

Milestone 2

Table of contents

1. Users
2. User Research
3. Value Propositions
4. Scenarios
5. Persona
6. Project Themes
7. Team Contribution

Users

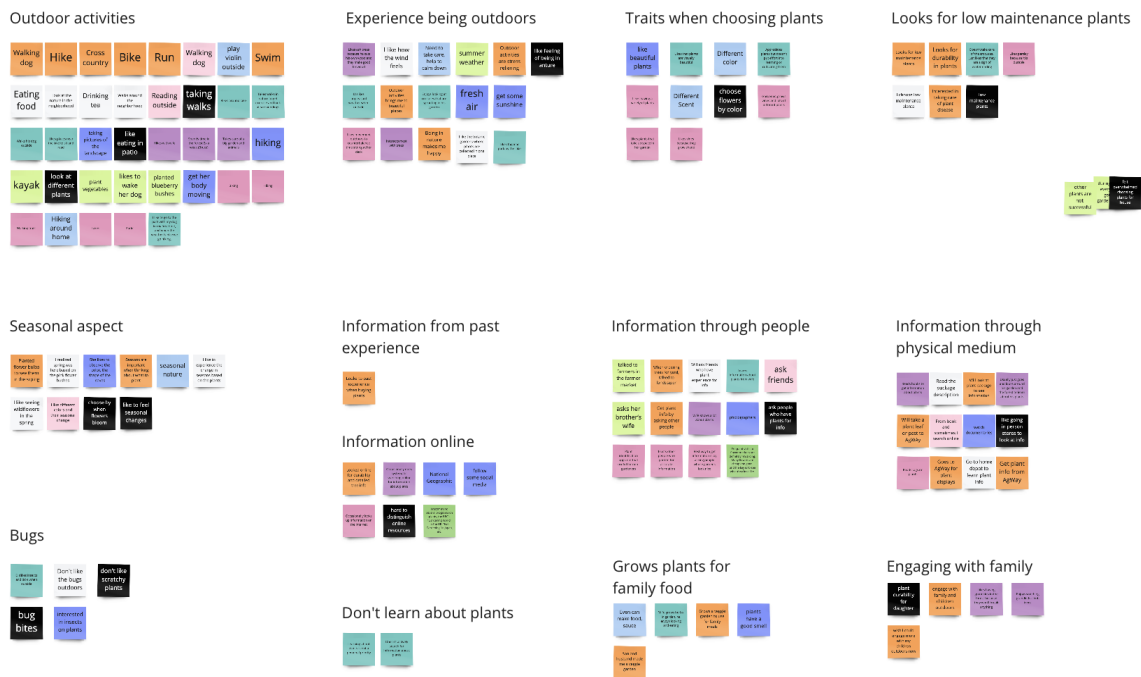
Our users are older adults who have a family and are interested in gardening. These users are interested in gardening, even having some elementary experience with gardens but are not experts. The goals of our users are to create gardens for themselves and their family members to enjoy in order to spend more time outdoors and to engage in nature together. Most importantly, our users enjoy different sensory experiences of plants, such as their appearance, smell, and taste, but they wish to invest minimal effort in creating their gardens. They have difficulty gaining access to credible information about how to create their gardens based on what they like.

User Research

User research statistics

- Number of participants: 12
- Research method: Interviews
 - We conducted both guerilla and scheduled interviews by knocking on doors in Phillips Hall as well as planning interview times with professors and other adults. We abided by our interview guide with questions such as:
 - Could you describe your most recent/most favorite/least favorite experience with plants, if any?
 - When was it?
 - What types of plants were involved?
 - How long was the experience?
 - How did you feel during this experience?
 - What would have made the experience better for you?

- If you do interact with plants, what do you like about them? (scent, color, seasonal, interactivity, size, ease of nurturing etc.)
 - At the start of each interview we introduced ourselves and the Playful Plants project we were working on to give each participant some background. We also made sure to get their demographic information before asking our questions.
 - Analysis method: Affinity Diagramming
 - This method was used to group information we learned from our users into affinities. Each post-it note is a different participant.



