

# Proposal

## Loveland Living Planet Aquarium Employee Communications Web App

Aaron Wilson  
Chad Patten  
Kristi Gordon  
Mati Collings

# Proposal

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# Section I : Client

This section covers basic information regarding the products target audience, client goals, and success metrics.

## **1.0 Client**

### **2.0 Statement of Need**

### **3.0 Client Goals**

### **4.0 Proposed Solution**

### **5.0 Deliverables**

### **6.0 Success Metrics**

### **7.0 Audience/Stakeholders**

#### 7.1 Target Audience

#### 7.2 Key Stakeholders

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## 1.0 Client

### Loveland Living Planet Aquarium

12033 Lone Peak Pkwy, Draper UT 84020

The Loveland Living Planet Aquarium is a non-profit organization, dedicated to inspiring people to explore, discover and learn about Earth's diverse ecosystems. They provide countless educational opportunities to understand and respect our precious Earth and its living ecosystems, from the Utah deserts and mountains, to rain forest habitats, to the planet's vast oceans.

The mission of the Loveland Living Planet Aquarium is to provide unique learning environments for learners of all ages to encourage an ongoing discovery of the Earth's diverse, yet fragile ecosystems. The primary goal of all our educational programs is to get students excited about science. They want to inspire people to explore, discover and learn about Earth's diverse ecosystems.

## 2.0 Statement of Need

The Loveland Living Planet Aquarium (LLPA) is a large facility, with numerous departments, all working as a whole to provide a unique, positive, fun, and educational experience for visitors of all ages. Overall, there is a need for a universal, fast, secure, and efficient way to communicate with employees. Many instances arise, in which staff members need to communicate with personnel in other departments, be it an urgent situation that needs immediate attention or an update that needs recognition. The need for communication throughout the facility between all personnel, including volunteers, is badly needed. Staff members need to be able to send messages to those that need to be informed, updated, alerted, or simply recognized. There are many instances that involve multiple staff members, and walking around the large facility or texting, emailing, or calling other employees is simply not effective. There is a need to inform multiple employees or departments of changes, alerts, updates, followups, questions, and more. There needs to be a way to keep up on the important things going on in the aquarium to save time, energy, and alleviate frustration.

## 3.0 Client Goals

- 1- Adopt a user friendly web based communication program, created specifically for the LLPA
- 2- Reduce response time for urgent or emergency situations
- 3- Increase problem solving efficiency
- 4- Reduce time spent physically walking from department to department
- 5- Improve communication between departments
- 6- Reduce confusion and repeat emails, text messages, and phone calls
- 7- Distribute important updates and notifications to all or limited LLPA employees
- 8- Communicate messages using the “Sea something, Say something” keys
- 9- Provide a way to monitor a situation from start to finish
- 10-Allow employees to send and receive messages at LLPA

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## 4.0 Proposed Solution

The goal is to design a custom web-based communication system to be used by all employees at the LLPA. The system is to be designed with consistent colors, fonts, and other elements found in the LLPA style guide. The custom ticketing program will be created to meet the needs of the LLPA by providing all employees their own individual profile, using their employee email address (volunteers will use their own personal email address). Each admin(s), within each department, will have the ability to send/receive messages from other admins from the same department or other departments. The main dashboard will display new messages as they are sent/received/approved by admins. Each employee can send messages to other departments or individuals upon admin approval (within their respective departments). All departments and employees within those departments will be included in the app. Features can be added/removed as needed within the program during design and development process by UVU DGM team.

## 5.0 Deliverables

- Proposal
- Design Prototypes
- Working Prototypes
- Final Working Web App
- Final Documentation with Time Logs

## 6.0 Success Metrics

- Increased number of issues being reported sooner
- Improved issue response time
- Improved staff & volunteer job satisfaction
- Improved perception of communication effectiveness among staff & volunteers
- Decreased visitor complaints
- Decreased safety concerns

# 7.0 Audience & Stakeholders

For our project work it is important to identify the variety of users that will access this web app. This is vital for specifying goals as well as for identifying pain points among staff communications.

