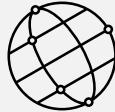


UX Design Case Study: LittleSeed Plants

A plant-shopping e-commerce website

Project requirements

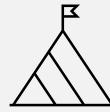
- About LittleSeed Plants
- Challenges
- Goal



About LittleSeed Plants

An e-commerce website, LittleSeed Plants is dedicated to offering a wide variety of plants for plant enthusiasts and gardeners.

LittleSeed Plants not only enables its users to choose and buy from a wide range of plants, but also offers a platform for them to get gardening tips and interact with other plant enthusiasts and experts!



Challenges

While accessing the website, the users face the following challenges.

- **Complex navigation:** Plants come in various types and sizes and have varying care requirements. However, LittleSeed Plants' current navigation isn't intuitive enough for users. As the users are unable to easily find the right plants, they get frustrated quickly.
- **Imbalanced information:** On a plant's details page, LittleSeed Plants provides a lot of information, including its scientific name, which may not be relevant for all buyers. This makes it difficult for users to find key information.
- **Limited filtering and sorting options:** The current filtering and sorting options on the website are limited to basic options, such as plant type, size, and price range. This makes it difficult for users to find plants that suit their preferences, reducing potential sales.



Goal

To address the users' challenges, the goal of the project is to:

- Update the navigation system to make it easier for users to find the plants they're interested in
- Provide the right amount of information without overwhelming the users
- Redesign the filtering and sorting options so that users can narrow down their plant choices based on various criteria, such as by example, size, light requirements, and pet-friendliness

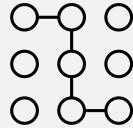
Research users

- Hypothesis
- Research methods and techniques
- Analysis results

Hypothesis

IBM SkillsBuild

The following hypotheses were made during the user research stage for the LittleSeed Plants' website.



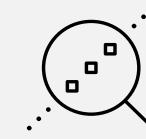
Hypothesis 1: Reducing the steps in the checkout process from five to three will lead to a 20% decrease in cart abandonment rates over the course of two months.

Explanation: This hypothesis focuses on simplifying the existing checkout process to reduce cart abandonment.



Hypothesis 2: Adding customer reviews and ratings to product pages will result in a 15% increase in the average conversion rate within a 30-day period.

Explanation: This hypothesis focuses on the impact of adding reviews and ratings from the buyers on the potential sales of a product.



Hypothesis 3: Providing a filtering and sorting feature will increase the conversion rate by 30% within a 30-day period.

Explanation: The filtering and sorting feature is designed to enhance the user experience by allowing customers to quickly and easily narrow down their choices and find the plants that best match their preferences. Including this feature will result in efficient shopping journey for the users.

Research methods and techniques

IBM SkillsBuild

To understand the user's behaviors, preferences, and pain points, the project employed the **qualitative** UX research method.



User interviews

The following are some examples of questions that the users answered:

- Can you describe your typical process when shopping for plants online?
- What factors influence your decision to purchase plants from an online platform?
- Can you share any specific challenges or frustrations you've encountered while shopping for plants on e-commerce websites?
- How important is detailed plant care information when considering a plant purchase online?
- What features do you find most appealing and user-friendly on other online plant shopping websites?



Focus groups

The following are some examples of questions that the users answered:

- How do you usually start your search for new plants to buy online?
- What emotions or concerns arise when making an online plant purchase?
- Can you provide examples of positive or negative experiences you've had while shopping for plants online?
- How do you determine the credibility and reliability of an e-commerce website when it comes to plant quality and care?
- What improvements would you suggest to enhance the online plant shopping experience?



User testing

The following are some examples of questions that the users answered:

- Can you walk us through the process of finding a specific type of indoor plant on the LittleSeed Plants website?
- How intuitive do you find the navigation and filtering options while exploring different plant categories?
- Can you add a plant to your wishlist and explain the steps you took?
- Did you face any challenges during the checkout process? If yes, what were they?

Analysis results

IBM SkillsBuild

Based on the data gathered from user interviews, focus groups, and user testing, the hypotheses on the shorter checkout process, customer reviews/ratings, and filtering/sorting options were **proved**.



Research findings

Discovery and selection

- Users appreciate a wide variety of plant options and clear categorization.
- Beginners find it overwhelming to choose from a large selection without proper guidance.
- Plant care information is crucial for confident decision-making.

User interface and navigation

- Users prefer an intuitive and visually appealing interface.
- Users want clear and easily accessible filters to narrow down their choices.

Checkout and payment

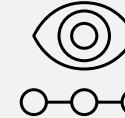
- Users value a streamlined and secure checkout process.
- Providing multiple payment options is essential for a diverse user base.

Wishlist and account features

- Users find wishlist useful for saving items for future purchases.
- The ability to create accounts for personalized recommendations is appreciated.

Trust and customer reviews

- Positive customer reviews and ratings influence users' purchasing decisions.
- Users trust detailed and authentic plant care reviews from other buyers



Insights

Pain points

Based on the findings from the research, the following can be concluded:

- **Lack of plant knowledge:** Users might **lack knowledge** about different plant types, care requirements, and suitable plants for their specific environments.
- **Complex plant care:** Users might find plant care **instructions overwhelming or confusing**, especially if they're new to gardening.
- **Limited space and light:** Users with **limited outdoor space** might struggle to find plants that thrive in indoor or small balcony environments.

Create user personas

- User persona 1: Gardener Grace
- User persona 2: Urban gardener Alex
- User persona 3: Gift shopper Sarah

User persona 1: Gardener Grace

IBM SkillsBuild



Image source: Photo by [Artem Beliaikin](#) on [Unsplash](#)

Personal background

Age: 28 years

Status: Married

Education: Masters degree in Elementary education

Professional background

Occupation: Elementary school teacher

Earning potential: \$70K per year

Location: Neighbourhood school

Lifestyle: Prefers a classy and extravagant lifestyle

"With every plant and flower that I care for, I find the strength in me to care for life."

Goals and motivations

- Discover new and unique plant varieties to enhance the beauty and diversity of her garden.
- Expand her gardening knowledge and skills through workshops and informative content.
- Connect with a community of fellow garden enthusiasts to share experiences and seek advice.
- Create a peaceful and visually appealing outdoor space that serves as a retreat from her busy work life.

Needs and pain points

- **Plant selection:** Seeking a wide variety of plant options, from flowering plants to perennials, to create a balanced garden ecosystem
- **Plant care guidance:** Needs detailed and reliable plant care instructions specific to each plant's needs
- **Community engagement:** Wants a platform that fosters engagement with like-minded individuals who can offer insights and solutions to her gardening challenges
- **Convenience:** Looking for a convenient way to access gardening tips, workshops, and purchase plants online

Behaviors and preferences

- Grace spends considerable time researching plants online before making a purchase decision.
- She values plants with natural beauty, preferring those that attract butterflies and bees.
- Grace is open to trying new gardening techniques and experimenting with different planting arrangements.
- She enjoys participating in online gardening forums and attending local workshops to expand her knowledge.
- Grace prefers a user-friendly and visually appealing website with clear navigation and a comprehensive plant directory.

Key characteristics

- Passionate about gardening and nature
- Curious and eager to learn new gardening techniques
- Enjoys outdoor activities and spending time in her garden
- Values sustainability and organic gardening practices
- Seeks a balance between her teaching career and her love for gardening

User persona 2: Urban gardener Alex

IBM SkillsBuild



Image source: Photo by [Jamie Fenn](#) on [Unsplash](#)

Personal background

Age: 34 years

Status: Married, father of two sons

Education: Professional degree in Photography

Professional background

Occupation: Freelance photographer

Earning potential: \$100K per year

Location: Home studio

Lifestyle: Prefers an aesthetical and artistic lifestyle

In this bustling city, I want to have peace by building my own nature landscape.

Goals and motivations

- Transform his city apartment's balcony into a lush and peaceful oasis.
- Enhance the aesthetic appeal of his living space by decorating it with low-maintenance indoor plants that can thrive in his apartment's conditions.
- Establish a stronger connection with nature despite his city environment.

Needs and pain points

- Plant selection:** Needs a variety of indoor plants that can thrive in a small balcony garden and complement his apartment's décor due to limited space and light
- Plant care guidance:** Requires simplified and brief plant care instructions that are specific to urban living conditions without getting overwhelmed
- Convenience:** Seeks a user-friendly platform that simplifies the process of browsing, selecting, and purchasing plants online
- Visual appeal:** Values visually appealing plant images that showcase the plants' size, color, and overall appearance

Behaviors and preferences

- Alex often researches plants using his smartphone during breaks from his photography work.
- He prefers plants with unique foliage patterns and those that can add a touch of nature to his urban environment.
- Alex often seeks out blog posts and articles on urban gardening tips and creative ways to maximize small spaces.
- He appreciates platforms that provide personalized recommendations based on his apartment's conditions.

Key characteristics

- Urban and creative lifestyle as a freelance photographer
- Values aesthetics and seeks to incorporate beauty into his living space
- Appreciates the therapeutic and visual benefits of indoor plants
- Eager to learn about plant care and maintenance in an urban setting
- Seeks a balance between his passion for photography and his love for plants

User persona 3: Gift shopper Sarah

IBM SkillsBuild



Image source: Photo by [Christina @ wocintechchat.com](#) on [Unsplash](#)

Personal background

Age: 44 years

Status: Married, mother of two teenage daughters

Education: Masters degree in Business Administration

Professional background

Occupation: Marketing director

Earning potential: \$180K per year

Location: Downtown office

Lifestyle: Prefers a simple and elegant lifestyle

"With every plant I choose, I'm not just giving a gift; I'm gifting a piece of nature's beauty to the people I care about."

Goals and motivations

- Select and find thoughtful and memorable gifts based on the receiver's personality and interests.
- Bring joy and happiness to the receiver.
- Create lasting memories through thoughtful gifts.
- Make occasions special and memorable.
- Simplify the gift-giving process through curated collections and convenience.

Needs and pain points

- **Curated gift selection:** Needs a curated collection of plant options suitable for different occasions, from birthdays to housewarmings, to make her gift-giving process easier
- **Visual appeal:** Requires clear images of plants and their packaging to ensure that the gift presentation matches the significance of the occasion
- **Personalization:** Seeks the ability to add personal touches, such as custom gift messages, to make the plant gift feel more special
- **Convenient shopping:** Values a seamless and convenient online shopping experience, from selecting plants to placing orders and tracking deliveries

Behaviors and preferences

- Sarah frequently shops online for gifts during her breaks from work.
- She appreciates plants with meaningful symbolism or unique features that resonate with the receiver's interests.
- Sarah often reads customer reviews and ratings to ensure the quality and reliability of the plant and the shopping experience.
- She prefers plant gifts that come with clear care instructions, ensuring the receiver can enjoy the gift for a long time.

Key characteristics

- Thoughtful and attentive gift giver
- Values making occasions special through carefully chosen presents
- Balances a busy career with her role as a considerate friend and family member
- Enjoys exploring creative and unique gift options
- Seeks convenience and efficiency in her online shopping experience

Research the competition

- Competitors
- SWOT analysis

Competitors

IBM SkillsBuild

Based on the research, the LittleSeed Plants website has primarily **two main competitors**: **Botany World** and **Paradise Glee**.

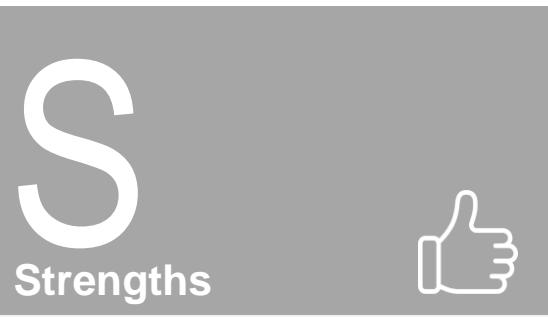
The following table provides an overview of how the LittleSeed Plants website compares with other competitors on various important parameters.

Parameters	LittleSeed Plants	Botany World	Paradise Glee
Plant variety	Wide variety of unique and rare plants	Limited plant variety	Focus on urban gardening solutions
Plant care information	Detailed care instructions provided	Some care guides for limited plants	Online guides for small-space gardens
Website design	User-friendly interface	Complex website layout	Sleek and modern design
Filtering options	Limited filtering options	Robust filtering for plant selection	Limited search functionality
Customer reviews	Limited customer reviews	Available customer reviews	Lack of customer reviews
Checkout process	Could be more streamlined	User-friendly checkout	Could be more streamlined
Community engagement	Engaging blog section with gardening tips	No community engagement features	Social media integration
Unique selling points	Wide variety of unique plants and detailed care instructions	Personalized plant recommendations and responsive service	Focus on urban gardening solutions and social integration
Delivery and shipping	Delivery and shipping information provided	Transparent shipping information	Limited information on shipping

SWOT analysis

IBM SkillsBuild

The LittleSeed Plants website gained the following insights from their SWOT analysis.



- Wide variety of unique and rare plants
- Detailed care instructions
- Delivery and shipping information provided
- Engaging blog section with gardening tips

- Limited filtering options
- Limited customer reviews

- Checkout process could be more streamlined
- Sleek and modern design
- Improving filtering options
- Adding a customer reviews section

- Higher costs and limited availability for seasonal plants
- Complicating the simplified interface while creating a sleek and modern design

Create user stories and solution sketches

- User stories: Gardener Grace
- User journey: Gardener Grace
- User flow: Gardener Grace
- Solution sketches

User stories: Gardener Grace

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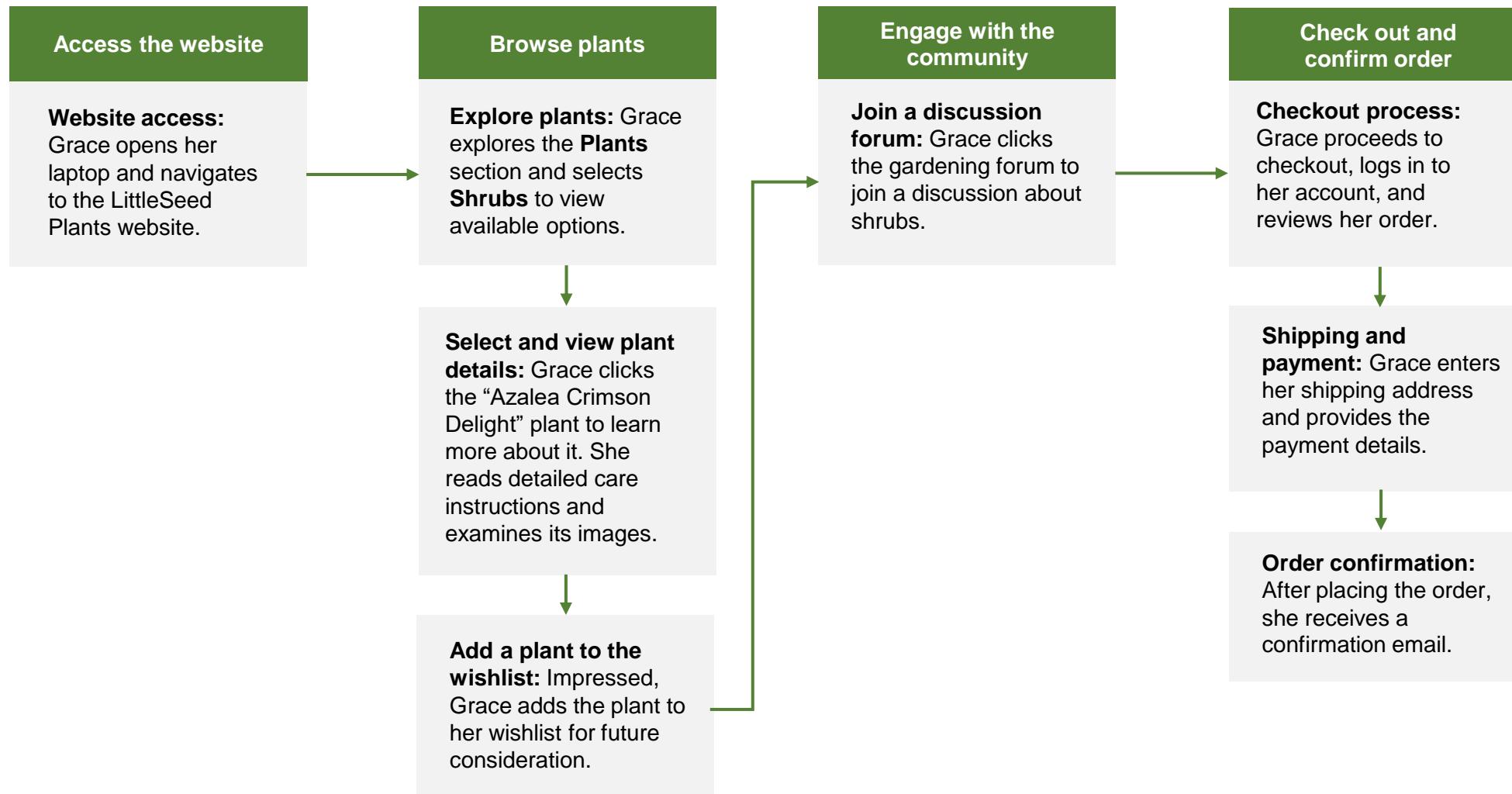
Focusing on the Gardener Grace user persona, the following are various user stories for such users that provide insights into their needs and requirements.

Discovering new plants	Engaging with the gardening community	Saving favorites for future purchase	Viewing customer reviews	Getting personalized plant recommendations
<p>As a gardening enthusiast, I want to easily filter and browse through the selection of perennial plants native to my region that can help me choose suitable options for my garden.</p>	<p>As a passionate gardener, I want to receive notifications about upcoming gardening workshops and events so I can continue developing my gardening skills.</p>	<p>As a frequent buyer, I want the ability to save plants I like to a wishlist so I can easily find and consider them for future purchases.</p>	<p>As an informed customer, I want to read reviews and ratings from other customers so I'm aware of the plant quality and the overall shopping experience.</p>	<p>As an avid gardener, I want to receive recommendations for plant varieties that thrive in my specific climate and garden conditions, helping me make informed choices.</p>

User flow: Gardener Grace

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This user flow provides a step-by-step overview of Gardener Grace's interactions and actions as she engages with the LittleSeed Plants website, from initial exploration to the successful conversion.



User journey: Gardener Grace

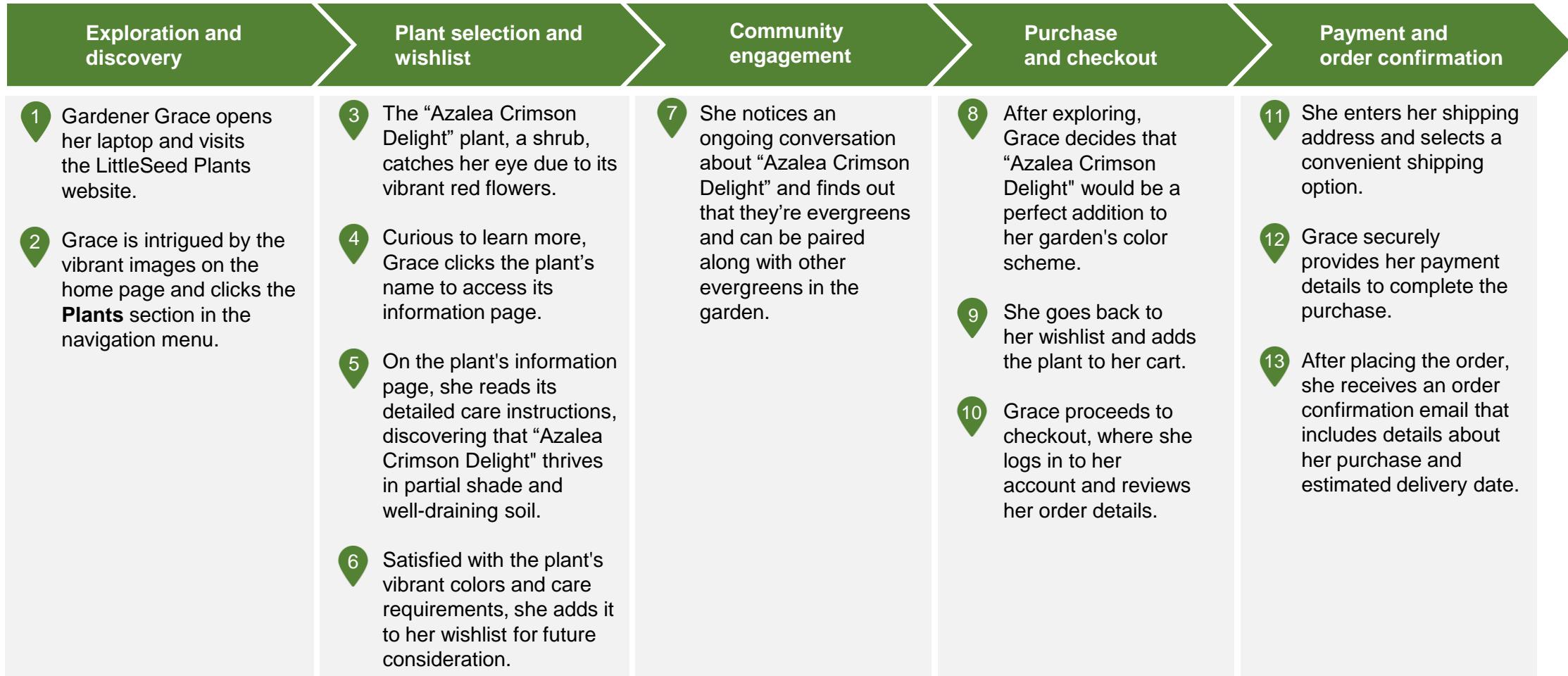
IBM SkillsBuild



Gardener Grace's goal: To save plants that I like by adding them to my wishlist for future purchases.