Key Takeaways for each user

- P1 learns about plants for his herb garden from his wife. He enjoys the beautiful appearance of plants but doesn't want to invest time to cultivate his gardening knowledge and appreciates plants that grow on their own.
- P2 appreciates the sensory nature of flowers once the seasons change (i.e. appearance, smell). She chooses plants based on their maintenance level and those that don't need to be watered as frequently. She goes to Home Depot to physically look at the plants she wants to buy and pays attention to the packaging for reliable information.

- P3 cultivates her backyard in the recent house that she built. She gains her information by asking people around her and does some web search but finds it hard to distinguish between resources. She looks for low maintenance plants, those that look beautiful, not scratchy, and durable for her daughter.
- P4 likes hiking, taking pictures, fresh air and sunshine. For plants, she likes their appearance, color, insects and good smell. To learn about plants, she watches documentaries and follows social media.
- P5 likes walking dogs, planting, summer weather and kayaking. She tried to plant vegetables with gardening kits, some succeeded and some didn't. She asks her brother's wife, who is a gardening expert, and local farmers in the farmer market for tips.
- P6 likes outdoor activities. He loves to be in nature and get exercise besides sitting at work for a long time sitting at work. He enjoys Cornell's Botanic Garden. For plants, he likes how the garden organizes.
- P7 likes to go hiking around his home, and also likes to play violin outside. He loves plants because he really likes their color and their seasonal nature. His wife tells him some websites to search for plants.
- P8 likes to go to the park with his dog in free time, and when the weather is nice they go hiking. He has his own garden with some flowers, but often forgets to take care of it. He is a heavy plant lover. He grows both vegetables and flowers, as well as fruit trees. He recommended several programs on plants, the BBC's "Gardening World " in the UK, "Fun Gardening" in Japan, etc.
- P9 likes reading, hiking, and walking dogs. He likes plants because their different colors and their seasonal change. Most of his knowledge about plants comes from books.
- P10 has a vegetable garden and some houseplants. She is not an expert in gardening, so she asks other people when she runs into issues, and looks for durability and easy maintenance first when selecting plants.
- P11 takes care of his garden and cuts his own wood in the forest twice a week. He learns about different plants from reading books and from consulting his wife, who is a trained vegetable farmer. He enjoys watching his grandchildren play in the forest and climb trees.
- P12 is a staff member at Cornell and a gardener. She has vines and durable plants in her garden, and likes looking at other people's gardens and learning from their gardening experience.

Executive summary

- Users enjoy spending time outside in the natural world, seeing plants and botanical gardens, which they find stress-relieving and pleasant.

- The trait that users consider the most when choosing plants is their maintenance level. Low maintenance plants were favored by most of our users. Other than that, sensory aspects such as color, scent, and taste were sought out.
- Users were sensitive to the seasonal aspect of gardening, mentioning that they intentionally chose plants that bloomed in the spring and prepared their garden for the spring/summer months. They also appreciated the change in appearance of plants based on the different seasons.
- Users use a variety of sources to obtain information about plants and gardening, including the internet, offline sources like plant stores and package descriptions, as well as past experience. However, users agree that the most effective and trustworthy is getting information from other people, such as gardening experts, farmers, friends and family who have experience in the area.
- Users often grow vegetables in their garden for family meals. These edible gardens help users engage with their family and provide safe, sensory experiences for their children outdoors.

Value Propositions

Our product is able to...

1. Provide the user with plant suggestions for their garden based on their preferences from a reliable, Cornell plant database.
2. Provide a visual reference based on the suggestions to help users start building their first gardens
3. Provide trustworthy and straightforward instructions for users to seed and grow their recommended plants in their first gardens

Scenarios

Provide the user with plant suggestions for their garden based on their preferences from a reliable, Cornell plant database.