## 7.1 Target Audience

Administrators / Department Heads	Need additional access and ability to communicate one with another individually as well communicate needs to all department heads.
Full Time Employees	Need access to general information and information specific to their departments. They need to be able to report issues to whom it may concern.
Part Time Staff	Basic communications in general and department specific. Also share the need to report issues, though it will be seen first by the admin.
Volunteers	Access to the general board and access to a department if granted

## 7.1 Key Stakeholders

Brent Anderson	Founder and CEO
Chris O'Meara	VP of Operations and Information Systems
Gary Christensen	CFO
Department Heads	Jeff Vanek, Christian Burrell, Caroline Ralston, Suzanne Stratton, Jared Springer, Lorraine Clark, Hedi Sheridan

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## 8.0 Requirements

The project requirements are conditions that must be completed to ensure the success of this project. They provide a clear picture of the tasks that need to be accomplished. These requirements are meant to align the project's resources with the objectives of your organization.



## 8.1 Data/Content Requirements

- Safety Alerts
- Dashboard Notifications
- Calendar of Events
- Exhibit Dates
- Husbandry Documents
- Employee Database
- Org Chart

## 8.2 Functional Requirements

Scenarios described for each function listed below illustrate ways users might use the website application to accomplish their goals in different situations. In order to use the web app a user must first login to the system.

Function	Scenario
User Login	<ul style="list-style-type: none"> <li>• Admin User logs in to manage users</li> <li>• Admin User logs in to manage central dashboard messages and posts</li> <li>• Standard User logs in to submit a message for admin approval</li> <li>• Standard User logs in to view central dashboard and check calendar of events</li> </ul>
Post Dashboard Messages	<ul style="list-style-type: none"> <li>• Admin User logs in to post on a central dashboard that all users can see</li> <li>• Admin User logs in to post messages to a specific department that only members from that department can see.</li> </ul>

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Function	Scenario
Read Dashboard Messages	<ul style="list-style-type: none"><li>All authorized users (current employees) are able to login and read new and previous messages</li></ul>
Calendar of Events	<ul style="list-style-type: none"><li>Employees log in to check the Aquarium Calendar of Events (Google Calendar Feed)</li></ul>
Safety Notifications	<ul style="list-style-type: none"><li>Admin User posts a safety alert for all staff to review immediately</li></ul>
Sea Something Say Something	<ul style="list-style-type: none"><li>Employee sees something that should be reported to a specific department , they take a picture of it and send it with a message to that department</li><li>Department heads can review and post issues to other departments or aquarium-wide</li></ul>
Issue Feedback	<ul style="list-style-type: none"><li>Employee reviews previously submitted issues in order to track whether the issue is pending or resolved</li></ul>

## 8.3 Product Qualities

- Use Loveland Living Planet Aquarium style guidelines for logo, color scheme, fonts, & imagery
- Create a centralized location for employee communications
- Maintain a satisfying user experience by achieving the following usability goals

Usability Goal	Usability Measures
<b>Ease of Use:</b> Web app must be simple and intuitive to use	During user tests, new users will be able to login, navigate the dashboard and find new messages and events within 30 seconds or less
<b>Efficiency:</b> Web app will decrease repeat communications	Department heads receive fewer repeat communications due to centralizing where that communication takes place
<b>Engagement:</b> Web app is professional, informative, engaging, and fun.	Dashboard remains active with new messages and events. Admin accounts continually receive new tickets from employees

## 8.4 Constraints

- Time will be the biggest constraint on this project. Creating a communications app that is not only informative but engaging will be a lengthy process that will undergo many iterations.
- Provide a secure connection to protect sensitive information
- Ensuring web app functions properly across all major internet platforms
- Must work in technical environment and constraints of the web host

## 9.0 Development Process

In order to determine the best possible solutions we will be doing an iterative design process. Pre-production and production phases may be iterated multiple times until the best design decisions have been made.