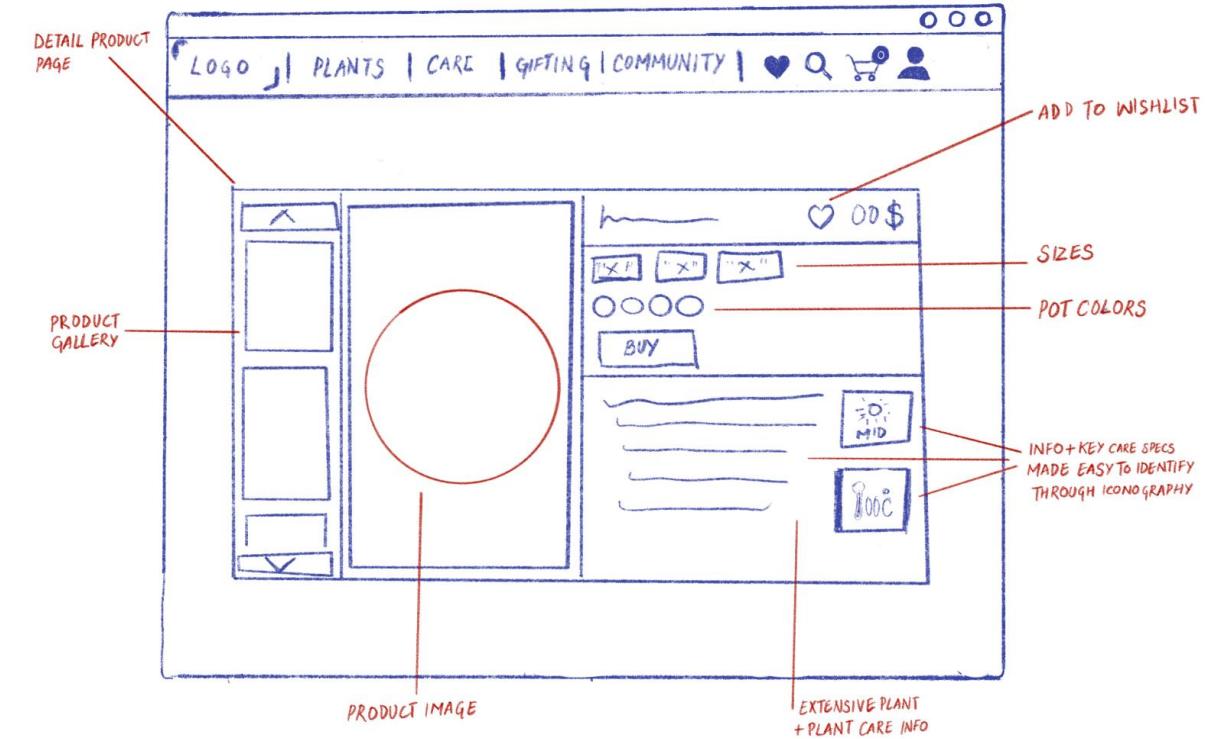
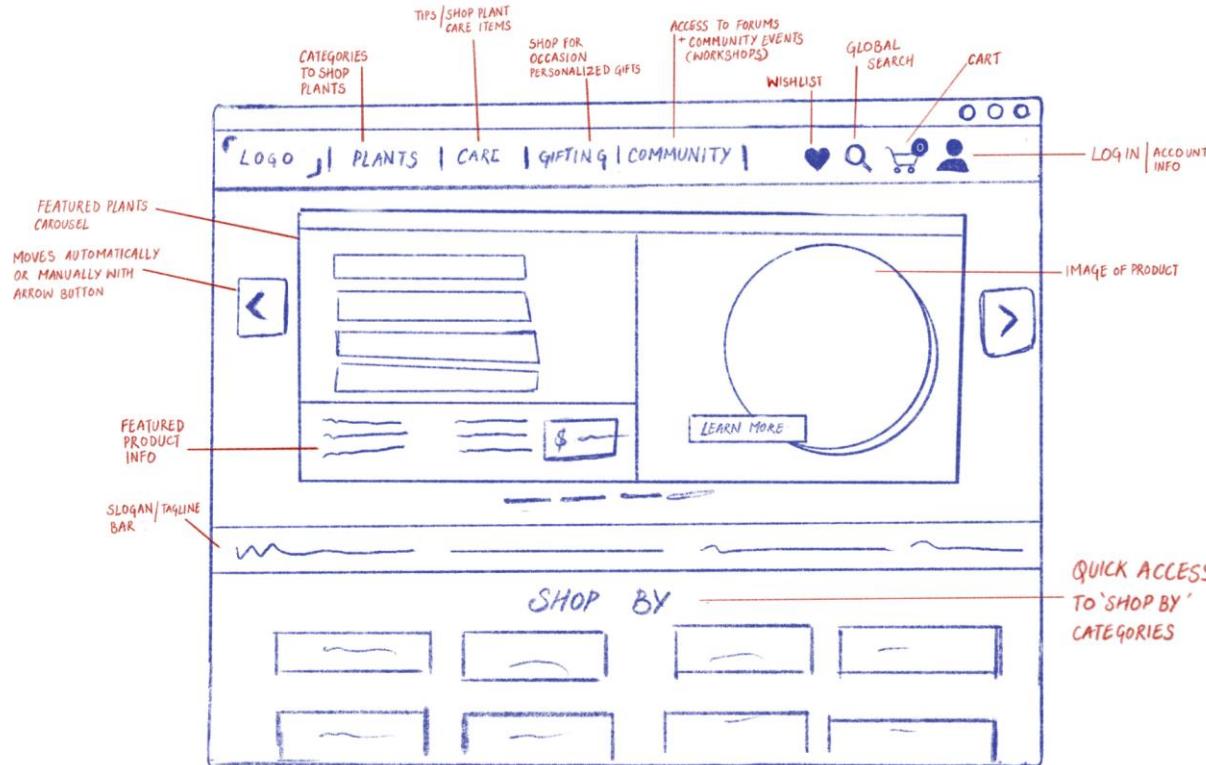
Gardener Grace's journey: This user journey provides insight into Gardener Grace's experience as a frequent buyer who wants to save her favorite plants for future consideration. It highlights her interaction with the wishlist feature so she can make well-informed purchasing decisions.



Solution sketches

IBM SkillsBuild

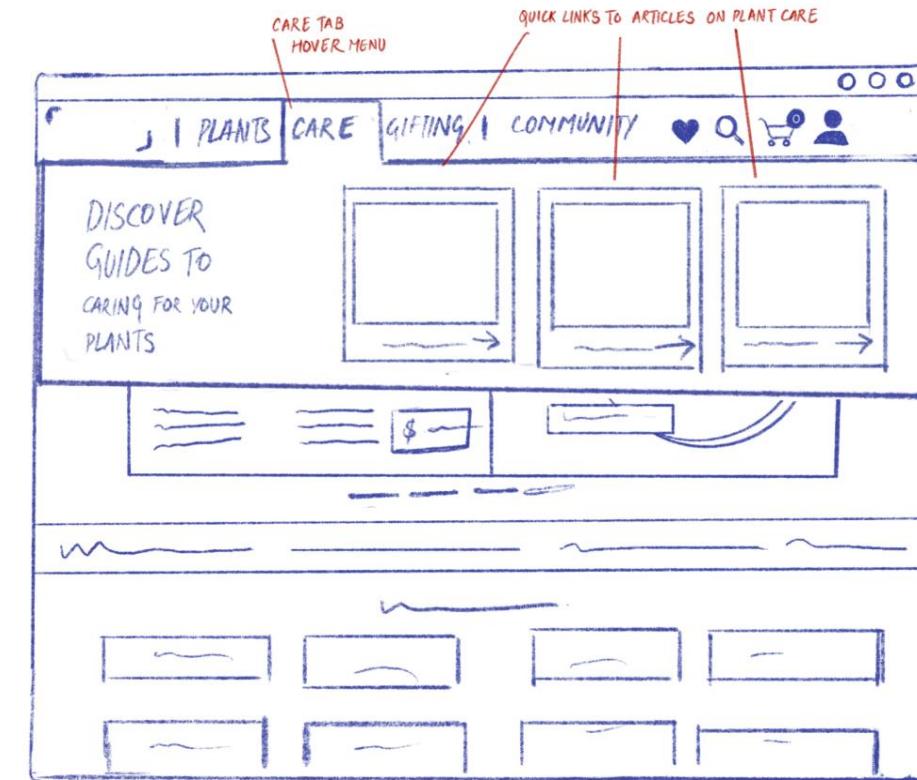
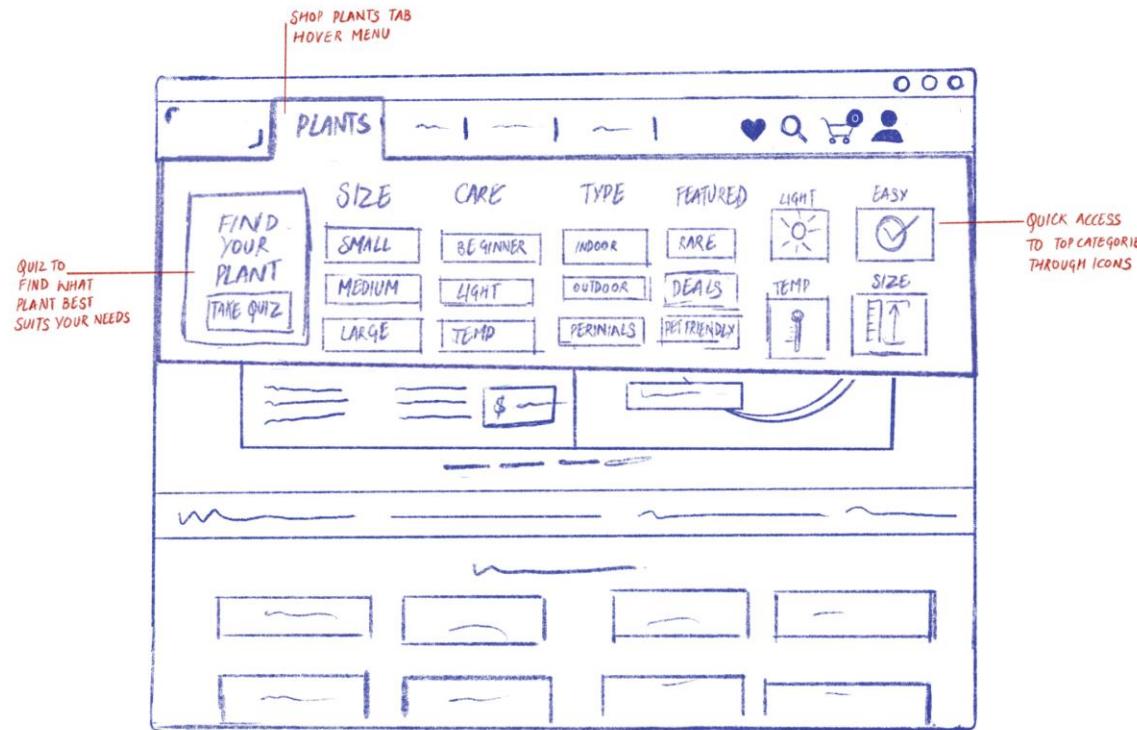
The following pen and paper sketches are a visual representation of a potential solution to address Gardener Grace's requirement to add a plant to the wishlist for easier purchases. Zoom in to view the sketches in more detail.



Solution sketches (cont.)

IBM SkillsBuild

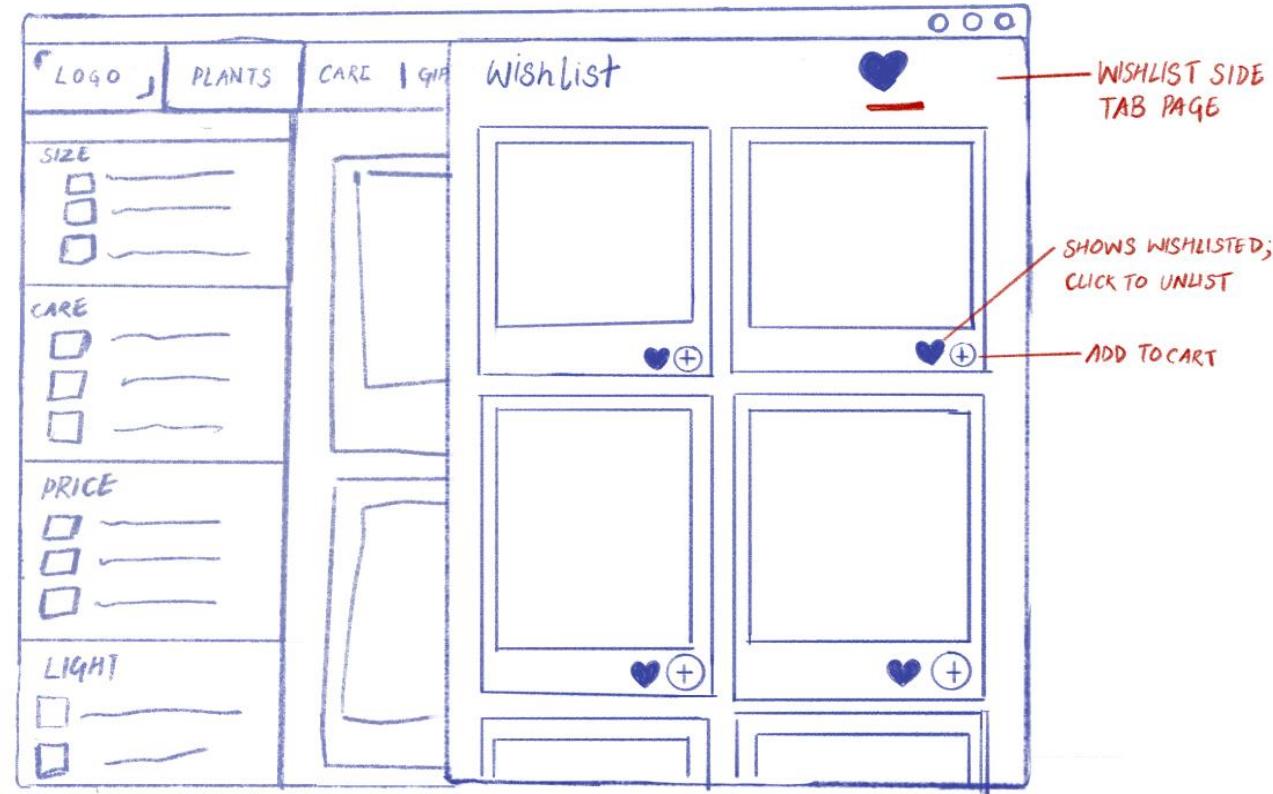
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Solution sketches (cont.)

IBM SkillsBuild

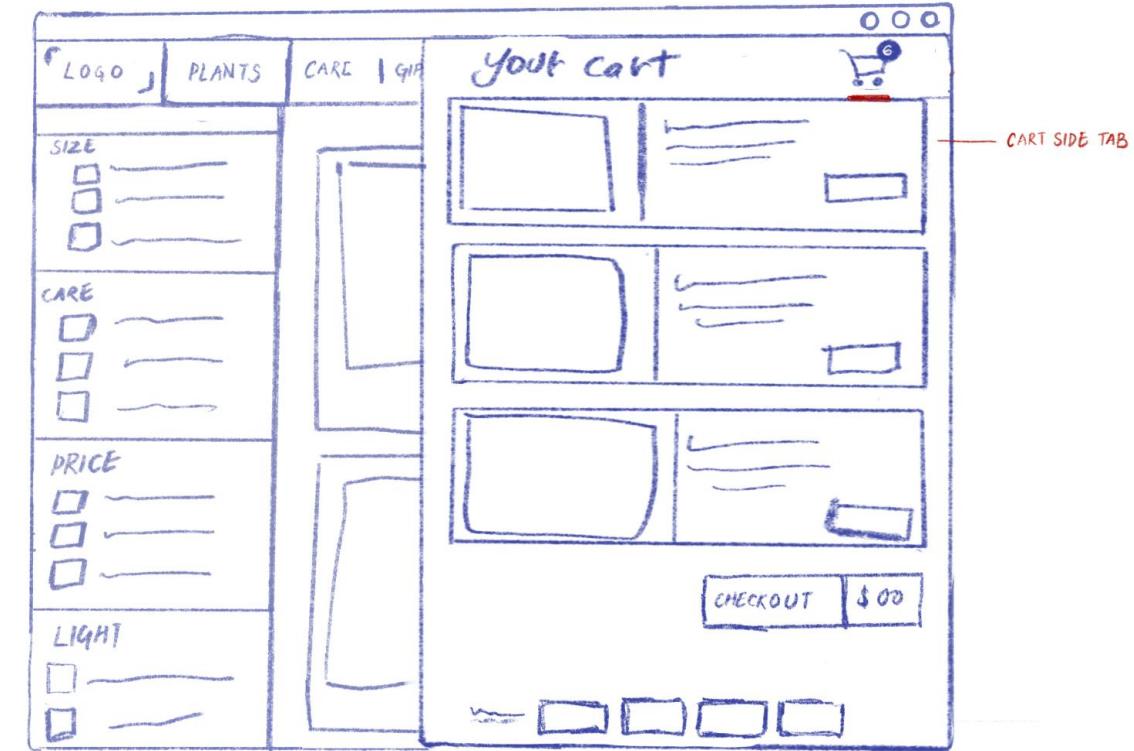
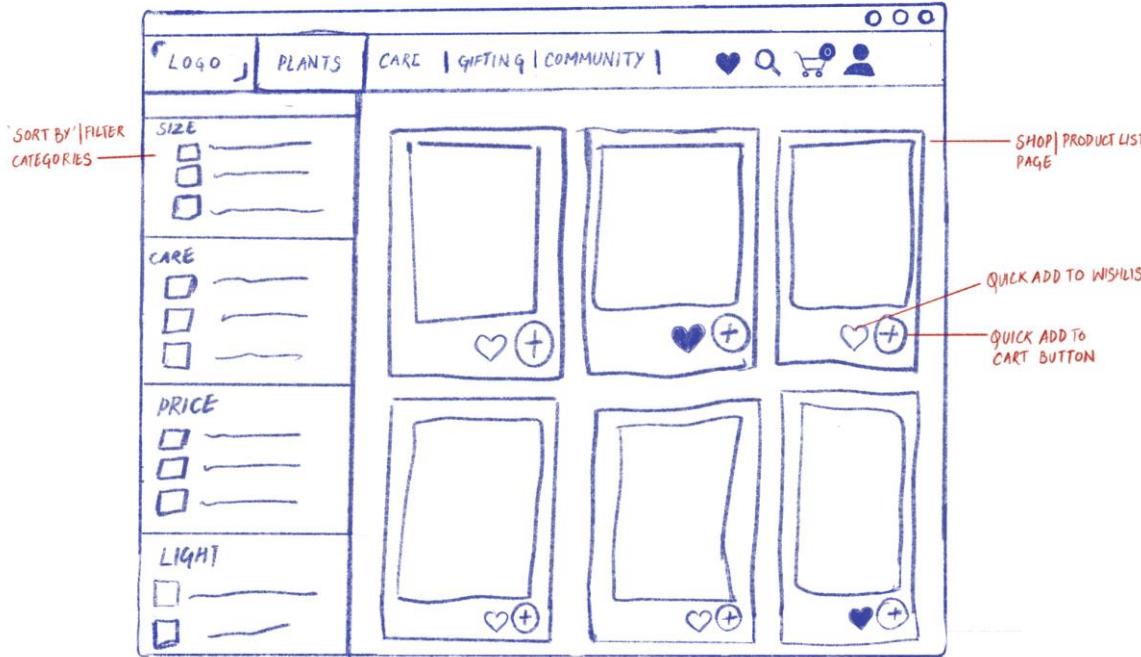
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Solution sketches (cont.)

