Testing Protocol

Explanation of MapTest.jsx

- This test validates the ZIP code input functionality in the Map component by simulating user input using the React Testing Library and ensuring the input behaves as expected. It checks that a valid ZIP code ("98011") and an invalid ZIP code ("97011") can both be entered into the input field, confirming the component captures user input correctly.
- First, npm install to gather all required dependencies
 - Use npx jest to run this test

Map Page

Users are able to interact with our map feature to find relevant resources close to them

Test 1: Zoom in and out of the map and move their view around.

- Input: Zoom in near Bellevue
- Output: The map view will change to show the Bellevue area
 - Valid Result: The map responds smoothly to user movement/scrolling and zooming, resources also remain visible.
 - Invalid Result: The map freezes, is unresponsive, or resources disappear during user interactions (excluding use of filter).
- Pass criteria: The map smoothly moves to Bellevue, either through touch, mouse movement, or using the zoom-in/zoom-out buttons.

Test 2: Click on a resource marker on the map and look at more details.

- Input: Click on a resource near West Seattle, then click the want more details, "click here" button to read more about the resource
- Output: A resource card will pop up with the mental health service, including a button to see additional details.
 - Valid Result: Clicking on a resource marker will have a popup information card displaying information about the resource.
 - Invalid Result: Clicking on the resource does not bring up information or incorrect information appears.
- Pass criteria: The resource appears without a lag, and the whole resource popup card is shown. All the links on the resource card should work.

Search - Map

Users can use the zip search to navigate the map

Test 1: Users are able to find a resource near them

- Input: User inputs "98115" into the ZIP code search bar
 - Valid input: User inputs the correct 5-digit ZIP code into the search bar.
 - Invalid input: User does not input any ZIP code or a ZIP code outside of King County.
- Output: The map view will change to the correct ZIP code area smoothly after hitting enter or the search button.

- Valid result: Map view resizes to the given ZIP code area.
- Invalid result: Map fails to resize and doesn't display a zip code.
- Pass Criteria: The map should be responsive to any valid user inputs, changing the user view to the submitted ZIP code.

Test 2: User gets error message if ZIP code not found

- Input: User inputs "12345-6789" into the ZIP code search bar (should be an incorrect code)
 - Valid input (for this test): Entering a **wrong** or invalid ZIP code.
 - Invalid input: Entering a correct King County ZIP code.
- Output: Error message pops up telling the user to input a valid ZIP code.
 - Valid result: An error message displays and map does not resize
 - Invalid result: The map resizes and doesn't display an error message
- Pass Criteria: The map view does not change and an error message is displayed until the user enters a valid ZIP code. A valid zip code is a King County Zip code in this case.

Filter - Map

Test 1: Users can click on multiple, relevant filters, and get appropriate resources

- Input: Filter with tags: crisis hotline and peer support
 - Valid input: User clicks the 2 tags mentioned above
 - Invalid input: User clicks tags that aren't mentioned above
- Output: There should be a handful of resources in King County
 - Valid result: User should see 9 map markers after selecting both filter options
 - Invalid result: Map markers are not displayed correctly or
- Pass criteria: The map should be rendered correctly, with all the relevant resources on the map. When you click on the resources, you should see a resource card. If you remove the filters, more resources should pop up, and vice versa for if you add more resources.

Resource Page

Please use the Navbar to navigate to the "Resources" page.

Test 1: Learn more about a resource

- Input: Look at any resource of your choosing and click the "Learn More" button
- Output: Resource detail page shown
 - Valid Result: The resource detail page corresponding to the resource chosen is displayed.
 - Invalid Result: More details page does not appear, or shows an incorrect resource page not corresponding to the resource selected.
- Pass Criteria: Selecting learn more allows the user to navigate and see more information about a resource such as what categories of treatment the user offers. Additionally, if the user is signed in they can save a resource from the learn more page as well.

Search - Resources

Test 1: Users are able to view all resources.

