

backyard berry

Team 2: The Berry Bunch

02/13/20

User Scenarios

Unregistered Guest User:

1. Access to a map of available patches, a berry identification section, information on the fruit fly, a harvest form, and cultural uses of berries.

Registered User:

1. Access to a profile page
 - a. Access to past logs/records of harvests
 - b. Private Locations.
2. Data sharing
 - a. “public” (for all eyes)
 - b. “private” (for their eyes and the scientist’s eyes).
3. Access to map of available patches, a berry identification section, information on the fruit fly, a harvest form, and cultural uses of berries.

Scenario:

Guest User

Application Users & Environment

Users

- Foragers
- Scientists
- Tourists
- Residents in the Great Lakes Region

Environments

On a laptop or phone

- at home, in a vehicle, in the woods
- Before or after a harvest
- Before or after looking for berries
- looking for a berry patch
- logging a berry patch

Example:

On your phone, in a vehicle headed back from a berry patch logging berries.

Prototype Demo



Workflow

This slideshow has a page-by-page flow. Each new page has a selection of buttons. Each of these buttons will be described. Then we move on to the next page in sequence and describe all of the buttons on that page. The figures of each page are labeled according to this order.

Figure 0:

**Logo page. Tap
anywhere to continue.**



Figure 1:

This is the first thing a user would see when opening the app.

The user can choose to

1. Continue as a Guest
2. Create an Account
3. Login if they already have an account

The image shows a user authentication interface. At the top, there are two buttons: 'SIGN UP' (highlighted in red) and 'LOGIN'. Below these are two input fields: 'email' and 'password'. Underneath the input fields is a link that says 'CONTINUE AS GUEST'. At the bottom of the form is a red 'Submit' button.

If this is a scenario where the user does not have user credentials (first time user), they will enter in a new username and password into the “Sign Up” section.

This will take them to an information page that instructs all new users on how the app works. (As seen in Figure 3)

Figure 2:

In this image, the user already has an account. So, we will select the “Log In” option and enter our credentials.

This scenario does NOT produce the instruction manual seen in figure 3. It merely logs the user in and allows them access to exclusive features only for members of the app.

The image shows a user login interface. At the top, there are two buttons: "SIGN UP" and "LOGIN". The "LOGIN" button is highlighted with a red background. Below these buttons is a light pink rectangular area containing two input fields: "email" and "password". Below the input fields is a link that says "CONTINUE AS GUEST". At the bottom of the form is a red "Submit" button.

Figure 3:

When the user has finished creating an account (first time user), they are automatically directed to this view. It contains a brief introduction to the application and the purpose for data collection.

This will NOT show again for repeat logins, however it can be accessed again in the info page.

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NEXT >

Figure 4:

Users see this view after they select “next” from Figure 3. It also serves as an introduction to the application.

Its purpose is to teach users about the different icons the application uses and what they mean in regards to using the application.

This view can also be accessed later in the info view.



My Profile.

This is where you can access past harvests and patches.



Map.

This is where a map of berry picking spots will be available.



Add new harvest.

This is where you can log new harvests.



Resources.

This is where you'll be able to find more information.



Home.

This is where you can find this information.

NEXT >

Figure 5:

After the initial information, the user sees the map of berry harvests. They can search for locations and harvests at the top.

Tapping the map on an icon will show harvest info and let them log a new harvest.

On the bottom are buttons with functionality described on the previous view (Figure 4).

