

# Personas, Use Cases, and User Interviews

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# **Table Of Context**

Personas	3
Use Cases´	11
Patterns and Insights	16
User Interviews	22

# Personas



#### Will Byers the Average Gardener

Will is a passionate gardening enthusiast in his late 20s. He is living in a home in California that has somewhat limited space, but has an outdoor and indoor section for plants. After moving in, he started gardening and developed a beginner to intermediate level of experience. Ever since he started gardening he grew a mutual

connection with plants and aspires to create a flourishing garden where plants can thrive. Although gender is not a key factor in his gardening journey, he prefers gardening because it appeals to all genders and loves meeting people at local farms. Will mainly cares about simplicity and embodies the everyday gardener that plans to contribute to a more eco-friendly and green environment.

In Will's gardening journey, he initially started focusing on low maintenance plants like succulents and herbs. However with his commitment to higher maintenance plants, like fruit trees and vegetable plants he decided to explore his local nursery. After meeting with the local nursery, he invested in a high maintenance lemon tree and decided to place it outdoors in his backyard that has limited space. Will has started a new challenge of caring for his lemon tree and went to his online resources from Youtube and Wikipedia for help. After scrolling through the internet, Will found an interesting startup idea about a device for plants that can provide real-time weather information, humidity levels, moisture data, and soil information about plants. As an eco-friendly gardener who regularly checks in their plants throughout the week, Will believes the idea can be beneficial to his gardening experience.

After checking out the product Will thought of a few core beliefs for the product. Will possesses a few habits such as regular plant care maintenance, seeks information online, and

budgets for new plants. As a new homeowner, Will creates a budget for his spending to ensure that he has leftover money to pay for his needs rather than his wants. Therefore, when reading about a One Time Device or Subscription Based Device on the internet, he is more keen to choose a one time device because he cares about the utility and effectiveness of the product. Since Will is somewhat technically proficient, he is able to maneuver online resources and mobile devices effectively for garden knowledge.

Initially Will had a few goals and motivations starting his journey like, adding more outdoor and indoor plants to his gardening space, learning more about the basics of plant care, gaining more information about his personal plants, and incorporating healthy gardening practices into his garden. However, his primary goal is to establish a healthy growing environment with indoor and outdoor plants, which can vary between high maintenance to low maintenance plants. However, his plant care journey hasn't always been a smooth ride. Will also faced a few set of challenges such as understanding basic plant care needs, struggles with basic plant knowledge, and managing water for your plants. Typically, he experienced a cause and effect scenario, by looking for answers after facing a problem in the garden. Therefore, Will has a preference of being told information about his plants, common problems, and solutions to fix them through supplementing materials and help pages.

The average gardener is very passionate about his garden and plans to turn his home into a clean and green environment. Everyday gardeners are eager to learn and face new challenges in basic plant care and would love helpful information for their plants. As a beginner to intermediate gardener, Will struggles with basic plant knowledge and with a device from AquaGrowth, a device that could provide plant care information can benefit Will significantly in terms of plant care knowledge and when to nurture and treat your plants

# Jim Hopper the Older Gardener



Jim Hopper is a seasoned 62 year old gardener. Hopper lives in a cozy urban neighborhood where he has transformed his outdoor space into a thriving garden. Hopper's green thumb has been developed over the years from a young age helping care for his family's garden. Additionally Hopper is a retired Sheriff with a

new goal of growing a self sustaining garden. Though Hopper no longer fights crime he is still catching wanted bugs (dead or alive) in his garden.

Hopper began his gardening journey once he moved into his home. With his large backyard he figured he should put it to use. In his backyard Hopper cares for various fruits and vegetables. His garden consists of tomatoes, peppers, cucumbers, bananas, mangoes, apples, potatoes, herbs and more. In his front yard he grows various flowers not just for the aesthetic appeal but to create a warm and inviting atmosphere for his home. He is particularly fond of his various snapdragons. To those who don't know much about gardening he jokingly says the flowers were grown from the remnants of a demogorgon. Hopper is a firm believer of hardwork and dedication which extends to his garden care. Though Hopper has a lot of hands-on experience he still has areas in which he can improve upon to effectively take care of his garden.

Hopper without doubt is an amazing gardener. Since he is retired he has more time to invest into his gardening routine. Hopper starts off his day by inspecting his garden examining his plants for any signs of pests and visual signs of unhealthy plants. Hopper also tends to water his garden early in the morning or late in the evening. Additionally if he isn't too tired Hopper will occasionally weed his garden, trim overgrown plants and add supports as needed. Despite Hopper being very dedicated to maintaining his garden, he does not want to break the bank when

it comes to purchasing necessities for his garden. He relies on traditional methods and his past experience when it comes to handling issues of over and under watering his plants as well as general plant care. Due to his lack of technical skill with modern technology he is skeptical of incorporating it into his daily routine. He is not against it and is open to the idea as long as it is easy to use and isn't a subscription based service.

One of Hopper's main goals is to water his garden effectively, he understands how important water conservation is for both the environment and saving money. One significant challenge Hopper is faced with is watering all his plants efficiently. Hopper's garden has a wide variety of plants each with their own needs in terms of watering and care. Some plants require less water than others and it can be difficult to keep track and remember all of this information. Additionally, Hopper has waged war with demogorgons but he now faces a new threat of unwavering pests that dare hinder his plants growth. Due to Hopper's lack of technical skill with modern technology he hopes to find a mobile application or device that is easy to use with minimal setup. He hopes that such a device will streamline his gardening routine. Ideally he would like an app in which he can see the health conditions of his plants and general information about said plants such as a watering schedule/needs, fertilization, and anything that would promote effective growth.

Jim Hopper resembles older gardeners who have experience under the belt. Gardeners who are dedicated and enjoy seeing the plants grow. An issue amongst older gardeners (not all) is that all their experience and methods are traditional and do not incorporate modern technology. Although it is not absolutely necessary it can be an effective tool to streamline and efficiently take care of one's garden. The only concern is that such technology may be too difficult to learn

and use that it would outweigh any benefits that it would provide. Jim Hopper is not against the idea but would like something simple and isn't too expensive.



#### Nancy Wheeler the Professional

Nancy Wheeler is in her early 40's and has an extensive background in farming. Growing up, she lived on a family farm with her brothers and sisters located in San Francisco, California. From there, her parents taught her basic agricultural techniques that instilled a deep understanding of plants and gardening, providing her an experienced level of expertise in plant care. Nancy's

experience in nurturing a diverse set of plants, ranges from indoors to outdoors and has shaped her into the highly skilled and knowledgeable gardener she is today. Aside from this she combines her professional life at the local nursery and her passion for gardening, aiming to create a balance between her full-time job and her passion for gardening. Not only that, she has commitments to environmentally friendly gardening practices and plant care.

Currently residing in San Francisco, California she has adapted to an urban style of living while maintaining her garden. Nancy cares for a diverse amount of plants featuring a mix of outdoor and indoor crops. To name a few, she cares for fruit trees like mangoes and orange trees, while on the other hand she takes care of vegetable plants such as tomatoes, potatoes and even carrots. Nancy has a deep connection with her garden and treats it as a sanctuary or safe place for greenery, where she expresses her love for the environment by applying her plant care knowledge.

Nancy is very determined and organized in regards to her plants and prefers practicality rather than looks. Her passion for the environment reflects her sustainability to the world and

values eco-friendly solutions to plants and saving water. Therefore she prefers practical solutions in a budget friendly way, seeking affordable and effective solutions for her garden. She does value technology, but rather prefers user-friendly tools that simplify her gardening tasks.

After owning a couple fruit trees and vegetable plants, Nancy developed a few goals for her garden. To name a few, she plans to provide new environmentally friendly gardening practices and seeks to provide an optimal way for nurturing her plants. However, her primary goal is to maintain her expansive garden, which is filled with high maintenance plants that can be tricky to keep up with. Since the garden is very expansive, it can be difficult to keep track of, therefore Nancy is planning a way to provide an optimal approach to take care of her mango and orange trees. A few challenges Nancy encountered are the ability to monitor plant information. She faces a recurring issue of not providing the correct amount of nutrients and sunlight, which led to her plants naturally dying. Additionally, pests and bugs can be a major issue leading to holes on leaves and crops dying. Therefore she faces an ongoing concern with pest control and would love a natural way without pesticides.

Nancy Wheeler represents an advanced group of farmers and gardeners that have an extensive background in farming and plant care. She mainly embodies a wealth of experience that has been passed down by family members and experience over the years. Nancy has a deep connection to her garden and dedicates herself to sustainability and providing environmentally friendly practices. Additionally, she appreciates technology, but doesn't actively seek it and prefers to use tools that simplify tasks that align with her value of sustainable gardening practices

# **Eleven the Tech Savvy Hobbyist**



Eleven is a 24-year-old tech enthusiast pursuing her Master's degree in Computer Science. Her passion for technology is only rivaled by her love for gardening, a hobby she developed during her undergraduate years. Growing up, she was always curious about how things worked, which naturally led her to explore the world of coding and plants. With

above-average experience in plant care, she enjoys experimenting with various plant species, both indoors and outdoors. Her inquisitive nature and tech-savvy skills have led her to explore innovative gardening solutions that align with her sustainable living values.

Eleven is a driven and curious individual, always seeking new challenges and knowledge. Her love for gardening began as a simple hobby but has now evolved into a significant part of her life. She enjoys the tranquility it brings amidst her busy academic life. Despite her busy academic schedule, Eleven dedicates time to her plants, considering them not just as hobbies but as part of her lifestyle. She seeks smart gardening tools that enhance her existing knowledge and skills, providing valuable insights and easing her gardening tasks. Eleven resides in a cozy urban apartment in the middle of the city, adorned with a variety of indoor plants and a small balcony garden. Her living space is a blend of technology and nature, reflecting her dual interests. Eleven views gardening as a therapeutic escape from the digital world. It allows her to reconnect with nature and find solace in the midst of her tech-heavy academic pursuits. She sees her plants as more than greenery; they are companions in her personal sanctuary. Her daily routine includes checking her plants, adjusting their placement to ensure they receive optimal light, and

meticulously watering them as per their specific needs. She enjoys experimenting with different plant species, learning about their unique requirements and behaviors.

Driven, tech-savvy, and environmentally conscious, Eleven is open-minded and always ready to explore new possibilities. She is patient and detail-oriented, often diving deep into understanding the intricacies of the plants she nurtures. Eleven's primary goal is to create a thriving indoor and outdoor garden space that reflects her personality and brings her joy. She aims to expand her knowledge of plant care techniques and experiment with unique plant species. One of Eleven's primary challenges is optimizing her plant care routine efficiently. Additionally, understanding the individual needs of various plants and optimizing their care routines can be overwhelming at times. As an enthusiast with above-average experience, she's always on the lookout for advanced technologies and techniques to improve her gardening practices. Eleven values products that offer in-depth data and analytics, allowing her to tailor her care methods based on precise information about her plants' needs.

Despite her tech-savvy nature, Eleven often finds herself longing for a more seamless gardening experience. She dreams of a solution that could effortlessly integrate her love for plants with her love for technology. While she has experimented with various plant tech devices, she wishes for something more comprehensive, something like AquaSolutions' automated plant sensor. Unlike other devices, AquaSolutions offers more than just basic monitoring. It understands her plants' individual needs, providing real-time insights into their health, water requirements, and sunlight preferences.

# **Use Cases**

#### Eleven's Use Case

Eleven's connection to her garden is deeply personal. It reflects her nurturing personality and her desire for a harmonious balance between the natural world and technology. As a tech enthusiast, she eagerly seeks innovative solutions to enhance her gardening experience. In this scenario, AquaSolutions, an automated plant sensor, becomes the secondary actor. AquaGrowth integrates seamlessly with Eleven's garden, offering real-time data and insights through its dedicated mobile application. This technology aims to simplify Eleven's gardening routine by providing accurate information about her plants' sunlight exposure and soil moisture levels. Every morning, Eleven receives a personalized notification from the AquaGrowth app on her tablet. This notification serves as a gentle nudge, indicating which plants in her balcony garden require attention. The app offers real-time monitoring, constantly collecting data on sunlight intensity and soil moisture levels. This data is then transmitted to Eleven's tablet, where she can access detailed insights and customized care recommendations for each plant. The AquaGrowth app doesn't just stop at notifications; it also provides timely reminders. When specific plants need watering, the app sends reminders to Eleven's tablet. Armed with precise information, Eleven waters her plants, ensuring they receive just the right amount of water, avoiding the pitfalls of overwatering or underwatering.

However, this scenario isn't without its challenges. Technical glitches might occur, disrupting the flow of information between the app and the sensor. Inaccurate data could mislead Eleven, leading to inappropriate actions on her plants. User understanding plays a crucial role too; misinterpretation of the app's recommendations could potentially harm her plants. In the positive outcome, AquaGrowth empowers Eleven. With accurate notifications, real-time

monitoring, and detailed insights, she efficiently manages her balcony garden. Her plants thrive under her care, and she feels confident in her gardening abilities. In contrast, the negative outcome highlights the potential consequences of technical issues or misinterpretation. If not addressed promptly, Eleven's plants might suffer due to improper care, leading to wilting or damage.

In this use case, AquaGrowth plays a pivotal role in Eleven's gardening journey, ensuring her plants flourish under her attentive and informed care. Whether the outcome is positive or negative depends on the system's performance and Eleven's understanding of the provided information.

# Jim Hopper's Use Case

Jim Hopper is an experienced gardener who takes care of a wide variety of plants ranging from various fruits, vegetables, and herbs to beautiful flowers. Hopper being a retired sheriff has more time to dedicate to his garden care.

From past experience Hopper understands that it is good practice to water his garden early in the morning. Hopper wakes up early just before the sun rises and walks into his backyard to tend to his fruits and vegetables first then he will move onto his flowers in the front of his home. Hopper begins with taking a quick glance over his garden looking for signs of pests, or wilting. He finds nothing is wrong and proceeds with watering.

In the past Hopper would generally just use visual cues to see if his plants needed to be watered and occasionally use his finger to see if the soil in his garden had any moisture. However now that Hopper has integrated AquaGrowth Solutions with his garden he first opens the app to see which of his plants requires watering. He goes from plant to plant to see if any

need to be watered. Before watering any of them he reassures himself that his plants need to be watered with the app by selecting the corresponding plant. From there Hopper is provided data regarding the plants water status and other relevant data such as general information about its needs. Hopper now has a better understanding of exactly how much water to give to each of his various plants and does so accordingly.

There are some pitfalls that Hopper could face when using the app. Since Hopper is not familiar with using digital tools he may initially find it difficult to navigate through the app itself. If it is too complex he might give up on using it altogether. Being able to see and select a specific plant would help him navigate the app. Additionally Hopper might misinterpret the data that is provided to him. He may need guidance or an alert and clear instructions for when care/action is needed.

An ideal positive outcome would be Hopper being able to navigate the app without much trouble. It should be simple enough to the point where he can do so as he is going from plant to plant during his usual garden routine. From here Hopper would find relevant data and would know if action is needed in regards to how much he should be watering his plants.

# Nancy Wheeler's Use Case

In this use case, Nancy Wheeler is a dedicated gardener. Her garden is full of diverse plants, including fruit trees such as mangoes and orange trees, as well as a variety of vegetable plants, including tomatoes, potatoes, and carrots. Her commitment to nurturing these plants is a daily task that has several steps, including assessing her plants' condition, identifying their specific care requirements, planning her gardening tasks, and using various tools and materials like pruning shears and watering cans.

Nancy's day begins with a careful assessment of her plants' condition. She observes each plant, scrutinizing the leaves, stems, and overall health. This routine allows her to identify any signs of distress, helping her proactively address potential issues. This can all be a very manual process so she also uses the premium version of the AquaGrowth Solutions app to simplify her plant care and maintenance routine. AquaGrowth Solutions is the secondary actor that seamlessly integrates with Nancy's garden, becoming an essential tool in her gardening experience. It provides real-time data and insights through a dedicated mobile application. As she evaluates her garden, Nancy's trained eye discerns each plant's specific care requirements. She recognizes that different plants demand distinct levels of sunlight, soil moisture, and attention. Her expertise enables her to tailor her care routine to the unique needs of each plant.

Nancy meticulously plans her gardening tasks for the day. She creates a task list that might include watering, pruning, fertilizing, or repotting specific plants. She uses the app's daily task feature to ensure optimal care. This proactive approach ensures that her garden thrives.

#### Will Byers's Use Case

Will, the enthusiastic gardener, stumbles upon AquaGrowth Solution, a soil moisture sensing device, while browsing online resources for plant care. Intrigued by the idea of real-time weather data, humidity levels, and soil information for his plants, he decides to explore this new gardening tool for his lemon tree. Will goes and purchases the device immediately. As Will is technically proficient he set up the device using his mobile devices extremely quickly with no issues following the setup instruction provided.