IBM SkillsBuild

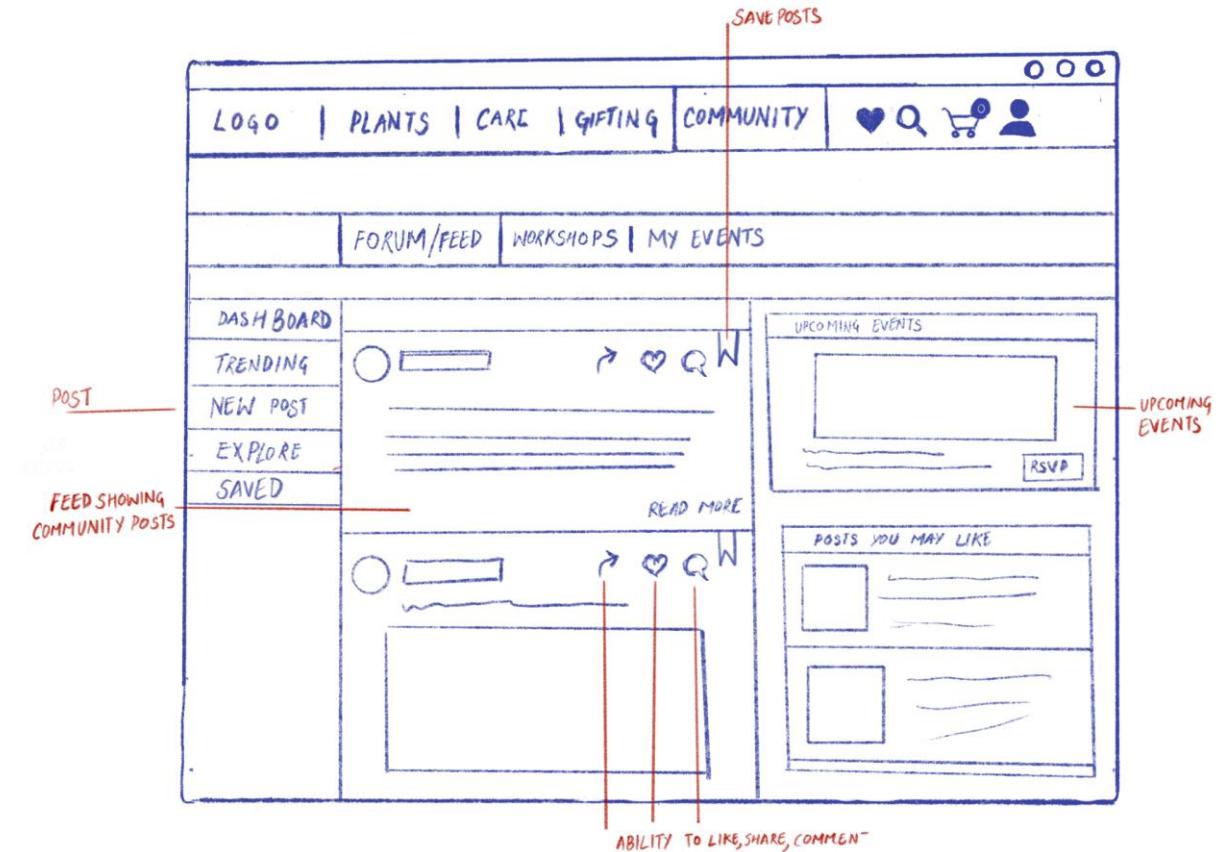
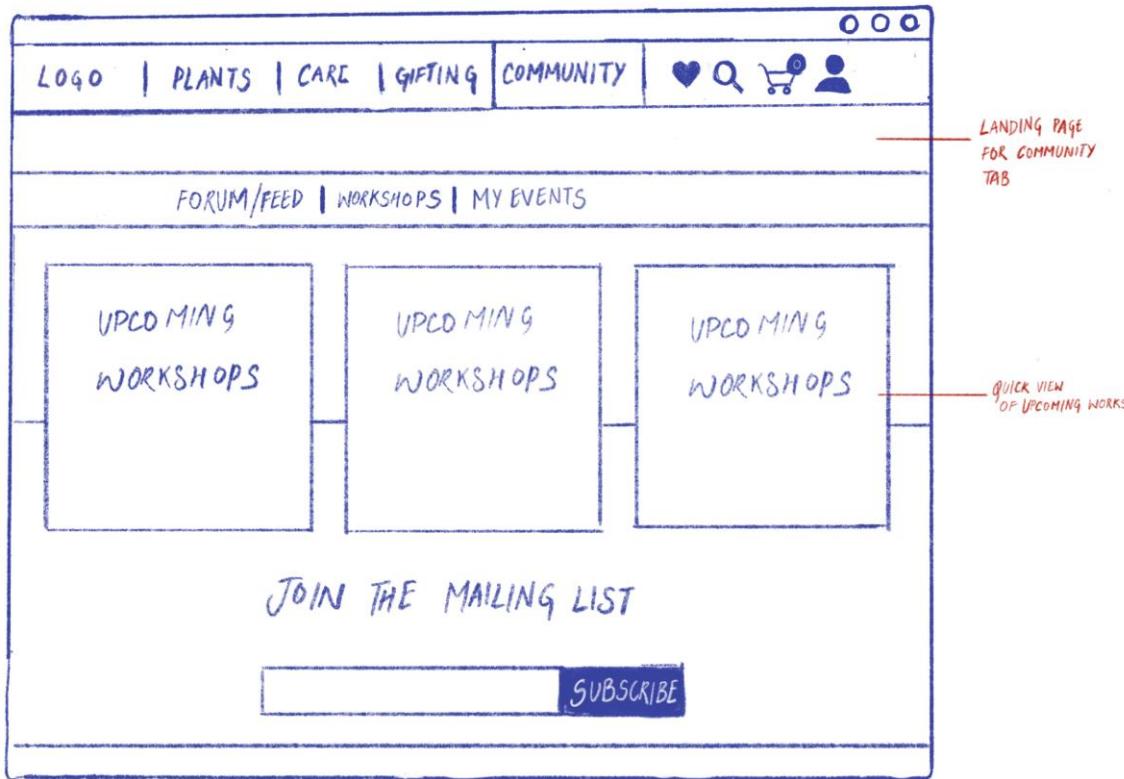
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IBM SkillsBuild

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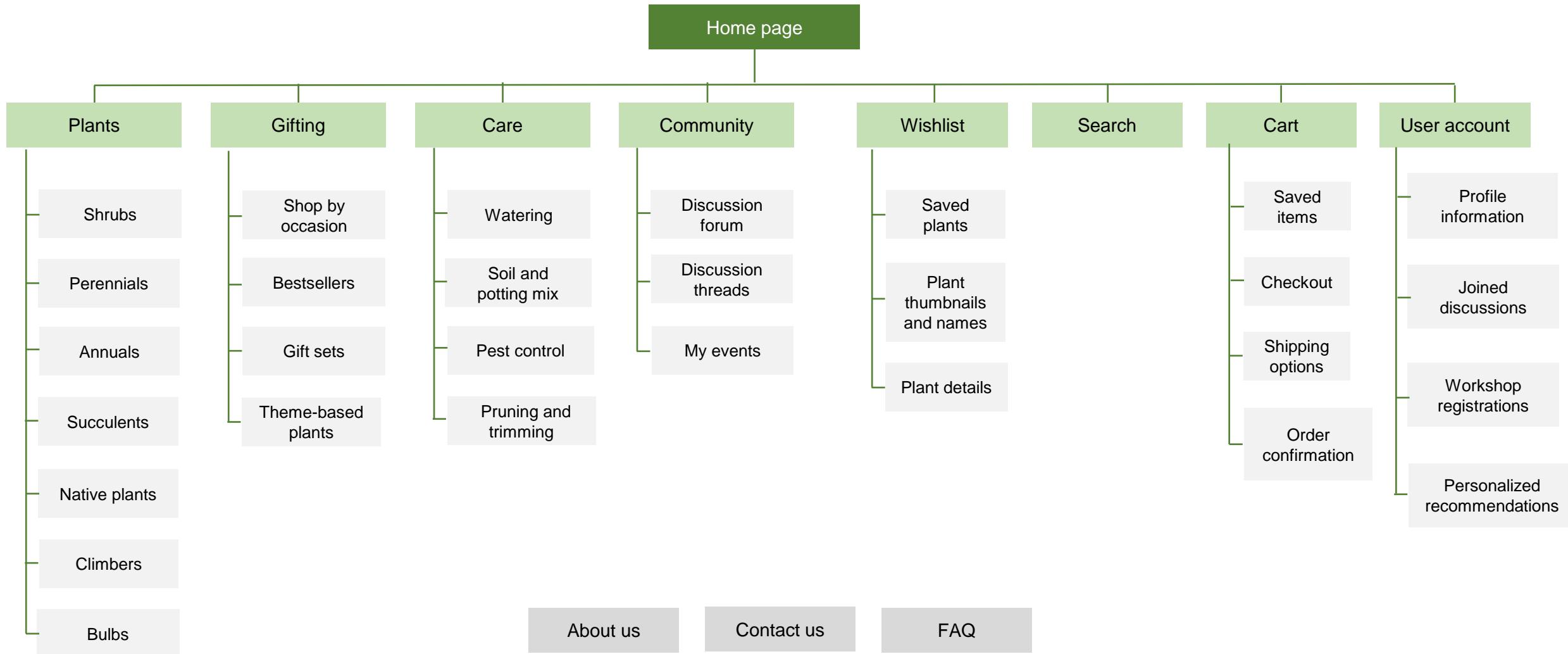
Wireframes

- Information architecture (IA)
- Sitemap
- Paper wireframes
- Digital wireframes

Information architecture (IA)

IBM SkillsBuild

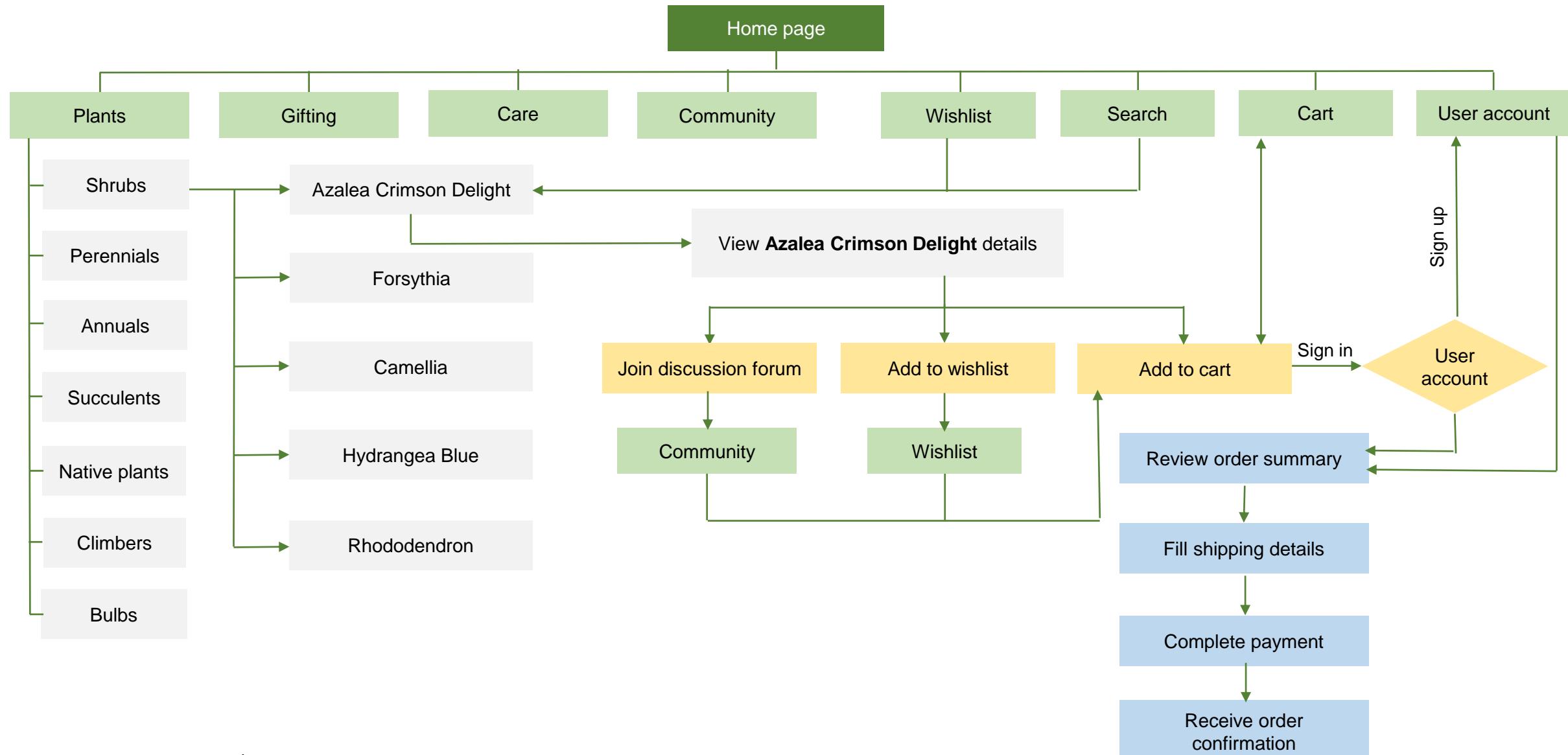
Based on the insights from the card sorting session with test users, the UX design team created the following diagram as a representation of the final IA for the LittleSeed Plants website.



Sitemap

IBM SkillsBuild

Using the finalized IA, the following sitemap shows Gardener Grace's journey from plant selection to purchase.

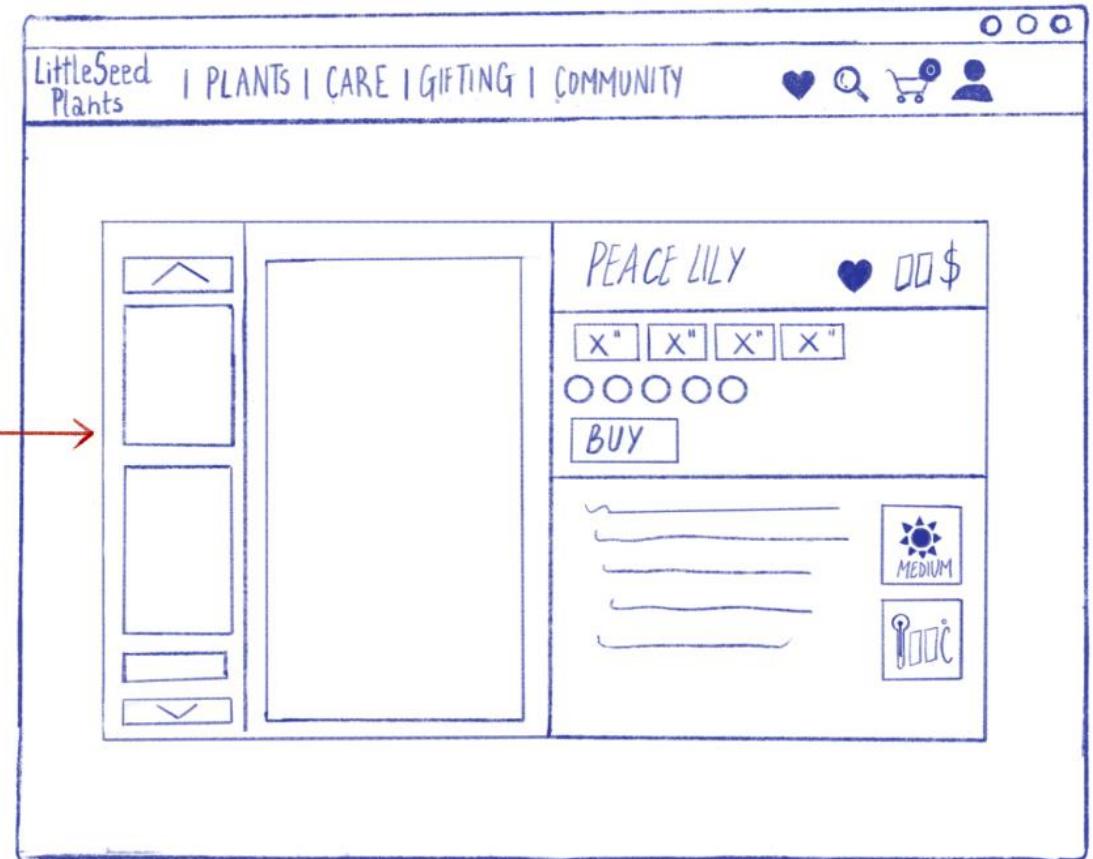
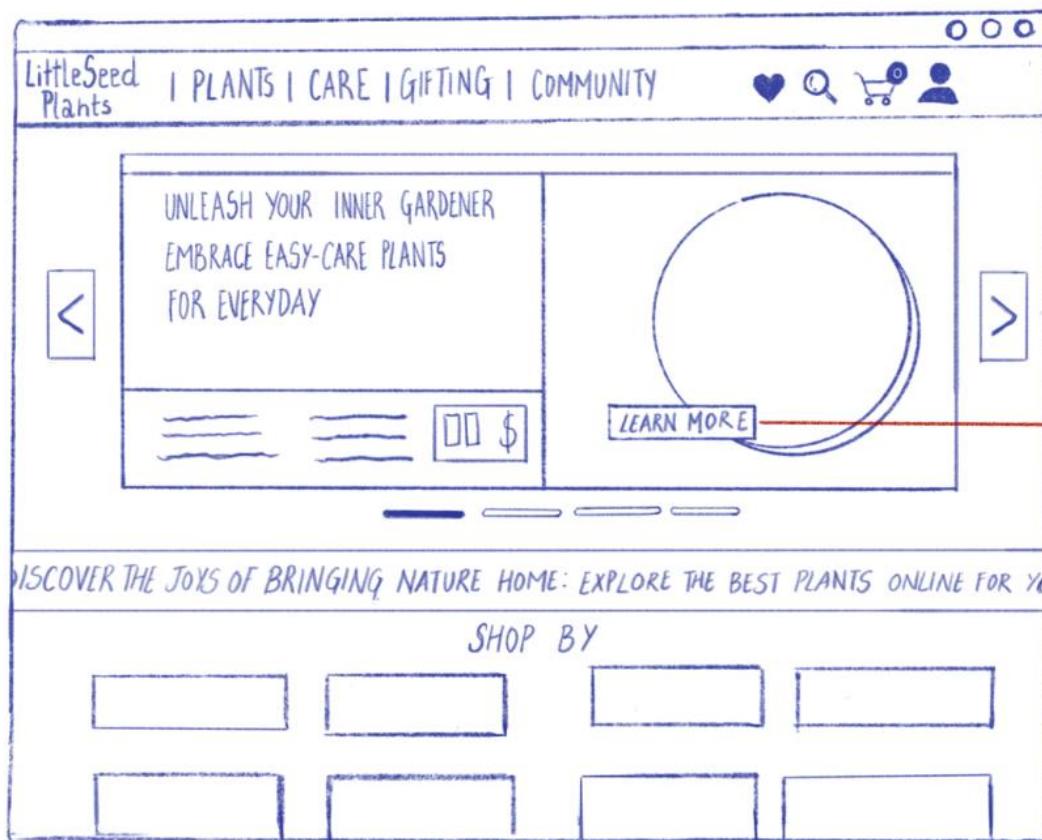


Paper wireframes

IBM SkillsBuild

The following are the low-fidelity (low-fi) paper wireframes for the LittleSeed Plants website. Zoom in to view the wireframes in more detail.