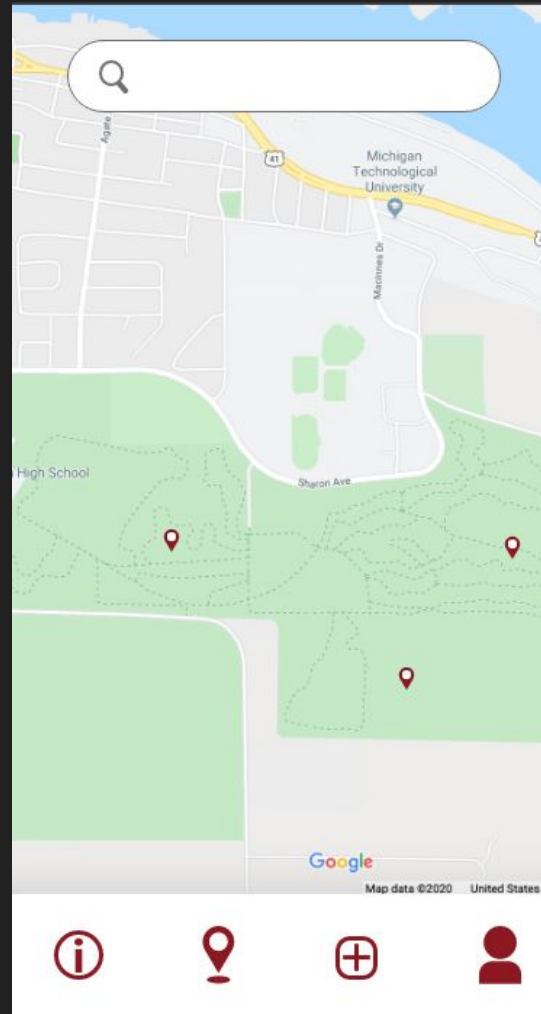


Figure 6:

This pop-up appears when the user selects the “Information” button (the ‘i’ in a circle).

“App Summary” shows the user the info seen from when they first created an account.

Clicking the buttons shown will produce the pop-ups seen in figures 11, 12, 13, and 14 respectively.

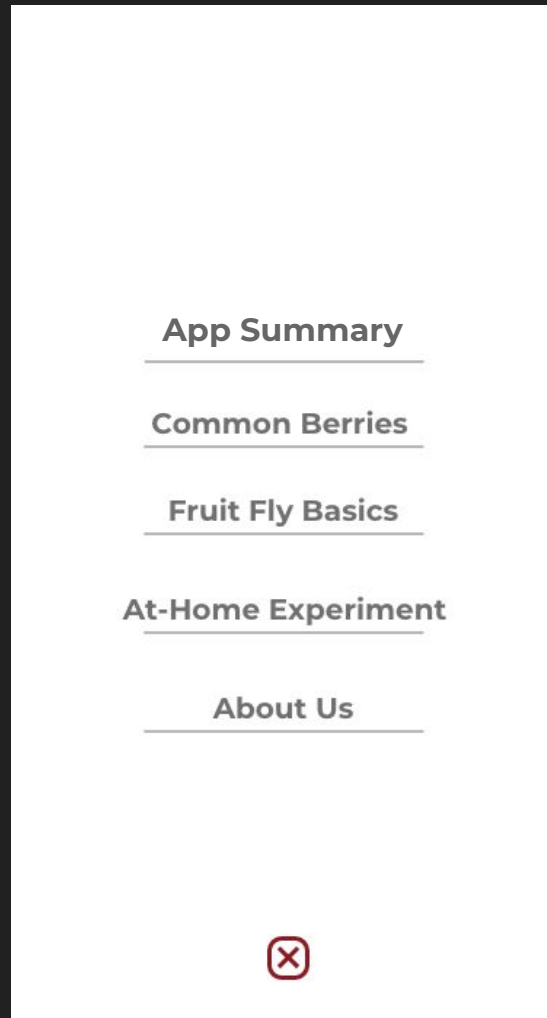


Figure 7:

This is the view that a user will see whenever they click on their profile button in the bottom right of the app.

Buttons:

- **My Profile**
 - Shows your profile information. (Name and Email)
- **Private Patches**
 - Displays the users private berry patches
- **Berries Logged**
 - A list of all the previous harvests logged.
- **Demographic Info**
 - Contains the Demographic survey from Figure 8. (next page).

