

A Design Challenge from Liz Newman | February 4, 2018

THE DESIGN PROBLEM

The Design Problem:

Design an interface that helps customers keep track of their Sockables.

The Design Question:

How can Inventables provide users with a mobile interface that makes it easy, efficient and enjoyable to track, manage and find their Sockables?

What's the impact we are trying to have?

We want to encourage consumers to wear clean Sockables, find their missing Sockables and enhance the tracking experience on mobile devices.

WHO will be using this product?

People who have purchased a variety pack and need to manage their 20 Sockables.

WHAT device are we designing for?

Current smart phone devices including Apple and Android operating systems.

WHERE will users use this interface?

Users can use this interface anywhere they use their mobile device.

WHY are we designing this interface?

To provide users with a place to track and manage their 20 Sockables.

Project Goals:

- 1. Create a mobile interface that manages a user's variety pack of Sockables
- 2. Showcase the Sockable's color/pattern
- 3. Indicate to users if a Sockable is clean or dirty
- 4. Indicate to users if a Sockable is currently being worn or not
- 5. Indicate to users the current location of the Sockables
- 6. Make the interface understandable, helpful, and delightful

THE USERS

Socks are typically worn everyday, by a wide variety of people. For this project, I chose to focus on two user groups and scenarios in which they would need the Inventables' Sockables application.

1 | Parents

In today's households, there are a lot of moving socks. Inventables' Sockables application will allow parents to keep track of the Sockables they have purchased, determine when their children are running out of clean Sockables and always find that one missing Sockable.

GOALS:

- Manage the Sockables in the household
- Stay on top of the dirty Sockable laundry
- Find all of the children's Sockables

NEEDS:

- Know how many Sockables are clean or dirty
- Quickly find all of the Sockables when it is laundry time

CONSTRAINTS:

• Accessible only on a mobile device

ASSUMPTIONS:

- Purchased one variety pack from Inventables
- Has an Apple iPhone 8 device
- Has already signed into the Inventables' Sockables application and created a profile

2 | College Students

College students typically live in an apartment or house with numerous roommates. This makes it very easy to lose track of socks, especially clean ones. Inventables' Sockables application will now allow college students to quickly and easily find clean Sockables at anytime.

GOALS:

- Pick out clean Sockables based on color/pattern
- Keep track of all of the Sockables

NEEDS:

- Know which Sockables are clean
- Ability to find Sockables when separated

CONSTRAINTS:

• Accessible only on a mobile device

ASSUMPTIONS:

- Purchased one variety pack from Inventables
- Has an Apple iPhone 8 device
- Has already signed into the Inventables' Sockables application and created a profile



Mary Smith

Mary is a full-time project manager, wife and mother of three. Since she is busy working and keeping the household running, the last thing she wants to worry about is whether or not her children have clean, paired socks. She primarily uses the Sockables application to determine where that one missing Sockable went and how many Sockables are still clean.

MARY'S SCENARIO:

Mary is heading out of town on a business trip for three days. Before she leaves, she wants to make sure there are enough clean Sockables in the variety pack for each child to have three/four clean Sockables. She opens up the Sockables application to determine how many Sockables in the variety pack are clean and to double check that the clean Sockables are located in the children's rooms.

MARY'S USE CASE FLOW:

- Navigate to Inventables' Sockables application and open it.
- The application opens to the homepage, which lists Mary's variety pack, the main menu and options to buy more packs.
- On the homepage, Mary can view how many Sockables in her variety pack are clean and currently being worn. To learn more about which Sockables are clean and where they are she clicks into variety pack.
- Mary explores the breakdown of her variety pack on her Sockables dashboard and uses the filtering options to make the dashboard showcase only clean pairs. This allows her to confirm that there are 15 clean Sockables left in the pack.
- Then Mary uses the map page to confirm that the clean Sockables are in the house. She uses the filtering options to filter for clean, at home Sockables.

USER TYPE 2: COLLEGE STUDENTS | PERSONA, SCENARIO & USE CASE



Derek Jones

Derek is a sophomore in college and currently lives in a fraternity house with 30 other guys. He just purchased an Inventables variety pack and wants to make sure he does not lose any of his new high-tech Sockables. He primarily uses the Sockables application to pick out which Sockables to wear based on their color/ pattern and track the location of his Sockables.

