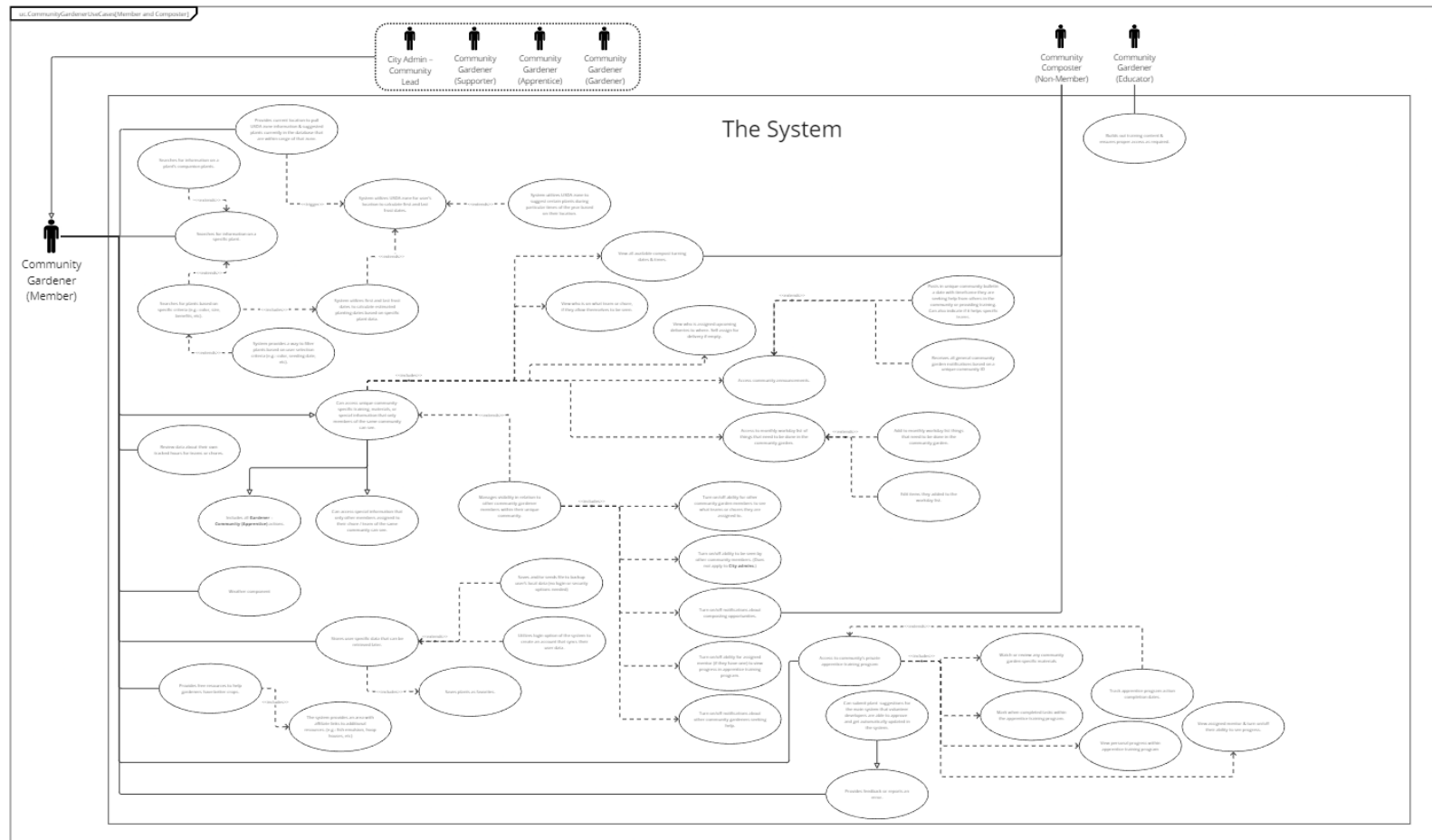
Use Case Diagram – System Admin, Community Lead, Educator

Here is the use case diagram for the specific actor: **System Admin (+ special access needs)**