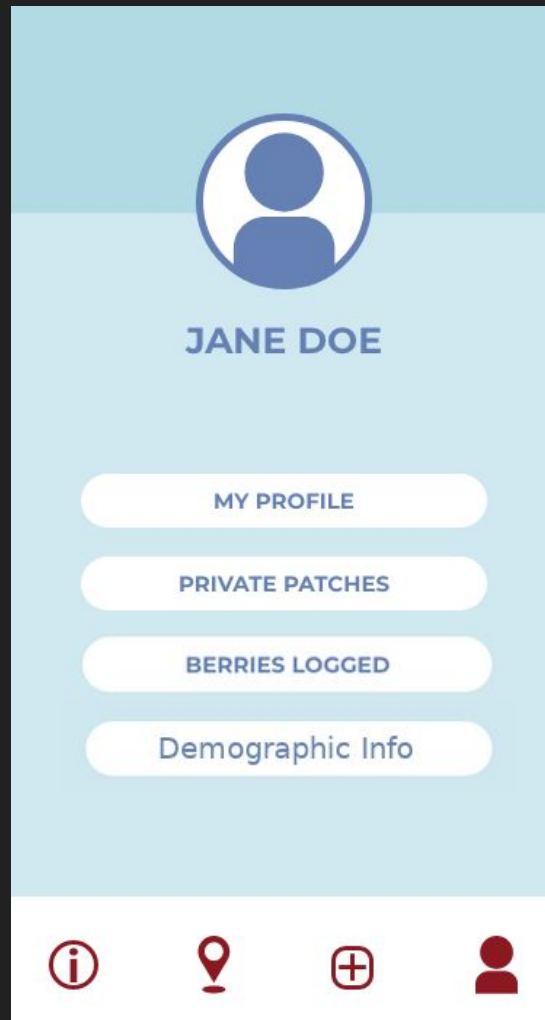


Figure 8:

This is the Demographic Info view. It is an optional survey that users can access from their account view.

The demographic info is meant to gather information on who is using the application (requested by the scientists).

The page will show previous responses

Demographic Info

Location?

EX: 123 MAPLE ST.

Age?

SELECT

Gender?

SELECT

Race?

SELECT

DONE

1. Age: _____
2. Gender:
 - o man
 - o woman
 - o non-binary
 - o prefer to self describe: _____
 - o prefer not to say
3. Race or ethnicity:
 - o White
 - o Hispanic or Latino
 - o Asian or Asian Indian
 - o Black or African American
 - o American Indian or Alaska Native
 - o Middle Eastern or North African
 - o Native Hawaiian or Pacific Islander
 - o Other: _____
4. Tribal member:
 - o yes
 - o no
5. What are your favorite berries to pick: _____

Figure 9:

This form will show after logging a berry harvest. This will ask questions about the specific harvest completed.

The questions can be seen in the next slide.

Harvest Questionnaire

Location?

EX: 123 MAPLE ST.

Type?

SELECT



Date?

SELECT



Regular?

SELECT



DONE

Harvest Questionnaire

* = required field

1. * Date: mm/dd/yy
2. * Type(s) of berries picked (check all that apply):
 - raspberries
 - blackberries
 - blueberries
 - cherries
 - strawberries
 - thimbleberries
 - other: _____
3. * Were the berries you picked
 - wild or natural
 - planted grown of cultivated
4. * Approx. quantity of berries picked (in cups): _____
5. * Location of berries
 - use my current location
 - choose location on map (*this will pop up the map; you can tap the map to choose the location; it will ask you to confirm that you tapped the location you wanted; if yes, it will return to the form; if no, it will close the confirmation pop up and stay on the map*)
6. * Where did you pick the berries?
 - you-pick farm
 - backyard/garden
 - pine/conifer/softwood forest
 - deciduous/hardwood forest
 - grassy area/meadow
 - roadside
 - wetlands
 - other: _____
7. * Have you heard of the Spotted Wing Drosophila (SWD) fruit fly?
 - yes
 - no
8. With whom did you pick the berries?
 - by myself
 - with family
 - with friends
 - other: _____
9. How do you plan to use the berries? (check all that apply)
 - sell
 - eat unprocessed
 - process into other products (pies, jams, etc.)
 - share/give away/gift
 - freeze to eat or process later
 - other: _____
10. Distance traveled to pick berries (in miles): _____

Figure 10:

This appears after a user completes a survey.

“Return to map” returns you to the map! (main page)

THANK YOU!

We appreciate you
taking time out of your
day to log your harvests.

Happy picking!

[Return to Map >](#)

Figure 11:

This pop-up appears when the user selects “Common Berries” from the information menu in figure 6.

It is a scrollable database of berries common to the UP complete with pictures, latin nomenclature, etc.

The ‘X’ shown at the bottom above the nav bar closes the pop-up.

Common Berries



Blueberry *latinus namus*
Small description of berry goes here.



Raspberry *latinus namus*
Small description of berry goes here.



Thimbleberry *latinus namus*
Small description of berry goes here.



Blueberry *latinus namus*
Small description of berry goes here.



Raspberry *latinus namus*
Small description of berry goes here.



