



backyard berry

Team 2: The Berry Bunch

04/02/20

Our Team

DEVELOPERS

- James Helm
- Jacob Jablonsky
- Dawson McKenzie
- Brandon Paupore
- Drew Stockero
- Joe Taylor

GRAD STUDENT

- Niusen Chen

UI EXPERTS

- Rebekah Craft
- Jayleen Rossi
- Piper Schlaeppi

SCIENTISTS

- Tara Bal
- Angie Carter
- Erika Hersch-Green

System Overview

Backyard Berry is a web app spearheaded by Angie Carter, Tara Bal, and Erika Hersch-Green with the goal of learning more about what berries are harvested, how they are used, and who is harvesting them in the Great-Lakes region.

This app is designed for use on desktops, laptops, and mobile devices so users can easily record data during or after harvests.

This app has five primary functions:

1. Record berry harvest data
2. Record demographic data
3. Download data (registered scientist accounts only)
4. View instructional content about types of berries, the Spotted Wing Drosophila (SWD) fruit fly, and this project
5. Locate berry harvest sites on a map

Users

GENERAL USER

- Record a recent berry harvest (for public use or just for research purposes)
- Record their own demographic data
- Read information about types of berries, the SWD fruit fly, and the project itself
- Find a place to pick berries on map

SCIENTIST

- Download data collected from other users of the app
- All other actions available to general users

Demo

Instructional Content

SWD fruit fly information and at-home test:

<https://docs.google.com/document/d/1mBS9suGUTJYw3qi8zenZYjrVrsQ3gVGH413tncwc7MI/edit?usp=sharing>

Berry information:

<https://drive.google.com/a/mtu.edu/file/d/1aG-VHATMmcGR9BCyqfj0XvktBpoRwlva/view?usp=sharing>

Project/scientist information:

<https://docs.google.com/document/d/1RN6PvzSHwRcpljNAtarvLLDN8q0NvtAkvA-g5h9KOi0/edit?usp=sharing>

Usability Concerns

1. *Harvest survey readability* - the current formatting is not yet polished and is difficult to parse. We need to make sure the formatting is user friendly, preferably on multiple screen sizes.
2. *Scientist login clarity* - we need to make it clear that the login in feature is only meant for a select few scientists so general users don't get confused and try to make an account.
3. *Navigation bar clarity* - we need to have descriptive yet succinct labels in the navigation bar so users can intuitively navigate through the app.
4. *Demographic survey optionality* - we need to make it clear that the demographic survey is optional and should be completed no more than once by each user.

Usability Concerns (cont.)

5. *Latitude/longitude field in harvest survey* - we want users to be able to select their position from a map, from their device's GPS data, or by entering a nearby town or address. Needing to know your latitude and longitude is not user friendly.
6. *Intuitive map controls* - we need to make sure that navigating and interacting with the map is intuitive (ideally for both mouse and touch-screen interactions).
7. *Instructional Content* - there is currently no instructional content for the app. Depending on the results of the usability tests, we may need to add instructional content. If we manage to implement the map it will be a likely candidate for needing instructional content.

UI Components

IMPLEMENTED

(but not completed)

- Navigation bar
- Harvest survey
- Scientist login

TODO

1. Polish implemented components
2. Download data in Excel format
3. Add PDF downloads for instructional information on berry types and the SWD fruit fly
4. Add the “About” page
5. Add a map that showing recorded berry harvests

Questions?