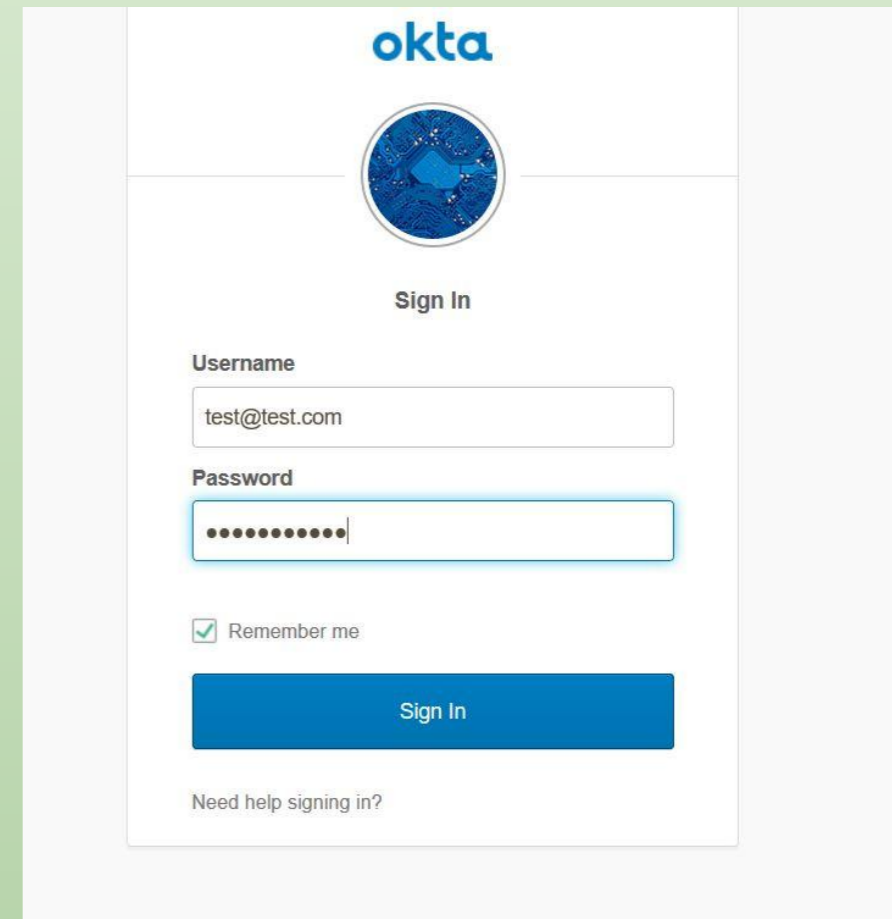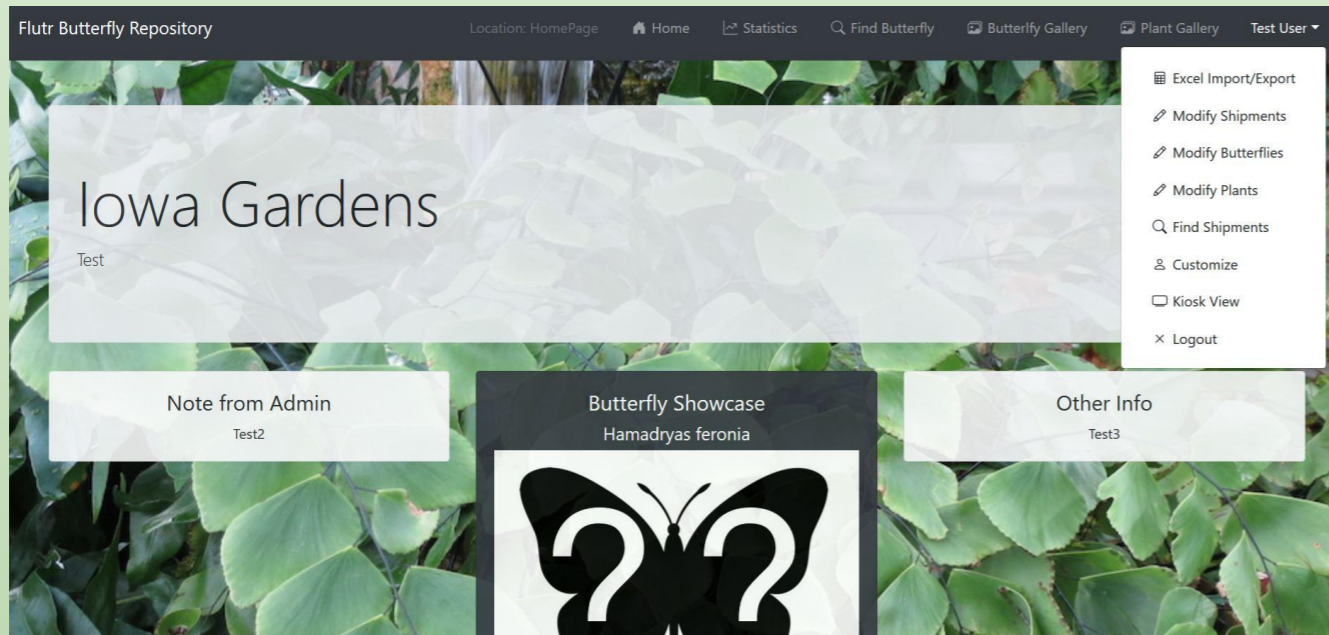# Small Pupae - Big Data