AquaGrowth Solutions's soil moisture sensor starts gathering real-time weather, humidity and soil data immediately for Will's lemon tree. Will checks the app occasionally for updates

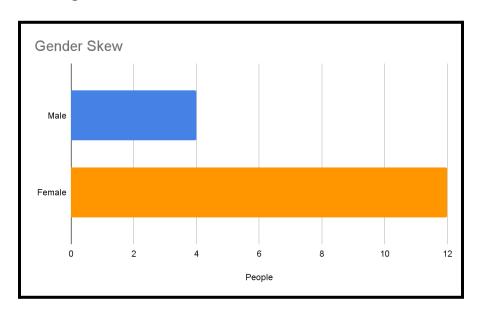
regarding the weather, humidity and soil moisture. This informs Will when to water his lemon tree and what precautions to take in case the weather forecast shows some uncommon weather patterns. As a gardener who has had to deal with challenges regarding weather in the past, Will is ecstatic about the insight and value that is given by AquaGrowth Solutions. If any issues arise the app offers valuable suggestions and resources on how to address these issues.

Will gains confidence in his ability to tend to plants and decides to integrate additional plants into the AquaGrowth Solutions moisture sensors. Will add three more sensors to his succulents and herbs. With the help of AquaGrowth Solutions, Will successfully established his healthy growing environment for his indoor and outdoor plants. Will watches as his garden flourishes and evolves.

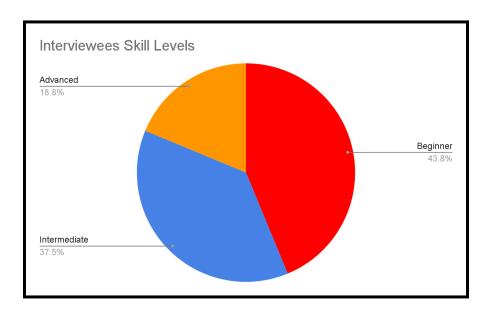
# Patterns and Insights from User Interviews

When conducting a series of interviews with homeowners and plant enthusiasts, with varying levels of gardening experience, several patterns and insights have emerged. These findings provide valuable guidance for developing a plant care product that caters to a broad audience with different needs and preferences.

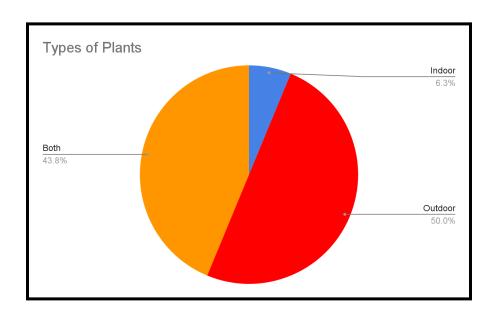
# 1. Diverse User Backgrounds:



Gender: Interviewees varied between men (4) and women (12)

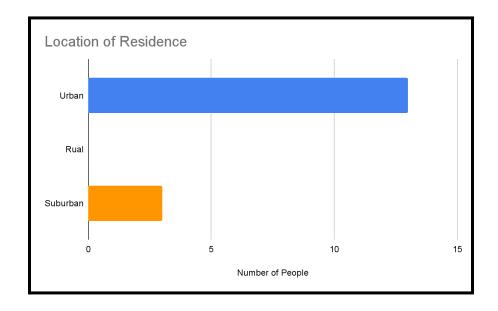


**Varied Experience Levels**: Interviewees ranged from absolute beginners to experienced gardeners.

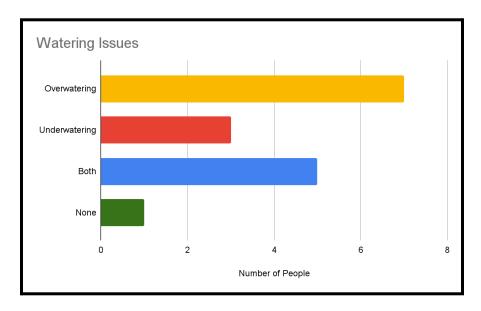


**Different Plant Types**: Interviewees cared for a variety of plants, including outdoor gardens (8 plants), indoor houseplants (1) and both (7).

**Interview Locations:** Interviewees lived in urban (13) and suburban (3) environments. None were rural.



# 2. Common Challenges:



**Watering Dilemmas**: Many Interviewees faced challenges related to watering, such as overwatering, underwatering, and determining the correct amount of water.

**Sunlight Management**: Controlling sunlight exposure, especially for indoor plants, was a common concern.

**Lack of Knowledge**: Beginners struggled with understanding specific plant care needs and indicators of plant health.

**Pest control:** A few Interviewees faced issues with pest control and bugs for fruit and vegetable plants.

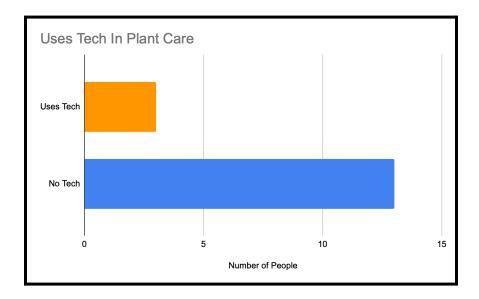
#### 3. Expectations from a Plant Care Product:

tailored to each plant's specific requirements.

Convenience and Automation: Interviewees emphasized the importance of automation and convenience, especially for busy individuals, as it could significantly aid in consistent plant care.

Personalized Recommendations: Interviewees expected personalized care recommendations

**Monitoring Plant Health**: Interviewees desired real-time monitoring of plant health, including water levels, sunlight exposure, and potential diseases.



# 4. Importance of User-Friendliness:

**Simplicity is Key**: All interviewees, regardless of their experience level, stressed the need for a user-friendly interface and straightforward setup process.

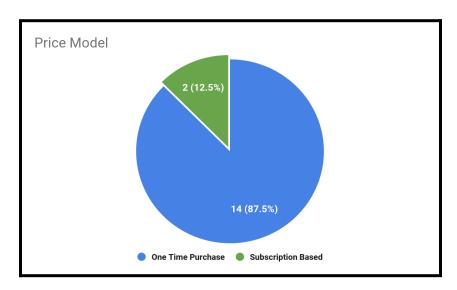
#### 5. Environmental Consciousness:

**Water Conservation**: Interviewees expressed awareness of water conservation, making it essential for the product to assist in efficient water usage.

**Support for Eco-Friendly Practices**: Interviewees supported environmentally friendly gardening practices.

# 6. Pricing and Affordability:

**Budget Considerations**: Price played a significant role, with interviewees preferring one-time purchases over subscription models and expecting the cost to align with typical gardening expenses.



**Perceived Value**: Interviewees were willing to invest in a product that provided tangible value and simplified their gardening tasks effectively.

# 7. Desire for Comprehensive Information:

**Educational Resources**: Interviewees expressed interest in additional features such as plant identification, gardening tips, and comprehensive plant care guides.

**Remote Monitoring**: There was a desire for features allowing remote monitoring and care of plants, especially when users were away from home.

# **Conclusion:**

The insights gathered from interviewees underline the importance of developing a user-friendly, intuitive, and comprehensive plant care product. Automation, personalized solutions / recommendations, plant insights, and water conservation became crucial aspects from the interviews. By addressing these patterns, a plant care product can effectively meet the diverse needs and expectations of users, fostering a positive gardening experience for individuals of all backgrounds and expertise levels.

#### **Interviews**

**Danny San Pedro Interview** 

What is your name?

• "My name is Danilo San Pedro."

What is your age?

• "I'm 73 years old."

What do you identify as?

• "Male"

Can you tell me a bit about yourself? What is your background, including education and work experience?

• "I'm educated. My background is that I am a BSA major in accounting."

What is your current job or role, and what does it involve on a day-to-day basis?

NA

Where are you located, and can you describe your living situation (e.g., urban, suburban, rural)

• "I live in California, but I didn't provide my specific address. Currently, I would say suburban."

#### 1. Plant Care Experience:

- Can you tell us about your experience with taking care of plants? Do you consider yourself an experienced gardener or more of a beginner?
  - "I'm a beginner because, it's the first time my uh very good at this is uh when I retired It's a 65 that's where I started gardening and I enjoy it every day okay"
- What types of plants do you currently care for (e.g., indoor houseplants, outdoor garden, specific species)?
  - o "I like vegetables and flowers"
- What are some of the challenges you face when it comes to plant care and maintenance?
  - "It's easy to maintain the vegetables in the flower and when maintaining these vegetables do you do it routinely every single day. I water and check it out what do they need if they need soil they add soil if they need water every day I water them so it will be good and a flower are also the same"

#### 2. Pain Points and Challenges:

- What are the most significant challenges you encounter while caring for your plants?
  - "Most of this is the first time I did it. I didn't know how to transplant.
- How do you currently monitor the water needs of your plants?
  - "Um, when transplanting from a container to the soil in the ground, I initially thought it was as simple as putting the plant in the soil and watering

it; that's what I believed. However, the next time I attempted it, I realized that I lacked experience. To improve my knowledge, I sought advice from a nursery. They recommended having access to resources like computer courses, which could be helpful. They also emphasized gaining practical experience within the nursery setting."

- Are there any tools or methods you use?
  - "I just eyeball it. I check the soil by touching it with my finger. If the soil feels wet, I assume it's okay."
- Have you ever faced issues with overwatering or underwatering your plants? What tools, technologies, or solutions do you currently use to address these challenges?
  - "No, I haven't faced issues with overwatering or underwatering because I monitor it closely. I primarily use a hose for watering, and this method has worked well for me."

#### 3. Expectations from a Plant Care Product:

- What features or capabilities would you like to see in a product that helps with plant care and watering?
  - "I have high expectations for it, and sometimes it's quite exciting. For instance, there's this berry plant that will produce fruits in winter. Currently, it's only September, and there are already flowers on it. So, I anticipate that by next month, in October or November, I could have some berries"
  - "Looks like everything is in order with what everyone else is doing... but more knowledgeable."
- How important is automation and convenience in plant care to you?
  - "It's very important and convenient because everything you will see in this product can make you enjoy your experience."
- Are there specific plant care problems or tasks you'd like a new product to address?
  - o NA

#### 4. Mobile App Preferences:

- Have you ever used any automated or smart gardening devices before (Yes or No)?
  - If so, which ones, and what was your experience like?
  - o "None."
- What role does technology play in your daily life? Are you comfortable using digital tools and apps to manage your garden?
  - "Somewhat plays a role in my life. Computers are everywhere right now and it's more interesting and productive."
- Do you use any mobile apps or digital tools to assist with plant care or gardening tasks?

- "A little bit of everything, and I hope it can make sure plants get watered everyday."
- What features would you expect from a mobile app designed to help you take care of your plants?
  - o NA
- How often would you use a mobile app for plant care, and for what purposes?
  - o "Probably most of the time."

# 5. Water Conservation and Sustainability:

- Are you conscious of water conservation and its importance in plant care?
  - "It's very important because wasting water is just wasting your money. It's important to monitor for me, because you might as well just check your mobile application."
- Would you be interested in a product that not only makes plant care easier but also helps you use water more efficiently?
  - o "Yes."
- What are your thoughts on environmentally-friendly gardening practices?
  - "It's a good idea, nowadays not a lot of people are planting because of their way of living. For those that are like me, retired, it's helpful to do planting because it's good for the environment."

#### 6. User-Friendliness:

- How important is ease of use and user-friendliness when considering a product for plant care?
  - "Very Important and very useful because everyday we are using our iPads for emails, so why not?"
- Are there any specific design or usability features that are essential to you in a plant care product?
  - o "It's hard to tell."

#### 7. Future Expectations:

- If you were to imagine an ideal plant care product, what would it look like, and what would it do for you?
  - "It would look like a regular sprinkler inside City Parks, but if it's for homes it should look like a normal sprinkler in a designated area like your garden."
- What would make you excited to try a new plant care product, and what concerns would you have?
  - o "None."
- Are there any additional features or capabilities you'd like to see in a plant care product that we haven't discussed?

#### o "None for now"

#### 8. Pricing and Monetization

- Are there any budget constraints or cost considerations when it comes to your gardening practices? How do you allocate resources for your garden?
  - "Many things are expensive for me, because I have lots to do but if this product is necessary for a small or big garden, I may use it."
- When considering a product for plant care, how important is the price or cost to you?
  - "Very important because I monitor my budget. If you are retired, you are receiving money every month, so it's very important."
- What price range do you believe is reasonable for a device or system that helps you take care of your plants?
  - "Have a sale like a 50% discount."
- Would you be more inclined to purchase a one-time device or system, or are you open to subscription-based models?
  - "One time device"
- Are there specific features or benefits that you would expect to justify a higher price for such a product?
  - o "None."
- What would you expect with our automated sprinkler?
  - o "None, it looks okay."

#### **Closing:**

- Is there anything else you'd like to share about your experiences, preferences, or needs that we haven't covered in this interview?
  - "I think everything is covered, but the only thing for me is the pricing."

#### **Monique Castanon Interview**

What is your name?

• "My name is Monique Castanon"

What is your age?

• "I am 21 years old"

What do you identify as?

• "Female"

Can you tell me a bit about yourself? What is your background, including education and work experience?

NA

What is your current job or role, and what does it involve on a day-to-day basis?

NA

Where are you located, and can you describe your living situation (e.g., urban, suburban, rural)

• Urban

#### 1. Plant Care Experience:

- Can you tell us about your experience with taking care of plants? Do you consider yourself an experienced gardener or more of a beginner?
  - "I have had a few small succulents that I've kept for a few years, but I consider myself a beginner when it comes to gardening. The most I do is water them for the sun."
- What types of plants do you currently care for (e.g., indoor houseplants, outdoor garden, specific species)?
  - o "They are outdoor plants."
- What are some of the challenges you face when it comes to plant care and maintenance?
  - "Umm yea randomly the leaves on some of them would just start dying, and I don't really understand as to why? But other than that they are usually fine. I feel like its considered watering because I know that succulents need a specific amount of water, but I don't really know how much water is added. I don't really think it's the soil and I hope it's not with light, but I assume they need light."

#### 2. Pain Points and Challenges:

- What are the most significant challenges you encounter while caring for your plants?
  - "I mean mostly like I said before it's just some randomly like a piece of the plant will start dying and the other half will be thriving, that's what throws me off as to how that happens but I think really that's it I mean I got pretty low maintenance plants though too so there isn't much to say"
- How do you currently monitor the water needs of your plants?
  - "I kind of just do it once maybe every couple of days, if it looks super duper dry I'll add a little extra but that's as much as I go with monitoring it."
- Are there any tools or methods you use?
  - "I use a mini watering can that I have."
- Have you ever faced issues with overwatering or underwatering your plants? What tools, technologies, or solutions do you currently use to address these challenges?
  - "So I went to water it and the little cap on the end fell off so a bunch of water just shot into the pot and it just kept over filling and filling until the water came out so it sucked in all this soil and then it was so much excess that it spilled out over the top. A few pieces turned brown from overwatering."

#### 3. Expectations from a Plant Care Product:

• What features or capabilities would you like to see in a product that helps with plant care and watering?

- "I feel like maybe it being able to tell you how much you should water it based on what plant you have, kind of like having its own little background knowledge on the plants. I feel like it's just a generic category of the most popular plants, let's say for this much water and so on."
- How important is automation and convenience in plant care to you?
  - "I feel like it does help I end up being busy a lot throughout the day so just being ready and done for me would be a big help"
- Are there specific plant care problems or tasks you'd like a new product to address?
  - "Maybe how much sun it should get I guess that would go with the background knowledge on whether or not it needs to be in the Sun every day"

# 4. Mobile App Preferences:

- Have you ever used any automated or smart gardening devices before (Yes or No)?
  - o "No"
- What role does technology play in your daily life? Are you comfortable using digital tools and apps to manage your garden?
  - "I use digital stuff pretty much every day at work I'm on the computer all day I think you would be convenient to have it somewhere that I'm already going to every day"
- Do you use any mobile apps or digital tools to assist with plant care or gardening tasks?
   "No"
- What features would you expect from a mobile app designed to help you take care of your plants?
  - "maybe just kind of an alarm you know is saying like whether it's automatically watering it for me or telling me eyeshadow water it just like a notification pops up it's like hey you need to do this"
- How often would you use a mobile app for plant care, and for what purposes?
  - "I mean like I said if it gives me notification like oh I need to do this I think I would use it as much as it notified me and I would use it for its sole purpose as you know keeping track of my plant watering it and what not."