- Input: There is no user input into the search bar.

- Valid input: Resource list contains 51 card components of resources with resource name, address, phone number, and website.
- Invalid input: No resources appear.
- Output: The web page displays all 51 card components available from our dataset.
- Pass Criteria: The resource list should be rendered correctly on the web page when no user input is displayed into the search bar. If the resource card list fails to display anything, there will be an error message that says "No results found...". The resource list should be centered in the middle of the page.

Test 2: Users are able to search a resource by a name.

- Input: User inputs "Snoqualmie" into the search bar.
- Output: The web page displays one card resource about Snoqualmie.
 - Valid Result: Resource list changes, and one card component with the title "Sound Snoqualmie" appears in the resource list.
 - Invalid input: No resources appear or resources without "Snoqualmie" in the title, address name, or categories appear.
- Pass Criteria: The function for searching should successfully filter the dataset and create card components that match either the title of a resource, the tag of the resource, or the address of the resource. We are able to verify that the function correctly functions by viewing it on the browser and correctly identifying that only 1 card component is present after typing in "Snoqualmie".

Filter - Resources

The filter works in tandem with the search bar to help users easily locate a resource by tag.

Test 1: Filter by one category

- Input: User clicks the "Bilingual services" filter option (ensure the search bar is empty)
- Output: The page should display cards that all contain bilingual services in their categories
 - Valid Result: The page should display 3 Asian Counseling and Referral Service resource locations and 5 Seamar behavioral health
 - Invalid Result: The page doesn't display the desired resources or displays more resources than the tags apply to.
- Pass criteria: The page should display the 8 total resources mentioned and filter all resources not matching the criteria. It should generate 8 resource cards with tags/categories that match the bilingual service filter options.

Test 2: Filter two categories

- Input: User clicks the "Bilingual Services" AND the "Latino" filter options (ensure the search bar is empty)
- Output: 5 Resources will remain after both actions are completed
 - Valid Result: Upon clicking to bilingual the service will filter to 8 resources including Asian Counseling and Seamar services, then upon selecting the Latino filter option only 5 Seamar resources will remain.
 - Invalid Result: Resources outside those mentioned in valid results are shown or fewer resources are shown than should be displayed.

- Pass Criteria: The page should apply the first tag to filter the list down to bilingual services tagged resources, then as you specify further that you want treatment focused on the Latino demographic it will filter the list down further to match resources with both tags.

Test 3: Filter and search

- Input: User clicks "Assessment services" tag filter AND searches "IKRON" in the search bar (click the search button or use the ENTER key to search)
- Output: The appropriate cards are displayed after searching
 - Valid result: Assessment service filtered resources contains 6 mental health resource cards before searching, and after searching should narrow down to 2 IKRON cards
 - Invalid Result: Cards other than the two IKRON resources are displayed or no cards are displayed.
- Pass Criteria: The search and filter functions should work collaboratively to narrow down a search from a specific tag to a card name within those tags.

Quiz Page

Please navigate to the "Quiz" page using the Navbar

Test 1: LGBTQ+ selection

- Input: Select disagree for all options and select LGBTQ+ for question 2
- Output: It should return the two cards that fit both the search and filter criteria
 - Valid Result: This should initially return about 6 services when filtering before searching and after searching should narrow down to 2 IKRON cards
 - Invalid Results: Resources outside those mentioned in valid results are shown or fewer resources are shown than should be displayed.
- Pass Criteria: The quiz page will recommend results based on how you respond and match you
 with resources with the most amount of applicable tags in that scenario. Youth Eastside Services
 has services that cater specifically to the LGBTQ+ community so they are a prime
 recommendation if you only select the LGBTQ+ as a category that you desire.