VIEWING FEATURED PRODUCT DETAILS

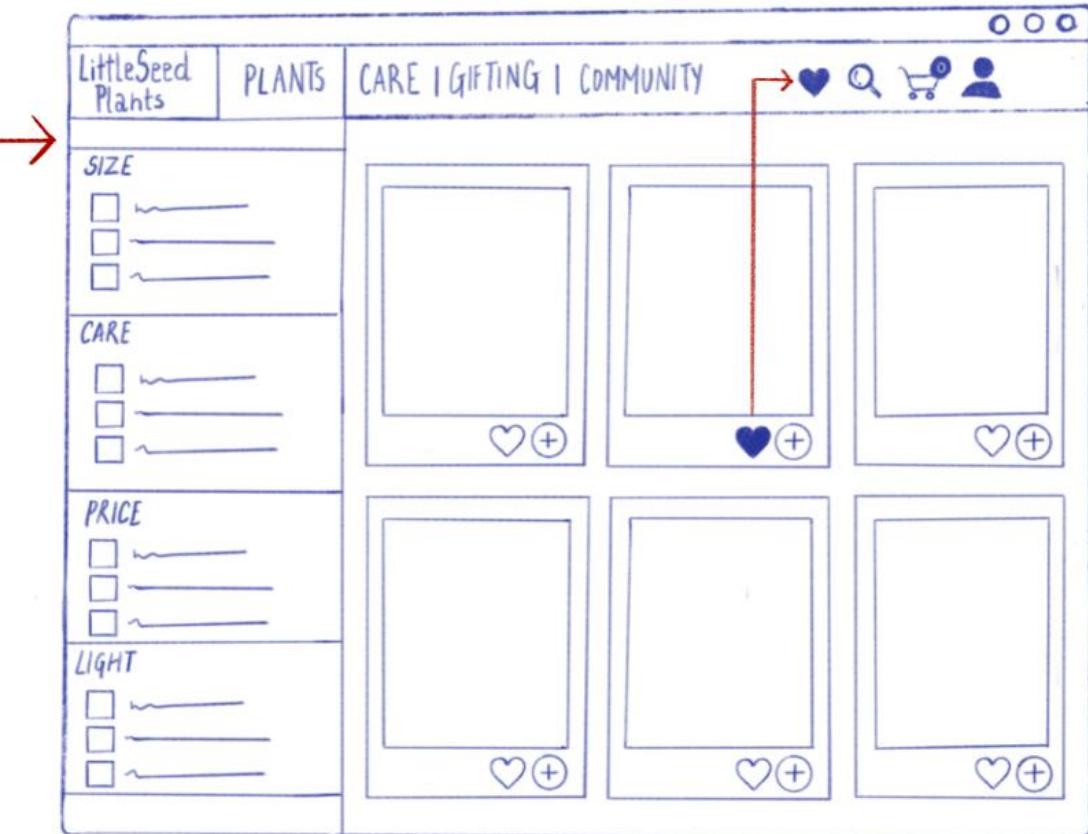
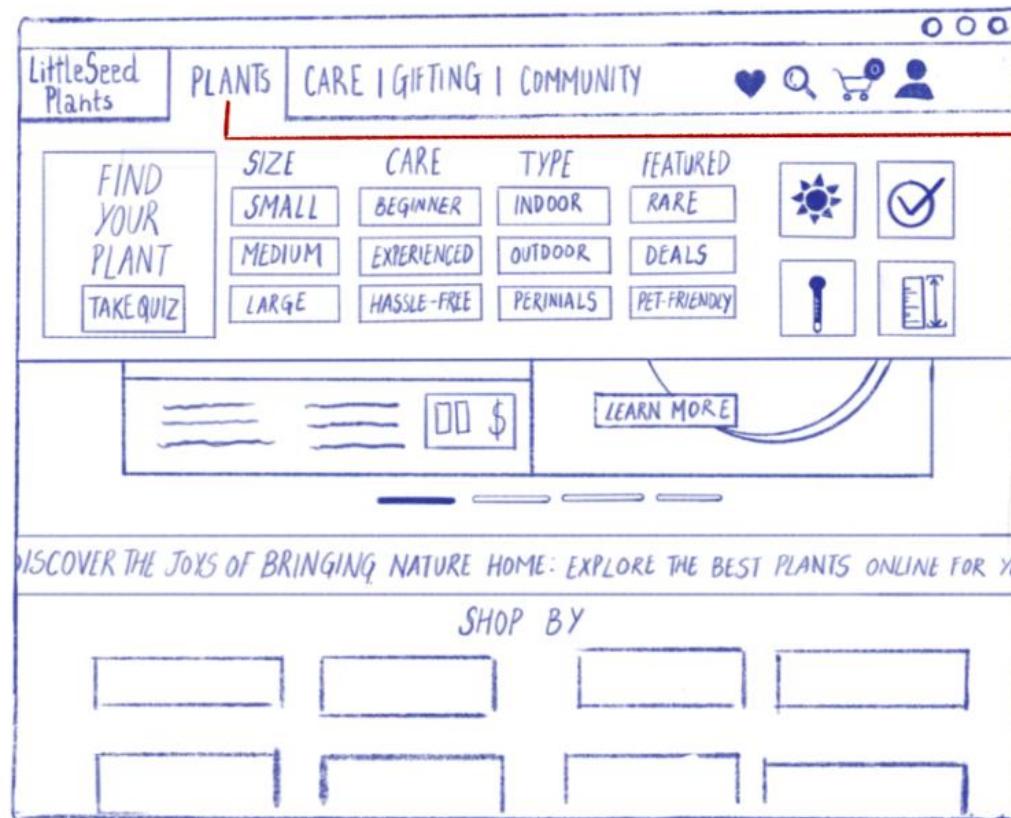


Paper wireframes (cont.)

IBM SkillsBuild

The following are the low-fidelity (low-fi) paper wireframes for the LittleSeed Plants website. Zoom in to view the wireframes in more detail.

VIEWING PLANTS TO SHOP AND ADDING TO WISHLIST

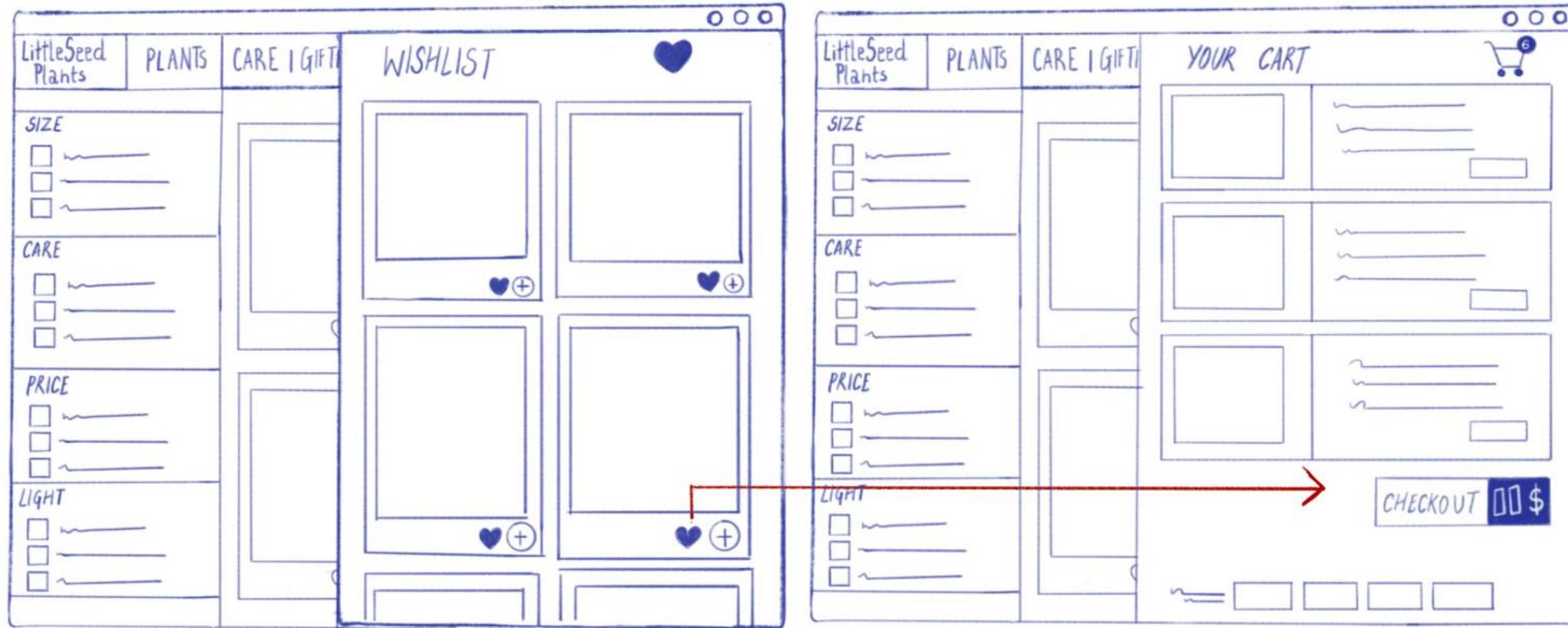


Paper wireframes (cont.)

IBM SkillsBuild

The following are the low-fidelity (low-fi) paper wireframes for the LittleSeed Plants website. Zoom in to view the wireframes in more detail.

VIEWING WISHLIST AND ADDING WISHLISTED ITEMS TO CART

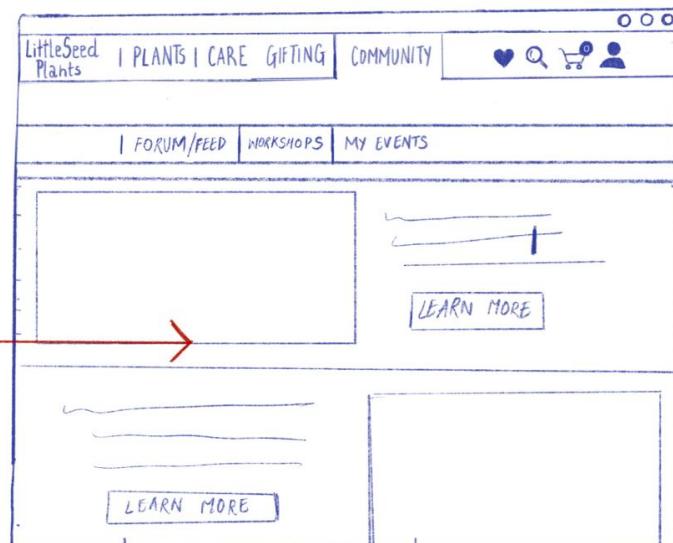
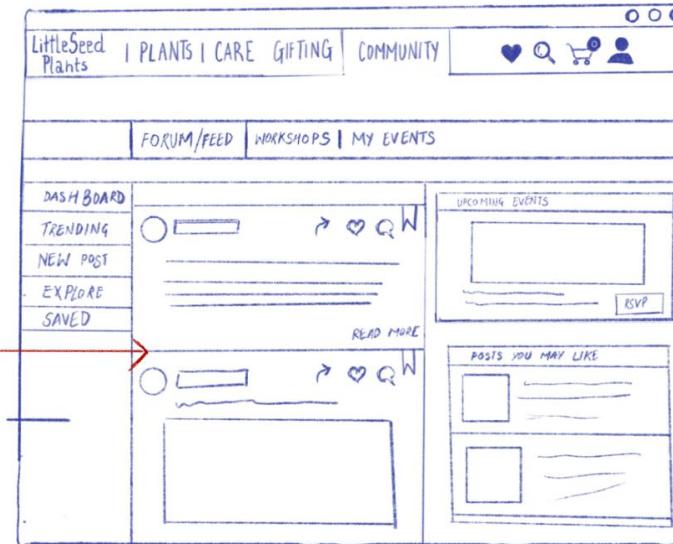
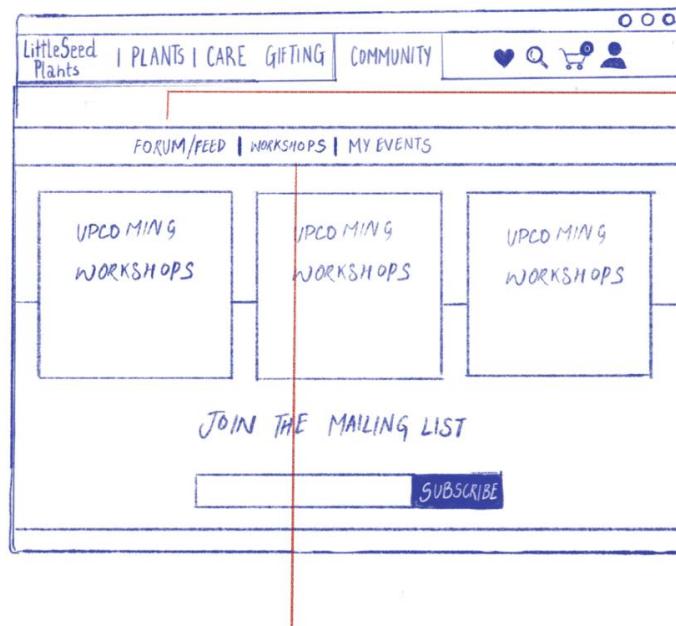


Paper wireframes (cont.)

IBM SkillsBuild

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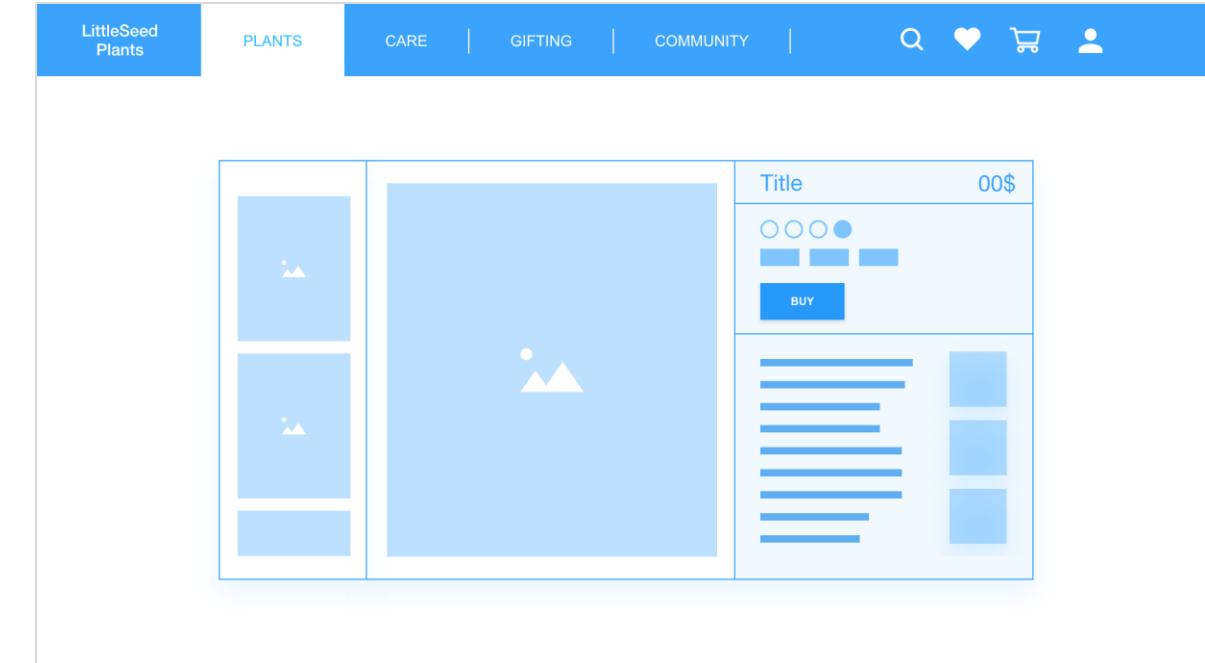
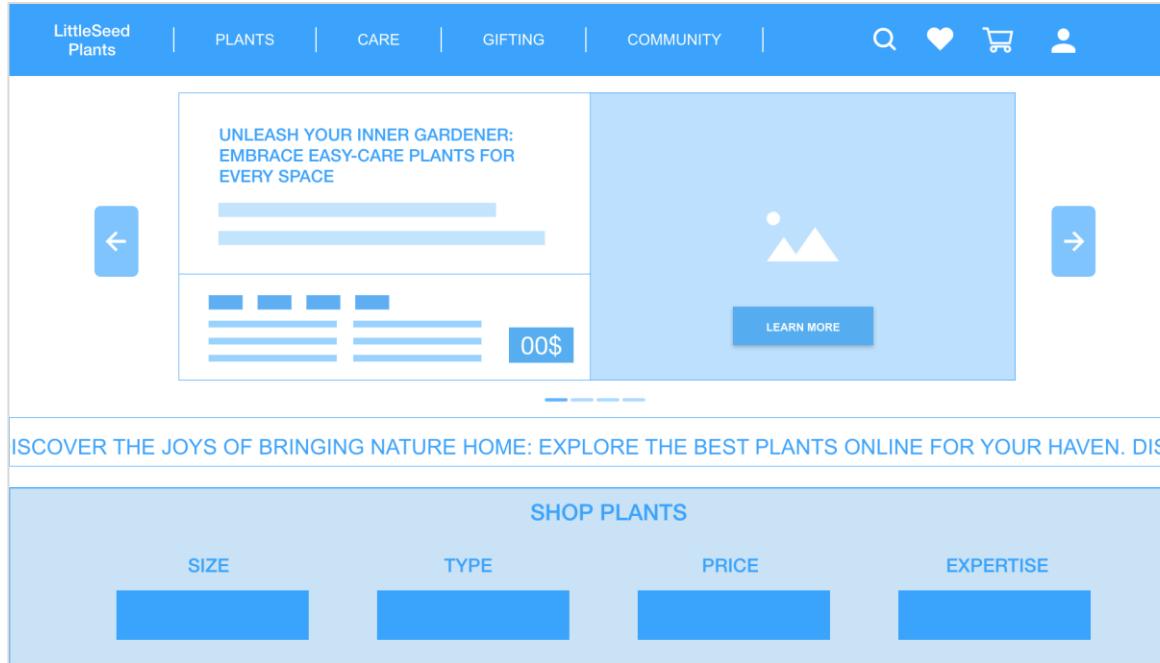
VIEWING FEED AND WORKSHOP
TABS ON THE COMMUNITY PAGE



Digital wireframes

IBM SkillsBuild

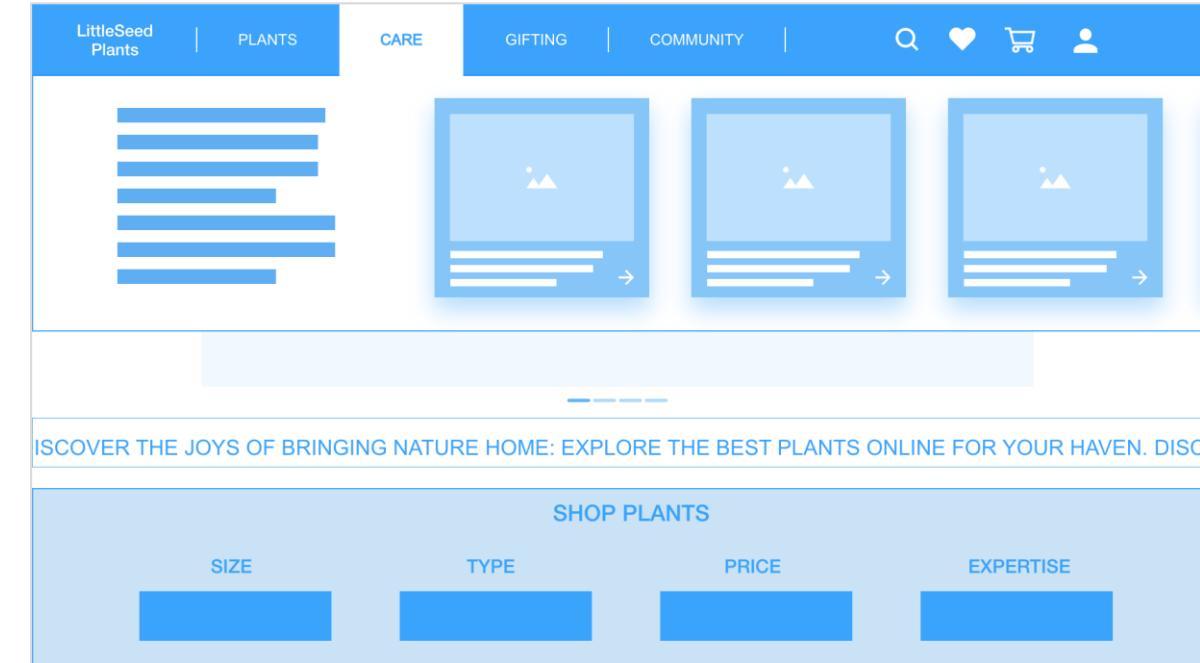
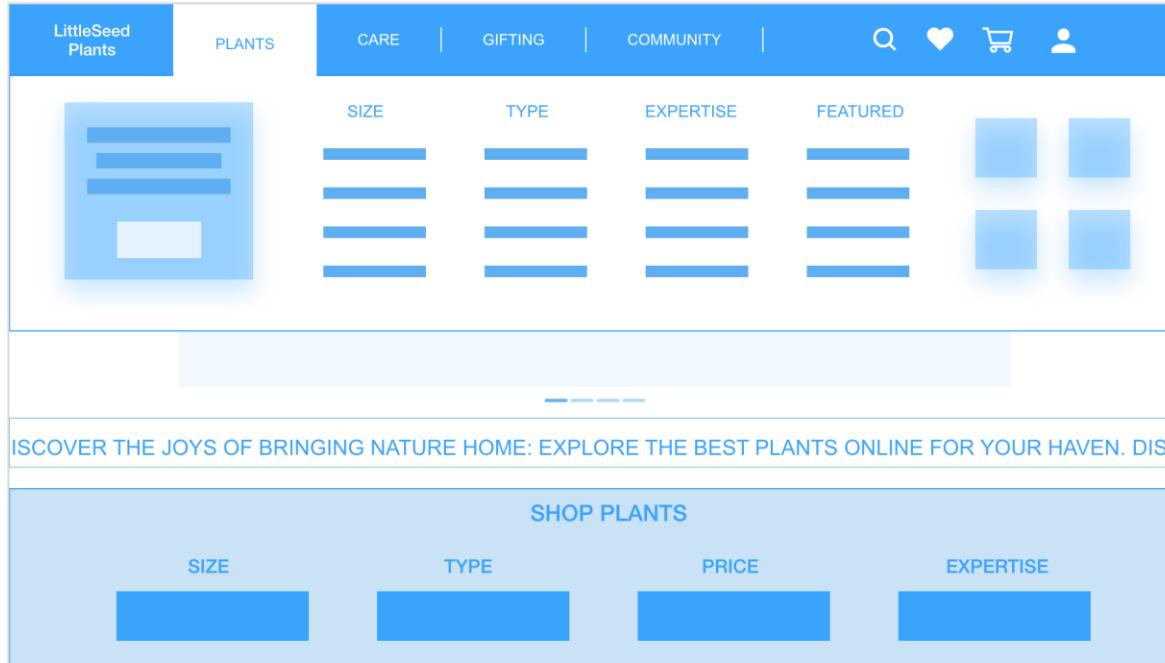
The following are the mid-fidelity (mid-fi) digital wireframes for the LittleSeed Plants website. Zoom in to view the wireframes in more detail.



Digital wireframes (cont.)