### 9.1 Phases

Project Initiation	Pre-Production	Production	Post-Production
<b>Digital Media Team</b> <ul style="list-style-type: none"><li>• Conduct kick-off meeting</li><li>• Prepare proposal</li><li>• Meet with client to sign off on the proposal</li></ul>	<b>Digital Media Team</b> <ul style="list-style-type: none"><li>• Design application structure</li><li>• Design surface treatments</li><li>• Design database schema</li><li>• Create prototypes</li><li>• Conduct usability tests</li><li>• Prepare final prototypes</li><li>• Meet with client to sign off on prototypes</li></ul>	<b>Digital Media Team</b> <ul style="list-style-type: none"><li>• Code and style web application</li><li>• Create any required assets not provided by the client</li><li>• Provide incremental status and demonstrations of features</li></ul>	<b>Digital Media Team</b> <ul style="list-style-type: none"><li>• Test all features to ensure functionality</li><li>• Test application on mobile devices</li><li>• Conduct final usability test</li><li>• Provide all remaining deliverables to client</li></ul>
<b>Loveland Living Planet Aquarium</b> <ul style="list-style-type: none"><li>• Attend Kick-off Meeting</li><li>• Provide Style Guide</li><li>• Provide Org Chart</li><li>• Sign off on Proposal</li></ul>	<b>Loveland Living Planet Aquarium</b> <ul style="list-style-type: none"><li>• Review and sign off on prototypes</li><li>• Provide access or point person for technical details (what type of server/database will be used)</li></ul>	<b>Loveland Living Planet Aquarium</b> <ul style="list-style-type: none"><li>• Provide content as desired</li><li>• Provide feedback as necessary</li><li>• Meet with Digital Media Team for Milestone Sign-offs</li></ul>	<b>Loveland Living Planet Aquarium</b> <ul style="list-style-type: none"><li>• Sign off on deliverables</li><li>• Complete user satisfaction survey</li></ul>

## 9.2 Development Tools

Deliverable	Software
Proposal	PDF
Prototypes	InVision / Sketch
Website	To be determined
Database	To be determined

## 9.3 Development Team

Team Member	Role	Contact Information
Aaron Wilson	Project Manager	<b>Email:</b> aaronwilsonphoto@gmail.com <b>Phone:</b> (801)367-6153
Chad Patten	Lead Developer	<b>Email:</b> pattenchada@gmail.com <b>Phone:</b> (801)502-7086
Kristi Gordon	Interaction Design	<b>Email:</b> kristijanea@hotmail.com <b>Phone:</b> (801)400-3629
Mati Collings	Interaction Design	<b>Email:</b> matibethb2@yahoo.com <b>Phone:</b> (801)910-0770

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## 9.4 Quality Control

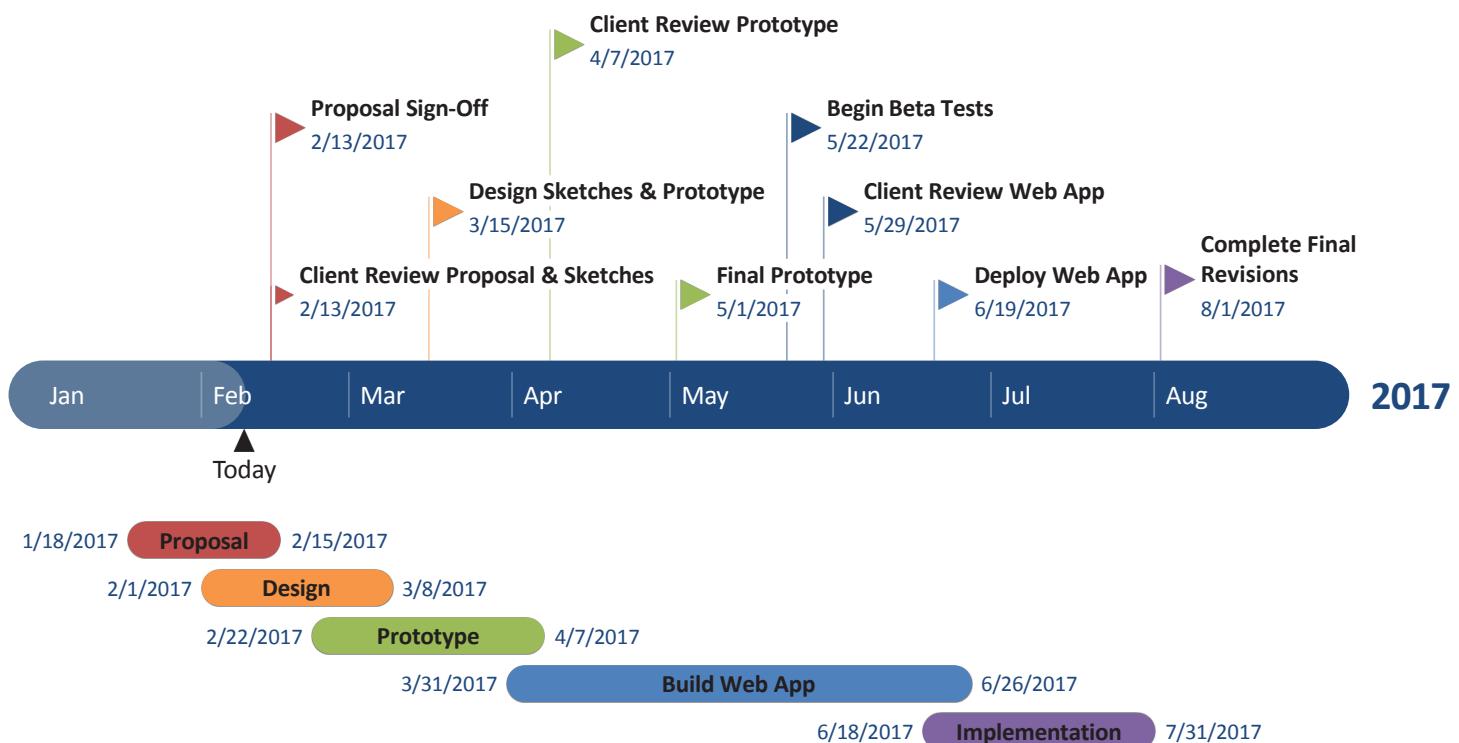
To ensure the quality of the final web application, the Digital Media Team will incorporate usability and functional testing throughout the development process. At the end of the process the Digital Media Team will test the application with a representative sample of users (6-10). The review will look at the finished product and complete a user satisfaction survey. We will also incorporate the following client reviews and checkpoints to help ensure the client's satisfaction with the final product.