#### 5. Water Conservation and Sustainability:

- Are you conscious of water conservation and its importance in plant care?
  - "Yes" "for example the way I'm taught to wash dishes is normally like you see on TV they'll leave the water running the whole time, what we do is we set up a bowl of soapy water and we scrub them all and leave the sink off so that we're not wasting the water while we're doing that"
- Would you be interested in a product that not only makes plant care easier but also helps you use water more efficiently?

- "Yes, I feel like it's good to be environmentally environmentally aware to just be able to help when you can and it's just the small things that'll work out"
- What are your thoughts on environmentally-friendly gardening practices?
  - "you know I've never really thought too much about it but I mean it's they're doing it with like good intentions right like it's just being environmentally aware yeah I mean I'm for it if I knew more ways that I could contribute I would"

#### **6. User-Friendliness:**

- How important is ease of use and user-friendliness when considering a product for plant care?
  - "I mean I feel like it's pretty important some people get really confused and frustrated easily and I know a lot of older people like to maintain and keep up with plants so I feel like it'd be important for it to be easier for them to use"
- Are there any specific design or usability features that are essential to you in a plant care product?
  - "I don't really think I have anything specific I feel like as long as it's not a crazy complicated process then I'm fine with it"

#### 7. Future Expectations:

- If you were to imagine an ideal plant care product, what would it look like, and what would it do for you?
  - "um I mean so like a sprinkler just something automatic that would water my plants when I needed to take care of them and have you know be even able being able to have it set to the exact amount for that specific plant and maybe if say like the person has different kinds of plants that they're able to change how much water comes out for that specific one
- What would make you excited to try a new plant care product, and what concerns would you have?
  - "I don't think I'd have any concerns but I feel like maybe just like the design of it that's what really gets like the attention you would need a good attention driver for me to be like oh yeah I want to try this"
- Are there any additional features or capabilities you'd like to see in a plant care product that we haven't discussed?
  - "I feel like I mean at least for me personally since my plants are outside I wouldn't mind it being bigger because it's on my patio so it has you know the more space. I feel like it'd be just to each their own you know if someone had it inside it'd be something small and convenient but like I said earlier I'm

# pretty busy throughout the week so hopefully it can carry more and do longer than I wouldn't mind if it had to be bigger okay"

# 8. Pricing and Monetization

- Are there any budget constraints or cost considerations when it comes to your gardening practices? How do you allocate resources for your garden?
  - "I like I don't have a big budget for my plans because I'm like oh they're smaller like they're fine I feel like it also just depends on the type of plant if I had more of a high maintenance one I would definitely invest more but because there's such but because there's smaller plans a little lower maintenance I don't really feel the need to invest as much"
- When considering a product for plant care, how important is the price or cost to you?
  - "I feel like as long as it's nothing like too crazy I'd be interested in it"
- What price range do you believe is reasonable for a device or system that helps you take care of your plants?
  - "honestly I feel like that price of \$50 is pretty reasonable I mean looking at the costs of production and then looking at what this entire thing can do I feel like it's it's Justified honestly"
- Would you be more inclined to purchase a one-time device or system, or are you open to subscription-based models?
  - "I feel like they're both pretty good to be honest because I would like the subscription I'd like to like have something to look forward to and I feel like that's better for a trial run of the product but the one-time purchase does you know sound good too especially for the long run instead of having to pay every every now and then you just wanted your one and done okay"
- Are there specific features or benefits that you would expect to justify a higher price for such a product?
  - o "I don't really think specifically okay"
- What would you expect with our automated sprinkler?
  - o NA

#### **Closing:**

- Is there anything else you'd like to share about your experiences, preferences, or needs that we haven't covered in this interview?
  - "really the only expectation is for it to be doing what it's supposed to be doing you know keep my plants watered like giving me some background information and just helping me really maintain and take care of my plants better okay and the last question"

#### Krisha Yu Interview

What is your name?

• "Krisha Yu"

What is your age?

• "42"

What do you identify as?

• "Female"

Can you tell me a bit about yourself? What is your background, including education and work experience?

• "I work at LAUSD as a senior office Tech I've been working for over 14 years now okay I got a college I have a bachelor's degree in the role studies I graduated from Cal State Dominguez I'm a mother of two okay raised in L.A okay"

What is your current job or role, and what does it involve on a day-to-day basis?

• "Senior Office Tech"

Where are you located, and can you describe your living situation (e.g., urban, suburban, rural)

• "Maybe urban"

#### 1. Plant Care Experience:

- Can you tell us about your experience with taking care of plants? Do you consider yourself an experienced gardener or more of a beginner?
  - "I would say more of a beginner even though I've been around plants and planting my whole life."
- What types of plants do you currently care for (e.g., indoor houseplants, outdoor garden, specific species)?
  - o "Fruit trees and herbs."
- What are some of the challenges you face when it comes to plant care and maintenance?
  - "Keeping them alive, bugs, and yes I do experience challenges in maintenance."

#### 2. Pain Points and Challenges:

- What are the most significant challenges you encounter while caring for your plants?
  - "Keeping them all alive and planting in general"
- How do you currently monitor the water needs of your plants?
  - "I water them everyday, if the top of the soil looks dry we water it. Also yes our plants get watered regularly in the morning and in the afternoon"
- Are there any tools or methods you use?
  - o "A hose on shower settings"
- Have you ever faced issues with overwatering or underwatering your plants? What tools, technologies, or solutions do you currently use to address these challenges?
  - "Yes on both" "One was over watering because I didn't have good drainage and the other because I think I was watering it enough and then it was

# watering out. Both plants died" "Root rot happened from overwatering because there was no drainage and the leaves were like dying"

## 3. Expectations from a Plant Care Product:

- What features or capabilities would you like to see in a product that helps with plant care and watering?
  - "well if we're talking about like data I would like it to tell me what is wrong with the plant if it's like dying and how to fix it"
- How important is automation and convenience in plant care to you?
  - "convenience is very important and no I don't mind the automation"
- Are there specific plant care problems or tasks you'd like a new product to address?
  - "nothing other than just helping to like make a plant grow like just to be able to succeed"

#### 4. Mobile App Preferences:

- Have you ever used any automated or smart gardening devices before (Yes or No)?
  - o "No"
- What role does technology play in your daily life? Are you comfortable using digital tools and apps to manage your garden?
  - "Well I use like a system at work for every day like you Know that gives me data analysis of like the school and all that stuff and then I use you know my smartphone for like social media and all that stuff so maybe more than 50 50. maybe more like 80 percent"
- Do you use any mobile apps or digital tools to assist with plant care or gardening tasks?
  - "Once I figure it out sure"
- What features would you expect from a mobile app designed to help you take care of your plants?
  - "Um maybe design like say I planted it in a wrong place maybe it should tell me where to find it better"
- How often would you use a mobile app for plant care, and for what purposes?
  - o "depending on how easy and convenient it can be probably every week"

# 5. Water Conservation and Sustainability:

- Are you conscious of water conservation and its importance in plant care?
  - "No" "I mean I just water when I feel like I need to water I don't really think too much of it okay"
- Would you be interested in a product that not only makes plant care easier but also helps you use water more efficiently?
  - o "Yeah sure"
- What are your thoughts on environmentally-friendly gardening practices?

o "yeah ideally it would be nice"

#### 6. User-Friendliness:

- How important is ease of use and user-friendliness when considering a product for plant care?
  - o "Very important"
- Are there any specific design or usability features that are essential to you in a plant care product?
  - "I like things simple like if it's too much on like a page and it's like click click click I like to click click but if it's like too much then it doesn't make it user friendly" "I prefer mobile applications be on iPhone"

#### 7. Future Expectations:

- If you were to imagine an ideal plant care product, what would it look like, and what would it do for you?
  - "something small or non-like visual visual like it would be something that you could stick into the ground and you kind of don't know see it or don't know it's there you know so uh an item that's discrete"
- What would make you excited to try a new plant care product, and what concerns would you have?
  - "not really no concerns and just I mean I don't know I would try it if it'll help me make my pants grow"
- Are there any additional features or capabilities you'd like to see in a plant care product that we haven't discussed?
  - o "no not really"

#### 8. Pricing and Monetization

- Are there any budget constraints or cost considerations when it comes to your gardening practices? How do you allocate resources for your garden?
  - "Yes, affordability is a cost constraint." "I don't really allocate resources for my garden and buy when I want to buy"
- When considering a product for plant care, how important is the price or cost to you?
  - o "Very much"
- What price range do you believe is reasonable for a device or system that helps you take care of your plants?
  - "I don't know I've never really looked into it"
- Would you be more inclined to purchase a one-time device or system, or are you open to subscription-based models?
  - o "I'm usually like the one time device"
- Are there specific features or benefits that you would expect to justify a higher price for such a product?

- o "Not really"
- What would you expect with our automated sprinkler?
  - "Um not other than just helping me keep the plants growing nothing much"

#### **Closing:**

- Is there anything else you'd like to share about your experiences, preferences, or needs that we haven't covered in this interview?
  - o "no not really"

#### **Marwin Jacinto Interview**

What is your name?

• "Marwin Jacinto"

What is your age?

• "29"

What do you identify as?

• "Male"

Can you tell me a bit about yourself? What is your background, including education and work experience?

• "I am yeah I'm 29 years old uh from Southern California mostly in the like La Orange County region so that that's where I've always been I graduated with a computer engineering degree at UC Irvine so I know a little bit about um building stuff like this uh and I'm currently a homeowner with a sprinkler system"

What is your current job or role, and what does it involve on a day-to-day basis?

• NA

Where are you located, and can you describe your living situation (e.g., urban, suburban, rural)

• "Urban I think"

### 1. Plant Care Experience:

- Can you tell us about your experience with taking care of plants? Do you consider yourself an experienced gardener or more of a beginner?
  - "I am a beginner definitely a beginner" "So far so good I have about half a year of hands on experience with it and I am still learning"
- What types of plants do you currently care for (e.g., indoor houseplants, outdoor garden, specific species)?
  - "mostly outdoor garden plants just a little bit of um indoor decorative kind of types of plants but outdoor I have a lot of like citrus fruits um and some decorative kind of like bushes and stuff" "I have more than 20 okay more than 20, lets just say more than twenty I don't have an exact count"
- What are some of the challenges you face when it comes to plant care and maintenance?
  - "some plants are getting too much sunlight I think so it looks like it's it's drying up the the so not not maybe not getting enough water I I don't really

know exactly but the leaves are drying out on some of them so I have to move some of them into the shade uh I think uh some issues with the I guess uh like I guess it's like fungus or something on the leaves so I had to clean that out uh overgrown vegetation was was a big thing um and just a little bit on the pest side with like spiders and and stuff actually uh yeah underwatering sometimes I think on the indoor plants over watering was a big thing on the outdoor plants. For the indoor plants over watering on the indoor what about underwatering uh underwatering on the grass uh I had an instance where I had I underwatered it um during especially during the summer so I had to adjust the sprinkler system to to provide more water in the summer"

#### 2. Pain Points and Challenges:

- What are the most significant challenges you encounter while caring for your plants?
  - "so I think the most significant one is um the water the spray the sprinkler system that I have kind of sprays sprays things not really in the direction that I want it to spray in so it would be nice to have a sprinkler system that only Waters just the grass and avoids like a concrete area okay um so I guess it's more of hold on there's a mosquito uh more I think I think the the struggle is the the water isn't going where I want it to go yeah so with the trees I would love if the water would just be focused on like the area of the tree rather than just having a generic uh off-brand sprinkler system that that just sprays it everywhere and then same thing with uh with the near the concrete instead of like spraying it on the concrete."
- How do you currently monitor the water needs of your plants?
  - "I kind of just eyeball it"
- Are there any tools or methods you use?
  - "Smart sprinkler systems"
- Have you ever faced issues with overwatering or underwatering your plants? What tools, technologies, or solutions do you currently use to address these challenges?
  - "increase costs mostly uh actually there's another another downside to it is um if the soil gets too much water then uh uh stuff that you don't want to grow starts growing yeah so like like uh like I guess like fungus and stuff starts growing on places where they shouldn't grow um and then I think increased mosquito activity is a big thing too if it's over watered underwater obviously the plants aren't very happy so they just um before I before I had the smart sprinkler system that was a problem okay so it'd be nice to have like a like the perfect sweet spot for watering your plants yes yeah so uh something that would um that would uh measure like moisture content would be or the moisture of the soil would be good or something more specific to the

plant so each plant has very specific needs I think but I think the sprinkler system I have even though it's a smart sprinkler system it it kind of just uh throws a blanket over the whole area rather than being plant specific"

#### 3. Expectations from a Plant Care Product:

- What features or capabilities would you like to see in a product that helps with plant care and watering?
  - o "no uh I think that's don't have any any questions I think"
- How important is automation and convenience in plant care to you?
  - "Very important" "it would help me because it would uh ease the burden of handling certain laborious task I think"
- Are there specific plant care problems or tasks you'd like a new product to address?
  - "I think controlling the sprinkler where the water sprays I think would be a cool thing to include in there so instead of just controlling the monitoring part also the water delivery would be pretty helpful"

# 4. Mobile App Preferences:

- Have you ever used any automated or smart gardening devices before (Yes or No)?
  - "Rachio" it's good it's convenient being able to remotely control the sprinklers is convenient yeah um I don't think it's smart enough without the expensive uh sensors and and um yeah additional stuff. I don't think it's it's smart enough for what I would consider as smart because it doesn't really have all the without without all the uh you have to spend on a a good chunk of money I guess i'm with all the monitoring systems that you have to add on to it and even then if you do have the monitoring system I think it's it's not specific enough for a plant it's more per zone so yeah sometimes sometimes sprinklers can't cover the whole zone right yeah so you think it's getting uh the Water ends but it turns out it's not right on the certain areas"
- What role does technology play in your daily life? Are you comfortable using digital tools and apps to manage your garden?
  - "yes to manage my garden though because I'm relatively new to it but to eventually yes but anything else around the house I think I'm very comfortable with using technology"
- Do you use any mobile apps or digital tools to assist with plant care or gardening tasks?
  - o "Yes i do"
- What features would you expect from a mobile app designed to help you take care of your plants?
  - "I expect one app to maintain water delivery and monetization, along with remote control to control it away from home or at home. I also expect it to integrate with the rest of my smart home and devices"

- How often would you use a mobile app for plant care, and for what purposes?
  - "Probably once every two weeks for setting it up. For automation every four days"

#### 5. Water Conservation and Sustainability:

- Are you conscious of water conservation and its importance in plant care?
  - "on water conservation yes with respect to plant care I just try to to use as much water as I can get away with without the plant dying"
- Would you be interested in a product that not only makes plant care easier but also helps you use water more efficiently?
  - "Yes definitely"
- What are your thoughts on environmentally-friendly gardening practices?
  - "I'm all for it, definitely we need it" "I haven't participated in it but I might start it soon"

#### **6. User-Friendliness:**

- How important is ease of use and user-friendliness when considering a product for plant care?
  - "important otherwise I won't use it okay if it's not if it's not easy to use then it'll be more of a headache"
- Are there any specific design or usability features that are essential to you in a plant care product?
  - "I'm happy with the Rachio design, it's very clean and has nice icons without you having to read as much so you can get the info pretty quickly and efficiently and I like that it tells me the water consciousness part I think it'll tell me if it skips watering because of rain or something like that then it will tell me how much minutes I've saved and the impact of that to the community"

# 7. Future Expectations:

- If you were to imagine an ideal plant care product, what would it look like, and what would it do for you?
  - o NA
- What would make you excited to try a new plant care product, and what concerns would you have?
  - "The cost if it is, if it's not not as expensive as other full systems, that would get me excited. Okay, cost is a big thing."
- Are there any additional features or capabilities you'd like to see in a plant care product that we haven't discussed?

## 8. Pricing and Monetization

- Are there any budget constraints or cost considerations when it comes to your gardening practices? How do you allocate resources for your garden?
  - o "Yes I do"
- When considering a product for plant care, how important is the price or cost to you?
  - "Very important"
- What price range do you believe is reasonable for a device or system that helps you take care of your plants?
  - o NA
- Would you be more inclined to purchase a one-time device or system, or are you open to subscription-based models?
  - "One time purchase models"
- Are there specific features or benefits that you would expect to justify a higher price for such a product?
  - o "None"
- What would you expect with our automated sprinkler?
  - ""I expect the UI to be easy to use and not limiting I expect integration with the rest of my smart devices I expect reliability I think yeah it doesn't it doesn't miss any any watering cycles and you know what not and then fault detection would be nice to have"

## **Closing:**

- Is there anything else you'd like to share about your experiences, preferences, or needs that we haven't covered in this interview?
  - "I don't think so I think that's it"

#### **Sharon Jacinto Interview**

What is your name?

