App Idea:

The app's purpose is to allow sightings of herptiles (amphibians and reptiles) in Michigan to be documented online. This documentation is able to be done simply and efficiently. When a user spots a herptile they will be able to fill out a form to report the sighting. This form will be able to be filled out offline and allows the user to document the sighting by uploading a picture, providing a description of what they saw, and additional information of the sighting conditions. Data on the form will also be able to be automatically filled out, real time, on the basis of the users location, time, etc. These reports will then be able to be viewed in their website

Users (children through elderly)

1. Citizen scientists
2. scientists/researchers
3. highschool /middle school teachers
4. highschool/middle school students
5. Conservation organizations

Major Workflows

A user first downloading and logging into the app:
1. The user will download the app and open it
2. The user will be greeted with the home page
3. The user will click the login button and be taken to the login page
4. The user will then log in
   a. If they have an account, they will log in with their credentials
   b. If they do not have an account, they will be taken to the website to create an account, and then login on the app with their new credentials
5. The user will then be taken back to the home page

A user wants to record a sighting
1. The user will navigate to the add record page(through hamburger menu or home page button)
2. The user will fill in all basic form data
3. The user will use the map, auto populate location data, or fill in location data
4. The user will add any files they have to their record
5. The user then sees the advanced info drop down button for more form data
   a. The user will skip clicking this
   b. The user will click this and fill in more information
6. The user will click the submit button

7. If the user has an internet connection, it will send the report to the database, otherwise it will be stored on the device and wait for a connection

A user wants to delete an unsent report
1. The user will navigate to the manage reports page (through hamburger page or homepage button)
2. The user sees their reports and clicks the delete button on the specified report

A user wants to upload saved reports
1. The user will be logged in
2. The user will navigate to the manage reports page (through hamburger page or homepage button)
3. The user will click the upload reports button

Views

Login Page
When a user first logs into the app, they will open it to the login page. If a user uses the remember me feature, they will not have to login again. A link to create an account ill also be available
Features:
- Login stuff
- Link to register an account
- Checkbox to remember your login

Page Header
This will be consistent across different pages and allow users to navigate the app.
Features:
- title
- Help button
- Dark/light page theme button
- Hamburger menu
  - Home page
  - Add record
  - Manage record
  - login/sign out

Homepage
When the user opens the app, They will be greeted by a home page with a brief description of the app along with options for where they would like to go on the app.
Features:
- Page Header
- Logo
- Hello username message if logged in

- Add record button
- Manage record button
- Login button/sign out button

Add record page
This page will allow users to enter a record of a creature they found.
Before being able to log records, the user must sign in. Should be able to store forms for later while offline.
Basic Features:
- Add additional entry button
- Upload file
  - Camera (if time)
- Location field
- Map
  - Button to autofill based on device coordinates(if time)
  - Autofill county
- Request device for autofill of certain information (autofill county, date, time, etc.)
- Other basic data input
  - Basic data will be based on what information is required on their website
- Link to website for more information about herptiles
Advanced Features:
- Advanced data input
  - Advanced data will be based on what information is not required on their website

Help Modal
This modal will include information about how to use the app
Features:
- Information on adding records
- Information on managing records
- Information on how to create an account

Manage Records Page
This page will allow users to view their previous records and view whether they have been uploaded or not
Features:
- List of record the user has made
- Symbols to indicate upload status
- Upload all records button
- Upload automatically when internet is available (if time)
  - Checkbox to turn this on or off

Data

1. Form data
2. Account Data

3. Pictures/Videos
4. Gps Coordinates
5. Coordinates/General Weather Data

Anticipated Challenges

1. Delay between uploading records and storing in the field
2. Syncing issues
3. Getting precise coordinates of +-15 error margin
4. Integrating previous data