DEREK'S SCENARIO:

Derek has a job interview coming up and he wants to wear his new lucky Sockables. He goes to the dresser to look for his lucky blue and white-checkered Sockables, but he cannot find them. He cannot remember if they are clean and where they are located. So he opens up his Sockables application to find out if his Sockables are clean and where they are located.

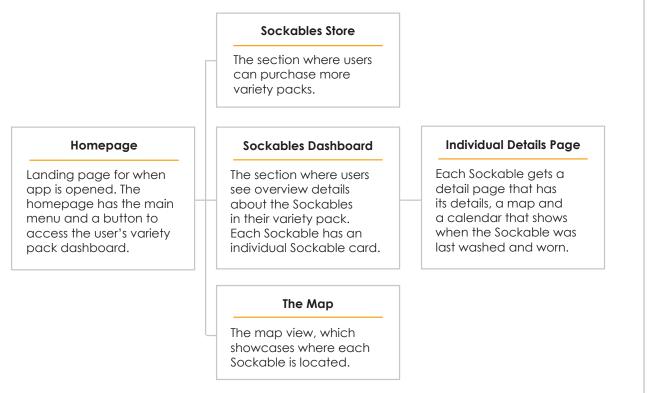
DEREK'S USE CASE FLOW:

- Navigate to Inventables' Sockables application and open it.
- The application opens to the homepage, which lists Derek's variety pack, the main menu and options to buy more packs.
- Derek clicks on "Sockables" in the main menu to navigate to his Sockables dashboard.
- Derek uses the filtering options to narrow down the list of Sockables to only show Sockables with blue in them.
- Derek clicks on the blue and white checkered Sockables card to navigate to the Sockables' individual details page.
- Derek finds out his lucky Sockables were left at his friends house, so he clicks the "DIRECTIONS" button to get step-by-step directions to his Sockables.

THE PRODUCT

The product is the Inventables' Sockables mobile application. The Sockables application allows users to manage and track their smart-technology, Internet connected Sockables. The application provides users with the ability to check on their variety packs and view details about the Sockables. The details shown in the application include the Sockables' colors, whether they are clean or dirty, if they are currently being worn and their location.

PRODUCT ARCHITECTURE



ASSUMPTIONS

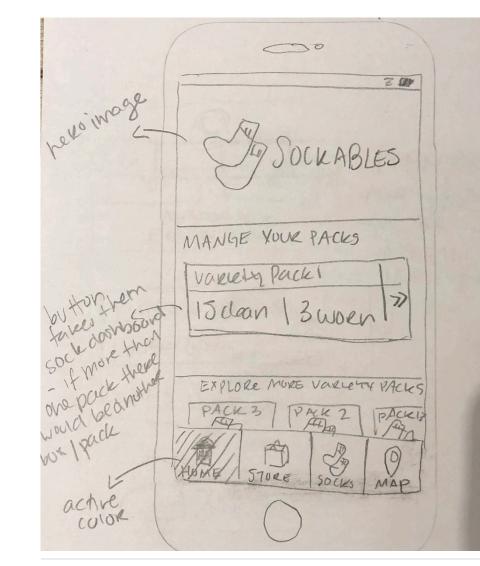
I made the following assumptions about the software and hardware capabilities of Sockables for this challenge:

- When the Sockables are connected to the in-home wireless Internet, the application can determine the Sockables location down to the specific room, i.e. Living Room.
- Outside of the home, the Sockable's location is determine by geo-location and will provide an address.
- Each Sockable has its own tracker, so the application can determine if the right and left one are paired or separated.

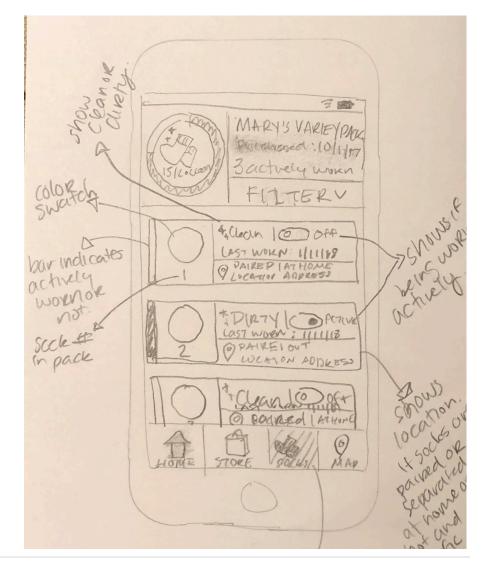
SKETCHING

In order to start brainstorming ideas for the Sockables application's interfaces, I started with sketching. Below are a few examples of my sketches for the homepage, Sockables dashboard, individual detail pages and the map.

