

Backyard Berry

HU4628 + CS4760 Team 2

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Assignment 1, Part C

App Summary Document

App Idea:

An app for citizen science berry pickers to record harvest numbers, berry type, and location of berries in the Great Lakes region. Citizen scientists will also be able to learn more information about local berry types, common uses, and the invasive fruit fly that is affecting harvests. This data collection will allow scientists to learn about harvests and demographics of berry pickers.

Users:

- Foragers – Those who pick berries at you-pick farms or wild berries in the Great Lakes Region
- Scientists – Tara Bal, Angie Carter, Erika Hersch-Green
- Tourists – people who have come to the Great Lakes Region and want to go berry picking
- Residents in the Great Lakes Region who are not regular foragers, but would like to go berry picking on occasion

Major Work Flow: This is a list of the major interaction using the app for each users

Tourists and Residents (casual users):

- Use a guest account
- View map of public berry harvests

- Filter berry harvests based on type of berry
- Submit public berry harvests to the map
 - By gps or by marker placement on the map
- View information on identifying berries
- View information on fruit fly test
- View cultural uses of berries
- View scientist's about-us/contact-us page

Foragers (recurring users):

- Make an account
- View personal berry patch locations on a map
- Submit private harvest data
 - By gps or by marker placement on the map
- Examine data of past personal harvests
- Submit cultural uses of berries

Scientists:

- View demographic data
- View any other special private data
- Export berry map data

Data:

1. Harvest Form Data

- Date of collected harvest
- Type of berries (blackberries, raspberries, blueberries, cherries, strawberries, thimbleberries, other)

- Berries were: (wild/natural, or planted/grown/cultivated)
 - Approximate quantity (per berry type, units are cups)
 - Map data (two levels: nearest town and location selected on a map)
 - Where did you pick these berries? (Description of location, e.g. My Backyard)
2. GPS coordinates, map marker positions (possibly part of harvest form)
 3. Locations, Location frequency, and the distance traveled (part of map information)
 4. Berry Questionnaire (Berry info + location + fruit fly test)
 - Have you heard of the fruit fly Spotted Wing Drosophila (SWD)? (Yes/No)
 - Would you like to learn more about Spotted Wing Drosophila? (link to pdf information)
 5. Survey of Behavior Form
 - Who did you pick berries with? (myself, family, friends, etc.)
 - What are your plans for the berries? (Sell, eat, process, share, freeze, etc.)
 - How far (in miles) did you travel from home to pick these berries?
 6. Demographic Form data (for guests, users enter on account creation)
 - Age (self report)
 - Gender
 - Ethnicity
 - Tribal member (Yes/No, if yes, which tribe_____)
 - What are your favorite berries to pick?