IBM SkillsBuild

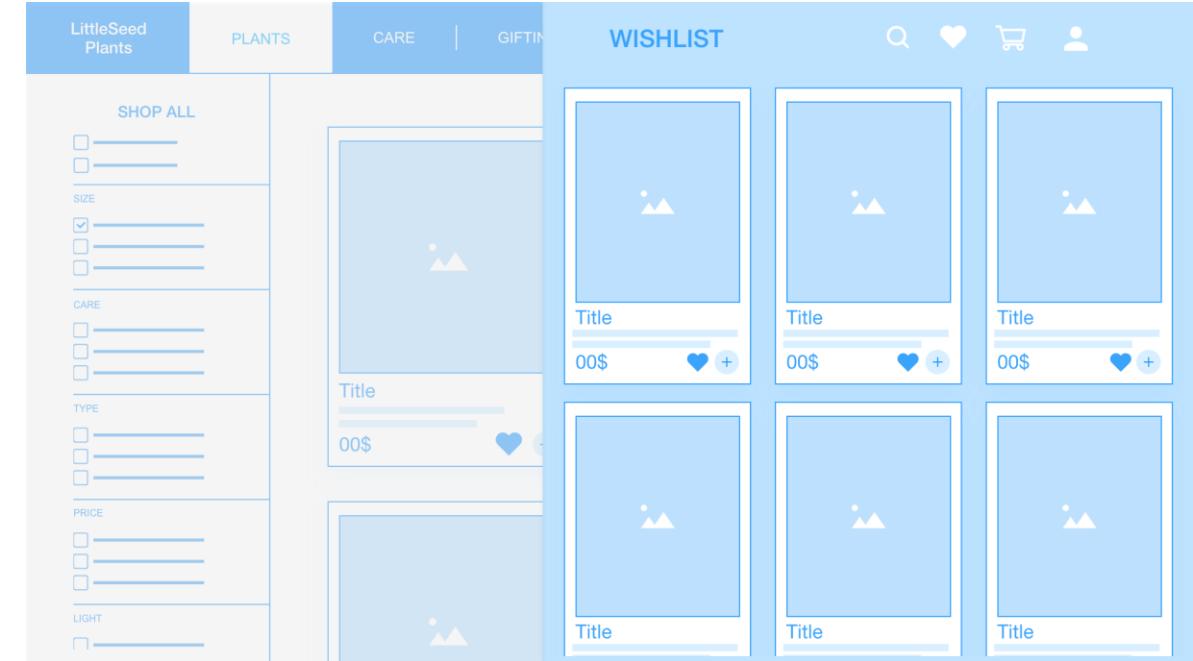
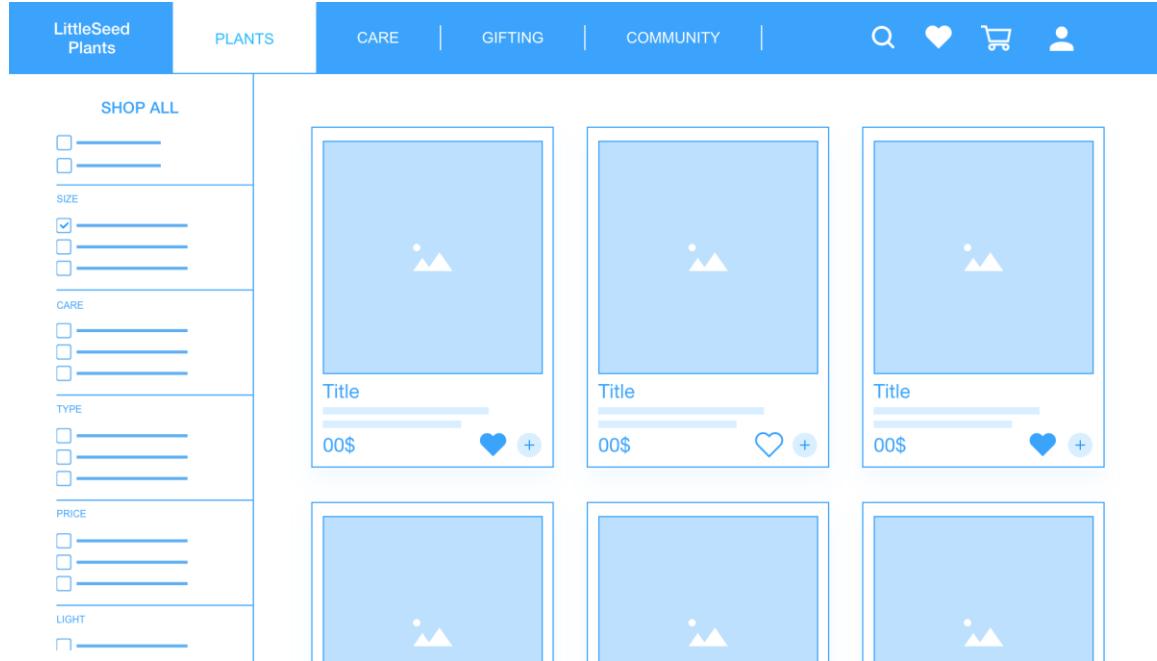
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Digital wireframes (cont.)

IBM SkillsBuild

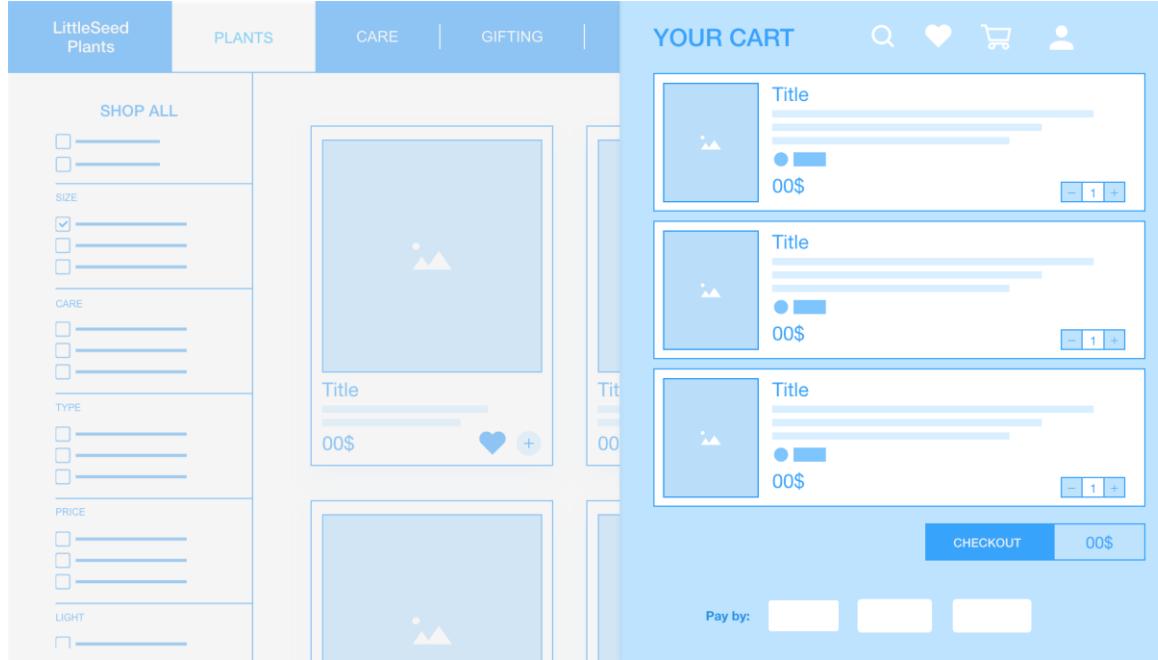
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Digital wireframes (cont.)

IBM SkillsBuild

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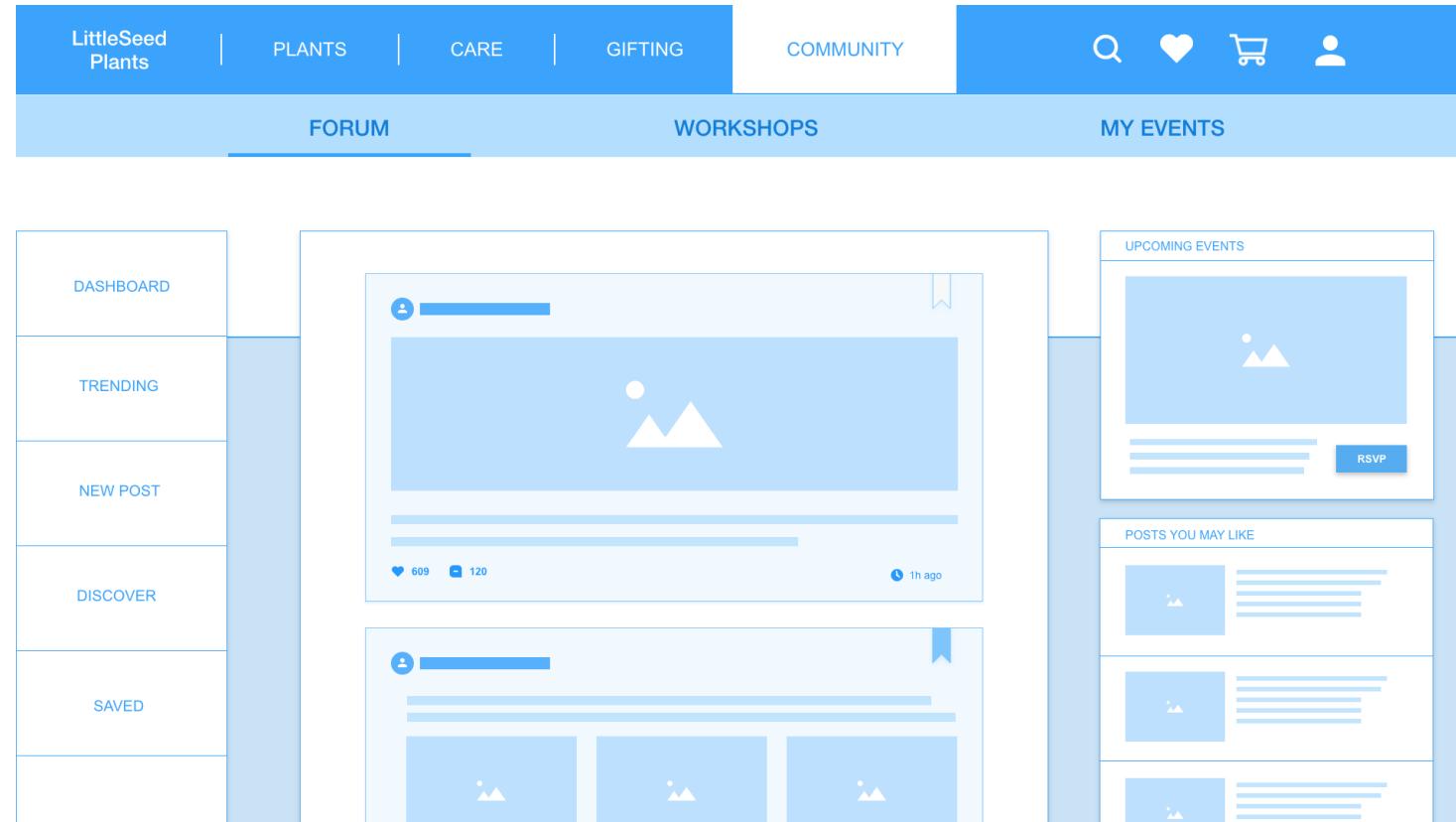


This wireframe illustrates the payment process for LittleSeed Plants. It starts with a 'LittleSeed Plants' header and a progress bar with three steps: 'ORDER', 'SHIPPING', and 'PAYMENT'. The 'PAYMENT' step is currently active. It features a 'Pay by:' section with three empty input fields. Below this are two forms: 'Billing Info' and 'Credit Card Info'. The 'Billing Info' form includes fields for Full Name (John Doe), Address (497 Evergreen Rd.), City (Roseville), Zip Code (95673), and Country (United States). The 'Credit Card Info' form includes fields for Card Number (1234 5678 3456 2456), Cardholder Name (John Doe), Expire Date (05 / 21), and CVV (123). A VISA logo is also present.

Digital wireframes (cont.)

IBM SkillsBuild

The following are the mid-fidelity (mid-fi) digital wireframes for the LittleSeed Plants website. Zoom in to view the wireframes in more detail.



Prototypes

- Accessibility considerations
- UI design
- UI design feedback and resulting changes
- Digital prototypes

Accessibility considerations

IBM SkillsBuild

While working on the user interface (UI) design for the LittleSeed Plants website, the following accessibility guidelines were considered to provide an inclusive experience for all users.

Alternative (alt) text

Provide descriptive alt text for all plants' images so that users with visual impairments can understand the content of the images using screen readers.

Contrast and color

- Ensure sufficient contrast between text and background colors to make content readable for users with low vision or color blindness.
- Avoid using colors alone to convey information.

Typography

Use legible fonts and font sizes so that users can adjust the text size without losing functionality or readability.

Keyboard navigation

Ensure all the interactive elements, such as links, buttons, and forms, can be accessed and operated using a keyboard so that users who're unable to use mouse can navigate easily.

Focus indicators

Make sure that there is a clear and visible focus indicator around the interactive elements when they are selected or activated so that users can navigate the website with assistive technologies.

Form accessibility

- Ensure that all form fields have clear labels and instructions.
- Use proper markup to associate labels with form controls.

Navigation and menus

- Design a clear and consistent navigation structure.
- Use headings to organize content hierarchically and make it easier for screen reader users to navigate.

Responsive design

Ensure the website is responsive and works well on various screen sizes, including mobile devices and tablets.

Video and audio content

Provide closed captions (CCs) and transcripts for videos and audio content for users with visual and/or hearing impairments.

Error handling

- Provide descriptive error messages and suggestions for correcting errors in forms.
- Avoid using colors alone to indicate errors.

Readable links

- Use descriptive link text that provides context about the destination of the link.
- Avoid using generic terms, such as "click here."

Consistent layout

Maintain a consistent layout and design across pages to help users understand and predict the placement of elements.

Page titles

Ensure each page has a descriptive and meaningful title that helps users understand the page's content and purpose.

UI design

IBM SkillsBuild

The following screen captures show the first version of the UI design for the LittleSeed Plants website. Zoom in to view the UI design in more detail.

LittleSeed Plants

PLANTS | CARE | GIFTING | COMMUNITY | 🔎 ❤️ 🛒 ⚙️

Unleash Your Inner Gardener: Embrace Easy-Care Plants For Every Space

>Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua. Ut enim ad minim veniam,

SOON

LEARN MORE

Discover the joys of bringing nature home: explore the best plants online for your haven. discover the joys of b

SHOP PLANTS

SIZE	TYPE	PRICE	EXPERTISE
SMALL	INDOOR	UNDER \$25	BEGINNER

LittleSeed Plants

PLANTS | CARE | GIFTING | COMMUNITY | 🔎 ❤️ 🛒 ⚙️

Azalea Crimson Delight

00\$

4" 6" 12"

BUY

Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua. Ut enim ad minim veniam,

Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua. Ut enim ad minim veniam,

Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua. Ut enim ad minim veniam,

UI design (cont.)

IBM SkillsBuild

The following screen captures show the first version of the UI design for the LittleSeed Plants website. Zoom in to view the UI design in more detail.

LittleSeed Plants

PLANTS CARE GIFTING COMMUNITY

Not sure what's right for you? Take our plant quiz.

TAKEN QUIZ

SIZE	TYPE	EXPERTISE	FEATURED
Small	Indoor	Beginner	On Sale
Medium	Outdoor	Intermediate	Rare
Large	Perennials	Experienced	Filter Plants
Bundles	Pet-Friendly	Hassle-Free	Low-Light

Discover the joys of bringing nature home: explore the best plants online for your haven. discover the joys of b

SHOP PLANTS

SIZE	TYPE	PRICE	EXPERTISE
SMALL	INDOOR	UNDER \$25	BEGINNER

LittleSeed Plants

PLANTS CARE GIFTING COMMUNITY

Discover different guides to caring for your plants

→

→

→

Discover the joys of bringing nature home: explore the best plants online for your haven. discover the joys of b

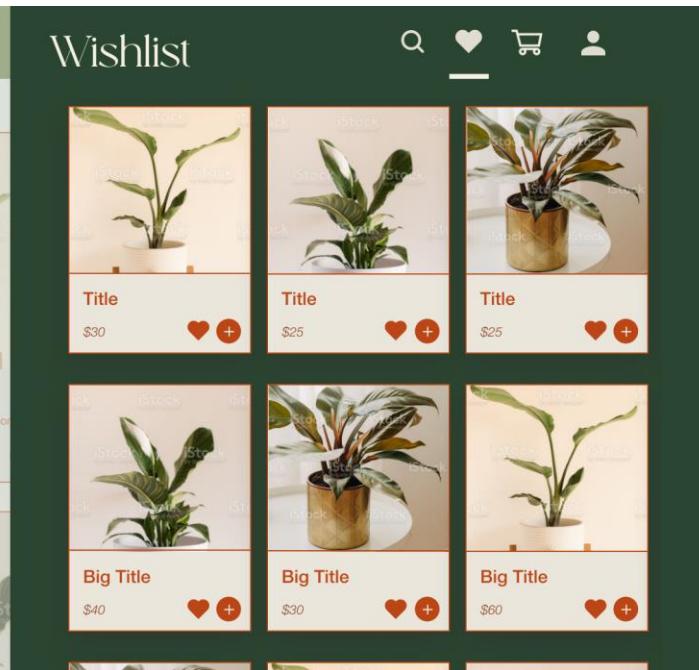
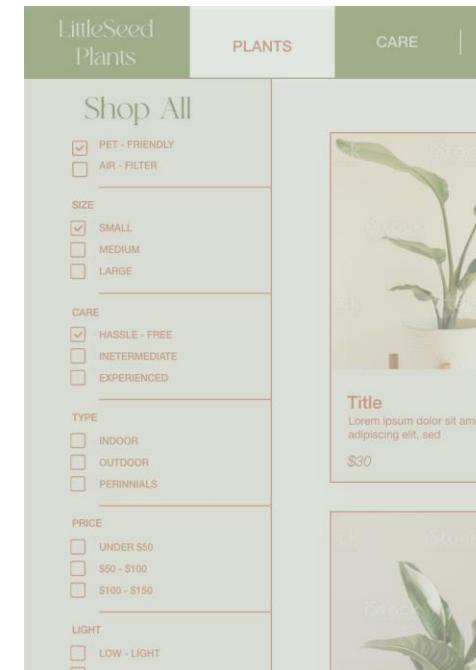
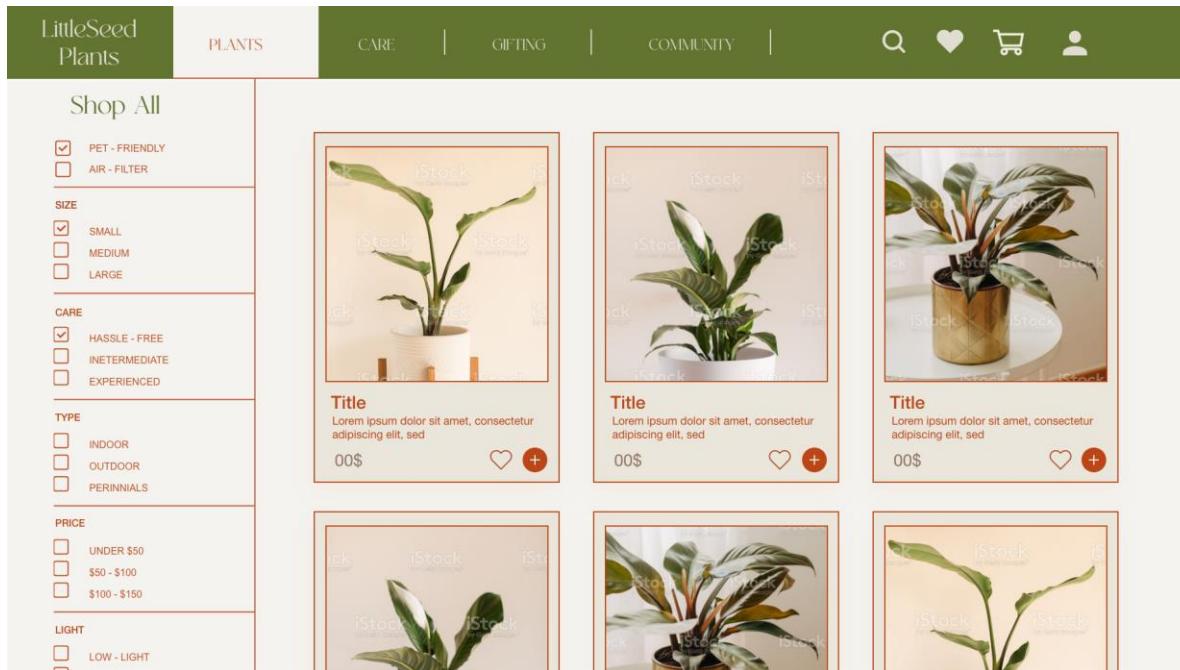
SHOP PLANTS

SIZE	TYPE	PRICE	EXPERTISE
SMALL	INDOOR	UNDER \$25	BEGINNER

UI design (cont.)