HOMEPAGE

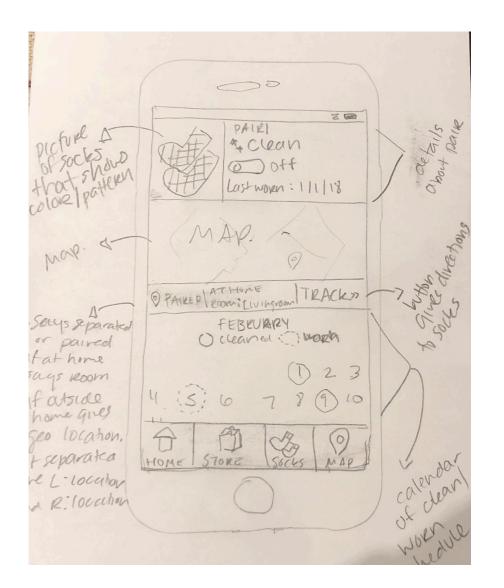


SOCKABLES DASHBOARD

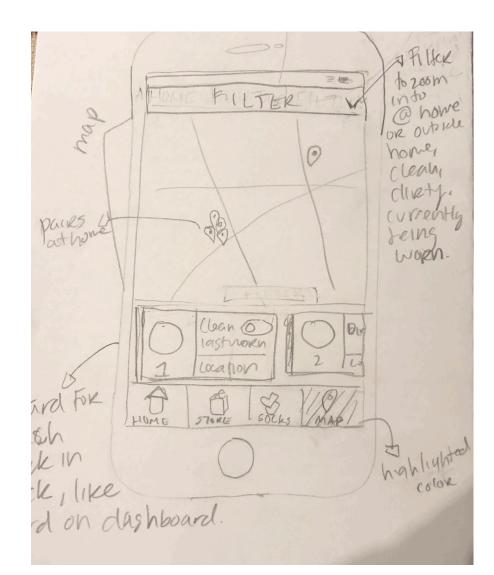




INDIVIDUAL DETAIL PAGE



MAP



HOMEPAGE

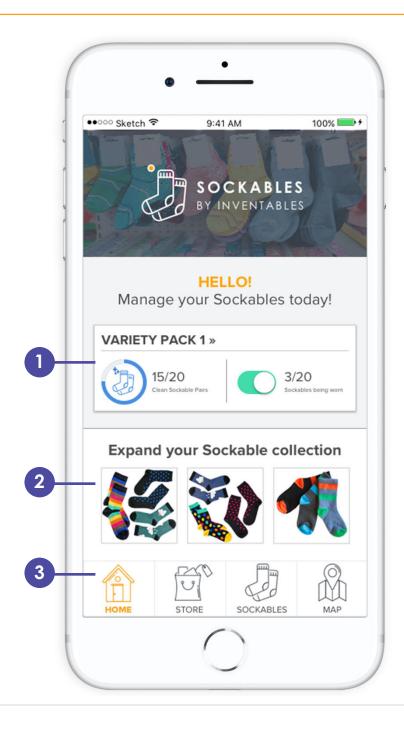
The homepage is the welcome page to the Inventables' Sockables application. It provides users with access to the global menu, the store and their Sockables dashboard.

ANNOTATIONS

This is a button that will allow the user to access their Sockables dashboard for their variety pack. As a user buys more variety packs more buttons will appear on their homepage. It provides them with an overview of the number of clean Sockables and the number of Sockables currently being worn. This example shows 15 clean Sockables and 3 Sockables currently being worn to showcase how Mary's variety pack has 3 Sockables being worn, one for each of her children.