• "Sharon Jacinto"

What is your age?

• "50"

What do you identify as?

• "Female"

Can you tell me a bit about yourself? What is your background, including education and work experience?

• "I am a california homeowner and have been here since 7 years old"

What is your current job or role, and what does it involve on a day-to-day basis?

• "Nurse"

Where are you located, and can you describe your living situation (e.g., urban, suburban, rural)

• "California and Suburban"

## 1. Plant Care Experience:

- Can you tell us about your experience with taking care of plants? Do you consider yourself an experienced gardener or more of a beginner?
  - "I know I am not a beginner but I am also not a thoroughly experienced gardener. I am sort of in between"
- What types of plants do you currently care for (e.g., indoor houseplants, outdoor garden, specific species)?
  - "I prefer to garden in the ground instead of pots, because it has a better life expectancy. I am more knowledgeable in growing different types of plants than trees. Mainly fruit trees in grounds and I prefer it that way using natural resources like the sun and rain" "I did have experience in indoor houseplants, I've purchased a few indoor palm trees and it was a fiddle tree that has large leaves that are classy trees for indoor homes featured in a lot of magazines. But unfortunately they are sensitive to moisture inside the home and heat and cold so they didn't do well for me even if I transplanted it in a large pot."
- What are some of the challenges you face when it comes to plant care and maintenance?
  - o "I battle bugs because I don't use pesticides"

## 2. Pain Points and Challenges:

- What are the most significant challenges you encounter while caring for your plants?
  - "Indoors is challenging because life expectancy is short. I like plants that can stay alive for a long period of time. For years, it gives me joy seeing a plant growing but I have a problem with that because the temperature in our house doesn't do well for these plants. The moisture and humidity plays a role and it doesn't do well. For outdoors, the number 1 problem is expensive. The water is now expensive to water the vegetables and I've limited growing vegetables because the cost of the bills is too high. When you see vegetables in the market it's cheaper to buy but I prefer to grow them myself."
- How do you currently monitor the water needs of your plants?
  - "I grow fruit trees in my backyard they are um within the range ages of 2 years old to 12 years old and all of them especially the young one the young 2-year-old I water it um more frequently than the older one in the summer I water them twice a week because it's hot um in the winter once a week or once in every two weeks even and I think drainage in the soil is absolutely important um how I monitor the moisture well I check the soil and I check I check it to see if it's so dry on the top um it look if it looks too dry uh I will water it and I do water only in the morning never in the late afternoon or especially in the evening um it's very damaging it attracts a lot of bugs onto

the leaves and that's not good for the trees and also I monitor it by the moisture and watering I monitor it by the weather how hot it could be or how cold it would be or if it's going to rain next week"

- Are there any tools or methods you use?
  - "I use hose um I prefer it because I can see how much water I'm giving it and I like to water the entire tree it's like giving it a shower if I use a sprinkler it's not effective um there's I water the tree the entire tree to give it a entire to give it a complete shower uh once a week and um with a sprinkler it's not as effective can you please State why you believe as sprinkler is not effective"
- Have you ever faced issues with overwatering or underwatering your plants? What tools, technologies, or solutions do you currently use to address these challenges?
  - "like I said I go twice a week in the summer once a week or once in a week and a half in the winter I go by temperature and if it's cloudy uh and it's cold you know I I really go by the weather okay and when you're directly uh addressing these challenges Alles are you using any Technologies other than the hose and the weatherman on TV channel 7 Mega Doppler oh yes I'm very much into the Mega Doppler because uh I see what is the weather forecast for the week"

# 3. Expectations from a Plant Care Product:

- What features or capabilities would you like to see in a product that helps with plant care and watering?
  - "you know I saw on a Tik Tok and apps um Facebook I see this app where you can just picture with your phone and see the damage on the leaves of the plant or if there's any damages and it can and it tells you what you need to do what what nutrient you need to give or you know if it's under water or if there's a disease on it I don't know how exact and correct that is that app but um I don't know maybe that would be a nice feature to have with a sprinkler system."
- How important is automation and convenience in plant care to you?
  - "like the sprinkler it would be very convenient it is convenient in a way where I don't have to go outside especially if it's uh hot in the summer I don't need to be out there um you know if I'm too tired and I'm busy doing other things I it gives it it gives me time to do other things instead of me spending one hour uh watering all my plants front yard and backyard takes me about 1 hour and in that one hour I could use it to do cooking or housework or anything else or maybe just to even relax if I don't feel like going out that would be a convenience for me okay."
- Are there specific plant care problems or tasks you'd like a new product to address?
  - o NA

# 4. Mobile App Preferences:

- Have you ever used any automated or smart gardening devices before (Yes or No)?
  - "Just a sprinkler system which I am not happy with"
- What role does technology play in your daily life? Are you comfortable using digital tools and apps to manage your garden?
  - "I do I use my phone my Apple it's my Bible I Google if I have a question like for example uh fertilizing I'm always looking for the best way to fertilize or how to compost the best way to compost what to use for uh to feed my plants"

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- Do you use any mobile apps or digital tools to assist with plant care or gardening tasks?
  - o "None"
- What features would you expect from a mobile app designed to help you take care of your plants?
  - o NA
- How often would you use a mobile app for plant care, and for what purposes?
  - "then I I'd be using it all the time I'd be checking on it all the time"

# 5. Water Conservation and Sustainability:

- Are you conscious of water conservation and its importance in plant care?
  - "yes I am very much um it would save me money knowing that I am not overwatering my plants um I you know it would have it would be great to have a sensor in the soil or knowing that it's um I don't need to water it yet because it has it still has plenty of water and it could also uh alert me you know the sensor if my soil is too dry for my plants before it starts to you know uh dry out"
- Would you be interested in a product that not only makes plant care easier but also helps you use water more efficiently?
  - o "Yes"
- What are your thoughts on environmentally-friendly gardening practices?
  - I like environmentally Garden practices like I said I'm very much into organic um I'm not into any thing that's unnatural

#### 6. User-Friendliness:

- How important is ease of use and user-friendliness when considering a product for plant care?
  - "I like things easy I don't like things complicated like I said I'm old fashioned uh I'm not uh what do you call gen Z person I'm one of those I don't know

what you would call me for a 50y old but like I said I like things easy one two steps done"

- Are there any specific design or usability features that are essential to you in a plant care product?
  - "I don't know I can't say because you have to give me like a comparison or something that I've seen"

## 7. Future Expectations:

- If you were to imagine an ideal plant care product, what would it look like, and what would it do for you?
  - "well I'd like it to be localized like, it's not sprinkling so wide and big everywhere I want it to be specific only to the plants like why does it have to be only one I usually see only one or two sprinkler in a garden why can't it not be like underneath a tree a small one on each tree if I want my plants and my trees to be watered I want it specifically localized to each tree like a and when I turn them on it would be like number one number two number three number four and then I would have like like a a pad where I can say I only want number one and two watered today tomorrow I want three and four watered something like that and I want it not all over I just want it just specifically for those trees and those those plants you know you understand it's localized"
- What would make you excited to try a new plant care product, and what concerns would you have?
  - "just whatever I said before um not being localized and uh it would be nice to have a sensor that um that detects uh how much water is in the ground it'll tell me the how the moisture level if it's too dry it'll alert me um it what by percentage that would be good you know"
- Are there any additional features or capabilities you'd like to see in a plant care product that we haven't discussed?
  - o NA

## 8. Pricing and Monetization

- Are there any budget constraints or cost considerations when it comes to your gardening practices? How do you allocate resources for your garden?
  - if it's in my budget I'll buy but if it's too EXP expensive I don't know I'd be thinking about it and if it's too much well I also enjoy watering it with the hose that cost me only \$20
- When considering a product for plant care, how important is the price or cost to you?
  - "Very important"

- What price range do you believe is reasonable for a device or system that helps you take care of your plants?
  - well if the product is efficient and uh water saving and um like I said efficient enough enough moisture given to the plant and the tree I don't mind paying that much but with your product that's only \$55 and and if it has a better system um and more features at \$55 well that's a great deal okay I'm willing to buy I'm willing to try
- Would you be more inclined to purchase a one-time device or system, or are you open to subscription-based models?
  - "I would try that one product first because I'm not sure of the product so if I'm happy with the product I'm I most likely would think about subscribing since I am a gardening Enthusiast"
- Are there specific features or benefits that you would expect to justify a higher price for such a product?
  - o "None"
- What would you expect with our automated sprinkler?
  - "I don't know um I expect it to be more efficient than what's out there, the regular sprinklers um cost saving I'm hoping and a better product that censors it more correctly with the weather system that they can also be uh you know they know what's happening with the weather you know if it's going to rain things like that"

#### **Closing:**

- Is there anything else you'd like to share about your experiences, preferences, or needs that we haven't covered in this interview?
  - o "it would be nice also to have a sensor that lets you know uh what type of um the soil content if it needs if you have a it would be nice to have like a sensor for the soil as well knowing uh you know what is its what it lacks like you know um in in its uh if it lacks certain vitamins you know what I mean for a good soil it would it would be helpful so that way the home Gardener don't have to test their soil uh a lot of people don't do that so you know and they just plant their trees and and and vegetables and then they die easily and they don't know why so but a lot of but basically it's all about the soil not just the moisture of water but you know a sensor that will let you know if it's high in acidity or alkaline um if it needs magnesium nitrates it'll even it's a good thing to know and uh a sensor a device that suggests that"

All right. So for our project, we plan to transform traditional farming into a more efficient and sustainable practice.

Speaker 1

Speaker 2

OK

Traditional farming can be unpredictable and can lead to waste of valuable water and resources. But with our new innovative approach of an automated automated sprinkler, we hope to provide real time data, weather response automation and scalability. So our project, our product is an automatic automated sprinkler. A smart and user friendly solution designed for California homeowners and plant enthusiasts in a garden companion. Is a guarding companion that optimizes your plant care routine and automates a healthy growing environment for your house plant.

Speaker 1

That sounds really sick.

Speaker 2

Uh-huh. So I'm here with. Henna, a college student So.

Speaker 2

Can you tell us a little bit about your experience with taking care of plants?

Speaker 1

They all die. I'm not good at it as much as I'd like to be good at it. I'm not good at it. I had succulents and I over or no, I had a cactus and I ended up over watering it and it got a virus or whatever. A disease and it popped like a water balloon and it was really gross.

Speaker 2

And then do you consider yourself an experienced gardener or more of a beginner beginner?

Speaker 1

Uh, definitely beginner my mom's experience, but.

Speaker 2

So what? What type? Of plans, do you currently care for?

I care for none, but in my house and.

## Speaker 2

Like indoor house plants, outdoor garden.

## Speaker 1

We have we have at the House, we have outdoor garden and indoor. We have a lot of indoor plants. And yeah.

#### Speaker 2

And then what are some of the challenges you face when it comes to taking care of a plant?

## Speaker 1

Over watering, like I said, I over water a lot. I don't know. How much water certain plants need, but I. Should be doing The research for them but I don't. So yeah.

# Speaker 2

So so you would say that you don't really monitor like, how do you currently monitor your water needs for your plants?

# Speaker 1

I just pour whatever you know, like if you know, like when you have like water bottles in your room. Me and my mom just collect the water bottles and just pour it in each.

## Speaker 2

All right, uh, are there any tools or methods you use to water the plants just.

# Speaker 1

Uh, usually my mom. She what's it called? She reads the little. The thing that comes with it. Like the Tag and it says the information and like what it needs and what to Do and all that.

#### Speaker 2

And the tag that's in most of the store plants have. Have you ever faced issues with overwatering or underwatering your plans?

Speaker 1
Yes, I had a succulent like I said.
Speaker 2
Did you over water those?
Speaker 1
Yeah. No, I didn't water them enough cause it told me on the table to just spray it with water every once in a while and It ended up dying and drying out.
Speaker 2
OK, So what What features or capabilities would you like to see in a product that helps with plant care and watering?
Speaker 1
I think just watering it like automatically knowing which plant it is . I think you like You put the plant that it Is and then it like.
Speaker 2
And it tells you when to water it and.
Speaker 1
No, it does it itself. I'm not Doing it.
Speaker 2
So how important is automation in convenience in in plant care to you? So you want automation?
Speaker 1
I do, but also I feel like it take away the. I think it's like important. Yes, it would be really beneficial, but also at the same time it would Kind of be like Taking away the whole point of like planting, not like, I don't know, like people who like.

Like the the fun of...

Speaker 1
Not like the fun like the purpose like like if it's like, I don't know like.
Speaker 2
The purpose of having a plant?
Speaker 1
Like Kind of learning it yourself.
Speaker 2
Like learning to take care of a plant or something. Are there a specific plant care problems or tests that you would like a new product to address?
Speaker 1
Sometimes I don't know what plants I'm getting. I'm just buying a plant, so if we can identify which. Plant is that'd be great. But I don't think that's possible. I don't know.
Speaker 2
So have you ever used any automated or smart gardening devices before? Not really?
Speaker1
No.
Speaker 2
Does technology play a role in your? Daily life.
Speaker 1
Yes.
Speaker 2
Are you comfortable using digital tools and apps to manage your garden?
Speaker 1
Yes, I am.

So you don't use any mobile apps or tools to assist with plant care, do you?

# Speaker 1

I no, I tried. There's a app, OR no, I think that's actually never mind that's to drink water.

## Speaker 2

So what features would you expect from a mobile app design to help you take care of your plants?

## Speaker 1

UM. To be able. Obviously just to input what plant is and if you don't know what plant it is you you Can just put, I don't know. And then to just automatically know how much water it's Supposed to be giving it. And the soil level. If the soil is like good or whatever, the amount of soil. But yeah.

## Speaker 2

And how often would you use an app like that for plant care?

# Speaker 1

I would use it a lot because again, I want plants in my house, but I don't I'm not good at taking care plants, so I and I also don't want fake flowers and fake plants cause those are ugly too.

## Speaker 2

Are you conscious of water conservation and its importance in plant care? Like water conservation, like not to, You gotta use the right amount of water. Not to wastewater.

#### Speaker 1

Like I said, I just get my nasty old water bottles and I put it in the plants.

## Speaker 2

So would you be interested in a product that not only makes your plant care easier, but also helps you use water more efficiently?

#### Speaker 1

Ohh, I would actually really love that.

So how important is ease of use and user friendliness when considering a product for plant care?

## Speaker 1

I think that's really important because. I know like, like I can imagine my grandma using something like that. But like, if she doesn't know how it's like her phone, we got her like the newest iPhone or Whatever, She don't know how to use it. I don't know why we did that. Same with her car. So I think it would just have to be like, easy for, like the geriatrics.

#### Speaker 2

OK. Are there any specific design features or usability features that are essential to you in the plant care product?

# Speaker 1

Again, identifying the plant if it can. If there's such thing as doing so and then soil level, how much soil and what soil is. How much water.

# Speaker 2

If you were to imagine an ideal plant care product, what would it look like and what would it do for you?just like in general. Like what? What would you? See as like an ideal plant care product like how would you imagine one?

# Speaker 1

Like a like a pot that would like be able to like identify that and if. I don't know cause this sounds really ideal to me.

#### Speaker 2

Yeah. So I mean, our plan is to like put a little stick thing into like the top of your plant.

# Speaker 1

A stick. Yeah. Hmm. Ohh yeah, like I know there's a There's this. I don't know if you saw like back in like the 2000s Or whatever, like 2010 or some some junk like that. But there's a thing where you fill it up with water and you like. It was like a little circle thing. You put it in your plant and it just dunks all that water in there. Something like that. But like, that would be able to test out how much water and all that stuff.

# Speaker 2

UM. What would you? What would make you excited to try a new plant care product and what concerns would you have?

Speaker 1

Knowing that ohh it would just excite me because I know the plan is not gonna die. I'm concerned if it kills. The plant. Then that's crazy.

Speaker 2

If it doesn't do what it's. Supposed to do?

Speaker 1

Yeah, I think that would be the concern.

Speaker 2

Are there any additional features or capabilities you'd like to see in a plant care product that we haven't discussed yet?

Speaker 1

Again, just identifying what being able to identify. What plant it? Is how much soil level should. How much soil should it be...

Speaker 2

Like the moisture level and nutrient level and stuff.

Speaker 1

Yeah. Yeah

Speaker 2

Alright so. Would you have any budget constraints or cost considerations when it comes to your gardening practices? Are there any budget constraints when it comes to your gardening practices now?

Speaker 1

No, I. Don't. Not really. I mean, water is really expensive water bill.

