Water Treatment Technology Selection Guide, Spring 2015
Andrew Mullen and Sarah Sinclair
6 February 2015

Task List

Task Map
Task Details

1. **Back arrows join front arrows - COMPLETE!**
   - Date: 2/02/15
   - Individual Responsible: Andrew Mullen
   - Explanation: The back arrows are cloaked links, rather than submit buttons, so backwards navigation within the site loses data that the user has entered. Successful completion means that a user can navigate forward and backward without losing any information entered by the user.

2. **Left justification for checkbox items - COMPLETE!**
   - Date: 2/02/15
   - Individual Responsible: Sarah Sinclair
   - Explanation: Current checkbox layout makes it slightly confusing which options correspond to which boxes. Distance between

3. **Checkboxes stay checked**
   - Date: 2/05/15
   - Individual Responsible: Andrew Mullen
   - Explanation: While checking the checkboxes for types of contaminants in the water, is saved to determine the type of treatment suggested, when a user navigates back to the contaminants page, the page does not reflect that information has previously been entered.

4. **Increase on-screen contrast**
   - Date: 2/05/15
   - Individual Responsible: Sarah Sinclair
   - Explanation: Some users have expressed that they find website content difficult to read. In order to make the website more accessible, drop-shadows can be darkened to provide more visual contrast.

5. **Create images for wireframes**
   - Date: 2/9/15
   - Individual Responsible: Sarah Sinclair
   - Explanation: In order to test the usability of the results page, which presents information about plant options to the user, some basic wireframes representing page layout should be mocked up. These will be created as images using layouts in Microsoft Publisher.

6. **Pictures need to stay selected**
   - Date: 2/10/15
   - Individual Responsible: Andrew Mullen
   - Explanation: While selecting pictures for identifying water turbidity, is saved to determine the type of treatment suggested, when a user navigates back to the turbidity pages, the pages do not reflect that information has previously been entered. Successful completion means both turbidity picture selection pages retain user-input data. A default state of selection should also be introduced at
this point so turbidity data will be provided even if the user attempts to skip these questions.

7. **Interactive wireframes for results page design**
   - Date: 2/11/15
   - Individual Responsible: Sarah Sinclair
   - Explanation: Using an interaction tool (most likely InVision). Migrate wireframes into tool and implement functionality, like responsivity to clicks and hovers, using hotspots and page redirections. The link can then be sent to users e.g. in Honduras for more perspectives.

8. **Discuss compensation options with Monroe**
   - Date: 2/11/15
   - Individual Responsible: Sarah Sinclair
   - Explanation: We may want to pursue compensating translators of our website; we should ask Monroe about the logistics of this when we meet with him.

9. **Edit operator pictures**
   - Date: 2/12/15
   - Individual Responsible: Andrew Mullen
   - Explanation: Modify the size of the image of the operator and the money, on the page for users to enter operator wages, to balance the margins. Furthermore include scaled versions of these images for smaller browsers, ensuring no aliasing problems. Mobile stylesheets must allow the turbidity selection pictures to shrink for medium and small browser screens. A very, very limited version of this implementation was previously begun, but it must be applied to all of these images/all browser sizes.

10. **Arrows stay in place**
    - Date: 2/14/15
    - Individual Responsible: Andrew Mullen
    - Explanation: Chevron buttons on bottom of the page move up and down in relation to the page elements present above them; they should be stabilized from page to page to maintain a coherent user experience.

11. **Compatibility for range slide, dropdown CSS across browsers**
    - Date: 2/17/15
    - Individual Responsible: Andrew Mullen
    - Explanation: Currently, the range slider for population input displays strangely in Chrome and non-Firefox browsers. This should be tweaked to maintain a nicer appearance for the slider. The same must be done to the selection menu for country, which occupies far too much of the page in Chrome.

12. **User testing of results**
    - Date: 2/18/14
    - Individual Responsible: Sarah Sinclair
    - Explanation: In order to discover usability issues with the proposed results page design, 5-10 users should use the interactive wireframes in a controlled
user test. Users should be recruited to be representative of diverse levels of experience with technology and AguaClara.