2 This is section of the homepage will encourage people to purchase more variety packs. It is a marketing area.

3 This is the application's global menu. It is placed at the bottom of the screen to make it easier for a person's thumb to reach the take-action buttons and navigate the application. The global menu is sticky and will appear on every interface within the application. The menu consists of four links to the home, store, Sockables dashboard and map. As the user navigates to different pages, the current page will change to orange in the menu to indicate to the user where they are within the application.



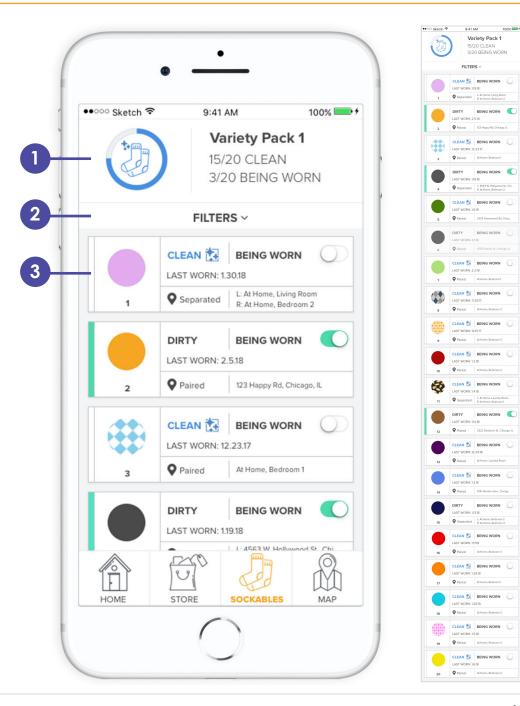
SOCKABLES DASHBOARD

The Sockables dashboard is the page that shows the user a full breakdown of their variety pack. Each variety pack has 20 Sockables in a variety of colors and patterns. Each Sockable has a card on the dashboard that provides the user with information specific to the Sockable, including its color/pattern, number in the pack, cleanliness, activity and location. Each Sockable card is clickable and leads to the Sockables' Detail Page.

ANNOTATIONS

This is the variety pack's overview. It reflects the overview information the user sees on the homepage. It says the number of clean Sockables in the pack and the number of Sockables currently being worn.

- 2 This is the filters button. The user can press on "FILTERS" to make the filtering options slide out above the dashboard. The user can filter by cleanliness, activity, distance and color to sift through the individual Sockables. Please see a full mockup of the filters on page 14.
- 3 This is an individual Sockable card. A user's dashboard is made up of 20 individual Sockable cards to represent each Sockable in their variety pack. Please see a full breakdown of the individual Sockable card on page 11.

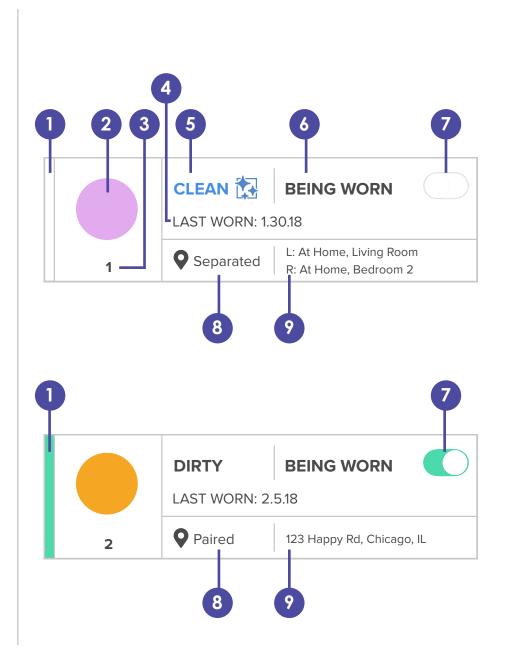


SOCKABLE CARDS

This is a breakdown of the information presented to a user on the individual Sockable cards seen throughout the application. The Sockable cards are used on the dashboard and on the map.