Sdmay20-01b
Client: Reiman Gardens

Manthan, Mark O'Meara, and Matthew Markose

Secure authentications

Engineering Standards and Design Practices

- Hardware is minimal in purpose, mainly a client facing web device and temperature/environment probe to create a standard of easy access and analysis
- Software practices planned are for easy adaptability for multiple potential clients, thorough data analysis presented in a simple way for clients, and cohesive design.
- Standards: all were considered; mainly ethics for pupae growth and competition
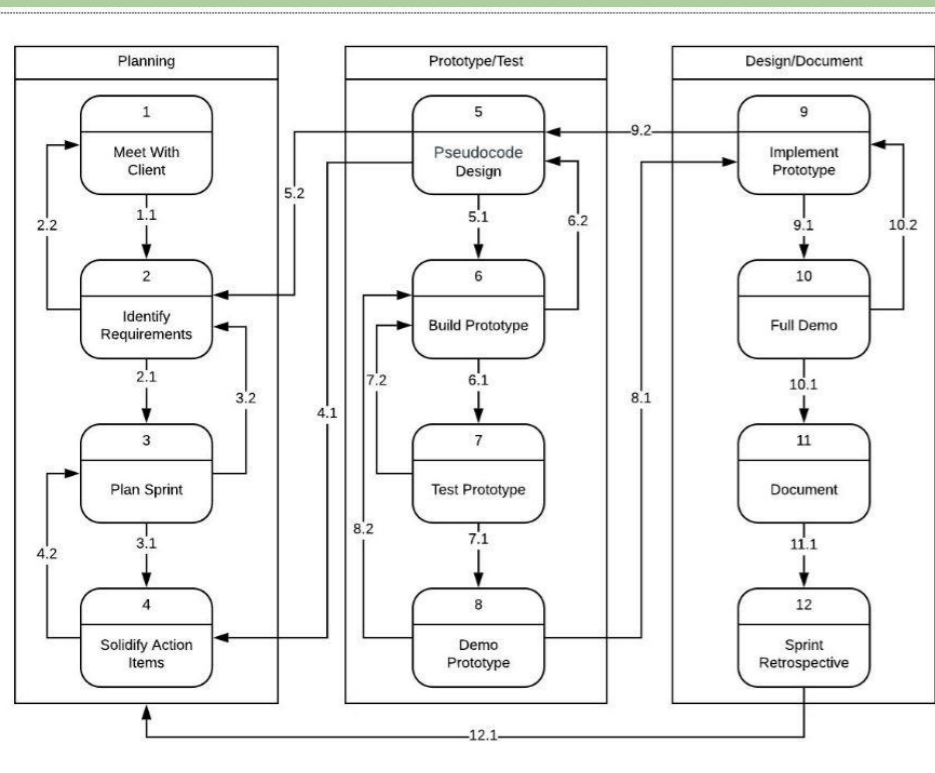
Design Process

Problem
- Reiman Gardens needs a way to store butterfly emergence data
- The current software only supports one garden
- New features need to be added to the software for statistical analysis

Solution
- We made a platform for storing emergence data and used a cloud-based database which is meant for big data projects
- The new software will support multiple gardens as authentication was developed using OKTA
- New features were added using Vue.js front-end framework and connected to the database

Technologies