IBM SkillsBuild

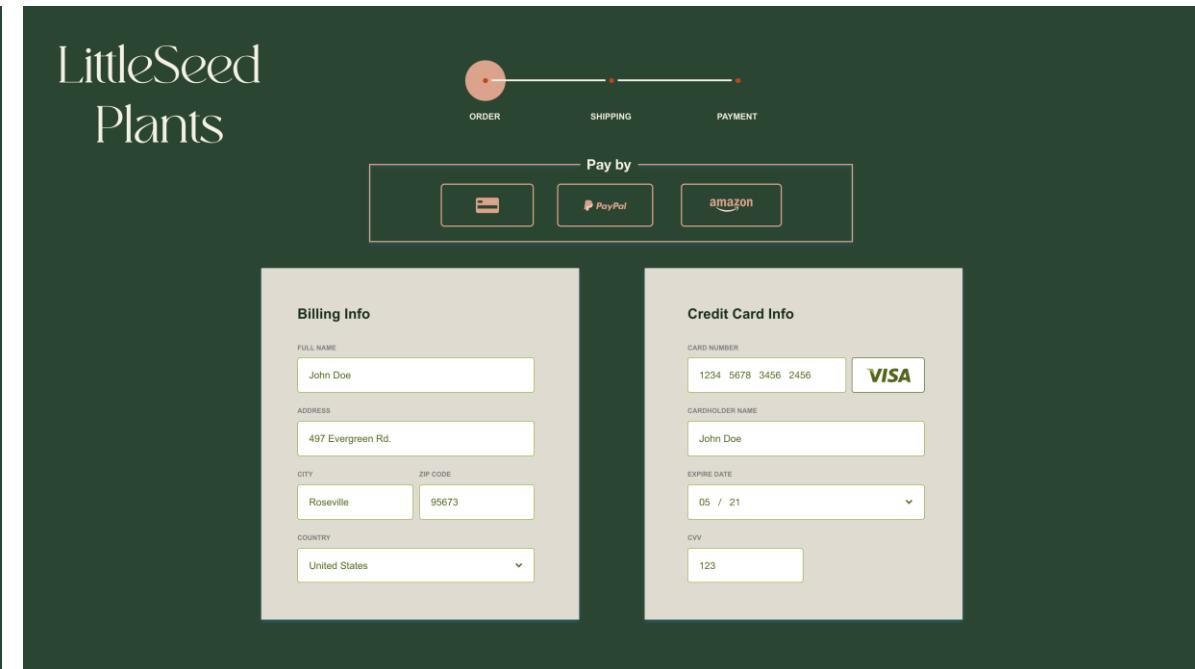
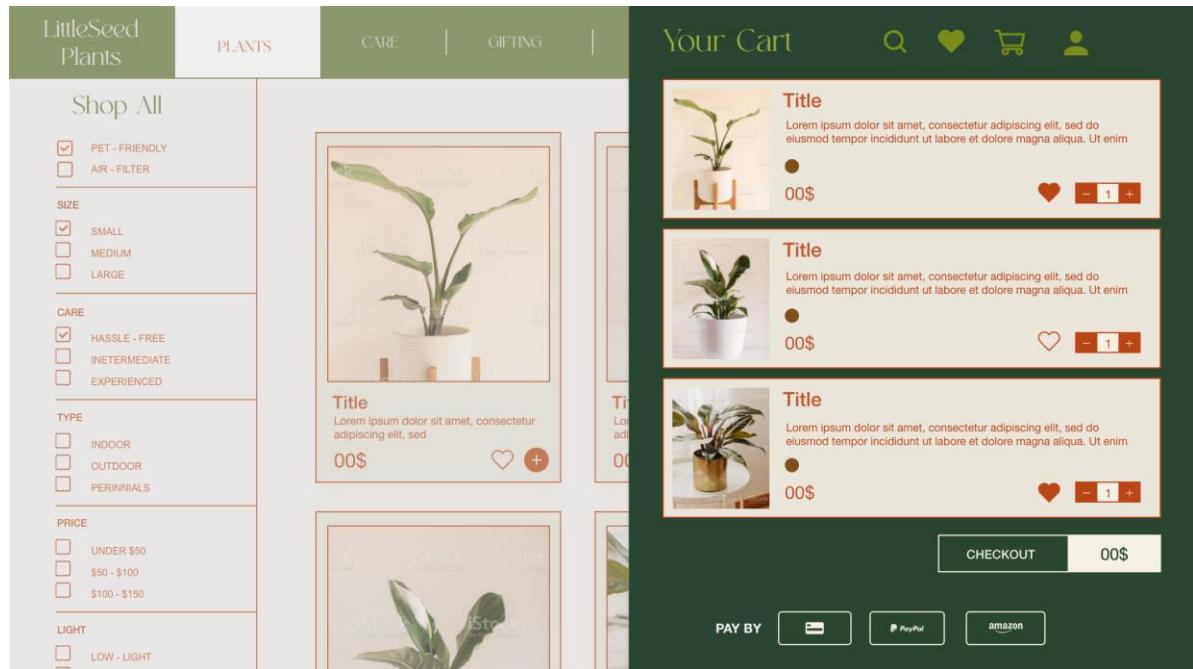
The following screen captures show the first version of the UI design for the LittleSeed Plants website. Zoom in to view the UI design in more detail.



UI design (cont.)

IBM SkillsBuild

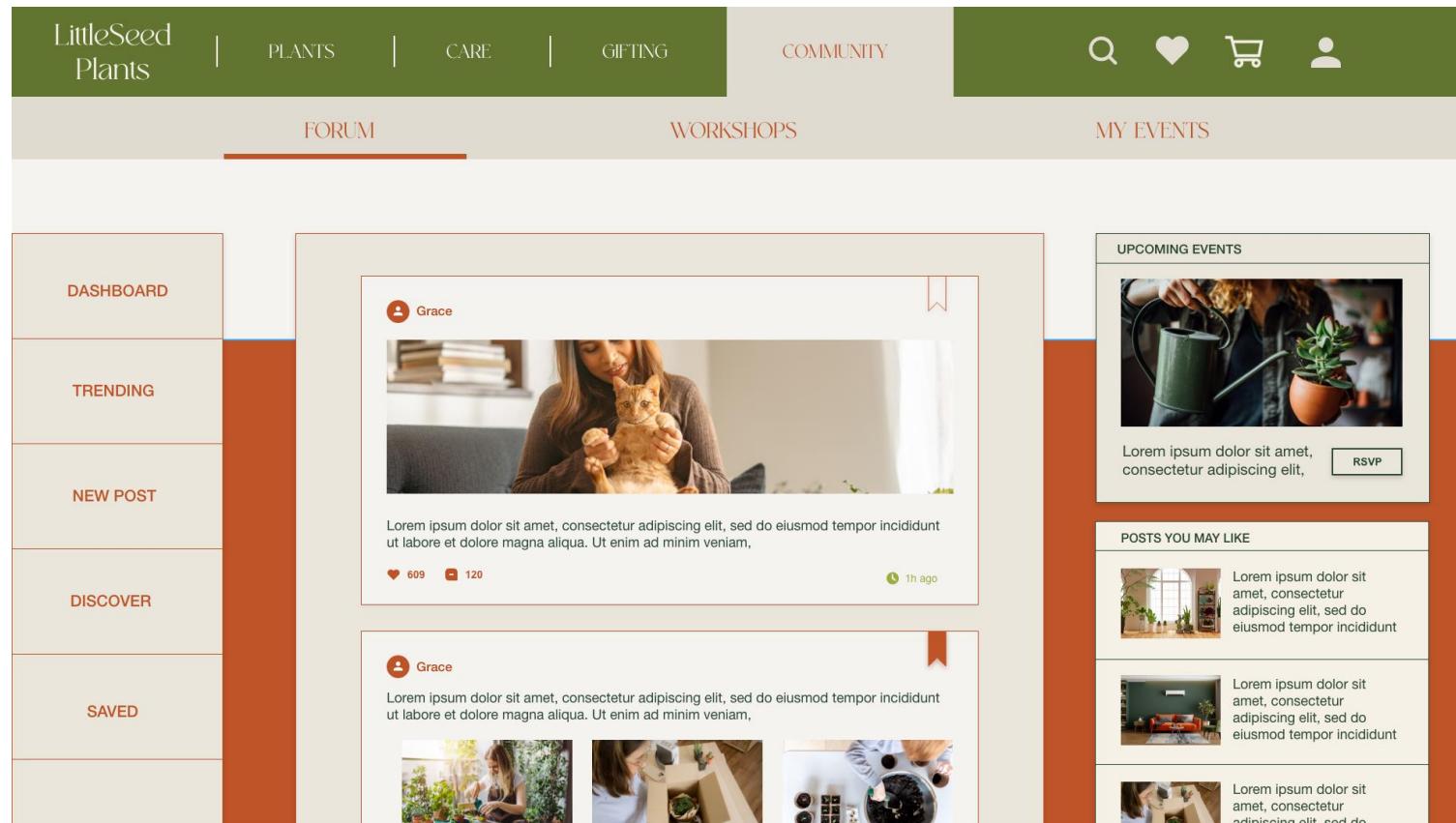
The following screen captures show the first version of the UI design for the LittleSeed Plants website. Zoom in to view the UI design in more detail.



UI design (cont.)

IBM SkillsBuild

The following screen capture shows the first version of the UI design for the LittleSeed Plants website. Zoom in to view the UI design in more detail.



UI design feedback and resulting changes

IBM SkillsBuild

Following is the feedback gathered from the accessibility tool **WebAIM** and **users** about the first version of the UI design for the LittleSeed Plants website, and the resulting changes.



Feedback

The following issues were identified by the accessibility tool, WebAIM:

- **Low contrast and color:** The color contrast for the website is low and does not meet the recommended accessibility standards.
- **Low legibility:** The legibility of the font for the website could be improved to enhance the overall user experience for a wider audience.

The following issues were identified by the user during usability testing:

- **Visual clutter:** The website shows a lot of elements that currently appear cluttered and are not aesthetically pleasing or clean.
- **No control and flexibility:** The website does not allow users to correct errors or make adjustments easily, especially for the cart section where they might add items by mistake or want to modify their selections before finalizing their purchase.
- **No transparency:** The website does not allow users to view a summary of their final orders and confirm if their order was correctly placed.



Overview of changes

To address the feedback received from WebAIM and users, the following changes were made to the design:

- Adjusted the website's overall color scheme to increase its color contrast
- Changed the website's fonts and font sizes wherever required to make the text more legible
- Removed borders on the UI elements wherever required to give the overall design a lighter, more engaging look
- Added more consistent navigation distinctions and buttons, such as **Back** and **Next** buttons, for more control
- Added the ability to remove items from the cart before proceeding to checkout for more flexibility
- Added a confirmation page that offers the option to view the order placed to provide more transparency

Digital prototypes

IBM SkillsBuild

After implementing the feedback from WebAIM and users, the UI design for the LittleSeed Plants website was updated and refined to create its digital prototypes. Zoom in to view the comparison between both versions in detail.

Description of change:

- Adjusted the website's overall color scheme to increase its color contrast
- Changed the website's fonts and font sizes wherever required to make the text more legible

Before receiving feedback

LittleSeed Plants

PLANTS | CARE | GIFTING | COMMUNITY

Unleash Your Inner Gardener: Embrace Easy-Care Plants For Every Space

>Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua. Ut enim ad minim veniam,

S00

LEARN MORE

SHOP PLANTS

SIZE	TYPE	PRICE	EXPERTISE
SMALL	INDOOR	UNDER \$25	BEGINNER

After implementing feedback

LittleSeed Plants

PLANTS | CARE | GIFTING | COMMUNITY

Unleash Your Inner Gardener: Embrace Easy-Care Plants For Every Space

Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua.

S00

LEARN MORE

SHOP PLANTS

SIZE	TYPE	PRICE	EXPERTISE
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Digital prototypes (cont.)

IBM SkillsBuild

After implementing the feedback from WebAIM and users, the UI design for the LittleSeed Plants website was updated and refined to create its digital prototypes. Zoom in to view the comparison between both versions in detail.

Description of change:

- Adjusted the website's overall color scheme to increase its color contrast
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Before receiving feedback

LittleSeed Plants

PLANTS CARE GIFTING COMMUNITY

Not sure what's right for you? Take our plant quiz.

TAKE QUIZ

SIZE	TYPE	EXPERTISE	FEATURED
Small	Indoor	Beginner	On Sale
Medium	Outdoor	Intermediate	Rare
Large	Perennials	Experienced	Filter Plants
Bundles	Pet-Friendly	Hassle-Free	Low-Light

Discover the joys of bringing nature home: explore the best plants online for your haven. discover the joys of b

SHOP PLANTS

SIZE	TYPE	PRICE	EXPERTISE
SMALL	INDOOR	UNDER \$25	BEGINNER

After implementing feedback

LittleSeed Plants

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SHOP PLANTS

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Digital prototypes (cont.)

IBM SkillsBuild

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Description of change:

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Before receiving feedback

LittleSeed Plants | PLANTS CARE GIFTING COMMUNITY

Discover different guides to caring for your plants

Discover the joys of bringing nature home: explore the best plants online for your haven. discover the joys of b

SHOP PLANTS

SIZE	TYPE	PRICE	EXPERTISE
SMALL	INDOOR	UNDER \$25	BEGINNER

After implementing feedback

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SHOP PLANTS

SIZE	TYPE	PRICE	EXPERTISE
Small	Indoor	Under \$25	Beginner

Digital prototypes (cont.)

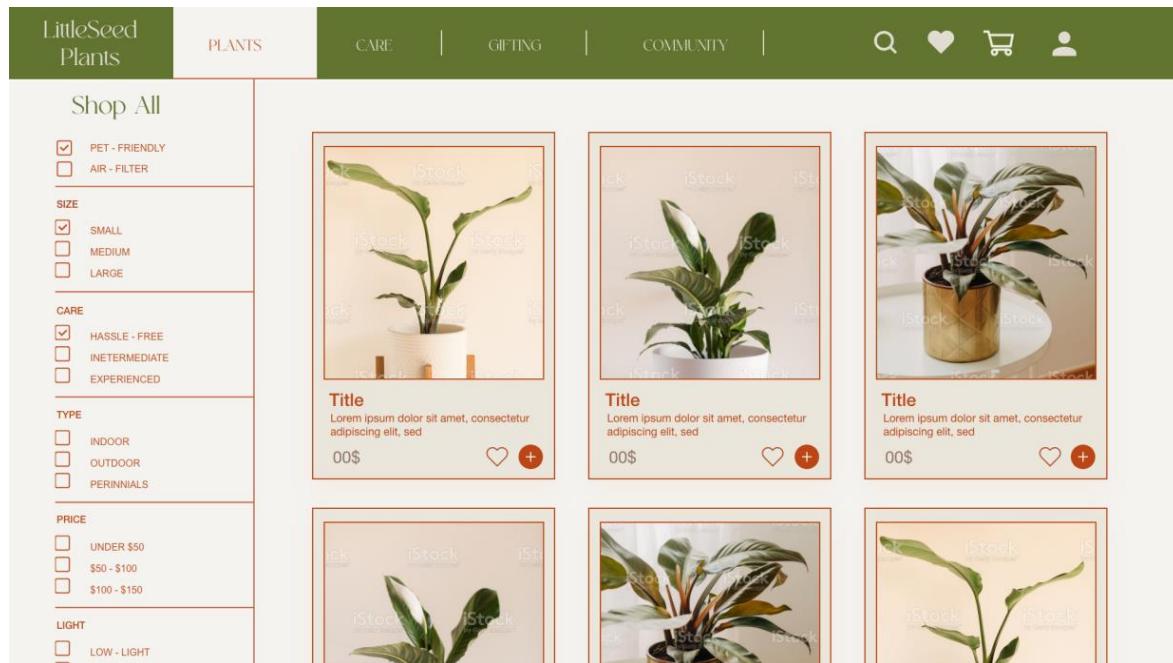
IBM SkillsBuild

After implementing the feedback from WebAIM and users, the UI design for the LittleSeed Plants website was updated and refined to create its digital prototypes. Zoom in to view the comparison between both versions in detail.

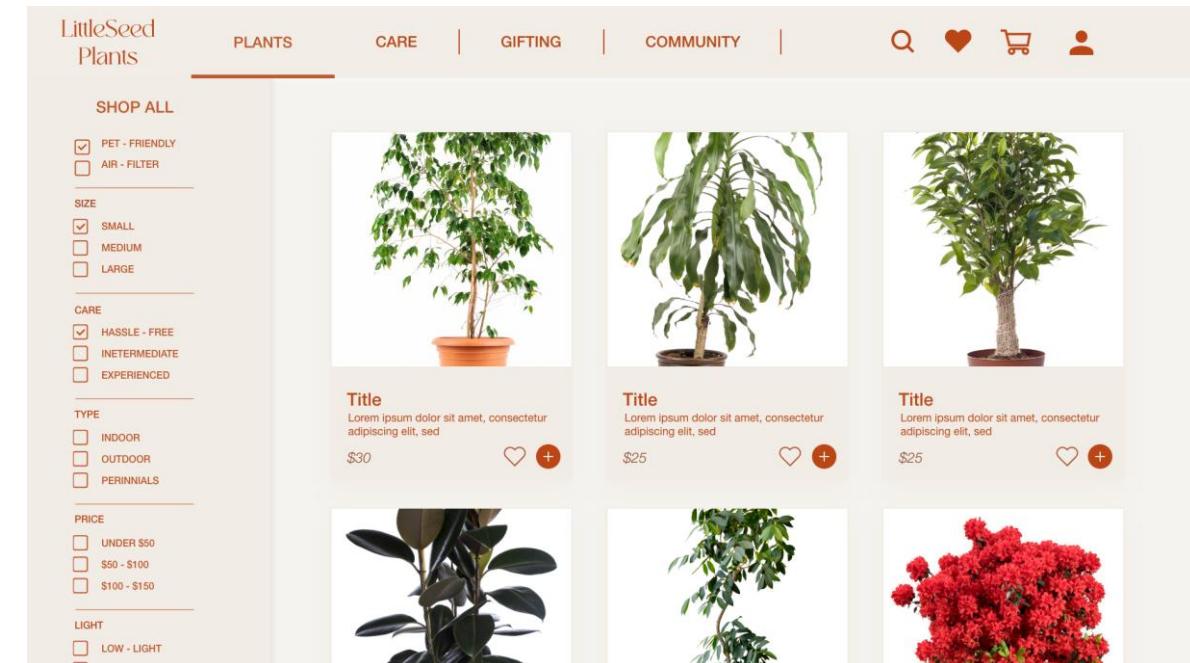
Description of change:

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- Changed the website's fonts and font sizes wherever required to make the text more legible

Before receiving feedback



After implementing feedback



Digital prototypes (cont.)