Speaker 2

So when considering a product for plant care, how important is the price or cost to you? Speaker 1 Considering that it could, it can be able to save me money on Water and obviously plants I think. It being this being like a lot of money would make sense. Speaker 2 So what kind of price range would you believe is reasonable? Speaker 1 I'm not good with money, but. Speaker 2 Just give a ballpark. Speaker 1 Like like a hundred \$200. But that's like if it's like Speaker 2 But like like if that's if, it's like fully automated water sprinkler. Speaker 1 Yeah, but that's like, OK, like, if it comes with like the little stick thingies where it's like, OK, this is plant one, plant 2, whatever, all these little stick thingies end up being able to connect to your phone and tell you which one is like which, like, OK, this is plant one, plant one is a blah blah blah, it needs this much water and it does it by itself. That makes sense. Speaker 2 Yeah. So. Speaker 1 Instead of buying like just one \$100 thing for a plant and then having to buy more for like different ones, you know. Speaker 2

So that, yeah, that's kind of like what we're trying to do. Like we have one for like your home garden and like one set of Product and like another set for household and the one for the garden will do the automatic watering sprinkler stuff. And along with all the measuring the soil and plant water stuff and the one for the. Household would be just. Telling you when to water it and stuff like that, yeah.

So Would you be more inclined to purchase a one time device or system, or are you open to subscription based models?

Speaker 1

I think subscription be.

Speaker 2

Like you pay overtime for...

Speaker 1

Oh, I mean, yeah, like subscription based, it's like.

Speaker 2

Like that would be like part of the the app, I guess, the mobile app that comes with it.

Speaker 1

Getting a gardener? You don't just pay the gardener once, then to come and do water your grass and whatever mow the lawn and stuff. Take care of the plants.

Speaker 2

So, like, what would you expect in like a subscription pack in the mobile app? What would you expect to be like included? like if if you were to pay. Money for Some sort of feature in the app. What would you expect?

Speaker 1

Um, Um

Speaker 2

Like I think I think we're gonna plan to have like some. Sort of free. Features and then some sort of paid feature. In the app so.

Yeah, I mean like that would be like the paid features would definitely be like being able To tell you what plant this is like And probably....

Speaker 2

List a whole bunch of data and stuff.

Speaker 1

Yeah. And like what area should be around or whatever that should be like, I don't know. That would be useful

Speaker 2

And then is there anything you else you would like to share about your experiences preferences or needs that we haven't covered in this interview?

Speaker 1

Um, No.

Speaker 2

Alright thank you.

#### **Rebecca Warner Interview**

Speaker 1

OK, so I'm here with my mom. Rebecca. So a little bit about our pitch for our project. So our project we plan to. Transformed traditional farming into a more efficient and sustainable practice. But with our new. Innovative approach. We hope to provide real time data, weather response automation and scalability so the product would be. UM. Well, I don't know because we just changed it. Where we took a part out of it. It was an automated sprinkler, but now it's just like an automated sensor thing for your plants, a smart and user friendly solution designed for California homeowners and plant enthusiast. It's a garden companion that optimizes your plant. Their routine and automates a healthy growing environment for your house plants. So can you tell us your experience with taking care of plants?

Speaker 2

Well, I don't have a green thumb. I usually kill them. I either overwater them or underwater them. So I need plants that. Are not very delicate.

Speaker 1

That don't require a lot of care in the sense. So would you consider yourself an experienced gardener or more of a beginner?

Speaker 2

I would say. More of a beginner.

Speaker 1

And then what types of plants do you currently care for? Indoor plants? Outdoor garden? Blah blah.

Speaker 2

I have indoor. Plants both succulents and. Leafy plants have outdoor. UM. A bunch of. Outdoor plants in the ground and I also. Have a backyard. Garden planter.

Speaker 1

And what what are some of the challenges you face when it comes to plant care and maintenance?

Speaker 2

Like I said, I have trouble. Remembering to water or overwatering or underwatering my. I never know how much or when to water my succulents. Also the other. Indoor plants. The outdoor plants are more lucky because they get rain when we have. When we have it very. Rarely and. UM. And also. Outside, I don't know how often to set the. The sprinklers to water the plants.

Speaker 1

Would you say you or how? How do you currently monitor the water needs of your plants? So you would say you don't really know when to.

Speaker 2

Exactly. I I guess the outside plants in the front yard actually are on a timed sprinkler. So they're. Luckier the indoor plants I. Have a very hard time keeping alive, especially succulents. I think I over water them, but I just guess.

Speaker 1

So, are there any tools or methods you use to?

Speaker 2

Not really. I would say no.

Speaker 1

OK. And then so with that timer sprinkler, would you? Say that it tends to overuse water or. Is it just like?

Speaker 2

Right. So it it can come on even if it rains when it doesn't. Need to be watered. It can run. I think it's set. To run. I'm not sure if it's set to run for enough water or or too much water. For certain plants.

Speaker 1

So what features or capabilities would you like to see in a product that helps with plant care and watering?

Speaker 2

Well, it would be nice to know, for instance, if there's like. Bend to water. How often water like different plants need different? UM. Length in between watering plants. Some plants need more water. Some plants need less. And I would like something where I it could actually be automated where you know you could. The tubes around and then it could just water them. When needed. So like. Of a database. In your software that has all this. Different kinds of.

Speaker 1

So have you ever used any automated or smart smart gardening devices before?

Speaker 2

Only the timer on the sprinklers outside. Other than that, no, not yet.

Speaker 1

So what kind of role does technology play into your daily life? Are you comfortable with using digital tools and apps to manage your garden and plants?

Speaker 2

That's definitely very. Technology I use every day.

Speaker 1

But you don't use any like apps or gardening digital tools and stuff.

Speaker 2

Yes, exactly. I use apps for other things, so I I would be interested in using an app to water or. To tell me when to order.

Speaker 1

So what features would you expect from a mobile app design to help you take care of your plants?

Speaker 2

So like if I could put the different kinds of plants I have or and and it could tell me when and how much to water them. Or have it automated and do it for me?

Speaker 1

And then how often would you use a mobile app for plant care?

I would use it every day or whenever needed.

## Speaker 1

So are you conscious of water conservation and its importance in plant care?

# Speaker 2

Yes, I, uh. With the drought. That's why we have the timer on the UM. Sprinklers outside and also why we took up most of the grass and justice put in. Plants outside.

#### Speaker 1

So would you be interested in a product that not only helps not only makes plant care easier, but also helps to use water more efficiently?

# Speaker 2

Yes, for sure.

#### Speaker 1

So how important would ease of use and user friendliness when how important is ease of use and user friendliness when considering a product for plant care?

#### Speaker 2

It's pretty important if it's too complicated, then I feel like I wouldn't want to. You know. If it's extremely complicated, I wouldn't have the time to figure that out.

## Speaker 1

And are there any specific design or usability features when that are essential to you in a plant care product?

#### Speaker 2

Not really essential, but user-friendly, I don't know. Like what? The product, your product you're proposing would end up like, but could it be like? Like pictures that you could click on like I have this kind of a plant or or would would you just? Type in the name and it could find that information for you. Something easy.

#### Speaker 1

So if you were to imagine an ideal plant care product, what would it look like?

# Speaker 2

UM. I guess it could be an app on my phone. Graphical. Maybe, uhm. Easy to look at like it has sensors.

#### Speaker 1

Yeah. So that's that's kind of basically exactly what we're trying to go for it. It'll be like. It'll be like UMA little thing you put in your plant. That measures the soil nutrients, the water. Moisture levels and then that will hook up to a mobile app that will tell you. When to water? And stuff like that. And we also plan on like incorporating a weather API.

Speaker 2

That's good.

Speaker 1

So it'll tell you. Importantly for outdoor plants, if you need to water those, if it will rain so you don't have to water it and wastewater stuff like that.

Speaker 2

That's like the nutrient thing, because some plants require some. That's great.

Speaker 1

What would make you excited to try a new plant care product and what concerns would you have?

Speaker 2

Well, just from what you're describing is exciting because like I said, I killed my plants. Uh, regularly. So this would be very helpful.

Speaker 1

Are there any budget constraints or cost considerations when it comes to your gardening practices?

Speaker 2

Yeah, I think it should be. Affordable not.

Speaker 1

Or like currently currently. Do you have any budget constraints and stuff?

Speaker 2

For gardening some things.

Speaker 1

They're just like. When you take care of your plants, they're those. Are there any budget constraints and stuff?

Speaker 2

Well, just. Don't want to overspend but not really. I mean, I don't. You want to buy anything expensive?

Speaker 1

So you would say that when considering a product for plant care, that price or cost is important to you.

Speaker 2

Yes, I would say.

Speaker 1

And then, like, how significantly like what kind of price range do you believe is reasonable for a device or system that helps you take care of? Your plants.

Speaker 2

Well, I would probably have to be, uh, dependent on how many sensors you would need right for how many plants so. I would. I mean, do you want me to? Give you a number. Because that's I don't.

Speaker 1

Just like.

Speaker 2

Know I mean.

Speaker 1

I mean, we don't. Really know either, but just like a ballpark.

Speaker 2

Right.

Speaker 1

The ballpark estimate.

Speaker 2

I mean like so for like 5 plants I wouldn't Want to spend more? Than like \$30.00 for or \$40. You know it, but it's going to be like a permanent thing. Yeah, so.

Speaker 1

Because I think we're planning on doing like a little bundle pack of sensors. That will all connect to. A mobile app. That then has features in that app that you can use, and I think we also. Want to do like a. Or there's free features and paid features and stuff like that.

Speaker 2

That's good.

Speaker 1

Within that app, are there any specific features or benefits that you would expect? From like a subscription base. Features in the app.

Well, it just. Maybe you know? Want constant updates?

Speaker 1

Like what sort of features would you see? Would you expect to be free and what would you expect to be? In the subscription.

Speaker 2

Well, well, maybe the soil moisture level when to water would be free because that's what I would be buying it for. Maybe the nutrient level could be add on. UM. Like, I'm not sure what other what other services you you would offer but. You thought of something else? Could be.

Speaker 1

I guess I should have asked first. Would you be more inclined to purchase a one time device or system? Or are you open to a subscription based models?

Speaker 2

I think I would prefer. Personally, the one time thing so I would. You know, I would understand if the cost was. A little bit more. UM. But it would depend on the features I think.

Speaker 1

MM. And so final question, is there anything else you'd like to share about your experiences, preferences or needs that we haven't covered in this interview?

Speaker 2

I don't think so, but. I would definitely use this device, my poor plants.

Speaker 1

Cool, yeah. Thank you.

#### Christina Kang Interview

What is your name?

My name is Christina Kang.

What is your age?

I am 60 years old.

What do you identify as?

Female.

Can you tell me a bit about yourself? What is your background, including education and work experience?

I came to America around the 70s when I was about 18. I went to a school to learn English. I then got a job as a quality inspector at Photo Sciences.

What is your current job or role, and what does it involve on a day-to-day basis? I am currently not working, the Photo Sciences company I have worked for shut down a couple years after covid.

Where are you located, and can you describe your living situation (e.g., urban, suburban, rural) I live here in Long Beach, California in an urban area.

#### Plant Care Experience

Can you tell us about your experience with taking care of plants? Do you consider yourself an experienced gardener or more of a beginner?

I have been planting for a long time. My parents were farmers back in Cambodia so, I have gained a lot of experience from helping my parents work on their farm. When I came to America, I didn't have any space for a garden as I lived in a very small apartment. I only had small plants. I didn't really start planting again till many years later when I got my first home. I think I am much more experienced than a beginner but I wouldn't call myself an expert.

What types of plants do you currently care for (e.g., indoor houseplants, outdoor garden, specific species)?

I have many plants. I plant a lot of fruits and herbs for cooking. Right now in the backyard, we have dragon fruit, zucchini, and we have some parsley growing. There's some cherry tomatoes as well. I take care of the flowers in front of the house and the money tree in the living room.

What are some of the challenges you face when it comes to plant care and maintenance? Bugs, many of them eat the plants. I also don't like bugs. Since I have many plants, to water every single one of them takes up much of my time. Sometimes I end up forgetting to water some plants inside and I don't remember till the leaves start browning then I water them. When I try to plant new things too I end up not taking care of them well enough.

#### **Paint Points and Challenges:**

What are the most significant challenges you encounter while caring for your plants? I think the bug issue is what is the worst right now. I stand outside watering all my plants and see that bugs destroyed some of them and I get bitten by all the bugs outside while I have to water. I also don't know why my plants are not growing sometimes so I have to ask my son who helps look it up.

How do you currently monitor the water needs of your plants?

I spend much of my time outside checking all my plants. I focus more on my backyard plants because the fruit and vegetables need more care and attention. I make sure everyday I check my plants' condition and water when I see they need it. I do the same with my flowers in front.

Are there any tools or methods you use?

No tools, It is just in my daily routine to check up on my plants and see they're condition and growth. If I think they need water, I water them.

Have you ever faced issues with overwatering or underwatering your plants?

Maybe in the beginning when I am not too familiar with how the plant needs to be watered, but overtime I can tell what it does and doesn't need. I accidentally killed a flower one of my daughters gave to me. A lot of my methods are trial and error.

- What tools, technologies, or solutions do you currently use to address these challenges? I don't have many tools or technology to help with watering. If it dies, I will try again. A lot of the plants I have now I have taken care of for years now and know what they need.

## **Expectations from a Plant Care Product:**

What features or capabilities would you like to see in a product that helps with plant care and watering?

Maybe something that can help me understand why my plant is dying. With new plants I have to try various things to find out what is helping it grow. I sometimes have to let one die to find this out.

How important is automation and convenience in plant care to you?

Since I am not working anymore, I like to take the time to go outside and water my plants. Let's me get some sun, and relax while watering. It does get tiring to have to water the inside ones and the ones in the front. But I enjoy taking my time in the backyard. It would be nice to have some of the flowers or grass up front be watered automatically since I don't care much for it and just want it to look nice in the front.

Are there specific plant care problems or tasks you'd like a new product to address? Just the bug problem but everything else seems to be addressed.

#### **Mobile App Preferences:**

Have you ever used any automated or smart gardening devices before (Yes or No)?

- If so, which ones, and what was your experience like?

No I have not.

What role does technology play in your daily life? Are you comfortable using digital tools and apps to manage your garden?

I have used my phone a lot for facebook and youtube. I still don't know how to work through technology that well so I have to ask my children all the time. It is simple I can probably manage.

Do you use any mobile apps or digital tools to assist with plant care or gardening tasks? I do not use any.

What features would you expect from a mobile app designed to help you take care of your plants?

Something that tells me that my plants are being watered or have been watered.

How often would you use a mobile app for plant care, and for what purposes? I would use it passively. I would probably check it every now and then to see if it's working but I think I wouldn't open it all the time. I would just trust that it's doing its job and I'll check on the actual plant.

#### **Water Conservation and Sustainability:**

Are you conscious of water conservation and its importance in plant care?

I never really thought about water conservation that deeply. Obviously I don't want to waste water, but when I water my plants it isn't really the first thing that comes to mind.

Would you be interested in a product that not only makes plant care easier but also helps you use water more efficiently?

If I don't need to water the plants as much as I do, I guess I can see that as a benefit. It would be nice to save some water not only for money reasons but for environmental reasons too.

What are your thoughts on environmentally-friendly gardening practices? If my plants are taken care of and get just enough water they need then I don't mind adapting new practices.

#### **User-Friendliness:**

How important is ease of use and user-friendliness when considering a product for plant care? Really important. I don't want to be confused by things just to water my plants. I ask my children for help on a lot of things on my phone, so I don't know that much about technology. If it is as simple as a button I can see myself using it.

Are there any specific design or usability features that are essential to you in a plant care product?

If it can do what it needs to do in one click, I am happy.

## **Future Expectations:**

If you were to imagine an ideal plant care product, what would it look like, and what would it do for you?

It wouldn't be too big and take up too much space. I honestly wouldn't even want to know it's there, like hidden. It would help me water the plants so I don't have to walk around the whole house.

What would make you excited to try a new plant care product, and what concerns would you have?

If it is simple to use and makes my planting easier.

I don't want it to waste any water since when I water my plants I know exactly how much I am watering them but, when it does it automatically I am unsure if it is always using only the amount it needs.

Are there any additional features or capabilities you'd like to see in a plant care product that we haven't discussed?

No, I have no suggestions.

## **Pricing and Monetization:**

Are there any budget constraints or cost considerations when it comes to your gardening practices? How do you allocate resources for your garden?

I don't use any tools I don't need in the garden. I am very into diy and makeshift things. If I can do it for free, I will. I say the most I spend would be to handle the bugs, watering cost and getting more plants.

When considering a product for plant care, how important is the price or cost to you? Cost is pretty important. I don't want to spend on things I don't necessarily need.

What price range do you believe is reasonable for a device or system that helps you take care of your plants?