13. Regression equation in PHP
   - Date: 2/18/15
   - Individual Responsible: Andrew Mullen
   - Explanation: Implement the previously determined cost regression formula in PHP to use the user values to allow results to be displayed for the user on the results page. This should be a function, outputting a cost in dollars.

14. MySQL on beta server
   - Date: 2/20/15 (Pending IT intervention)
   - Individual Responsible: Sarah Sinclair
   - Explanation: Problems with permissions have prevented the team from running MySQL on the beta server; the team must get this functionality up and running in order to interact with databases to provide logins and user-data-logging functionality.

15. Take pictures of turbidity samples
   - Date: 2/26/15
   - Individual Responsible: Sarah Sinclair
   - Explanation: The turbidity samples currently on the website don’t represent an appropriate or realistic range of turbidities. We need to take new pictures of turbidity samples that represent “critical points” that would correspond to different water treatment technologies.

16. Flowchart of response options
   - Date: 3/02/15
   - Individual Responsible: Sarah Sinclair
   - Explanation: A complete tree of response text must be populated so that the results page can respond appropriately to any combination of user input.

17. Country-appropriate currency
   - Date: 3/09/15
   - Individual Responsible: Andrew Mullen
   - Explanation: Allow the user-selected country to determine the symbol for currency throughout the site, and modify the pricing based on the up-to-date exchange rates. Webcrawl to obtain this data.

18. Implementation of results page
   - Date: 3/09/15
   - Individual Responsible: Sarah Sinclair
   - Explanation: Once data has been collected from user testing, the design from the updated wireframes should be implemented in CSS and HTML. Tailored content will come later; this is more a matter of layout.

19. Interface for Language Toggling
   - Date: 3/16/15
   - Individual Responsible: Sarah Sinclair
• Explanation: Some kind of interaction pane must be developed in order to allow users to select what language they will use while navigating the tool.

20. Human translation
• Date: 3/16/15
• Individual Responsible: Sarah Sinclair
• Explanation: For important stakeholder languages, like Spanish, Tamil, and Hindi, we should obtain translations from native speakers to ensure that our recommendations are coherent and comprehensible.

21. Admin login
• Date: 3/23/15
• Individual Responsible: Andrew Mullen
• Explanation: Salt the passwords before hashing to ensure safety from dictionary attacks on the database. Implement basic admin login and page redirect to an admin page. On the admin page, allow an admin to add a new plant to the SQL database, with associated cost information.

22. Finalize SQL tables
• Date: 3/25/15
• Individual Responsible: Andrew Mullen
• Explanation: Although previous tasks will require editing and using information in the SQL database, ensure that only the necessary information is stored, and ensure that all potentially useful information is stored.

23. Admin GUI to monitor visitors/data
• Date: 4/08/15
• Individual Responsible: Sarah Sinclair
• Explanation: We are logging user data input when people visit the site, and there should be a tool developed to allow for its easy review. Also include the ability to clear/delete this data, and to download a spreadsheet version/a summary sheet.

24. Language translation implementations
• Date: 4/10/15
• Individual Responsible: Andrew Mullen
• Explanation: Implement a structure to hold the website in 4 well-translated languages—English, Hindi, Tamil, Spanish—and then expand the internationality by interfacing with something similar to GoogleTranslate API to allow users of other languages to use the site.

25. Further iterations of user testing
• Date: 4/20/15
• Individual Responsible: Sarah Sinclair
• Explanation: Once various new features have been implemented in code, they should be tested with a variety of users, with any necessary design adjustments slated for implementation.

26. Make sure entire site validates
• Date: 4/30/15
Individual Responsible: Andrew Mullen
Explanation: The markup for all pages must validate (via a tool like W3 Schools').

27. **Deploy the site**
   - Date: 5/04/15
   - Individual Responsible: Sarah Sinclair and Andrew Mullen!
   - Explanation: When the rest of our work is complete, the site can go live!

Team Coordinator: Sarah Sinclair
Technical Coordinator: Andrew Mullen