Thimbleberry *latinus namus*
Small description of berry goes here.



Blueberry *latinus namus*
Small description of berry goes here.



Figure 12

This pop-up appears when the user selects “Fruit Fly Basics” from the information menu in figure 6.

It gives information about the invasive fruit fly population.

The ‘Download’ button allows you to download a PDF of this info.

The ‘X’ shown at the bottom above the nav bar closes the pop-up.



Figure 13:

This is the pop-up that appears when you select “At-Home Experiment” from the menu in figure 6.

This gives information on how to test at-home for traces of the invasive fruit fly species.

The ‘Download’ button allows you to download a PDF of this info.

The ‘X’ shown at the bottom above the nav bar closes the pop-up.

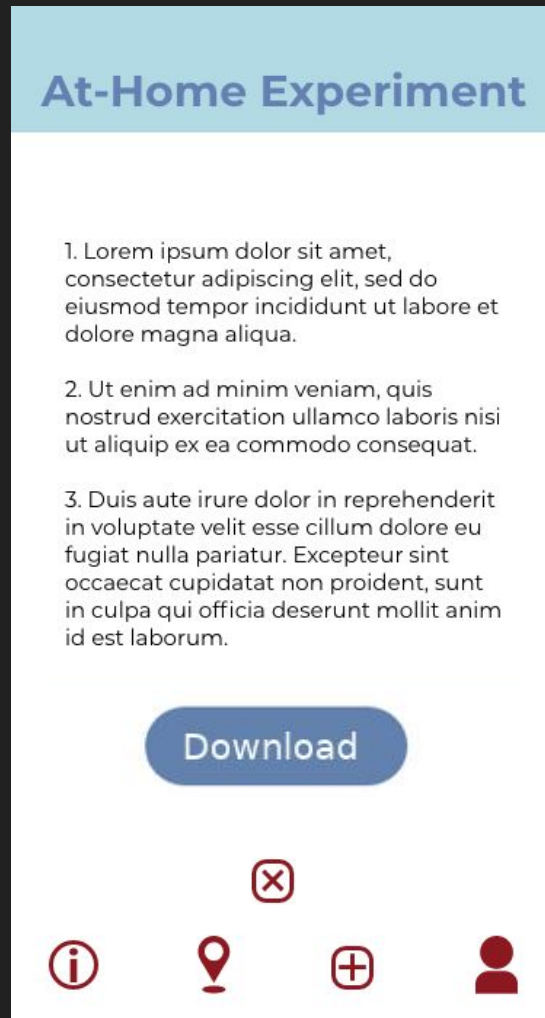


Figure 14:

This is the pop-up that appears when you select “At-Home Experiment” from the menu in figure 6.

This gives information on the scientists involved in the project

The ‘X’ shown at the bottom above the nav bar closes the pop-up.

About Us



Angie Carter *Social Science*

Angie Carter is a rural sociologist working at Michigan Tech University's Department of Social Sciences as an assistant professor of Environmental and Energy Justice. She studies local food systems, community sustainability, and social change. You can contact her at ancarter@mtu.edu or (906) 487-1431 (office).



Tara Bal *Forestry*

Tara Bal is a forest entomologist and mycologist at Michigan Tech University's College of Forest Resources and Environmental Science. She studies forest health issues and teaches a wide variety of coursework from professional forestry and insect ecology to wild foods and maple syrup. You can reach her at tbal@mtu.edu or (906) 487-1898.

