#### EE/CprE/SE 491 Weekly Report (09/15/19 - 10/01/19)

Group Number 001

Client: Brockman, Nathan - Reiman Gardens

Advisor: Vaswani, Namrata

Project Manager: Jay Amin Project Planner: Mark O'Meara Project Organizer: James Lockard

Communications Director: Adrianna Kallis Documentation Designer: Matthew Markrose

Test Engineer: Manthan

# Small Pupae Big Data

1st October 2019

#### **Weekly Summary**

Overall, the team worked to better understand the client needs and current system. The team met with an entomologist, Anita, at Reiman Gardens to observe environment and learn more subject knowledge pertaining to the project. The team also received current data and tools used by the client. Additionally, the team met with the faculty adviser to better understand the adviser role in the project, including learning additional details regarding the data analysis portion of the project.

#### **Past Week Accomplishments**

Team Member	Work Done	
Jay Amin	<ul> <li>Researched pupae growth and factors, spoke with Anita (entomologist)</li> <li>Researched topics learned about during client meeting</li> <li>Toured reiman gardens and learned about current and past systems as well as past tools created by groups         <ul> <li>Toured butterfly garden afterwards, added notes</li> </ul> </li> <li>Coded basic web front PWA using Vue, started looking into analytics integration         <ul> <li>Test deployment on localhost</li> </ul> </li> </ul>	
Mark O'Meara	<ul> <li>Group meeting with Anita at Reiman Gardens</li> <li>Design thinking</li> <li>Compiling questions for Nathan</li> </ul>	

James Lockard	<ul> <li>Built design document template</li> <li>Built status report template</li> <li>Assisted in creating design process diagram</li> <li>Reviewed frontend framework Vue         <ul> <li>Went through demos and practice projects</li> </ul> </li> <li>Began research in backend products that work with Vue         <ul> <li>Wanted to be able to contribute to the discussion for choosing a backend to use to make integration as easy as possible.</li> </ul> </li> </ul>
Adrianna Kallis	<ul> <li>Coordinated Reiman Gardens visit with entomologists</li> <li>Toured the Reiman Gardens facility and asked questions to better understand the user needs         <ul> <li>Gained perspective from another full time entomologist, Anita, in addition to the perspective from Nathan</li> </ul> </li> <li>Gained access to current data through Box</li> <li>Began researching existing analyses and existing data from the entomologists         <ul> <li>They have some existing statistical analyses, mostly in JMP</li> <li>For this project, users will be allowed to download aggregated data to perform their own analyses, or run analyses integrated in the website through Python or R</li> </ul> </li> </ul>
Matthew Markose	<ul> <li>Reviewed Excel APIs intended to transfer data from Excel files to database         <ul> <li>There are APIs that read spreadsheets</li> <li>James knew of technology that could help with project</li> </ul> </li> <li>Attended meeting with client to review use cases         <ul> <li>Learned what technology is currently used</li> <li>Understood changes needed to be made</li> </ul> </li> </ul>
Manthan	<ul> <li>Group meeting with Anita at Reiman to get better insight about the project details.</li> <li>Did some research on Angular and Node back-end related to the project requirements.</li> <li>Gained access to the project files on cloud storage(Box).</li> <li>Gathered some information about the process of chrysalis.</li> </ul>

#### **Pending Issues**

Overall, the team needs more clarity from the client, especially relating to how the client's current system should impact the system we produce.

Team Member	Issues Encountered	
Jay Amin	Need to get more clarity on frameworks and brand new vs build on old	

Mark O'Meara	<ul> <li>Need to determine if we are creating a separate website or using the reimangardens.com domain.</li> </ul>
James Lockard	<ul> <li>Need to solidify what framework and backend we are going to use to implement design.</li> </ul>
Adrianna Kallis	<ul> <li>Need to determine database management system, since currently some of the data is in Access, other data is in Excel files, and other data are designed for use with JMP</li> </ul>
Matthew Markose	<ul> <li>Unsure if client wants us to branch off current solution or develop new product.</li> </ul>
Manthan	Unclear client expectations.

## **Individual Contributions**

Team Member	Hours This Week	Hours Cumulative
Jay Amin	6	24
Mark O'Meara	6	20
James Lockard	8	25
Adrianna Kallis	6	20
Matthew Markose	6	20
Manthan	6	24

# Plans For The Upcoming Week

Team Member	Projected Work	
Jay Amin	<ul> <li>Assign communication task to get clarity on development from client</li> <li>Create pseudo code for analytics implementation</li> <li>Finish beginning of design document after getting clarity</li> </ul>	
Mark O'Meara	<ul> <li>Determine what domain we are using</li> <li>Set goals for first sprint</li> <li>Help with frontend setup, or backend setup, or both (wherever needed)</li> </ul>	

	<ul><li>Design Document</li><li>Lightning talk</li></ul>
James Lockard	<ul> <li>Determine frontend and backend framework to use</li> <li>Connect to server</li> <li>Make an initial project and make sure everyone has access to it</li> </ul>
Adrianna Kallis	<ul> <li>Set up meeting with Nathan to clarify requirements</li> <li>Do more research regarding current and desired analyses</li> <li>Ensure everyone has access to the repository and can begin pushing contributions</li> </ul>
Matthew Markose	<ul> <li>Connect to server</li> <li>Discuss necessary backed technologies to be used</li> <li>Get recommendations from teammates on their backed preferences.</li> </ul>
Manthan	<ul> <li>Work on setting up back end.</li> <li>Get more project details.</li> <li>Establish roles on the programming end of the project.</li> </ul>

## Summary of Weekly Advisor Meeting (Optional/If Applicable)

Initial advisor meeting was for introduction, to understand our roles, and what is expected of us. Documents, due dates, requirements, and deliverables for our project have been shared.