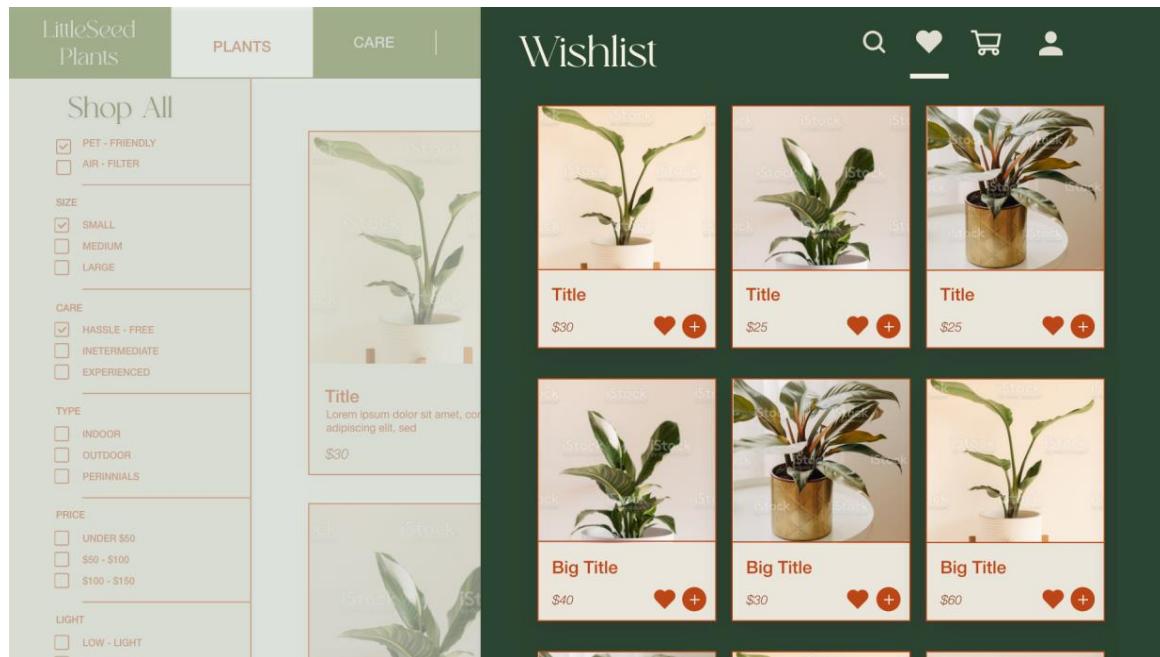
IBM SkillsBuild

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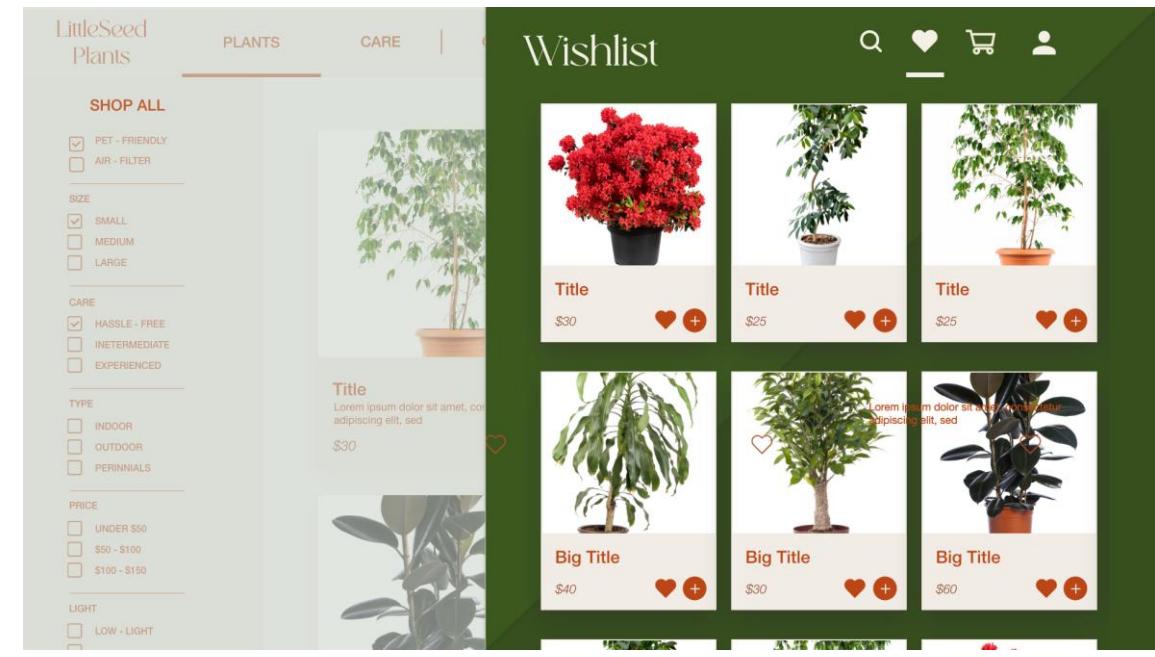
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Before receiving feedback



After implementing feedback



Digital prototypes (cont.)

IBM SkillsBuild

After implementing the feedback from WebAIM and users, the UI design for the LittleSeed Plants website was updated and refined to create its digital prototypes. Zoom in to view the comparison between both versions in detail.

Description of change:

- Adjusted the website's overall color scheme to increase its color contrast
- Changed the website's fonts and font sizes wherever required to make the text more legible

Before receiving feedback

This image shows a digital prototype of the LittleSeed Plants website as it appeared before receiving user feedback. The interface has a dark green header bar with the brand name 'LittleSeed Plants' and navigation links for 'PLANTS', 'CARE', 'GIFTING', and 'COMMUNITY'. Below the header is a search bar and a user icon. The main content area features a 'FORUM' tab, which is currently selected, showing a post by 'Grace' featuring a photo of her pet cat. To the right of the forum is a 'WORKSHOPS' section with an 'UPCOMING EVENTS' card showing a person watering a plant. Below these are 'MY EVENTS' and 'POSTS YOU MAY LIKE' sections. On the left side, there is a vertical sidebar with links for 'DASHBOARD', 'TRENDING', 'NEW POST', 'DISCOVER', and 'SAVED'. The overall color palette is dark with orange and white accents.

After implementing feedback

This image shows the same digital prototype after implementing user feedback. The changes include a lighter, more pastel-themed color palette. The header bar now includes a magnifying glass icon for search, a heart icon for likes, a shopping cart icon for gifting, and a user icon. The 'COMMUNITY' link in the header is now highlighted in red. The main content area retains the 'FORUM' tab but includes a new 'WORKSHOPS' tab. The 'UPCOMING EVENTS' card has been moved to a separate 'UPCOMING EVENTS' section on the right. The 'MY EVENTS' and 'POSTS YOU MAY LIKE' sections remain. The sidebar on the left has been simplified, showing only 'DASHBOARD', 'TRENDING', 'NEW POST', 'DISCOVER', and 'SAVED'. The overall aesthetic is cleaner and more modern.

Digital prototypes (cont.)

IBM SkillsBuild

After implementing the feedback from WebAIM and users, the UI design for the LittleSeed Plants website was updated and refined to create its digital prototypes. Zoom in to view the comparison between both versions in detail.

Description of change:

- Removed borders on the UI elements wherever required to give the overall design a lighter, more engaging look

Before receiving feedback

This image shows a digital prototype of the LittleSeed Plants website's product page for the 'Azalea Crimson Delight' plant. The header features a dark green bar with the logo 'LittleSeed Plants' and navigation links for 'PLANTS', 'CARE', 'GIFTING', and 'COMMUNITY'. Below the header is a search bar and user icons. The main content area displays a large image of the azalea plant in a terracotta pot, with smaller images above and below it. To the right of the image is a product card with the name 'Azalea Crimson Delight', a price of '00\$', and a heart icon. It includes size options (4", 6", 12") and a 'BUY' button. Below the card is a block of placeholder text: 'Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua. Ut enim ad minim veniam,' repeated three times. There are also three small orange square color swatches.

After implementing feedback

This image shows the same digital prototype after feedback implementation. The header remains the same. The main content area now features a larger, more prominent image of the azalea plant in a black pot. The product card has been simplified, showing only the name 'Azalea Crimson Delight', a heart icon, and a price of '\$20'. The size options (4", 6", 12") and 'BUY' button are still present. The placeholder text block has been removed. To the right of the product card, there are three new icons: a thermometer labeled 'MID', a sun icon labeled 'FULL', and a leaf icon.

Digital prototypes (cont.)

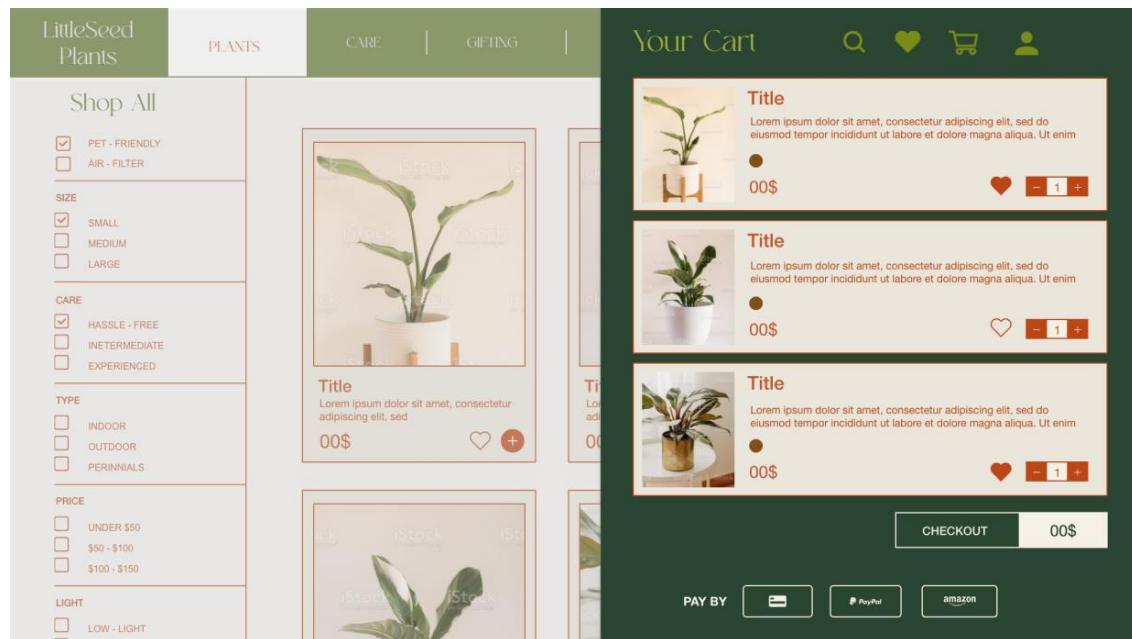
IBM SkillsBuild

After implementing the feedback from WebAIM and users, the UI design for the LittleSeed Plants website was updated and refined to create its digital prototypes. Zoom in to view the comparison between both versions in detail.

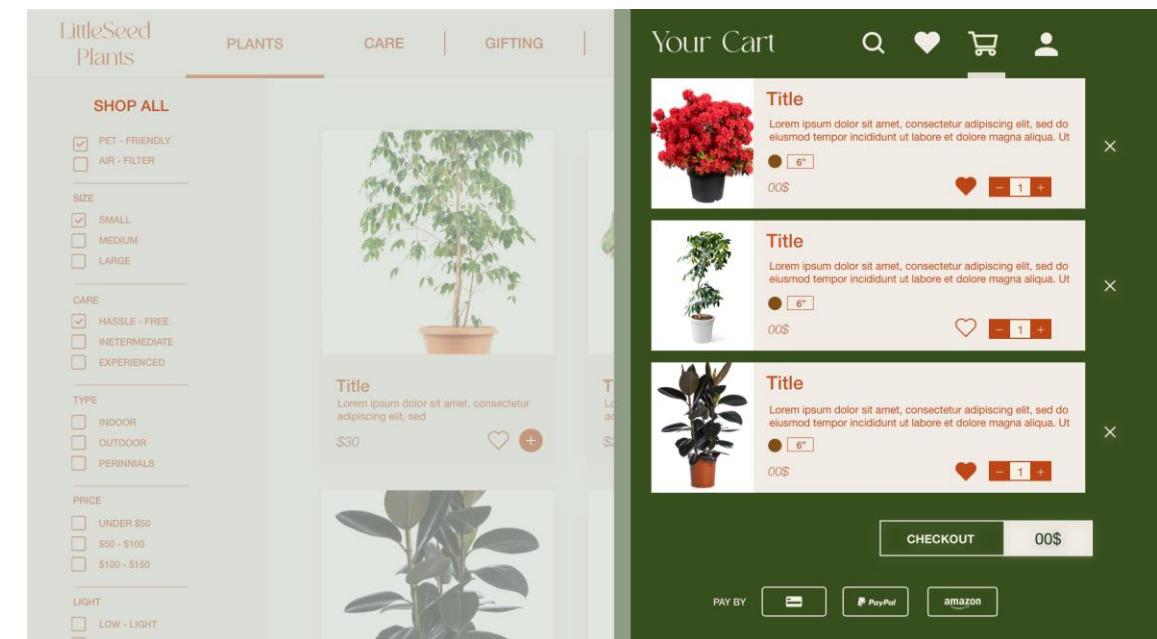
Description of change:

- Added the ability to remove items from the cart before proceeding to checkout for more flexibility

Before receiving feedback



After implementing feedback



Digital prototypes (cont.)

IBM SkillsBuild

After implementing the feedback from WebAIM and users, the UI design for the LittleSeed Plants website was updated and refined to create its digital prototypes. Zoom in to view the comparison between both versions in detail.

Description of change:

- Added more consistent navigation distinctions and buttons, such as the **Back** and **Next** buttons, for more control

Before receiving feedback

LittleSeed Plants

ORDER SHIPPING PAYMENT

Billing Info

Credit Card Info

Pay by

Bank PayPal Amazon

Full Name: John Doe
Address: 497 Evergreen Rd.
City: Roseville Zip Code: 95673
Country: United States

Card Number: 1234 5678 3456 2456
Cardholder Name: John Doe
Expire Date: 05 / 21
CVV: 123

After implementing feedback

LittleSeed Plants

ORDER SHIPPING PAYMENT

PAY BY

Bank PayPal Amazon

Billing Info

Credit Card Info

Full Name: John Doe
Address: 497 Evergreen Rd.
City: Roseville Zip Code: 95673
Country: United States

Card Number: 1234 5678 3456 2456
Cardholder Name: John Doe
Expire Date: 05 / 21
CVV: 123

BACK NEXT

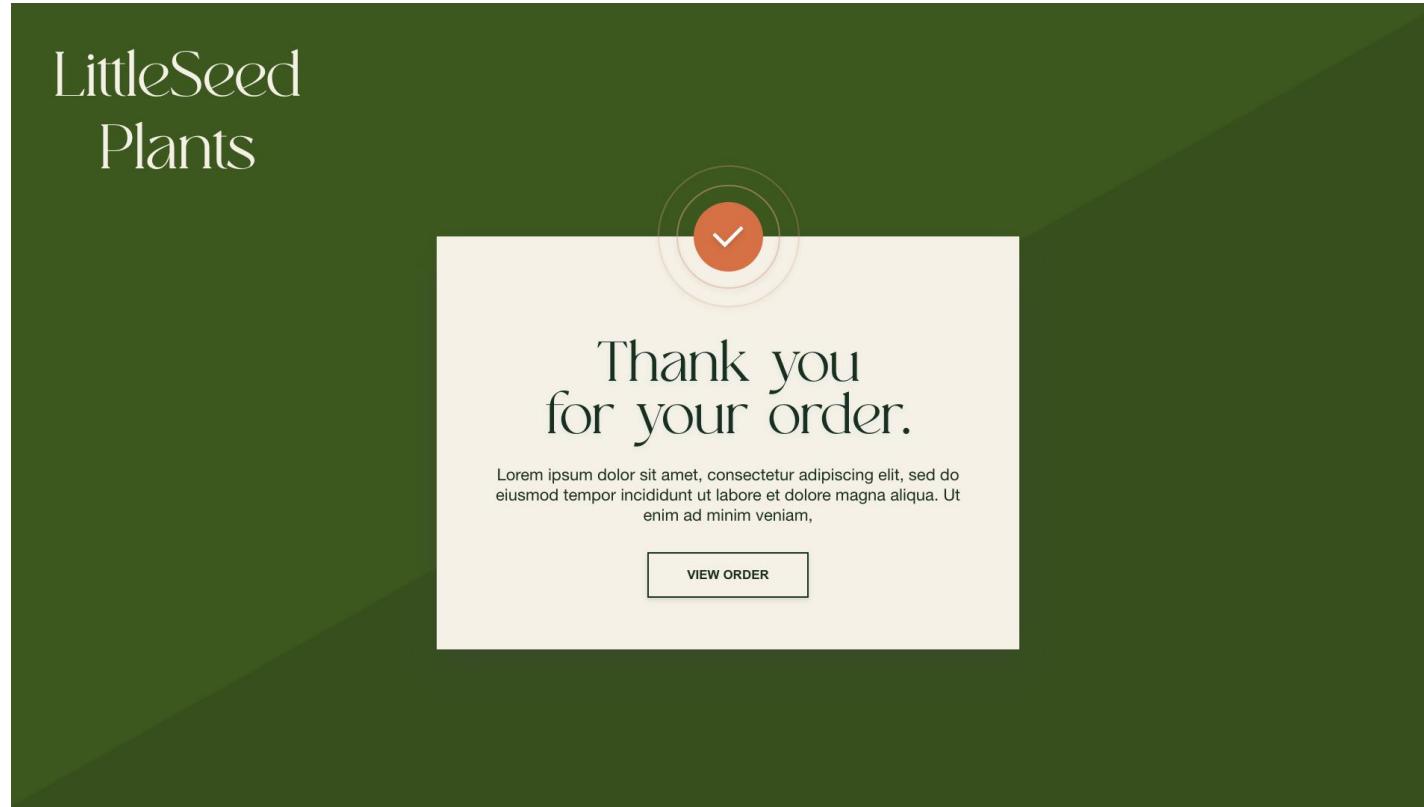
Digital prototypes (cont.)

IBM SkillsBuild

After implementing the feedback from WebAIM and users, the UI design for the LittleSeed Plants website was updated and refined to create its digital prototypes. Zoom in to view the comparison between both versions in detail.

Description of change:

- Added a confirmation page that offers the option to view the order placed to provide more transparency



Usability testing

- Test plan
- Tools for usability testing
- Usability test report
- Revised digital prototypes

Test plan

IBM SkillsBuild

Following is the usability testing plan for the LittleSeed Plants website.



Introduction

- **Project name:** Usability testing for the LittleSeed Plants website
- **Project team:**
 - **Recruiter:** Les
 - **Facilitator:** Jamie
 - **Observer and data logger:** Fawad
- **Date:** September 19
- **Objective:** To assess the overall usability and user experience of the LittleSeed Plants website and identify improvement areas.



Test goals and objectives

- **Overall goal:** To determine how effectively and easily users can browse, search for, and purchase plants on the website.
- **Specific objectives:**
 - Identify usability issues affecting user interactions.
 - Evaluate the website's navigation and IA.
 - Assess the clarity and effectiveness of product descriptions.
 - Test the checkout process for efficiency and user-friendliness.
 - Collect user feedback and suggestions for improvement.



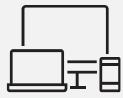
Recruitment criteria for participants

- **Total number:** 7
- **Profile:** The participants must:
 - Be between 25 and 40 years of age
 - Have a moderate to an advanced understanding of plant-related knowledge
 - Have an experience in online purchases
- **Recruitment method:** Online and in-house database
- **Incentives:** Gift vouchers worth \$20 each

Test plan (cont.)

IBM SkillsBuild

Following is the usability testing plan for the LittleSeed Plants website.



Testing environment

- **Methods:** Moderated, user analytics and tracking, and questionnaire
- **Location:** In lab
- **Devices:** Desktop, laptop, tablet, and smartphones
- **Browsers:** Latest versions of Safari, Chrome, and Microsoft Edge
- **Internet connection:** A stable internet connection is required for lab testing



Test scenarios and tasks

- **Usability scenarios:** The usability testing will focus on the following scenarios:
 - Browsing the website to find a potted flowering plant
 - Adding the selected plant to the shopping cart
 - Completing the checkout process
- **Test tasks:** Based on the scenarios, the participants will be asked to complete the following tasks:
 - **Task 1:** You're interested in purchasing a potted flowering plant for your home garden. Start by browsing the LittleSeed Plants website to find a selection of potted flowering plants. Once you identify a plant that you like, select it to view its details. While viewing the details of the potted flowering plant you selected, find information about its care instructions, size, and price.
 - **Task 2:** You've decided to purchase the potted flowering plant you just viewed. Add this plant to your shopping cart. After adding the plant to your cart, review the cart's contents to ensure it includes the correct item. Confirm the quantity and price of the plant in your cart.
 - **Task 3:** You're ready to complete your purchase. Proceed to the checkout process. Provide the necessary information to complete the purchase. However, don't enter your actual payment details. Perform the steps until you reach the point where you would enter payment information.

Test plan (cont.)

IBM SkillsBuild

Following is the usability testing plan for the LittleSeed Plants website.



Data analysis

The data collected through the testing will be analyzed as follows:

- Identify all usability issues encountered by the participants during the test sessions. This includes issues related to navigation, task completion, content comprehension, and overall user satisfaction.
- Categorize identified issues into specific groups for a structured analysis. Common categories might include navigation, layout, content, functionality, and performance.
- Assign a severity rating to all identified usability issues based on their potential impact on user experience and overall usability. The severity level might range from level 0 to level 4.
- Use qualitative feedback and comments provided by the participants to complement the quantitative data, providing a detailed view of user sentiment and suggestions for improvement.



Reporting

The report will document details for the following sections:

- Introduction
- Executive summary
- Scenarios and data collection
- Detailed findings
- Key findings
- Recommendations
- Conclusion

Test plan (cont.)

IBM SkillsBuild

Following is the usability testing plan for the LittleSeed Plants website.



Test materials

- **Prototype or website URL:** Provide access to the LittleSeed Plants website.
- **Usability testing script:** A detailed script that outlines the scenarios, tasks, and other additional instructions for the participants.
- **Questionnaire:** A post-test questionnaire to gather the participants' feedback and opinions.



Testing procedure

- Brief the participants about the goals and expectations of the usability testing session.
- Share test scenarios and tasks with the participants, encouraging them to think aloud while completing them.
- Observe the participants to take notes during the session and record the sessions for later analysis.
- Debrief the participants after each test to gather initial feedback and impressions.



Metrics and data collection

- To collect quantitative data, the following usability criteria and metrics will be used:
 - **Task success rate:** For each task, the percentage of the participants who successfully completed a task will be noted to find out the effectiveness of the UI.
 - **Time on task:** For each task, the average time it takes for the participants to complete it will be assessed to identify potential usability issues related to task complexity or design.
 - **System usability scale (SUS) scores:** Based on the post-test questionnaire completed by the participants, the SUS scores will be calculated to check the overall user satisfaction with the website.
- To collect qualitative data, comments and observations will be noted from the participants.

Tools for usability testing

IBM SkillsBuild

Following tools were used to conduct and analyze data collected from usability testing for the LittleSeed Plants website.

Maze

The tool helped in:

- **Analyzing data** by tracking user clicks to provide insights into which elements received the most attention and which paths users followed.
- **Measuring task success rate** by analyzing how many participants successfully completed specific tasks. This provided insights into the effectiveness of the design.