**Around \$30-50** 

Would you be more inclined to purchase a one-time device or system, or are you open to subscription-based models?

I would like to only buy one thing. I do not do subscriptions.

Are there specific features or benefits that you would expect to justify a higher price for such a product?

If it can take care of many things over than just watering my plants.

What would you expect with our automated sprinkler?

To water my plant properly and keep my grass and flowers looking healthy.

#### Closing:

Is there anything else you'd like to share about your experiences, preferences, or needs that we haven't covered in this interview?

I am used to doing a lot of my gardening manually. I enjoy taking my time outside. Using an app to control watering my plants would have to be on days I am very lazy, otherwise I would generally do it myself. I am forgetful sometimes but I tend to notice when they are dying.

# Alicia Hernandez Interview:

#### 1. Plant Care Experience:

Question: Can you tell me a bit about yourself? What is your background, including education and work experience?

**Answer**: I'm Alicia Hernandez, and I've had a strong connection to nature since childhood. I was raised on a ranch in Jalisco, where I worked with my father, learning to cultivate crops like corn, beans, and more. I'm the eldest of nine siblings.

Question: What is your current job or role, and what does it involve on a day-to-day basis?

Answer: I'm currently 72 years old and retired

Question: Where are you located, and can you describe your living situation (e.g., urban, suburban, rural)?

**Answer**: My house is in the city of Whittier, California. The climate is perfect for my flowers, and I have a garden where I grow various plants and trees.

Question: What is your age, gender, and family status (e.g., married, single, with children)?

**Answer**: 72 years old, married, with four children and ten grandchildren.

Question: Do you consider yourself an experienced gardener or more of a beginner?\*\*

Answer: I consider myself an experienced gardener.

Question: What types of plants do you currently care for (e.g., indoor houseplants, outdoor garden, specific species)?

**Answer**: I care for a wide range of plants, including flowers, fruit trees, chili peppers, and tomatoes.

Question: What are some of the challenges you face when it comes to plant care and maintenance?

**Answer**: Challenges often revolve around drought and manual watering.

## 2. Pain Points and Challenges:

Question: What are the most significant challenges you encounter while caring for your plants?

**Answer**: The most significant challenges include dealing with drought, monitoring water needs, and ensuring proper care.

Question: How do you currently monitor the water needs of your plants? Are there any tools or methods you use?

**Answer**: I rely on manual methods to water my plants. I water them individually

Question: Have you ever faced issues with overwatering or underwatering your plants? Answer: Overwatering and underwatering can both be issues during changing weather conditions. So yes I have

Question: What are the most significant challenges or pain points you face regularly? **Answer**: Ensuring my garden thrives without automated tools can be time-consuming.

Question: What tools, technologies, or solutions do you currently use to address these challenges?

Answer: I'm open to using new technologies and tools. But I currently do everything manually

#### 3. Expectations from a Plant Care Product:

Question: What features or capabilities would you like to see in a product that helps with plant care and watering?

**Answer**: I'd like a product that helps with plant care and watering while using eco-friendly fertilizers to protect fruits and the soil.

Question: How important is automation and convenience in plant care to you?

Answer: Automation is important, making plant care more convenient, especially for seniors.

Question: Are there specific plant care problems or tasks you'd like a new product to address?

**Answer**: Efficient water use and year-round blooming of plants

# 4. Mobile App Preferences:

Question: Have you ever used any automated or smart gardening devices before? If so, which ones, and what was your experience like?

**Answer**: I haven't used automated gardening devices, but I'm open to them.

Question: What role does technology play in your daily life? Are you comfortable using digital tools and apps to manage your garden?

**Answer**: I'm comfortable with technology and use digital tools for gardening. But I don't currently use any

Question: Do you use any mobile apps or digital tools to assist with plant care or gardening tasks?

**Answer**: no but I'm open to using mobile apps for plant care.

Question: What features would you expect from a mobile app designed to help you take care of your plants?

**Answer**: A mobile app for plant care should include features for watering schedules, plant health, and pest management.

Question: How often would you use a mobile app for plant care, and for what purposes? **Answer**: I'd use the app daily to simplify tasks.

# 5. Water Conservation and Sustainability:

Question: Are you conscious of water conservation and its importance in plant care? Answer: Water conservation is essential, and I'd be interested in a product that promotes efficient water use.

Question: What are your thoughts on environmentally-friendly gardening practices? Answer: Environmentally-friendly gardening practices are important for the future.

#### 6. User-Friendliness:

Question: How important is ease of use and user-friendliness when considering a product for plant care?

**Answer**: Ease of use and user-friendliness are important for any plant care products for me especially because i'm a senior.

Question: Are there any specific design or usability features that are essential to you in a plant care product?

**Answer**: Clear design and simple features are essential for seniors like me.

# 7. Future Expectations:

Question: If you were to imagine an ideal plant care product, what would it look like, and what would it do for you?

**Answer**: An ideal plant care product would automate watering, use eco-friendly fertilizers, and ensure year-round blooming.

Question: What would make you excited to try a new plant care product, and what concerns would you have?

**Answer**: I'd be excited to try a product that simplifies gardening without harming my plants.

Question: Are there any additional features or capabilities you'd like to see in a plant care product that we haven't discussed?

**Answer**: Additional features could include pest control and plant health monitoring.

# 8. Pricing and Monetization:

Question: Are there any budget constraints or cost considerations when it comes to your gardening practices? How do you allocate resources for your garden?

**Answer**: I do allocate resources for my garden specifically, and price is always a consideration.

Question: When considering a product for plant care, how important is the price or cost to you?

**Answer**: A reasonable price range for a plant care device would be \$50-\$200.

Question: What price range do you believe is reasonable for a device or system that helps you take care of your plants?

Answer: A reasonable price range for a plant care device would be \$50-\$200.

Question: Would you be more inclined to purchase a one-time device or system, or are you open to subscription-based models?

**Answer**: I'd prefer a one-time purchase but might consider subscription-based models for added benefits.

Question: Are there specific features or benefits that you would expect to justify a higher price for such a product?

**Answer**: I'd like to see features like advanced monitoring and advice in paid versions.

Question: Would you consider a free version of the mobile app with limited features, with the option to upgrade for additional functionality? What would you expect with the paid features?

**Answer**: I'd consider a free basic version of the mobile app, with paid features offering advanced monitoring and advice.

#### Interests and Preferences:

Question: What are your hobbies or interests outside of work?

Answer: Gardening is my primary hobby, and I enjoy nature-related brands and products.

09/27/2023

Pushti Bhagat

# **Beforehand Questions (Ask these next)**

What is your name?

Pushti Bhagat

What is your age?

24

What do you identify as?

Female

# Can you tell me a bit about yourself? What is your background, including education and work experience?

- · I'm grew up in California. I'm a single child and have a bachelor's degree in public health from Cal State Los Angeles. I've gotten my master's degree in biology from UC San Diego. Currently attending UC San Diego's accelerated program for Physicians Assistant. I've worked as a paramedic, cancer research, and works at a hospital as a wound care management.
- What is your current job or role, and what does it involve on a day-to-day basis?
- · I am currently working at a hospital as the lead wound care management. I do the paperwork for wound care patient. I also volunteer as a medic.

Where are you located, and can you describe your living situation (e.g., urban, suburban, rural)

I'm located in San Diego, CA. I live alone in a studio im an currently renting.

#### 1. Plant Care Experience:

- Can you tell us about your experience with taking care of plants? Do you consider yourself an experienced gardener or more of a beginner?
  - I've known how to grow plants since I was a child. I helped my parents with the farms when I was younger.
- What types of plants do you currently care for (e.g., indoor houseplants, outdoor garden, specific species)?
  - o I am currently taking care of orchids.
- What are some of the challenges you face when it comes to plant care and maintenance?
  - I struggle with when and how to water my orchids. I occasionally overwater them a lot.

## 2. Pain Points and Challenges:

• What are the most significant challenges you encounter while caring for your plants?

- I significantly suffer with watering my plants. I overwater them or forget to water them altogether with my busy schedule.
- How do you currently monitor the water needs of your plants?
  - I don't monitor the water that my plants need.
- Are there any tools or methods you use?
  - I use a pot and a small device that waters the plant for me.
- Have you ever faced issues with overwatering or underwatering your plants?
  - Overwatering is a major issue as the device I use does not water it correctly. It always overwaters.
  - What tools, technologies, or solutions do you currently use to address these challenges?
    - I used an automated watering device. It waters the plants slowly like a dropper.

# 3. Expectations from a Plant Care Product:

- What features or capabilities would you like to see in a product that helps with plant care and watering?
  - I would like a device that umm, can tell me how much water is needed or when water is needed.
- How important is automation and convenience in plant care to you?
  - Automation is an amazing addition to my life. It allows me to do things without ummm having to worry about it. Convenience is also an amazing add on as well as it helps with set up and use. These two are extremely important addition and need for me.
- Are there specific plant care problems or tasks you'd like a new product to address?
  - I would like a plant care product that could help with bug control and water control to help me main the correct amount of water that needs to be given to plants.

# 4. Mobile App Preferences:

- Have you ever used any automated or smart gardening devices before (Yes or No)?
  - Yes
  - o If so, which ones, and what was your experience like?
    - It's a device that I don't know the brand for. But the device just drips water slowly into my plant so I don't need to worry about watering. The only issue I have with the product is that the device waters too much and ends up killing my orchids.
- What role does technology play in your daily life? Are you comfortable using digital tools and apps to manage your garden?

- Technology is my extremely important in my daily life. I use my phone and laptop for work all day long. I don't have any digital devices that monitor my plants. I am comfortable using a device if it was added into
- Do you use any mobile apps or digital tools to assist with plant care or gardening tasks?
  - I do not use any digital tools or mobile apps to assist with my plant care. I've only done research on the internet regarding how to take care of my plants.
- What features would you expect from a mobile app designed to help you take care of your plants?
  - I would like a feature that allows me to monitor when my plants need water, and how much water is needed. I would also like to have a way to monitor all my plants in one place.
- How often would you use a mobile app for plant care, and for what purposes?
  - o I use mobile apps every day. My who life revolve around mobile and web apps. I work on my phone and laptop most of the day so it a daily part of my life.

# 5. Water Conservation and Sustainability:

- Are you conscious of water conservation and its importance in plant care?
  - o I am conscious of water conservation and its importance in plant care. I do see that water is becoming scarcer and that we need to save as much as we can.
- Would you be interested in a product that not only makes plant care easier but also helps you use water more efficiently?
  - Yes, I would be extremely interested. Plant care is extremely tedious for me so anything that makes it simpler and easier is a bonus in my book.
- What are your thoughts on environmentally friendly gardening practices?
  - I believe it should be at upmost importance. Gardening is what keep majority of the world population alive and having good practices can prolong the lives of millions. Umm Gardening practices that focus on the environment as always welcomed for me.

#### 6. User-Friendliness:

- How important is ease of use and user-friendliness when considering a product for plant care?
  - Ease of use and user-friendless is umm something I would like to have a lot of. I
    want a product that is easy to use. I would also like a product that I can use that is
    easy to navigate and understand. I could give it to someone else and they also
    could easily use it.
- Are there any specific design or usability features that are essential to you in a plant care product?
  - I want a small device that isn't too obtrusive. I would like it to be easy to install and straight forward to use.

## 7. Future Expectations:

- If you were to imagine an ideal plant care product, what would it look like, and what would it do for you?
  - Something that allows me to see when I need to water my plant. I don't want
    anything that waters them for me. I could water them myself. I would like it to be
    able to notify me when water is needed.
- What would make you excited to try a new plant care product, and what concerns would you have?
  - o If it was cheap. Easy to use, and I could recommend it to many family members. I would also like it to be cheap as I am on a budget living allow.
- Are there any additional features or capabilities you'd like to see in a plant care product that we haven't discussed?
  - I would like the ability to monitor multiple plants, and not just one. I would like the app to identify my plants, or tell me what's wrong with them.

# 8. Pricing and Monetization

- Are there any budget constraints or cost considerations when it comes to your gardening practices? How do you allocate resources for your garden?
  - I would only be able to afford a device between 30 50 dollars. I don't spend much on my gardening and that's the most I allocated every month.
- When considering a product for plant care, how important is the price or cost to you?
  - Price is extremely important for me. I want the product to be cheap and made of good quality. I would buy any product that can do what the competition can do at a cheaper price.
- What price range do you believe is reasonable for a device or system that helps you take care of your plants?
  - $\circ$  My price range for a product like that would be around 30 50 dollars. I am not willing to go above that.
- Would you be more inclined to purchase a one-time device or system, or are you open to subscription-based models?
  - I would pay a higher price than must pay a subscription. As I don't want to spend more money every month if it can be saved.
- Are there specific features or benefits that you would expect to justify a higher price for such a product?
  - I would justify a higher price for the product if it gained features over time and update to the app were made that justified the higher price.
- What would you expect with our automated sprinkler?
  - o I would expect it to do what it stated it can do. I want it to water my plants and notify me when water is needed for my plants. I want to be able to turn off or on the automated features. If all those are delivered this would a great product.

#### **Closing:**

- Is there anything else you'd like to share about your experiences, preferences, or needs that we haven't covered in this interview?
  - I have nothing else to add to this interview.

Rita Patel 10/4/2023

# **Beforehand Questions (Ask these next)**

What is your name?

Rita Patel

What is your age?

56

What do you identify as?

Female

Can you tell me a bit about yourself? What is your background, including education and work experience?

- I'm grew up with in a family of farmers. My dad was a farmer and I used to be a farmer. I used to live in India until recently. I moved to California in 2022. I've went to High School in India. Didn't attend college as money and family issues didn't allow me to. I've worked as a farmer for over 30 years, since I was in my 20's. That is the only previous work experience I have.
- · What is your current job or role, and what does it involve on a day-to-day basis?
- · I am currently working at Amazon, as a Warehouse Associate. It involves me taking packages and getting them into carts and trucks to be delivered to the whom every ordered the item's house.

Where are you located, and can you describe your living situation (e.g., urban, suburban, rural)

· I'm located in Los Angeles County. Which is an urban area. I currently live with my sister with another 5 people.

# 1. Plant Care Experience:

- Can you tell us about your experience with taking care of plants? Do you consider yourself an experienced gardener or more of a beginner?
  - I've known how to grow plants since I was a child. I helped my parents with the farms when I was younger.
- What types of plants do you currently care for (e.g., indoor houseplants, outdoor garden, specific species)?
  - o I have tomatoes, jalapenos, eggplants, mint, peas, mangos, and
- What are some of the challenges you face when it comes to plant care and maintenance?

o I struggle with how to water all the plants properly. Sometimes I overwater and sometimes I underwater. I also struggle with bug control. A lot of my plants have been eaten by bugs.

# 2. Pain Points and Challenges:

- What are the most significant challenges you encounter while caring for your plants?
  - o I significantly struggle with watering the plants properly. I water all my plants every day. However most plants don't require me to water them every day.
- How do you currently monitor the water needs of your plants?
  - I do monitor how off and how much I water my plants. I keep track in a notebook at home.
- Are there any tools or methods you use?
  - I use hose, shovels, and other gardening tools to help with my gardening.
- Have you ever faced issues with overwatering or underwatering your plants?
  - Yes, that's the one of the issues I still struggle with. I can never water my plants evenly. I sometimes water some plants extra and others less. As I water some plants more than others.
  - What tools, technologies, or solutions do you currently use to address these challenges?
    - I do use an automated sprinkler system. I also use YouTube to do research on new plants that I am planting and how to water them effectively.

## 3. Expectations from a Plant Care Product:

- What features or capabilities would you like to see in a product that helps with plant care and watering?
  - I would want a live monitoring system to see the status of my plants. If they need to be water or not.
- How important is automation and convenience in plant care to you?
  - Automation makes everything simpler for busy people however it could cause problems as well. I prefer convenience over automation.
- Are there specific plant care problems or tasks you'd like a new product to address?
  - I would like a plant care product that could help with bug control and water control to help me main the correct amount of water that needs to be given to plants.

#### 4. Mobile App Preferences:

- Have you ever used any automated or smart gardening devices before (Yes or No)?
  - o Yes

- If so, which ones, and what was your experience like?
  - The company I currently use is orbit, which is a automated sprinkler system. They have worker will however they just water at the same time every day. It doesn't monitor anything it just waters the plants every day at the same day no matter what.
- What role does technology play in your daily life? Are you comfortable using digital tools and apps to manage your garden?
  - It allows me to water the plants everyday with missing a day. However, it does overwater the plants a lot.
- Do you use any mobile apps or digital tools to assist with plant care or gardening tasks?
  - I do not use any digital tools or mobile apps to assist with my plant care. I only use YouTube to do research on new plants that I have never planted before.
- What features would you expect from a mobile app designed to help you take care of your plants?
  - I would want to monitor my plants health, such as water needs, nutrient levels, fertilizer reminder to add or replace. Things such as that. I would also like to monitor my water usage in a mobile app.
- How often would you use a mobile app for plant care, and for what purposes?
  - I don't use any mobile apps for plant care. I prefer to take notes and keep track of my details on paper in a notebook.