ANNOTATIONS

- This is a bar that switches between white and green to indicate if the Sockable is currently being worn or not. It matches the toggle indicator at number 7. When the Sockable is currently being worn the bar turns green.
 - This is a swatch that represents the Sockable's color or pattern.
- 3 This is the Sockable's number within the variety pack. The Sockables are numbered 1-20.
- This is the Last Worn date. It lets the users know the last time they wore this Sockable.
- 5 This is the cleanliness indicator. It lets the user know if this Sockable is clean or dirty. When the Sockable is clean it will say "CLEAN" in blue and shows the sparkles icon. When it is dirty it will say "DIRTY" and switches to gray without the sparkle icon.
- 6 This is the "BEING WORN" label. It connects with the toggle in number 7.
- This is the "BEING WORN" toggle. The user can press on the toggle to turn on the Sockable, or the application will switch the toggle automatically to reflect if the Sockable is currently being worn or not. When it is actively being worn it will switch to green along with the bar in number 1.
- 8 This is part of the location indicator and it tells the user if the Sockables are paired or separated. This indicates if the left and right Sockables are together or not.
- This is the Sockable's location. If the Sockable are paired there will be one location given. If they are separated there will be two locations one for the left and one for the right. If the Sockables are in the home it will indicate which room in the home and if they are outside of the home it will provide an address.

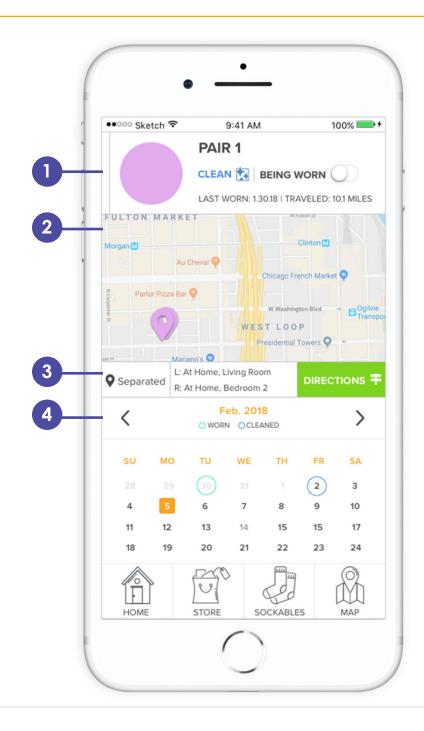


SOCKABLES DETAIL PAGE

This is the Individual Sockables detail page. It provides more detailed information about the Sockables. These pages can be accessed by clicking on the Sockable's card from the dashboard or map.

ANNOTATIONS

- This is the Sockable's overview information. It showcases the Sockable's color/pattern, pair number, cleanliness, and activity. It shows the last worn date and it shows the distance the Sockable has traveled over time while being worn.
- 2 This is the map. It shows the user where the Sockable is currently located. The pin matches the color of the Sockable. If the Sockable is separated there will be two pins to show the location of the left and right.
- 3 This is the location bar. It indicates to the user whether the Sockable is paired or separated and the location of the Sockable. The green button at the end of the location bar is the "DIRECTIONS" button. When this button is clicked the application will provide the user with step-by-step directions to their Sockable.
- This is the calendar section. The calendar showcases when the Sockable was cleaned and worn. The green circles indicate that the Sockable was worn on that day and the blue circle indicates the Sockable was cleaned that day. The orange box highlights the current date. The left and right arrows allow the user to scroll through the calendar months.



MAP PAGE

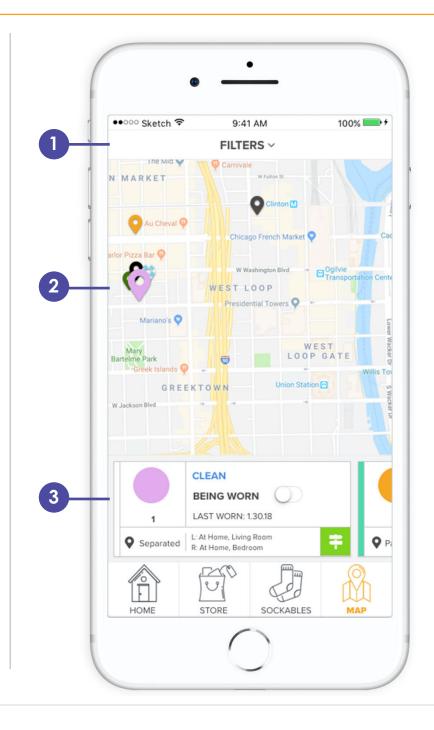
This is the map page. This page shows the user where all of their Sockables are located. The map page utilizes the filters, color coordinated pins and individual Sockable cards.

