

Prototype and Testing Protocol

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Will you create an interactive prototype before you begin coding (e.g., using Figma), or will you work from static wireframes?

Our team created an interactive figma before coding. Including two different pages, the first page with our low-fidelity static wireframe, and then the second page with a high-fidelity interactive wireframe. We then used our Figma frames as scaffolding for how we want our website to visually look, basing our HTML, CSS and JSX on the Figma interactive prototype.

[Link to our Figma File.](#)

What are the acceptance tests that your team will perform before beginning user testing? Describe the acceptance testing process for at least two key features, including which results would indicate a successful test and which results would indicate a failed test.

	Feature #1: Home Page ()	Feature #2: Resources Page ()	Feature #3: Discussion Forum Page ()	Feature #4: Behavior Tracker Page ()	Feature #5: Profile/ Login Page ()
Requirement Specification	<p><u>When not logged in</u> - Users should be able to navigate to all other pages within embedded paths, play the sleep apnea video, and navigate to the third party websites under the resources.</p> <p><u>When logged in</u> - Users should</p>	Users should be able to navigate to the third party educational resources websites.	<p><u>When not logged in</u> - Users should be able to filter through discussion threads, search for relevant discussion threads, and view specific discussion threads.</p> <p><u>When logged in</u> - Users should be able to post discussion</p>	Ensure users can enter and view CPAP/symptom data, see insights, and switch settings.	<p><u>When not logged in</u> - Users should be able to sign up for a 'SleepSync' account, Log in to their 'SleepSync' account, or continue as a guest.</p> <p><u>When logged in</u> - A user should be able to edit their profile or log out.</p>

	be able to Log-out of their account.		threads, and reply to discussion threads.		
Positive Test Scenario	<p>Test Scenario: (<u>When NOT logged in</u>) A user clicks on the “Sign-up/Log-in” button.</p> <p>Expected Result: The user is navigated to the Log-in page.</p> <p>Failed Test: The user is not navigated anywhere, or is navigated to an incorrect link.</p>	<p>Test Scenario: A user clicks on one of the third party educational resources cards.</p> <p>Expected Result: The user is navigated to a third-party website that contains the specific resource the user clicked-on.</p> <p>Failed Test: The user is not navigated anywhere, or is navigated to an incorrect link.</p>	<p>Test Scenario: (<u>When NOT logged in</u>) A user filters for “tips” discussion threads.</p> <p>Expected Result: The listed discussion threads will change to one’s relevant to the section “tips.”</p> <p>Failed Test: The listed discussion threads do not change at all and are not filtered to “tips,” or the listed discussion threads are filtered incorrectly and/or are relevant to other categories.</p>	<p>Test Scenario: (<u>When logged in</u>) A user navigates to the Behavior Tracker page and attempts to submit a symptom entry or CPAP usage data, switch monitoring mode, or save a CPAP device.</p> <p>Expected Result: All of the data is stored and shown in chart and history list. And different users show different data.</p> <p>Failed Test: When user upload data or choose different options, there is no change in history and chart. When switch different users, there is no change to the chart and</p>	<p>Test Scenario: (<u>When not logged in</u>) A user attempts to create an account.</p> <p>Expected Result: One the user input their email, username, and password, they are then able to log into an account.</p> <p>Failed Test: A user is not able to log-in to their account after setting a email, username, and password.</p>

				history.	
Testing Cases	<ul style="list-style-type: none"> - Attempt to navigate to the log-in/signup page - <u>(When logged in)</u> Attempt to log out of users account - Attempt to navigate to the Resources page - Attempt to navigate to the Discussion Forum page - Attempt to navigate to the Behavior Tracker page - Attempt to play Sleep Apnea video - Attempt to navigate to one of the third party websites under the resources. 	<ul style="list-style-type: none"> - Attempt to navigate to one of the third party websites associated with the specific resource card a user clicks on. 	<ul style="list-style-type: none"> - <u>(When not logged in)</u> Attempt to filter discussion threads based on "All, Treatment, Tips, Stories, Reviews, Questions." - <u>(When not logged in)</u> Attempt to search for specific discussion threads, or input keywords to find desired discussion threads. - <u>(When not logged in)</u> Attempt to look at a specific discussion thread. - <u>(When logged in)</u> Attempt to post a discussion thread 	<p><u>(When logged in)</u> Attempt to submit a symptom entry; the data is all saved</p> <p><u>(When logged in)</u> Attempt to submit CPAP usage data; all data shows on the chart.</p> <p><u>(When logged in)</u> Attempt to switch between "standard", "auto", or "boost" modes; the modes saved</p> <p><u>(When logged in)</u> Attempt to save a CPAP device selection; save the CPAP data</p> <p>(When logged in) Navigate through all tabs (Input, Insights, Settings, Report); confirm the tabs are</p>	<ul style="list-style-type: none"> - <u>(When not logged in)</u> Attempt to create an account - <u>(When not logged in)</u> Attempt to log-in to account - <u>(When not logged in)</u> Attempt to continue as guest - <u>(When logged in)</u> Attempt to edit profile - <u>(When logged in)</u> Attempt to Log out of account.

			- (<u>When logged in</u>) Attempt to reply to a specific discussion thread.	accessible, and charts and history lists show different changes with different user data.	
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What are the limitations of your acceptance tests? List some of the ways that your team's in-house testing environment may differ from the context in which your expected users will be interacting with the product.

- Different User Behavior and Data:
 - During our in-house testing, we are using sample data and sample inputs to test. This may not be fully representative of the dynamic behavior of a full sample of users. For example, with our search feature for the discussion forum a standard user could incorrectly spell something or use synomical words, which our tests may not account for.
- Potentially different devices and platforms
 - During our in-house testing we are all using similar Apple branded computers/phones. Additionally in terms of web browsers we have all been using Chrome or Safari. But, in an actual context, this may not be true for all of our users, and is not something we tested for so there could be different UI visuals based on different devices/platforms
- Local testing vs Live hosted testing
 - The majority of our testing has been conducted locally, and with little to no server loads. So, in an actual context, this could potentially be an issue, as when real-world users interact with out product simultaneously server loads could fluctuate, resulting in slower web page load times, or specific assets on our pages like a photo/video not showing up as quickly as others.

How will you conduct user testing?

In terms of outreach for our user testing, our team will reach out to friends and have them try using the website, as well as prioritizing anyone who either has Sleep Apnea, or has friends/family with sleep apnea.

In terms of the form of user testing, we will conduct it on a survey basis. With the survey asking about usability on the various different pages, and more questions on the more important/complex pages. For example the Home Page and Resources page may need one or two questions each. While the discussion forum page, behavior tracking page, and the create an account/login page will have closer to 3-4 questions each. Also, with an opportunity for open ended questions if users have specific comments about certain pages.

Bugs:

In the discussion forum, for "Posted by", some say by Anonymous while others are "Posted by Loading" instead of the proper username

- To view who the thread was posted by, they can click into a specific post and view the usernames.

How will you decide which bugs to fix first?

We will decide which bugs to fix first by looking at three main things:

- User feedback, as in, if multiple users are asking questions or making comments about bugs without a website these should be high priority as it is directly affecting the users.
- The actual severity of the bug. If the bug is only affecting one small aspect of the website it will be deprioritized. But if it is something taking away large functionalities in the website it needs to be addressed first.
- The original prioritization of our functionalized requirements via the P0/P1/P2 approach.

How will you re-test the solution after the bug fixes have been completed?

We will re-test our solution after the bug fixes have completed first locally, with our team, and then by conducting more user testing exactly how we would originally, just making the surveys on a much smaller scale focusing mainly on the feature we just had to fix/update.