# 5. Water Conservation and Sustainability:

- Are you conscious of water conservation and its importance in plant care?
  - I am conscious of water conservation and its importance. I monitor the amount of water that is used every month in watering plants and other water usage.
- Would you be interested in a product that not only makes plant care easier but also helps you use water more efficiently?
  - o I would be interested in reusable water for watering my plants. This would help with watering my plants while also allowing me to save money on my water bill.
- What are your thoughts on environmentally friendly gardening practices?
  - o I highly support environmentally friendly gardening practices.

#### 6. User-Friendliness:

- How important is ease of use and user-friendliness when considering a product for plant care?
  - Ease of Use and User friendliness is extremely important to me. Ummm. Without
    a product being umm easy to use I would have difficult using it every day. User
    friendliness is also important cause I was to be able to understand how the product
    works with ease rather than it being extremely difficult to use.

- Are there any specific design or usability features that are essential to you in a plant care product?
  - o I want an easy to install or use design. Not too bulky and great build quality.

- If you were to imagine an ideal plant care product, what would it look like, and what would it do for you?
  - Something that can water my plants when needed, umm, a product that can reuse water from the rain and store and use it.
- What would make you excited to try a new plant care product, and what concerns would you have?
  - I would be concerned in wasting money in a product that doesn't do what its intended to do. I would be willing to use a new plant care product if it can show that it can accomplish what it states it can do.
- Are there any additional features or capabilities you'd like to see in a plant care product that we haven't discussed?
  - o I would like to specifically see how much water each of my plants needs and the progress of how much water I've saved so far.

# 8. Pricing and Monetization

- Are there any budget constraints or cost considerations when it comes to your gardening practices? How do you allocate resources for your garden?
  - I would buy a product like yours for under 100 dollars. Anything above would be too much and over 50.
- When considering a product for plant care, how important is the price or cost to you?
  - Price and cost are extremely important. I don't want a product that is too
    expensive. I will not pay for a product that Is expensive and not built well or is
    not easy to use.
- What price range do you believe is reasonable for a device or system that helps you take care of your plants?
  - I believe that \$50 to \$100 dollars is reasonable anything more expensive would be out of my budget and not worthwhile.
- Would you be more inclined to purchase a one-time device or system, or are you open to subscription-based models?
  - I would pay a higher one-time purchase than pay a subscription model for a product. Unless the subscriptions offer something extra
- Are there specific features or benefits that you would expect to justify a higher price for such a product?

- I would justify a higher price for the product if it gained features over time. And was update regularly.
- What would you expect with our automated sprinkler?
  - I would expect it to deliver on what was promise. If it can't then it's not a good product

### **Closing:**

- Is there anything else you'd like to share about your experiences, preferences, or needs that we haven't covered in this interview?
  - No I have nothing else to add.

09/27/2023

Sneha Patel

# **Beforehand Questions (Ask these next)**

What is your name?

Sneha Patel

What is your age?

. 54

What do you identify as?

· Female

Can you tell me a bit about yourself? What is your background, including education and work experience?

- · I'm grew up with in a family of farmers. My dad was a farmer and I used to be a farmer. I used to live in India until recently. I moved to California in 2022. I've went to High School in India. Didn't attend college as money and family issues didn't allow me to. I've worked as a farmer for over 30 years, since I was in my 20's. I'm currently working at Amazon as a Warehouse Associate.
- What is your current job or role, and what does it involve on a day-to-day basis?
- · I am currently working at Amazon, as a Warehouse Associate. I am also working part time at an ICE Currency exchange at the LAX Airport.

Where are you located, and can you describe your living situation (e.g., urban, suburban, rural)

· I'm located in Hawthorne, CA. Which is an urban area. I currently own a house with 6 people living in it with me.

#### 1. Plant Care Experience:

- Can you tell us about your experience with taking care of plants? Do you consider yourself an experienced gardener or more of a beginner?
  - I've been cultivating plants since my early childhood, having assisted my parents on our family farm.

- What types of plants do you currently care for (e.g., indoor houseplants, outdoor garden, specific species)?
  - o I am currently growing a mango tree, tomatoes, jalapenos, oregano, and parsley.
- What are some of the challenges you face when it comes to plant care and maintenance?
  - I struggle with a lot of stuff. One being keeping track of how much water each
    plant requires. It the soil is watered properly, and if the plant is getting enough
    nutrients. Bugs are also a big issue. A ton of my crops get eaten by bugs and its
    extremely hard to get rid of them without pesticides

# 2. Pain Points and Challenges:

- What are the most significant challenges you encounter while caring for your plants?
  - o I significantly struggle with watering the plants properly. I water all my plants every day. However most plants don't require me to water them every day.
- How do you currently monitor the water needs of your plants?
  - I do monitor how off and how much I water my plants. I keep track in a notebook at home.
- Are there any tools or methods you use?
  - I use hose, shovels, and other gardening tools to help with my gardening.
- Have you ever faced issues with overwatering or underwatering your plants?
  - Yes, that's the one of the issues I still struggle with. I can never water my plants evenly. I sometimes water some plants extra and others less. As I water some plants more than others.
  - What tools, technologies, or solutions do you currently use to address these challenges?
    - I do use an automated sprinkler system. I also use YouTube to do research on new plants that I am planting and how to water them effectively.

## 3. Expectations from a Plant Care Product:

- What features or capabilities would you like to see in a product that helps with plant care and watering?
  - I would want a live monitoring system to see the status of my plants. If they need to be water or not.
- How important is automation and convenience in plant care to you?
  - Automation makes everything simpler for busy people however it could cause problems as well. I prefer convenience over automation.
- Are there specific plant care problems or tasks you'd like a new product to address?
  - I would like a plant care product that could help with bug control and water control to help me main the correct amount of water that needs to be given to plants.

# 4. Mobile App Preferences:

- Have you ever used any automated or smart gardening devices before (Yes or No)?
  - o Yes
  - o If so, which ones, and what was your experience like?
    - The company I currently use is orbit, which is a automated sprinkler system. They have worker will however they just water at the same time every day. It doesn't monitor anything it just waters the plants every day at the same day no matter what.
- What role does technology play in your daily life? Are you comfortable using digital tools and apps to manage your garden?
  - It allows me to water the plants everyday with missing a day. However, it does overwater the plants a lot.
- Do you use any mobile apps or digital tools to assist with plant care or gardening tasks?
  - o I do not use any digital tools or mobile apps to assist with my plant care. I only use YouTube to do research on new plants that I have never planted before.
- What features would you expect from a mobile app designed to help you take care of your plants?
  - I would want to monitor my plants health, such as water needs, nutrient levels, fertilizer reminder to add or replace. Things such as that. I would also like to monitor my water usage in a mobile app.
- How often would you use a mobile app for plant care, and for what purposes?
  - I don't use any mobile apps for plant care. I prefer to take notes and keep track of my details on paper in a notebook.

## 5. Water Conservation and Sustainability:

- Are you conscious of water conservation and its importance in plant care?
  - I am conscious of water conservation and its importance. I monitor the amount of water that is used every month in watering plants and other water usage.
- Would you be interested in a product that not only makes plant care easier but also helps you use water more efficiently?
  - o I would be interested in reusable water for watering my plants. This would help with watering my plants while also allowing me to save money on my water bill.
- What are your thoughts on environmentally friendly gardening practices?
  - I highly support environmentally friendly gardening practices.

#### 6. User-Friendliness:

• How important is ease of use and user-friendliness when considering a product for plant care?

- Ease of Use and User friendliness is extremely important to me. Ummm. Without
  a product being umm easy to use I would have difficult using it every day. User
  friendliness is also important cause I was to be able to understand how the product
  works with ease rather than it being extremely difficult to use.
- Are there any specific design or usability features that are essential to you in a plant care product?
  - o I want an easy to install or use design. Not too bulky and great build quality.

- If you were to imagine an ideal plant care product, what would it look like, and what would it do for you?
  - Something that can water my plants when needed, umm, a product that can reuse water from the rain and store and use it.
- What would make you excited to try a new plant care product, and what concerns would you have?
  - I would be concerned in wasting money in a product that doesn't do what its intended to do. I would be willing to use a new plant care product if it can show that it can accomplish what it states it can do.
- Are there any additional features or capabilities you'd like to see in a plant care product that we haven't discussed?
  - I would like to specifically see how much water each of my plants needs and the progress of how much water I've saved so far.

## 8. Pricing and Monetization

- Are there any budget constraints or cost considerations when it comes to your gardening practices? How do you allocate resources for your garden?
  - I would buy a product like yours for under 100 dollars. Anything above would be too much and over 50.
- When considering a product for plant care, how important is the price or cost to you?
  - Price and cost are extremely important. I don't want a product that is too
    expensive. I will not pay for a product that Is expensive and not built well or is
    not easy to use.
- What price range do you believe is reasonable for a device or system that helps you take care of your plants?
  - o I believe that \$50 to \$100 dollars is reasonable anything more expensive would be out of my budget and not worthwhile.
- Would you be more inclined to purchase a one-time device or system, or are you open to subscription-based models?

- I would pay a higher one-time purchase than pay a subscription model for a product. Unless the subscriptions offer something extra
- Are there specific features or benefits that you would expect to justify a higher price for such a product?
  - I would justify a higher price for the product if it gained features over time. And was update regularly.
- What would you expect with our automated sprinkler?
  - I would expect it to deliver on what was promise. If it can't then it's not a good product

# **Closing:**

- Is there anything else you'd like to share about your experiences, preferences, or needs that we haven't covered in this interview?
  - o No, I have nothing else to add.

09/27/2023

Christine Bui

# **Beforehand Questions (Ask these next)**

What is your name?

Christine Bui

What is your age?

22

What do you identify as?

Female

Can you tell me a bit about yourself? What is your background, including education and work experience?

· No job experience. Currently pursuing a bachelor's degree in computer science. I have a background in digital design, mobile app design, and web design.

What is your current job or role, and what does it involve on a day-to-day basis?

I don't currently work or have any job roles.

Where are you located, and can you describe your living situation (e.g., urban, suburban, rural)

Orange County, Low income Family, Renting. The area is urban.

## 1. Plant Care Experience:

- Can you tell us about your experience with taking care of plants? Do you consider yourself an experienced gardener or more of a beginner?
  - I am a very follow by the book kind of person. I'm very consistent with how I
    deal with plants. I took Agriculture in High school and I know how to and what to
    do for certain plants. I consider myself more of a beginner as I do not have as
    much experience as others.

- What types of plants do you currently care for (e.g., indoor houseplants, outdoor garden, specific species)?
  - Currently, I do not take care of any plants. MY parents are currently taking care of Orchids, Dragon fruits, tomatoes, and jalapenos. Many of these where grow indoors as I do not have a garden.
- What are some of the challenges you face when it comes to plant care and maintenance?
  - Bugs. Most people don't want to use pesticides. Rather use natural remedies.

## 2. Pain Points and Challenges:

- What are the most significant challenges you encounter while caring for your plants?
  - Controlling sunlight exposure. The plants I take care of need to be partial sunlight. They don't do that well with too much sunlight. Bugs are another pain point that I have to deal with on a daily basis. Another issue I deal with is looking at the plant and not knowing what the plant needs.
- How do you currently monitor the water needs of your plants?
  - I water them with a water at once and then wait a few days and repeat. I don't monitor the water at all in this case.
- Are there any tools or methods you use?
  - I don't have any tools or methods I use to help or assist me.
- Have you ever faced issues with overwatering or underwatering your plants?
  - I overwater most of the time.
  - What tools, technologies, or solutions do you currently use to address these challenges?
    - I started using a spray bottle instead and a shovel to replace the soil.

## 3. Expectations from a Plant Care Product:

- What features or capabilities would you like to see in a product that helps with plant care and watering?
  - I would like a system that waters the plants for me at a set time. Recycled water would be a bonus for me.
- How important is automation and convenience in plant care to you?
  - I would prefer convenience over automation. I can always water the plants myself. But if automation can be done, I don't mind having automation. It could help people that struggle to do tasks.
- Are there specific plant care problems or tasks you'd like a new product to address?
  - I would like a pump that can pump the water to my plants and water them for me with the amount of water that is needed.

## 4. Mobile App Preferences:

- Have you ever used any automated or smart gardening devices before (Yes or No)?
  - o No
  - o If so, which ones, and what was your experience like?

- What role does technology play in your daily life? Are you comfortable using digital tools and apps to manage your garden?
  - o I would be, yeah.
- Do you use any mobile apps or digital tools to assist with plant care or gardening tasks?
  - I use YouTube to assist me in certain cases. Not sure if that works in this case, but that is one tool I use.
- What features would you expect from a mobile app designed to help you take care of your plants?
  - A timer, ummm I guess water level, like a water needs. Like somedays may need more water than others. It should show us the moisture level in the mobile app. A reminder for fertilizer for plants to be added.
- How often would you use a mobile app for plant care, and for what purposes?
  - I would use it every day if the feature I listed are added. It would become a routine for me to check the app and water the indoor plants myself.

# 5. Water Conservation and Sustainability:

- Are you conscious of water conservation and its importance in plant care?
  - No not currently. I don't currently pay for water, so I am not that particular about water usage.
- Would you be interested in a product that not only makes plant care easier but also helps you use water more efficiently?
  - Of course, yes.
- What are your thoughts on environmentally friendly gardening practices?
  - Highly encouraged.

## 6. User-Friendliness:

- How important is ease of use and user-friendliness when considering a product for plant care?
  - Very important, because your target audience is elderly, younger farmers.
     User-friendly is a given to be honest. You want an app that can be used by everyone. A simple and easy to understand. Multiple languages for many different people to have access to the items.
- Are there any specific design or usability features that are essential to you in a plant care product?
  - o I would like a simple design that's easy to understand and set up.

- If you were to imagine an ideal plant care product, what would it look like, and what would it do for you?
  - Not too bulky, easy to set up, ummm I guess animal friendly. Avoid glass.
     Environmentally friendly. I guess it will has to be family friendly. Like kids can easily mess with. Something that can withstand wind, rain, sturdy, I guess.
- What would make you excited to try a new plant care product, and what concerns would you have?

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• Are there any additional features or capabilities you'd like to see in a plant care product that we haven't discussed?

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#### 8. Pricing and Monetization

- Are there any budget constraints or cost considerations when it comes to your gardening practices? How do you allocate resources for your garden?
  - I aim to find cheaper options; I usually buy items when I need the items/resources for my garden. I rather buy cheaper things then more expensive as it can be replaced easier and usually lasts as long as the more expensive options.
- When considering a product for plant care, how important is the price or cost to you?
  - Cost is highly important. Cheaper and good quality than others I would most likely buy it.
- What price range do you believe is reasonable for a device or system that helps you take care of your plants?
  - I would say it depends how big the system. I believe it should be around 2 to 3 digits.
- Would you be more inclined to purchase a one-time device or system, or are you open to subscription-based models?
  - I believe the system or device being a one-time payment is good. But I would be willing to pay for a subscription for the app to keep the features discussed.
- Are there specific features or benefits that you would expect to justify a higher price for such a product?
  - I would be willing to pay a higher price if I don't need to pay a subscription to access the any extra or new features.
- What would you expect with our automated sprinkler?
  - I would expect it to deliver on what was claimed a lowering of water usage. I would expect it to help me with my plant care.

### **Closing:**

- Is there anything else you'd like to share about your experiences, preferences, or needs that we haven't covered in this interview?
  - No, I have stated everything that I needed to say.

### **Emily Wokasch Interview**

What is your name?

• "My name is Emily Wokasch"

What is your age?

• "I am 29 years old"

What do you identify as?

• "Female"

Can you tell me a bit about yourself? What is your background, including education and work experience?

• "I actually went to Cal State Long Beach and I received my degree in HR. I have been working in my field for about 7 to 8 years now"

What is your current job or role, and what does it involve on a day-to-day basis?