ANNOTATIONS

This is the filters button. The user can press on "FILTERS" to make the filtering options slide out above the map. The user can filter by cleanliness, activity, distance and color to sift through the individual Sockable cards. Please see a full mockup of the filters on page 14.

2 This is the map. The map showcases a pin for each Sockable. The pins are color coordinated to match the color/pattern of the Sockable they represent. The map mockup shows many pins in one place because many of the Sockables are located at the user's home.

3 These are the individual Sockable cards. They are the same cards that are seen on the user's dashboard. This creates a consistent interface for the Sockables and their information across interfaces. The cards on the map have the addition of the green "DIRECTIONS" button to quickly and easily get step-by-step directions to the Sockable. The user can swipe left and right through the cards to shift which Sockable is highlighted on the map. For this mockup Sockable 1 is in the main viewpoint and therefore, the purple pin associated with Sockable 1 is larger than the rest. As the user swipes through the cards the pins will change in size to draw attention to the Sockable in the main viewpoint. The user knows they can swipe to see more because Sockable 2 card is peaking out from the edge of the viewpoint.

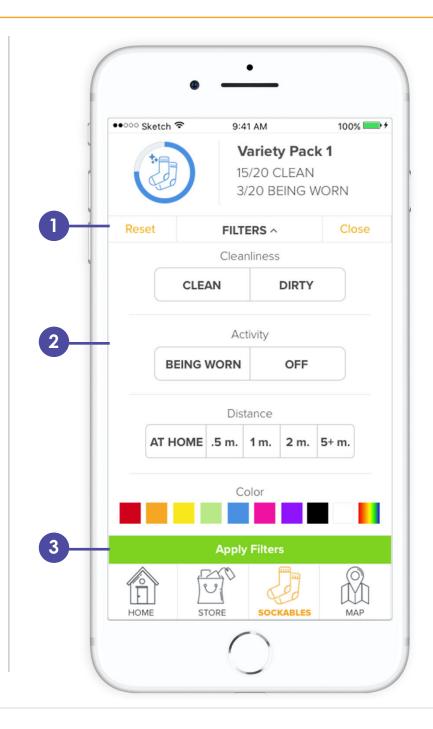


FILTERS

This mockup represents the "FILTERS" interface. When the user clicks the "FILTERS" button on either the dashboard or the map these filtering options will appear.

ANNOTATIONS

- The top bar of the "FILTERS" menu has a "Reset" button on the left that clears all of the previously chosen filters and sets it back to default. Then there is a "Close" button on the right that will allow the users to exit the "FILTERS" menu.
- 2 This section showcases the filtering options available to users. The first option is "Cleanliness." The user can filter by clean or dirty Sockables. The next section is "Activity," in which the user can filter by currently being worn or not. Then there is the "Distance" section. The user can filter the Sockables by their location, including the ones located at home. Lastly, the users can filter by colors or multi-color, which includes patterns.
- 3 The last section is the "Apply Filters" button. This activates the filtering options the user selected and will then indicate to the application which Sockables to display. When this button is clicked the filtering menu will close to showcase the results.



TEMS TO CONSIDER FOR FUTURE ITERATIONS

With all projects, I believe it is important to consider options, changes and ideas for future iterations. Below I have listed a few items that should be considered as the Sockables application continues to expand.

Multiple Variety Packs: For this project both of my use cases only included the user purchasing one variety pack. As Sockables grow, users may purchase more than one variety pack. For the next iteration the Sockables dashboard interface might want to provide users with the ability to switch between their variety packs.

Accessibility: The Sockables application has the potential to be a powerful tool for people who are visually impaired. The Sockables application can provide people who are visually impaired with audio feedback about their Sockables including their colors, cleanliness and step-by-step directions to their location. The application could also be coded to be read by screen readers.

Security Concern: The ability to track and locate the Sockables is a very helpful tool. However, the safety and security concerns with location tracking need to be considered for future iterations. If placed in the wrong hands, the tracking location technology could be used in a dangerous way. Future iterations may want to consider including security precautions before disclosing the Sockables' locations.