- Proposal review/sign-off
- Prototypes (wireframes, surface treatments, partially functional prototypes)/sign-off
- Incremental release reviews/feedback
- Final product review/sign-off

Upon receipt of all final deliverables, the client will sign-off on the project and complete a user satisfaction questionnaire for the Digital Media Department. The questionnaire asks the client to rate their perception of the final product as well as the quality of the service and performance of the project team.

## 10.0 Timeframe

In order to maintain project deadlines we have developed a general timeframe of milestones and tasks that need to be completed. Multiple iterations of design, prototyping, and testing will help us flesh out possible design flaws and pain points.



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## 11.0 Project Scope

The scope of the project is outlined in the table below. The estimated cost of the project will be based on these factors:

Task	Factors
Design	<ul style="list-style-type: none"><li>• Design research</li><li>• Iterating multiple designs</li><li>• Responsive design</li><li>• Admin and Standard Users</li><li>• Many department categories</li></ul>
Prototyping	<ul style="list-style-type: none"><li>• Iterating multiple prototypes</li><li>• User testing</li></ul>
Development	<ul style="list-style-type: none"><li>• Complexity of web app features</li><li>• Secure connection to database</li><li>• System constraints</li></ul>
Testing	<ul style="list-style-type: none"><li>• Multiple rounds of testing with various users</li></ul>

## 12.0 Cost Estimate

Although the labor required to complete this project is being donated, the UVU senior projects team would like to give The Loveland Living Planet Aquarium an idea of the typical cost for a project of this scope. The senior projects team is sharing this information to show the value your organization will receive for working with us. A project of this scope would typically cost between \$15,000 to \$18,000 assuming student rates of \$15-\$20 an hour. The actual time the team spends on producing this project will be provided at the end of the project along with final deliverables.

*\*All work done by UVU students for this project is on a volunteer basis, cost estimates are only shown to evaluate how much a project of this scope might cost.*

## 13.0 Proposal Sign-Off

This document has been reviewed and the content and requirements described therein conform to an agreed upon understanding of the design need.

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**Aaron Wilson**

Project Manager

Date

**Trudy Christensen**

Digital Media Associate Professor

Date

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**Chad Patten**

Lead Developer

Date

**Arlen Card**

Utah Valley University Department Chair

Date

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**Kristi Gordon**

Interaction Design

Date

**Chris O'Meara**

Loveland Living Planet Aquarium  
Vice President of Operations & Information Systems

Date

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**Mati Collings**

Interaction Design

Date

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