NA

Where are you located, and can you describe your living situation (e.g., urban, suburban, rural)

• "I live in a suburban area"

#### 1. Plant Care Experience:

- Can you tell us about your experience with taking care of plants? Do you consider yourself an experienced gardener or more of a beginner?
  - "I would say I'm an intermediate, I don't take care of garden at the moment since I live in an apartment but I have before"
- What types of plants do you currently care for (e.g., indoor houseplants, outdoor garden, specific species)?
  - "Currently I've been taking care of some outdoor succulents on our patio"
- What are some of the challenges you face when it comes to plant care and maintenance?
  - "Well due to my location, getting enough sunlight is a challenge. The patio where most of my plants are surrounded by other buildings and trees. So the only time my plants ever get sunlight is early in the morning and late evening. I also tend not to water them as frequently but they are succulents so there's that"

# 2. Pain Points and Challenges:

- What are the most significant challenges you encounter while caring for your plants?
  - "Well there's the sunlight issue as I mentioned earlier. In regards to water there are times where I will completely forget about watering my plants"
- How do you currently monitor the water needs of your plants?
  - "I don't really monitor them, it's more so of I haven't gone out to water them
    in a while and if I remember I'll go ahead and water them"
- Are there any tools or methods you use?

- "For some of my bigger plants I use this glass bulb kind of thing that is supposed to water them over time"
- Have you ever faced issues with overwatering or underwatering your plants?
  - "Yeah, sometimes I might overwater and underwater different plants"
  - What tools, technologies, or solutions do you currently use to address these challenges?
    - "If it's a new plant I usually just google information about the plant, like for certain plants if the leaves go from green to yellow it tends to mean you are overwatering the plant but yeah I either google about the plant or use my past experiences"

### 3. Expectations from a Plant Care Product:

- What features or capabilities would you like to see in a product that helps with plant care and watering?
  - "It would be cool to see if your plant is thriving or being over/under watered and if it's getting enough sunlight"
- How important is automation and convenience in plant care to you?
  - "Well since I have a small set of plants I would say not very important but if I had a full scale garden it would be much higher"
- Are there specific plant care problems or tasks you'd like a new product to address?
  - "Maybe something about bugs"

### 4. Mobile App Preferences:

- Have you ever used any automated or smart gardening devices before (Yes or No)?
  - If so, which ones, and what was your experience like?
    - "No"
- What role does technology play in your daily life? Are you comfortable using digital tools and apps to manage your garden?
  - "If there was one yes"
- Do you use any mobile apps or digital tools to assist with plant care or gardening tasks?
  - "Unless google counts then no"
- What features would you expect from a mobile app designed to help you take care of your plants?
  - "Maybe the name of the plant and general plant care for it and like I mentioned before the "stats" of the plant like water and sunlight I'm not sure what else but those would be the main ones"
- How often would you use a mobile app for plant care, and for what purposes?
  - "Id probably use it twice a week with my current plants since I have small set of plants"

#### 5. Water Conservation and Sustainability:

- Are you conscious of water conservation and its importance in plant care?
  - "I guess so, I have potted plants so they don't consume so much water"

- Would you be interested in a product that not only makes plant care easier but also helps you use water more efficiently?
  - "Yes that would be a nice tool"
- What are your thoughts on environmentally-friendly gardening practices?
  - "I'm all for it 100%"

#### 6. User-Friendliness:

- How important is ease of use and user-friendliness when considering a product for plant care?
  - "I would say pretty important"
- Are there any specific design or usability features that are essential to you in a plant care product?
  - "Not really just something that is easy to figure and something that doesn't require more work than taking care of the plant itself"

### 7. Future Expectations:

- If you were to imagine an ideal plant care product, what would it look like, and what would it do for you?
  - "I'm not too sure just basic stats of your plant maybe something like a thermometer that you put in your plant and connects to an app, the app i imagine would be colorful and easy to navigate, a simple design showing the main stats and maybe a picture of your plant or something similar to it maybe it could have status like green yellow and red to indicate your plant needs care"
- What would make you excited to try a new plant care product, and what concerns would you have?
  - "I don't really have much concerns I would be excited about seeing my plants status, there are other apps that let you take a picture of your plant and it can identify it, stuff like that"
- Are there any additional features or capabilities you'd like to see in a plant care product that we haven't discussed?
  - "Maybe tips or information about plants in general, I know like there's certain plants that do better in certain zones so maybe if i was interested in growing my garden or adding new plants maybe if there was an area for finding similar plants or have similar needs or do well with other plants"

### 8. Pricing and Monetization

- Are there any budget constraints or cost considerations when it comes to your gardening practices? How do you allocate resources for your garden?
  - "I don't invest a lot in my garden at the moment, id say i spend the most money on pots and decorations surrounding the plants"
- When considering a product for plant care, how important is the price or cost to you?

- "I would say it's very important i wouldnt to buy something really expensive and if it were a subscription service than i would like it be a low cost because then it defeats the purpose"
- What price range do you believe is reasonable for a device or system that helps you take care of your plants?
  - "I'm not really sure, I don't really purchase these kinds of things"
- Would you be more inclined to purchase a one-time device or system, or are you open to subscription-based models?
  - "A one time purchase would be more appealing than a subscription service, it's just more convenient"
- Are there specific features or benefits that you would expect to justify a higher price for such a product?
  - "I'm not really sure, I guess it would depend on your situation, like at the moment I don't have a huge amount of plants I wouldn't want to have to pay a lot but If I had a huge garden and it could reuse the device than I guess that would be justify the price of the product"
- What would you expect with our automated sprinkler?
  - "It would be cool if the sprinkler could somehow know if its early morning or night time because to conserve water those are generally the best times to be watering your plants and grass. Maybe functionality like how long it waters. And if it could somehow monitor if the plant has been watered enough so it would stop saving water"

### Closing:

- Is there anything else you'd like to share about your experiences, preferences, or needs that we haven't covered in this interview?
  - "I think we are good"

#### **Javier Vega Interview**

What is your name?

• "Hello, my name is Javier"

What is your age?

• "I am 60 years old"

What do you identify as?

• "I identify as a male"

Can you tell me a bit about yourself? What is your background, including education and work experience?

• "Growing up I lived in a family farm, In Mexico my education was elementary school up to high school, at the moment I do not work a fulltime job

What is your current job or role, and what does it involve on a day-to-day basis?

NA

Where are you located, and can you describe your living situation (e.g., urban, suburban, rural)

• "I live in an urban area"

# 1. Plant Care Experience:

- Can you tell us about your experience with taking care of plants? Do you consider yourself an experienced gardener or more of a beginner?
  - "I have many years of experience in gardening. I used to work on a family farm in Mexico, and I now maintain an outdoor garden. I would say I'm a very experienced gardener."
- What types of plants do you currently care for (e.g., indoor houseplants, outdoor garden, specific species)?
  - "I mainly care for outdoor plants in my garden, mainly fruits and vegetables but also a few flowers."
- What are some of the challenges you face when it comes to plant care and maintenance?
  - "One of the challenges I face is keeping track of when and how much to water my plants. Since I have a lot of different plants it can be hard to remember which plants need what"

## 2. Pain Points and Challenges:

- What are the most significant challenges you encounter while caring for your plants?
  - "My biggest challenges are knowing when to water my plants and making sure I don't waste too much water"
- How do you currently monitor the water needs of your plants?
  - "I mostly rely on visual cues, like checking the soil moisture either by looking at it or touching the soil itself"
- Are there any tools or methods you use?
  - o "No"
- Have you ever faced issues with overwatering or underwatering your plants?
  - "Yes, I tend to overwater my plants when I am feeling lazy because I just grab a hose and spray all the plants simultaneously until the soil looks moist"
  - What tools, technologies, or solutions do you currently use to address these challenges?
    - "I don't use any high-tech solutions right now. Just basic tools like a watering can and a hose"

### 3. Expectations from a Plant Care Product:

- What features or capabilities would you like to see in a product that helps with plant care and watering?
  - "I would like a product that can help me know how much to water my plants, and if it could save water, that would be even better also maybe if it could keep a record of the different plants I have so I know the needs of each individual plants"
- How important is automation and convenience in plant care to you?
  - "Automation would be a big help, I find it challenging to remember all the watering needs of my different plants so something that takes care of that for me would be great."

- Are there specific plant care problems or tasks you'd like a new product to address?
  - "I'd like a product to help me with watering, and maybe if it could help with repelling bugs"

### 4. Mobile App Preferences:

- Have you ever used any automated or smart gardening devices before (Yes or No)?
  - o If so, which ones, and what was your experience like?
    - "No I haven't used any smart gardening devices"
- What role does technology play in your daily life? Are you comfortable using digital tools and apps to manage your garden?
  - "I use my phone for calls and messages, but learning new apps can be difficult for me. I prefer simple and easy to use tools"
- Do you use any mobile apps or digital tools to assist with plant care or gardening tasks?
  - "No I rely on traditional methods"
- What features would you expect from a mobile app designed to help you take care of your plants?
  - "I would expect it to be easy to use and give me reminders for watering and other tasks, that would be helpful though i would say the easier to use the better because otherwise using the app itself would require more work than taking care of the plant"
- How often would you use a mobile app for plant care, and for what purposes?
  - "I would use it as needed, probably a few times a week but generally only when a reminder is sent and to learn more about the plants that I own"

#### 5. Water Conservation and Sustainability:

- Are you conscious of water conservation and its importance in plant care?
  - "Yes I'm very conscious of it"
- Would you be interested in a product that not only makes plant care easier but also helps you use water more efficiently?
  - "Absolutely saving water and caring for my plants effectively go hand in hand"
- What are your thoughts on environmentally-friendly gardening practices?
  - "I support them"

#### 6. User-Friendliness:

- How important is ease of use and user-friendliness when considering a product for plant care?
  - "User friendliness is very important for me as I mentioned I want something that doesn't require a lot of tech expertise"
- Are there any specific design or usability features that are essential to you in a plant care product?
  - "I would like clear and simple instructions to follow, and something that does not require a lot of setup and also if the application could be in spanish, that would be great"

- If you were to imagine an ideal plant care product, what would it look like, and what would it do for you?
  - "I would say a simple device that can automatically water my plants as needed, give me tips about the plant like what conditions help it grow"
- What would make you excited to try a new plant care product, and what concerns would you have?
  - "My only concern would be the cost"
- Are there any additional features or capabilities you'd like to see in a plant care product that we haven't discussed?
  - "Maybe some sort of monitoring of the plant, if its getting enough water and sunlight and if possible if the product could somehow repel bugs"

# 8. Pricing and Monetization:

- Are there any budget constraints or cost considerations when it comes to your gardening practices? How do you allocate resources for your garden?
  - "I only spend money on what is necessary"
- When considering a product for plant care, how important is the price or cost to you?
  - "The price is very important, it should be affordable"
- What price range do you believe is reasonable for a device or system that helps you take care of your plants?
  - "If it does what we mentioned earlier I would say something in the range of \$50 to \$70 would be reasonable for me"
- Would you be more inclined to purchase a one-time device or system, or are you open to subscription-based models?
  - o "I prefer one-time purchases. I don't want an ongoing subscription"
- Are there specific features or benefits that you would expect to justify a higher price for such a product?
  - "I dont think so"
- What would you expect with our automated sprinkler?
  - "I'd expect it to be easy to set up and use, water my plants efficiently and not use more water than is needed to help conserve water I would also expect it to water during certain times of the day only, it shouldn't be watering when it is really hot because than the soil would just dry up"

#### Closing:

- Is there anything else you'd like to share about your experiences, preferences, or needs that we haven't covered in this interview?
  - "I think we've covered everything"

#### **Melissa Leon Interview**

What is your name?

• "My name is Melissa"

What is your age?

• "I am 21 years old"

What do you identify as?

• "Female"

Can you tell me a bit about yourself? What is your background, including education and work experience?

• "I am a full time student studying psychology, I spend most of my time at school and doing chores and work"

What is your current job or role, and what does it involve on a day-to-day basis?

NA

Where are you located, and can you describe your living situation (e.g., urban, suburban, rural)

• "I would say I live in an urban area"

### 1. Plant Care Experience:

- Can you tell us about your experience with taking care of plants? Do you consider yourself an experienced gardener or more of a beginner?
  - "I am more of an absolute beginner, the few plants that i have had, I was assisted by my parents taking care of"
- What types of plants do you currently care for (e.g., indoor houseplants, outdoor garden, specific species)?
  - "I've been taking care of snapdragons and a few hanging plants, both of them are potted plants, the snapdragons are outside and I have the hanging plants indoors.
- What are some of the challenges you face when it comes to plant care and maintenance?
  - "Watering my plants is one and when my plants do get sick, I'm not sure what to do to get them back up to health"

#### 2. Pain Points and Challenges:

- What are the most significant challenges you encounter while caring for your plants?
  - "Knowing proper care for plants, some plants need more light than others, some thrive in certain conditions, some might need more heat than others and with our weather its kinda difficult at least for me"
- How do you currently monitor the water needs of your plants?
  - "I just look at them, like if they look dry i will water them"
- Are there any tools or methods you use?
  - $\circ$  N $\Delta$
- Have you ever faced issues with overwatering or underwatering your plants?
  - "I would say underwatering my plants sometimes it gets to a point where they just look to dry
  - What tools, technologies, or solutions do you currently use to address these challenges?
    - "Usually if there's any left over water bottles laying around to water my plants"

## 3. Expectations from a Plant Care Product:

- What features or capabilities would you like to see in a product that helps with plant care and watering?
  - "I would say alerts for when action is need and keep track of the plants health to know if its happy like if it has enough water and sunlight, and just basic information on the plant"
- How important is automation and convenience in plant care to you?
  - "Since i am very new to gardening I would say it would be very convenient but it would be definitely important for when your schedule gets busy and your plants are not your main priority"
- Are there specific plant care problems or tasks you'd like a new product to address?
  - "Just how the plant is doing as we talked about earlier"

# 4. Mobile App Preferences:

- Have you ever used any automated or smart gardening devices before (Yes or No)?
  - o If so, which ones, and what was your experience like?
    - "No"
- What role does technology play in your daily life? Are you comfortable using digital tools and apps to manage your garden?
  - "I am comfortable with using digital tools but I have never used one for gardening"
- Do you use any mobile apps or digital tools to assist with plant care or gardening tasks?
  - o "No"
- What features would you expect from a mobile app designed to help you take care of your plants?
  - "I would expect it to help maintain the plant health and keep it looking nice"
- How often would you use a mobile app for plant care, and for what purposes?
  - "Id say about every other day to make sure it's doing alright"

# 5. Water Conservation and Sustainability:

- Are you conscious of water conservation and its importance in plant care?
  - "Yes'
- Would you be interested in a product that not only makes plant care easier but also helps you use water more efficiently?
  - "Yes I would"
- What are your thoughts on environmentally-friendly gardening practices?
  - o "I am for it"

### 6. User-Friendliness:

- How important is ease of use and user-friendliness when considering a product for plant care?
  - "It is very important because if its too complicated to use than I would give up on using it"

- Are there any specific design or usability features that are essential to you in a plant care product?
  - "I would like to be able to use it without the need of physically being near my plant, and possibly automation to take care of it for you while you are away, it would be nice"

- If you were to imagine an ideal plant care product, what would it look like, and what would it do for you?
  - "Have a wide variety of information on different plants and how to take care
    of them for that given plant, like how to water them effectively and what
    they need, I imagine it being a mobile application"
- What would make you excited to try a new plant care product, and what concerns would you have?
  - "If it requires information not related to gardening would be my only concern, For people who travel something that would be exciting is that if a product could be efficient on its own and take of your plants while you are away for long periods of time and being able to see that your plant is happy and healthy like its getting enough water and sunlight or if it could at least tell me when it needs to be watered"
- Are there any additional features or capabilities you'd like to see in a plant care product that we haven't discussed?
  - "I think we discussed everything"

#### 8. Pricing and Monetization

- Are there any budget constraints or cost considerations when it comes to your gardening practices? How do you allocate resources for your garden?
  - "I personally do not invest much money into my gardening resources, id say every once in a blue moon i invest in some new soil"
- When considering a product for plant care, how important is the price or cost to you?
  - "It is very important, if it exceeds the normal costs of taking the care of the plant than it is not worth it"
- What price range do you believe is reasonable for a device or system that helps you take care of your plants?
  - "It would depend on whether it would be like a monthly thing then it shouldn't cost as much"
- Would you be more inclined to purchase a one-time device or system, or are you open to subscription-based models?
  - "I would definitely go for a one payment option over a subscription model"
- Are there specific features or benefits that you would expect to justify a higher price for such a product?
  - "I dont think so"
- What would you expect with our automated sprinkler?

"For the sprinkler to aim only for the plant and nowhere else, it should water the plant only and not the surrounding area and for it to be self sufficient to an extent like if it needs a lot of setup, it would need some sort of water supply like maybe a hose or a container but it should be capable of both depending on your needs for indoor and outdoor plants though it should not require to much hands on work"

# Closing:

- Is there anything else you'd like to share about your experiences, preferences, or needs that we haven't covered in this interview?
  - o "That is all"