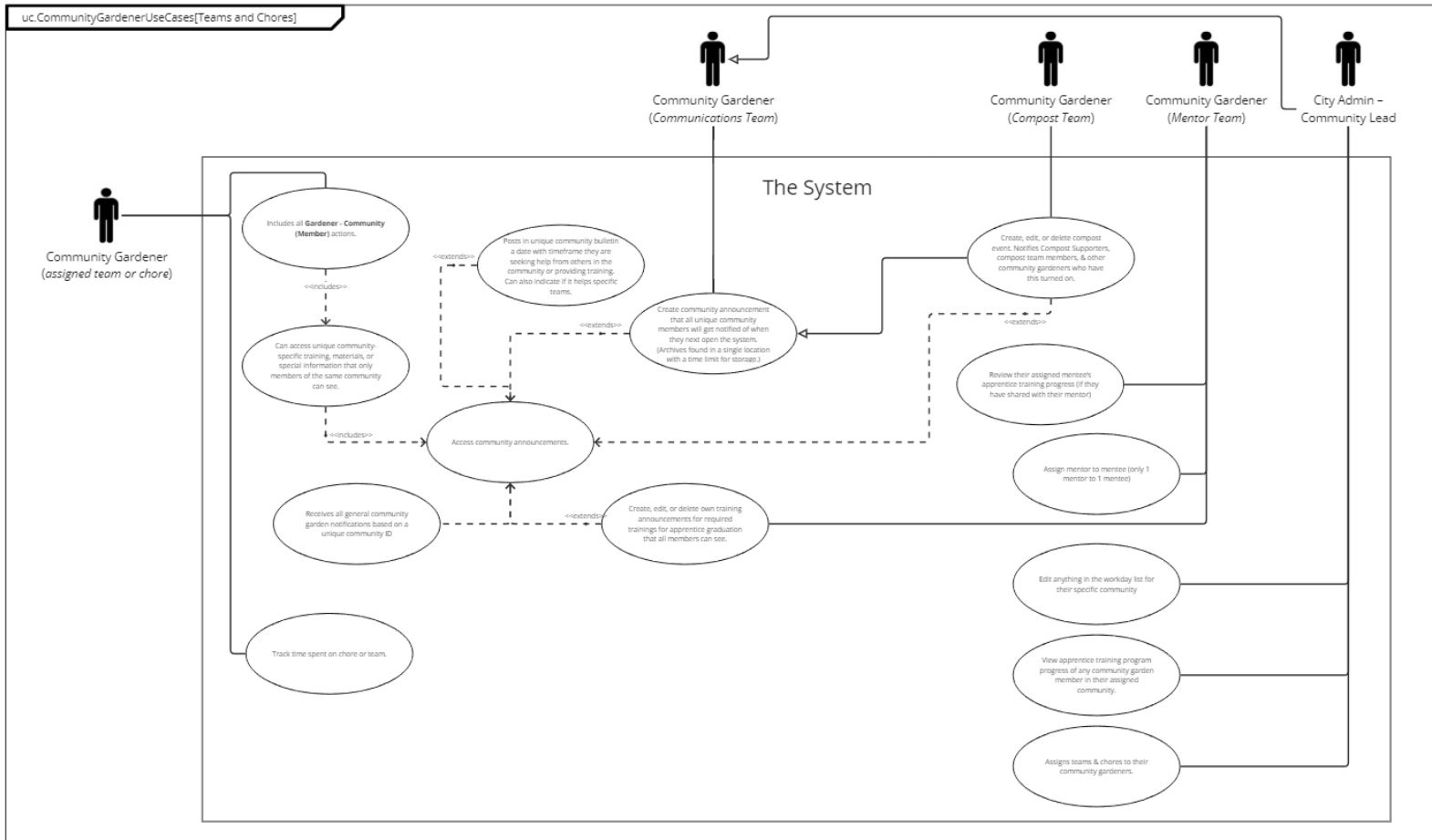
Use Case Diagram – Gardener Community Role (Member)

Here is the use case diagram for the specific actor: **Gardener – Community (Member)**



Use Case Diagram – Gardener Role Assignment (Team or Chore Assigned)

Here is the use case diagram for the specific actor: **Gardener – Community (*assigned team or chore*)**



Use Case Diagram – Community Gardener Component (Plots)

Here is the use case diagram for the specific actor: **Gardener – Community (*Plots*)**