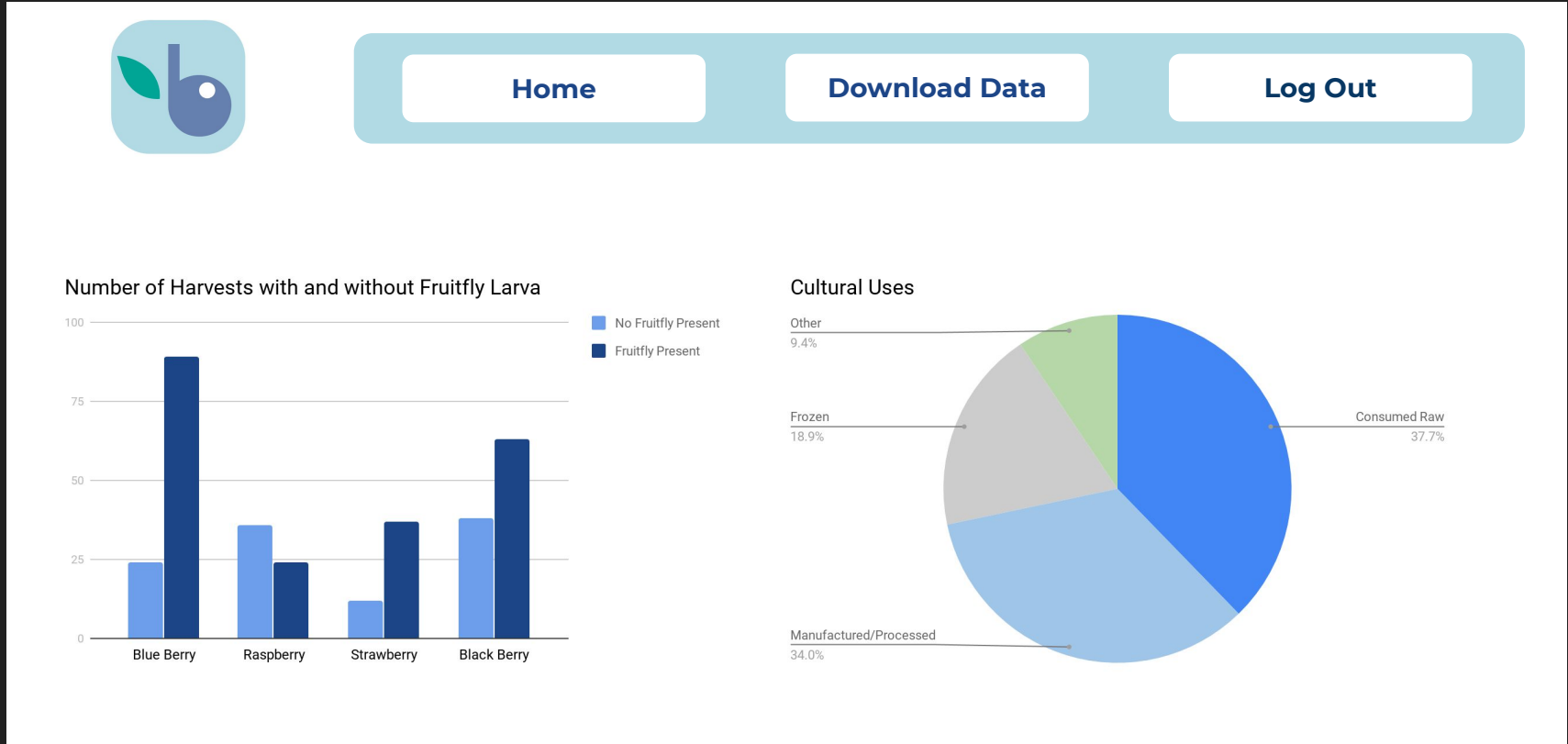


Erika Hersch-Green *Biology*

Erika Hersch-Green is a plant ecologist and geneticist working at Michigan Tech University's Department of Biological Sciences as an assistant professor. She is interested in understanding what factors affect biodiversity patterns and her research examines how living and non-living components of environments impact organisms, populations, and community dynamics. You can contact her at eherschg@mtu.edu or (906) 487-3351 (office).



Figure 15: Scientist View. If a registered scientist logs in to the app they have access to a page depicting charted data taken from all of the user surveys. The scientists can use this information for their studies.



Goals & Concerns

Goals

1. Simple user-friendly interface
2. User-test with users outside of our generation
3. Create easy-to-understand Scientist Materials

Concerns

1. Navigation
 - a. Are the icons clear enough?
 - i. Do they communicate what they need to?
 - b. Should there be a home button?
 - c. User profile?
2. Motivation
 - a. Get the word out and recruit users
 - b. Create a desire to use the app
3. Usability
 - a. Is it user-friendly?
 - b. Are instructions clear and where they need to be?
 - c. Will text be readable?
4. Feasibility
 - a. Is the project too complicated for the time frame?

Preliminary Instructional & Other Content

- First-time user informational content
 - App overview
 - Icon descriptions
 - Map use description
- Berry information
 - Common names
 - Pictures
 - Identifying features
- At-home fruit-fly larvae test
- “About Us” page
 - Background information on the scientists