Milestone 2

BiObserve

Team Number: 112 (4)
Team Name: Give Us A Bit
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BiObserve Features List

- **User map(Functional)** An interactable map that updates in semi real time and displays "pins". These may include a picture of the plant or animal that another user has uploaded to the network. This will be the main layout for the entire application.
    - Users will benefit by having an easy to use seamless device to see where wildlife has been spotted
    - Allows the app to have a constant background in its "Resting" state. Allows the user to see local instances of past flora and fauna and will allow the user to understand the location of their posts more intuitively
    - This feature will be one of the first to be implemented in layman but will be expanded upon depending on stretch goals
    - It will be considered complete once the map can show the users location and be able to access the information on flora and fauna

- **Dynamic pins(Functional)** These pins will have an option to click on them for more information
    - This will be used to give the user ease of accessibility. The goal is that by simulating GPS programs the average user should be able to intuitively use the program
    - Dynamic pins allows the program to have a unique style. The hope is that by doing this one can make this program look and feel better then most information gathering apps. The goal is also to make the information easily accessible to not only professionals but amatures as well.
    - This is a high priority and will be completed with the Map.
    - This will be considered complete at minimum when we have pins on a map indicating locations of sightings

- **User page(Functional)** The ability to use a login and password to track your post history and your comments and replies to those comments (provided that the comment stretch is completed.
    - The goal of this is to encourage user longevity and hopefully begin to establish a community of enthusiasts. It will also encourage the posting of quality Data
    - This, while not being a extremely integral part of the idea is a important part of the implementation as having a user is helpful when trying to secure uploads and provide a place to do said uploading
    - This will be considered acceptable when the user can keep track of their post history

- **Servers(Functional)** the goal is to have an off site server that stores the users data and put it onto an imported map. As such we will have to either create a server or find a server with the required flexibility.
    - This will benefit more advanced users and professionals as it will allow for mass collection of data. However the normal users should also see its effects.
    - This is also valuable to the project as the project is to create a program that allows for the mass collection of data. As such a server to store such data is integral to this project's development.
    - This will be done after user pages are implemented as we want the server to help store and track these user pages.
    - This will be considered complete when the user is able to update their device from the server and upload their information to the server.
- **Date and location of picture(Functional)-** The idea of this is that this application should be able to take the time date and location native to all ios pictures and use that to automate the upload process.
    - This will benefit the data and by doing so affect the user. This implementation should keep people from taking a picture, waiting until the end of their hike to upload it, and forgetting where they saw it. If this were to occur we speculate that the user will attempt to guess where they saw it which will attribute error to our data.
    - This allows for more accurate data to users and professionals. Again, the goal is to create a large net of user imported data as such its important the data is accurate.
    - This will be done very late possibly after the diagnostics page. This is however up to our march 17th meeting to decide.
    - This will be considered adicuit when the user has the option to use it and it works as intended.
- **Diagnostics page(Non-Functional)** a page to see more information in a more information dense layout
    - This will benefit any professionals using this database. It will be the culmination of all the users information by displaying all sightings in one area
    - This is valued to the project as a medium low.
    - This will be considered adequate when we can get a vectorized list of data in a readable format. The goal is to create a lot of info in one place and we will work on this parts features if we have the time too.

Features	User Story	Requirements
View observation history	As an BiObserve user, I need to select an observation in the history so that I can modify or delete it.	· log into BiObserve · navigate to the history · select one, or multiple history · modify or delete history
Location Services	As a BiObserve user, I need to get my location on the map so that I can know where I am.	· map as a background · point out where user is
Find nearby wildlife spots	As an BiObserve user, I need to search nearby wildlife spots on the map so that I can know wildlife spots near me.	· map as a background · point out nearby wildlife spots · list species information
Search species information	As a BiObserve user, I need to search species information so that I can know where I could go for wildlife I want to look.	· search species name and give search results · classify species according to their traits · show wildlife spots of selected species on map
Post wildlife information	As an BiObserve user, I want to post wildlife information so that I can share location and time of a wildlife observation with others.	· log into BiObserve · access camera · upload photos · edit location and time
Commenting system	As an BiObserve user, I want to post comments to wildlife spots or observations so that I can talk about it with others.	· log into BiObserve · select spot or observation

BiObserve Schedule

2020

Description	Week 2/3/20	Week 2/10/20	Week 2/17/20	Week 2/24/20	Week 3/2/20	Week 3/2/20	Week 3/9/20	Week 3/16/20	Week 3/23/20	Week 3/30/20	Week 4/6/20	Week 4/13/20	Week 4/20/20	Week 4/27/20

Key

Color	"=="	Status
(green)	"=="	Completed
(red)	"=="	Delayed
(cyan)	"=="	Ongoing
(gray)	"=="	Not Started

Formulation

Define The Idea
- 1 Find idea that lacks in the market — *(green)*
- 2 First Contact (Share vision and goals) — *(green)*
- 3 Product Canvas — *(green)*
  - Prepare description of product

Research
- 1 Web Based or Native — John *(green)*
  - IOs VS Android
- 2 Development Environment — John *(green)*
- 3 BackEnd
  - Data Base — Yin *(green)*
  - Query Language — John *(green)*
  - API's — Brett *(green)*
- 4 Dependencies — Drake *(green)*

Set Up for Development
- 1 Get Required Software — *(green)*
  - XCode
- 2 Set up a GitHub Repository — John *(green)*
- 3 CocoaPods — *(cyan)*

Development

RE-EVALUATION

Sprint 1	Sprint 2	Sprint 3	Sprint 4

Sprint 1 (Main Page Layout)
- 1 Layout Canvas — *(gray)*
- 2 Implement Map (Mapbox) — John
- 3 Create UI/UX — Brett | Brett/Drake
- 4 Other components — Drake | Drake/Yin

Sprint 2 (Begin BackEnd with User Authentication)
- 1 Create a Database — John/Yin
  - Hasura(Postgres)
- 2 Implement GraphQL — Drake/John
  - Incorporate Apollo
- 3 User Authentication — Brett
  - Create UI/UX of login/register page
  - Implement User Authentication Fully — John/Brett

Sprint 3 (Populate Main Page with BackEnd)
- 1 Map — John/Drake
  - Create dynamic pins (Popup)
- 2 User Profile
  - Profile UI/UX — Brett
  - Populate user information from database — John/Yin

Sprint 4 (Stretch Goals)
- 1 Diagnostics — Yin/Drake
- 2 Interacting with past posts — Drake/Brett

Reserved Time

Key

	"=="	everyone
Name/Name	"=="	First fiddle/support