Test 2: Selection of 3 questions

- Input: Select agree for questions 1, 4, and 5. Select disagree/none of the above for all other questions.
- Output: You should receive 3 Valley Cities Counseling and Consultation resources recommended to you.
- Pass Criteria: The quiz page is recommended based on your responses. Notably positive responses to questions 1, 4, and 5 correspond to tags such as Group Therapy, Family Therapy, and Crisis Hotline services. So the quiz recommends services that have those categories/tags.

Test 3: Incomplete quiz

- Input: Only answer the first 3 questions and leave the remainder blank, then click the submit
- Output: The quiz will not submit and display a message to complete the entirety of the quiz before submitting

- Pass Criteria: The quiz should not allow users to submit partial answers in order to accurately recommend services. The quiz will only proceed if all answers are answered before submission.

Login/Save (Profile Page, Resource Page, Map Page)

Test 1: Login

- Input: Navigate to the Profile page on the Navbar, and login using an email address or Google
- Output: Once you log in you should see a message telling you that you have successfully signed
 in and you can go ahead and look at resources to save. If you select the profile page again it will
 now show you a page saying "Welcome 'YOUR NAME" and show you a list of saved resources.
- Pass Criteria: The login page should allow the user to easily sign in to the site with an email or Google account. The user will remain logged in even when exiting and returning to the site and can use their profile to save resources (Test 1a).

Test 1a: Save a resource from the map page, then the resource page

- Input: Make sure you are logged in to get the saving permissions. Go to the map page, find a resource of your liking either through filters or zip code, and save it directly from the map page. Then, navigate to the resource page, and save a resource after searching/filtering for one. Go to your profile to view the resources you saved.
 - Valid Result: The resource save button was clicked and when looking at the profile page, the saved resource is persistently listed.
 - Invalid Result: Resources have not been saved to the profile
- Output: The save button should change to a "remove saved resource" button
- Pass criteria: The resources are properly saved and stored in the user's profile, so that they are able to reference them again.

Test 1b: Unsave a resource

- Input: Make sure you are logged in to get the removing permissions. Go to your profile, and un-save at least 1 of the 2 resources you previously saved.
 - Valid input: The resource was removed from the resource-saved page
 - Invalid input: The resource does not remove
- Output: The resource should be removed from your profile.
- Pass criteria: The resource should be removed from your profile, and if you were to run into the resource again, the button should say "save resource".

Test 2: Sign-out

- Input: Navigate to the profile page while signed in and click the sign out button.
- Output: The user will no longer be signed in and will need to sign in again to access functionality of resources.
 - Valid Result: The user is signed out
 - Invalid result: The user is not signed out
- Pass Criteria: The user should be able to easily sign out of the site using a single button click on the profile page.

Known Bugs:

ZIP code search

- Only the first 5 digits of the ZIP code are counted for map search. Inputting a ZIP code with the first correct 5 digits and any incorrect additional digits will still search. This is due to Leaflet not having a native ZIP code area search so we are using a JSON file of King County ZIP codes to validate user inputs.
- This bug doesn't impact search functionality extensively, just broadens the search to the larger ZIP area, and thus can be worked around by simply searching and then zooming further into the map.

Save resources button on Map and Quiz Recommendation Page

- For only one member of the team, the resources were unable to be saved from the map page and sometimes on the Quiz results recommendation. The save button would not show up for 5+ minutes, then would automatically appear after that, allowing the member to save. But that was only a problem for one person so far. This is likely an issue with Firebase communicating the save resources properly.
- This bug has 2 workarounds:
 - 1. It is still possible to save map resources by just clicking the more details "Click here" button and saving from the resources details page
 - 2. You can alternatively save a resource from the resource page and return to the map/quiz results page and the save resource button will often (but not always) reappear

Quiz Results Disappear on Refresh

- The Quiz results recommended resources will disappear if the site is refreshed. However, the page will prompt the user to retake the quiz
- This has a workaround of simply retaking the quiz and providing the same answers and the resources will be recommended to the user once again. Alternatively, the resources can also be saved for the user to remember them later.