GreenCycle

Team 5

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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?**

Before we begin coding, we will be using Figma to create an interactive prototype. This prototype will simulate user interactions, including navigation, button clicks, and viewing pop-up details, providing a realistic preview of how the final web app will work. This approach allows us to visualize the design flow, identify potential UX improvements early, and receive feedback on usability before committing to code.

- **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.**

<u>Feature 1: Interactive Map with City Filters</u>

Test Process:

- Select a county or city from the filter
- Verify that the map updates to display only the relevant facilities to the selected filter
- Clicking on a facility marker to ensure a pop-up appears to switch the facility
    - Names
    - Address
    - Material accepted

Success:

- Selecting a city updates the map to show relevant facilities
- The marker displays a pop-up with accurate facility information upon clicking

Failure:

- Maps fail to update or display incorrect facilities after city selection
- Facility markers do not display pop-ups or show incomplete information

<u>Feature 2: Learning Quiz</u>

Test Process:

- Start the quiz
- Answer Questions

- Quiz Submission
- Result from Feedback

Success:

- The quiz starts without errors and allows user to answer all the questions
- After submitting the quiz, the results are displayed accurately
- The user will receive the number of correct answers and a total score with feedback

Failure:

- The quiz does not start or encounters errors when answering questions
- Quiz submission fails to display the results
- Feedback is missing or contains incorrect information when receiving results

- **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.**

Our team will be testing in optimal network conditions and on updated browsers, while real users might have slower internet speeds or use outdated browsers which could potentially lead to performance issues for users who wouldn't be able to have the same settings as the in-house testing environment. Another limitation that could arise is familiarity bias. Since only members of our team will be testing the website, some functions and features could seem difficult to first-time users that we wouldn't have come across beforehand. There could potentially be areas that we may overlook because we're already comfortable with the layout and navigation from creating it. Another thing to keep in mind is device compatibility, as we will most likely be testing with smartphones and desktops, there will be many sorts of different devices that users will have so we must ensure that our website is responsive.

- **How will you conduct user testing?**
  - Conduct a study of diverse user profiles, ranging from different ages, tech experience, and geological locations within Puget Sound. Also, we would test on people in different living environments, such as apartments and houses. We will try to test on 5-10 people from varying counties.

- Target audience: Identify typical users such as residents in the Puget Sound area who need more information on recycling facilities.
- Identify core tasks users are able to complete on-site

- **How will you decide which bugs to fix first?**

Bugs will be prioritized based on how important the feature is and the accuracy needed, which will impact core functionality and user experience.

Most Critical Bugs:

- Bugs that prevent users from accessing core features, such as the map failing to load, city filters not working, or the educational cards not displaying.
- Website and mobile scaling
- Incorrect Geolocation Data: If the system displays inaccurate locations, it can mislead users to the wrong facility, impacting trust and usability.
- Map Loading Failures: Errors in loading map services (Google Maps, API failures) would prevent users from viewing facility locations or their own positions.
- Quiz getting the number of correct wrong or giving incorrect feedback about questions
- Items have mismatched information/traits or locations for recycling

Low Priority Bugs:

- Minor design inconsistencies and layout issues
- Link target behavior (opening a new tab vs the same tab)
- Minor accessibility concerns
- Hidden features on various screen sizes

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

After bug fixes are completed, we will conduct a series of tests to confirm that all functionality is stable and that no new issues have been introduced. First, we will use automated testing with Jest to validate the functionality of specific components, ensuring that they perform as expected following bug fixes. Then to ensure that recent fixes haven't affected other areas, we will conduct regression testing, which involves a comprehensive test of all features. This will allow us to identify any unexpected issues

resulting from the changes. Together, these tests will ensure that the solution is stable, reliable, and ready for further user testing or release.