

# Butterfly Longevity Tracker

*Weekly Report 9 (11/8/24 - 11/14/24)*

## Project Information

- Project Title: Global Butterfly Longevity Tracker
- Group Number: sdmay25-03
- Client: Nathan Brockman
- Advisor: Maruf Ahamed
- Team Members:
  - Alex Herting - Full-stack Engineer
  - Andrew Ahrenkiel - Full-stack Engineer
  - Charles Dougherty - Frontend Developer
  - Jaret Van Zee - Backend Engineer
  - Carter Awbrey - Visionary

## Summary

*In the front end this week, we continued optimizing and reworking the main pages' HTML. We also began to set up the site's navigation structure in order to set up a main flow for the website. Also, we continued looking into themes and organized our CSS to ensure an easy-to-maintain website.*

*In the backend this week, we discussed the structure for inputting data in a standardized way from the website and how butterflies should optimally be stored. A format was decided on, and we have started implementing the required features to allow for seamless integration.*

# Accomplishments

- Alex

- Team meeting with Maruf
- Worked on Lightning Talk 7: Prototyping
- Created merge requests for issues relating to the frontend for UI responsiveness changes
- Reviewed code for other team members merge requests

- Andrew

- Worked on configuring front-end views for mobile, tablet, and desktop sizing. Style for buttons and input fields complete.
- Collaborated on completing the Prototyping Lightning Talk Slide deck.
- Met with Maruf and the team to establish a goal for the end of the semester.
- Team code reviews are complete for two views/branches to be merged back into the main branch.

- Charles

- Team meeting with Maruf
- Worked on Lightning Talk 7 prototyping slides
- Frontend structure reworking and linking

- Jaret

- Worked on Lightning Talk 7: Prototyping
- Met with Maruf and discussed end-of-semester goals and end-project goals for our client.
- Working on and reviewing data structure for different types of information types that are stored.

- Carter

- Team Meeting with Maruf
- Created generalized tagging system for butterflies
- Finalized tagging definition with team members
- Researched Spring Security Mechanisms

# Pending Issues

## Frontend

- Tweak CSS to deliver correct responsive screens
- Connect screens using javascript
- Implement calls to the backend to load data
- Focus mainly on guest experience pages
- Connect navigation between guest experience pages, connect to backend API to add sightings
- Host on server?

## Backend

- Configure SSL encryption
- Implement authentication system
- Setup and Create Unit Tests
- Containerization of the server
- Add Fingerprints to Specific Database Actions
- Add MongoDB Validation rules to ensure that new data isn't duplicated
- Add tag generation for sites for available tag systems
- Create API documentation with "Spring REST Docs"

Both: Setup Integration Tests

# Individual Contributions

| <u>NAME</u>       | <u>Individual Contributions</u><br>(Quick list of contributions. This should be short.) | <u>Hours this week</u> | <u>HOURS cumulative</u> |
|-------------------|---|------------------------|-------------------------|
| Alex Herting      | Front End Fixes, Code reviews, lightning talks, Maruf meeting                           | 4                      | 38                      |
| Andrew Ahrenkiel  | Frontend Design, Lightning Talk, Presentation, Maruf Meeting, Code Review               | 4                      | 38                      |
| Charles Dougherty | Team meeting, lightning talk 7, frontend structuring and linking                        | 3                      | 34                      |
| Jaret Van Zee     | Team meeting, data structure discussion, lightning talk                                 | 3                      | 31                      |
| Carter Awbrey     | Team meeting, Tagging Data Structure, Spring Security Research                          | 4                      | 34                      |

# Future Plans

We have set the goal of completing the guest experience before our faculty demo. This means completion of all guest experience frontend views and connecting each view. Connection of the frontend to the backend API will be the next step. The team is working on documentation for API for frontend developers to easily understand the logic of the backend. Once Frontend and Backend are connected locally, we have set a goal to host both the frontend and backend on live servers for our demo, but this is the lowest priority. Being able to locally enter a butterfly sighting as a guest to the database is the main goal. Achievement of this requires the completion of all pending issues above.

# Meeting Review

In this meeting we showed our advisor the progress that we have been making in the frontend and backend. We explained our plan for the demo and what we want to have available as a prototype to our client by the end of the semester. He approved of our plan and we will continue to carry it out over these next couple weeks.