Hotjar

The tool helped in:

- **Analyzing session recordings** and observing how the participants interacted with the live website. This helped in identifying usability issues and pain points.
- **Assessing user interactions with online forms** that provided insights into which form fields users struggled with the most.

Optimal Workshop

The tool helped in **calculating time on task** by recording task completion times and analyzing user performance. This provided valuable insights into user efficiency and usability.

Usability test report

IBM SkillsBuild

Following is the usability test report for the LittleSeed Plants website.

Introduction

- **Project:** Usability testing for the LittleSeed Plants website
- **Date:** September 19
- **Number of test participants:** 7
- **Participants' profile:** The participants must:
 - Be between 25 and 40 years of age
 - Have a moderate to an advanced understanding of plant-related knowledge
 - Have an experience in online purchases
- **Recruitment method:** Online and in-house database
- **Testing methods:** Moderated, user analytics and tracking, and questionnaire
- **Location:** In lab

Executive summary

The purpose of this usability testing was to evaluate the UX of the LittleSeed Plants website, focusing on its ease of use, navigation, and overall usability.

Scenarios and data collection

The participants performed specific tasks for the following scenarios:

- Browse the website to find a potted flowering plant
- Add the selected plant to the shopping cart
- Complete the checkout process

The following metrics were used to collect data after the participants completed all tasks:

- Task success rate
- Time on task
- SUS scores
- Comments and observations

Usability test report

IBM SkillsBuild

Detailed findings

The following table shows detailed findings for each task based on the metrics:

Task details	Task success rate	Time on task	Comments
Browsing for a plant	75%	2 minutes	<ul style="list-style-type: none">The participants appreciated the variety of plant categories.Several participants had difficulty finding the filter for indoor vs. outdoor plants.
Adding to cart	70%	0.5 minute	<ul style="list-style-type: none">The participants were able to add items to the cart easily.A few participants struggled with updating the cart quantity.
Completing the checkout process	65%	1 minute	<ul style="list-style-type: none">Most participants navigated the checkout process smoothly.Some participants encountered issues with the shipping address form, which annoyed them.

Key findings

The following table shows key findings along with their severity levels based on the detailed findings:

Issue	Description	Severity level
Cluttered home page	85% of the participants found the home page cluttered, which overwhelmed them. They expressed difficulty in quickly identifying featured products and promotions.	Level 1 
Confusing search functionality	While the search bar was prominently located, 71% of the participants were confused and struggled with filtering and sorting search results effectively.	Level 2 
Challenging checkout process	The checkout process was generally smooth, but 42% of the participants encountered issues with the shipping address form, causing frustration.	Level 3 
Difficulties with mobile responsiveness	The website's mobile responsiveness received mixed reviews. 57% of the participants reported difficulty in reading the website's content on smaller screens.	Level 4 

Recommendations

Based on the key findings, the following recommendations are provided to improve the user experience on the LittleSeed Plants website:

- **Redesign the home page:** Simplify the home page layout to reduce clutter and improve visual hierarchy.
- **Enhance the search functionality:** Update the search functionality to include better sorting and filtering options.
- **Update the checkout process:** Conduct a detailed review of the shipping address form to eliminate any issues during checkout.
- **Optimize mobile responsiveness:** Optimize the website's layout for mobile devices to ensure a seamless experience.

Conclusion

Usability testing revealed valuable insights into the strengths and weaknesses of the LittleSeed Plants website.

Implementing the recommended improvements can enhance the website's usability and user satisfaction, ultimately leading to a better online shopping experience for users.

Revised digital prototypes

IBM SkillsBuild

Based on the analysis and recommendations in the usability test report, the digital prototypes for the LittleSeed Plants website were updated to implement the users' feedback. Zoom in to view the revised prototype in detail.

Description of change:

- **Redesign the home page:** Simplify the home page layout to reduce clutter and improve visual hierarchy.

The image shows a revised digital prototype of the LittleSeed Plants home page. At the top, there is a navigation bar with the "LittleSeed Plants" logo, followed by links for PLANTS, CARE, GIFTING, and COMMUNITY, and icons for search, heart, cart, and user profile. Below the navigation is a hero section with a green overlay containing the text "Unleash Your Inner Gardener: Embrace Easy-Care Plants For Every Space" and a "LEARN MORE" button. To the right of the text is a photograph of a woman watering a large potted plant on a windowsill. On either side of the text block are orange navigation arrows. Below the hero section is a banner with the text "Discover the joys of bringing nature home: explore the best plants online for your haven. discover the joys of b". The main content area features a green header with the text "SHOP PLANTS" and four filter categories: SIZE (Small), TYPE (Indoor), PRICE (Under \$25), and EXPERTISE (Beginner).

SIZE	TYPE	PRICE	EXPERTISE
Small	Indoor	Under \$25	Beginner

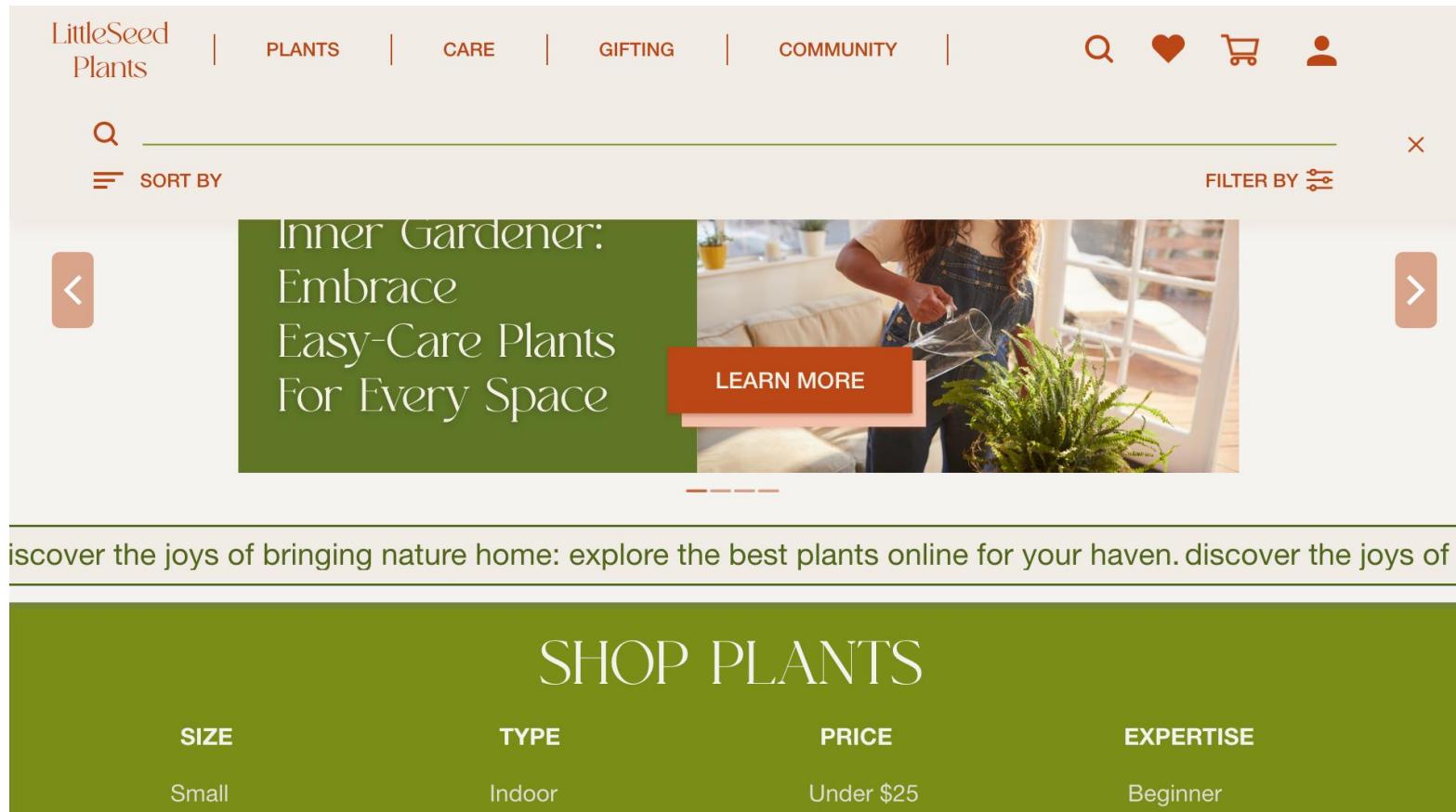
Revised digital prototypes (cont.)

IBM SkillsBuild

Based on the analysis and recommendations in the usability test report, the digital prototypes for the LittleSeed Plants website were updated to implement the users' feedback. Zoom in to view the revised prototype in detail.

Description of change:

- **Enhance the search functionality:** Update the search functionality to include better sorting and filtering options.



Revised digital prototypes (cont.)

IBM SkillsBuild

Based on the analysis and recommendations in the usability test report, the digital prototypes for the LittleSeed Plants website were updated to implement the users' feedback. Zoom in to view the revised prototype in detail.

Description of change:

- **Update the checkout process:** Conduct a detailed review of the shipping address form to eliminate any issues during checkout.

The image shows a digital prototype of a payment page for LittleSeed Plants. The page has a dark green background. At the top left is the LittleSeed Plants logo. In the center, there is a navigation bar with three steps: ORDER, SHIPPING, and PAYMENT. The PAYMENT step is highlighted with a red circle. Below the navigation is a "PAY BY" section with icons for Bank, PayPal, and Amazon. The main content area is divided into two sections: "Billing Info" and "Credit Card Info". The "Billing Info" section contains fields for FULL NAME (John Doe), ADDRESS (497 Evergreen Rd.), CITY (Roseville), ZIP CODE (95673), and COUNTRY (United States). The "Credit Card Info" section contains fields for CARD NUMBER (1234 5678 3456 2456), CARDHOLDER NAME (John Doe), EXPIRE DATE (05 / 21), and CVV (123). At the bottom left is a "BACK" button, and at the bottom right is a "NEXT" button.

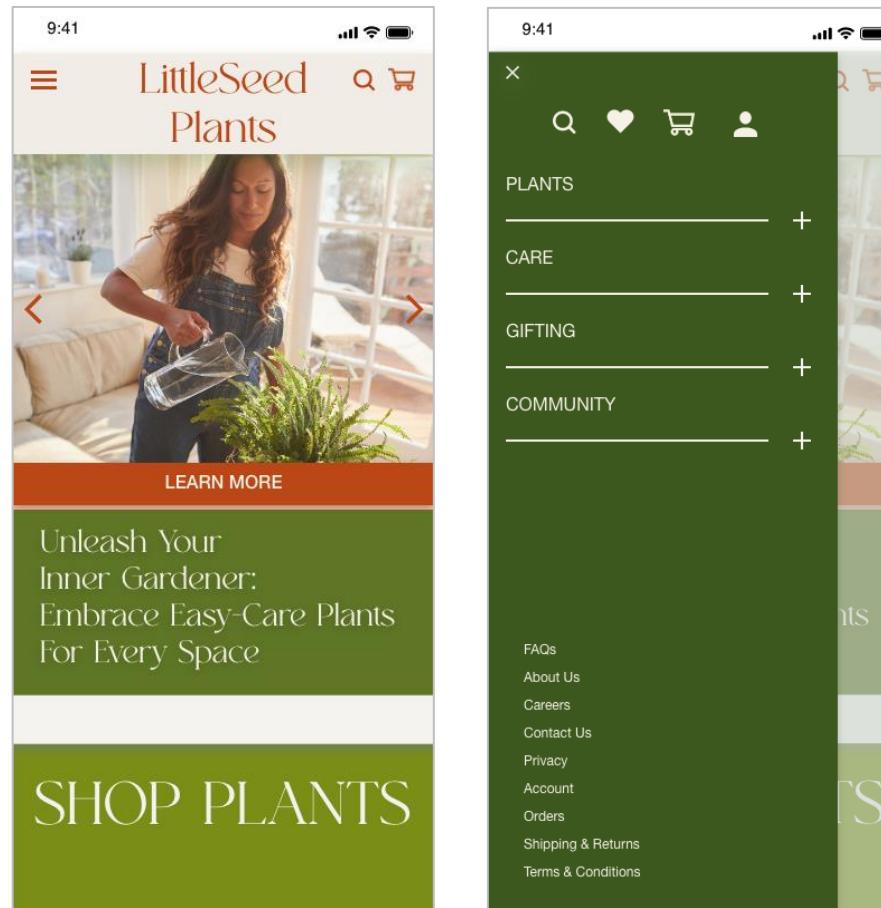
Revised digital prototypes (cont.)

IBM SkillsBuild

Based on the analysis and recommendations in the usability test report, the digital prototypes for the LittleSeed Plants website were updated to implement the users' feedback. Zoom in to view the revised prototype in detail.

Description of change:

- **Optimize mobile responsiveness:** Optimize the website's layout for mobile devices to ensure a seamless experience.



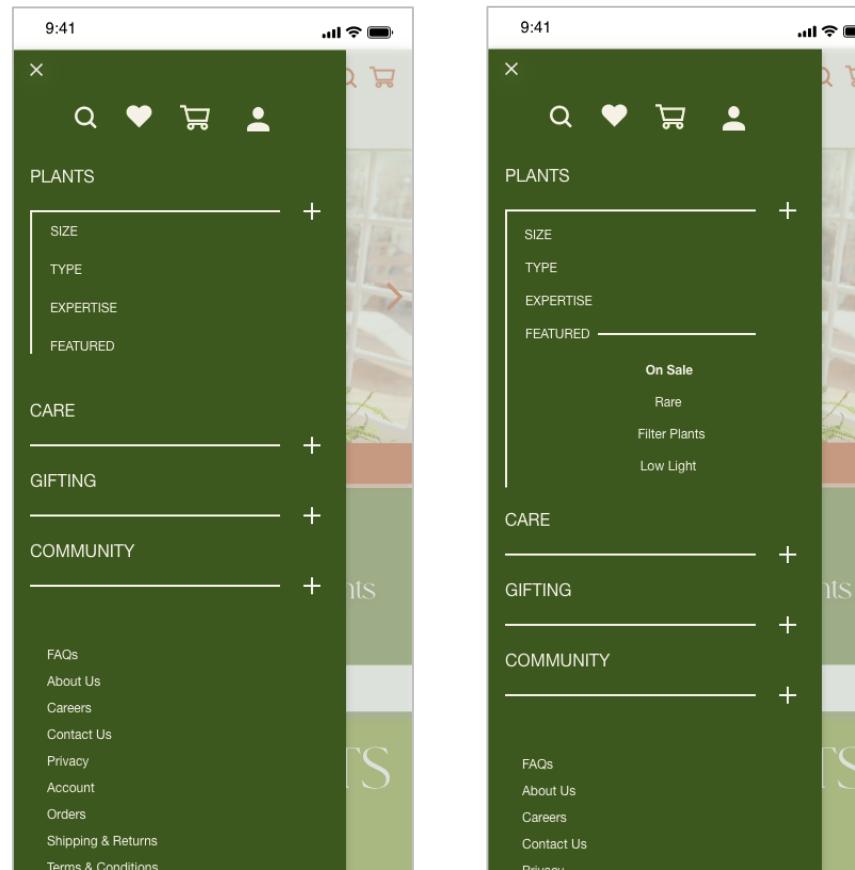
Revised digital prototypes (cont.)

IBM SkillsBuild

Based on the analysis and recommendations in the usability test report, the digital prototypes for the LittleSeed Plants website were updated to implement the users' feedback. Zoom in to view the revised prototype in detail.

Description of change:

- **Optimize mobile responsiveness:** Optimize the website's layout for mobile devices to ensure a seamless experience.



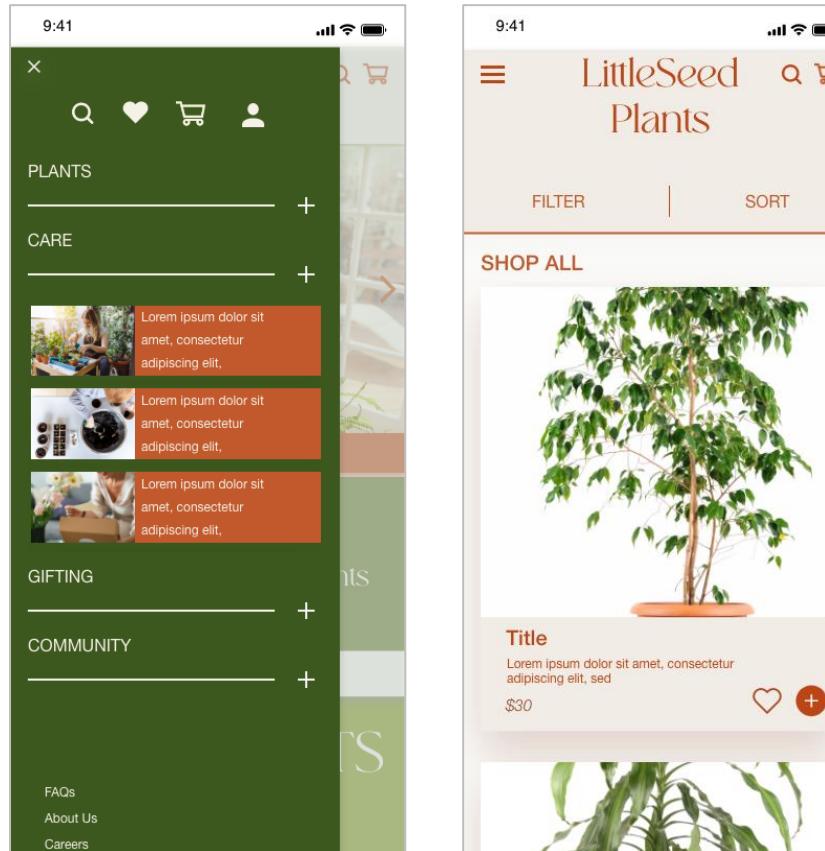
Revised digital prototypes (cont.)

IBM SkillsBuild

Based on the analysis and recommendations in the usability test report, the digital prototypes for the LittleSeed Plants website were updated to implement the users' feedback. Zoom in to view the revised prototype in detail.

Description of change:

- **Optimize mobile responsiveness:** Optimize the website's layout for mobile devices to ensure a seamless experience.



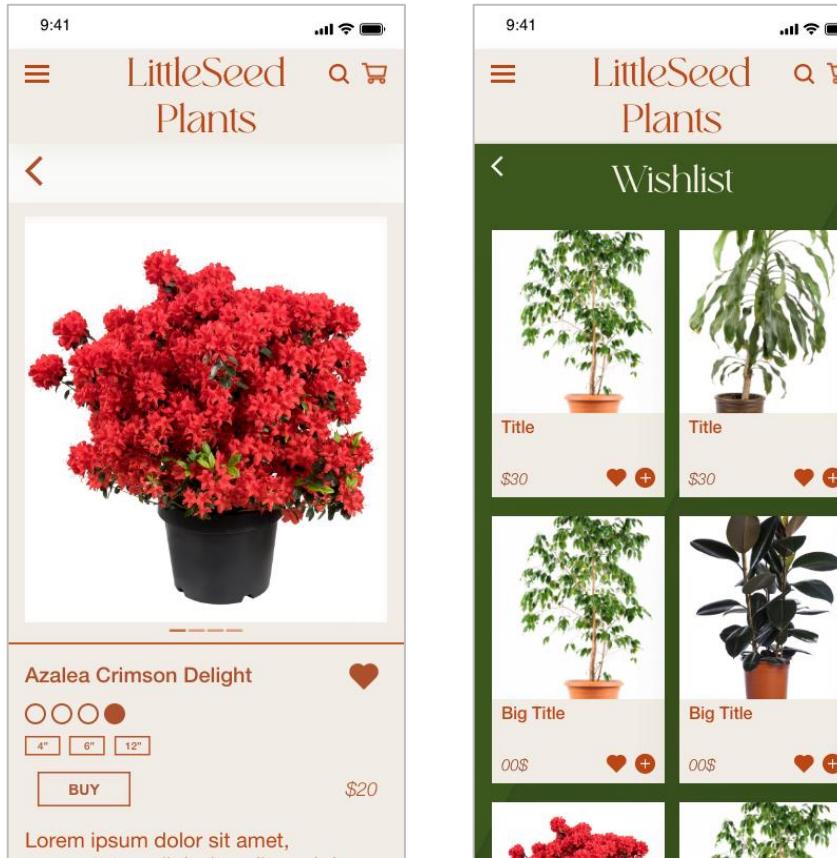
Revised digital prototypes (cont.)

IBM SkillsBuild

Based on the analysis and recommendations in the usability test report, the digital prototypes for the LittleSeed Plants website were updated to implement the users' feedback. Zoom in to view the revised prototype in detail.

Description of change:

- **Optimize mobile responsiveness:** Optimize the website's layout for mobile devices to ensure a seamless experience.



Revised digital prototypes (cont.)

IBM SkillsBuild

Based on the analysis and recommendations in the usability test report, the digital prototypes for the LittleSeed Plants website were updated to implement the users' feedback. Zoom in to view the revised prototype in detail.

Description of change:

- **Optimize mobile responsiveness:** Optimize the website's layout for mobile devices to ensure a seamless experience.