Joanne recently moved to a new house with a backyard, and wants to build a sensory garden where he can grow and care for plants with his daughter. He has no prior knowledge or experience with gardening, and is not sure what plant seedlings to begin with, given the harsh winters in the area. He wants to start with plants that are durable and can be easily maintained. He wants to get all this information and find a resource that he can utilize to gain tips and recommendations on how to start building this garden and what should be in it. Even though he spent the afternoon consulting some books and checking out some tips on the Internet, he feels that it's not very personalized, full

of ads and unknown resources. He wants to find some trustworthy sources that can recommend him plants that are personalized to his garden.

Provide a visual reference based on the suggestions to help users start building their first gardens

Joanne now needs to organize the plants in his garden. He has a list of recommended plants that fit his preference and that he can start to grow in his garden. However, given his inexperience with gardening, he is not sure how to map the garden beds and organize these plants in the way that is healthy for the plants, functional and easy to maintain, and also visually pleasing. He wants a plan or a map of how the garden may look like as a reference, before actually building it.

Provide trustworthy and straightforward instructions for users to seed and grow their recommended plants in their first gardens

With a visual plan of his future garden and a list of recommended plants, Joanna is now ready to start building the garden. He bought the seedlings according to his list and lined his garden beds according to the plan. However, after planting the seeds, he is unsure how much he should water each plant, what additional fertilizer each plant needs, and how to subsequently take care of each plant. Some seedling packets came with basic instructions, but some did not. He wants straightforward and beginner-friendly instructions for each type of plant on his list that tell him exactly what to do to grow and care for his sensory garden plants.

Persona



Joanne is a married man at 43 and has a nine-year-old daughter with his wife. He lives in upstate New York in a mid-sized house with a backyard. Joanne works at Cornell University as a staff member and is financially stable to support his family.

On the weekends, he likes to spend time taking walks and hiking with his family around Ithaca. He enjoys being outdoors with his wife and daughter, and likes to watch

his daughter engage with nature rather than spending time indoors on her phone and the television.

He recently learned about the benefits of sensory gardens for children and has become interested in starting one for his daughter in the backyard. He hopes to learn how to build a safe, inspiring garden, not only for his daughter but for the entire family because he expects everyone to engage in the gardening process. However, he is worried about the climate in upstate New York and whether his garden will be successful throughout the year. After looking at resources online, Joanne realized that he doesn't trust the information, often due to the amount of ads and unknown sources. Even though he spent the afternoon consulting some books and checking out some tips on the Internet, he doesn't trust them and wants more reliable information.

He thinks his decisions for the garden are important because once he decides what to plant, it will be hard to change. He really wants to see what his garden will look like.

Project Themes

High level user experience goals

- **Mobile, table, desktop scenarios.** Design will be fully responsive on any device the user chooses.
- **Accessibility.** Design will be accessible and inclusive for older users by reducing clutter, excessive information and choices, larger fonts, and appropriate color contrast.
- **Offering reliable recommendations and building trust.** Design will utilize a reliable Cornell database and cohesive branding to generate a plant recommendation list personalized to user wants and needs for their garden.
- **Providing basic visual aid.** Design will generate a collage of images based on the recommended list to act as a visual guide for the user that helps them imagine their garden.

Team Contribution

Wei

- Interviewed / took notes for 3 people
- Participated in weekly team meetings and contributed ideas
- Worked on Milestone 2 writeup

Alice

- Interviewed / took notes for 3 people

- Participated in weekly team meetings and contributed ideas
- Worked on value proposition, scenario, etc for the Milestone 2 writeup

Annice

- Interviewed / took notes for 3 people
- Participated in weekly team meetings to brainstorm ideas, work on affinity diagram, and write milestone 2
- Wrote 1 scenario, 1 value proposition, and parts of the persona and project themes.

Yunjiao

- Interviewed / took notes for 3 people
- Participated in weekly meeting and contribute some parts of milestone 2

Appendix

Raw interview Notes:

https://drive.google.com/drive/folders/1M7nO8T4axUp0_ywg182N1NImEs3NTBdJ?usp=sharing

Affinity Diagram:

https://miro.com/app/board/uXjVOCgeFs8=?invite_link_id=598454098216