Business Requirements: Exeter LMS Student Connection Web App

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Executive Summary

This executive summary document will outline the business requirements for our client, Exeter LMS, for the project of creating a web-based application for connecting like-minded students for group projects.

Included in this document is a high-level overview of our process for successfully addressing Exeter's need, as well as our policies, expectations of the client, and considerations for research.

Background & Business Objectives

As an online learning system, Exeter offers a convenient and accessible option for continuing education.

However, the downside to a completely virtual asynchronous learning environment is the difficulty in building community and interactions between students.

There are several opportunities for students to work on group projects to practice teamwork and collaboration, but requires more effort on the students to make these connections.

Exeter wants an easy and low-effort method for students to connect for group projects.

As Exeter is a browser-based learning management system, their preference is a web application with the following functionality:

- post an idea for a project (for other students to find)
- search for other students' ideas

Success for this project would be an increase in students' feeling connected and sharing ideas, and an increase in participation in group projects. We will measure success by analyzing student feedback at the end of each course after launching the tool.

Student feedback after launch will also provide information and direction for possible future improvements. [With the Waterfall methodology for project management, this feedback would have to be put aside for later use; with an Agile methodology, student feedback would provide ideas for iterative improvements over a longer period.]

Scope

In Scope:

- Voice of Customer research up until the start of implementation phase
- UI and UX design until the end of the implementation phase
- Development and deployment of web application tool
- Documentation on creation of the tool, and an overview of using the functions of the tool

Out of Scope:

- Procuring, securing, or otherwise setting up the deployment environment
 - ie. securing domain registration
 - ie. connecting from the existing Exeter application/domain to the new tool with links, menu options, etc.
- Promotion of the tool
 - We will make recommendations if requested, but promoting to students is currently of scope for our team on this project.
- Continuing maintenance and support of the tool
 - We will provide recommended ongoing maintenance tasks limited to current deployment environment
- In-depth orientation or tutorial materials for users
- Multiple language support of the web application
- Troubleshooting user experience outside of verification phase
- Writing, approving, or otherwise creating legal disclaimer or "Terms and Conditions"
 - We will include "Terms and Conditions" provided to use by Exeter and its legal team. However, we are not lawyers and are not qualified or responsible for the creation of the tool's legal disclaimer.
- Content moderation
 - We will offer suggestions based on knowledge from other projects
 - Exeter and its legal team are responsible for any content moderation framework(s) or disclaimers.
- Voice of Customer research after launch [Will be used to measure success in the Waterfall methodology; for Agile methodology, VOC research would still play a major role, but we would limit the number of iterations, eg. "2 revisions over 2 months incorporating student feedback from [limited number] of courses"]

Functional requirements

Success for this project will be delivery of a web application that meets these requirements:

- secure login (optional: same login as Exeter)
- UI and UX similar to current Exeter LMS for familiarity and credibility
- posting an idea for a project (for other students to find)
- searching for other students' ideas
- commenting on other students' ideas

Functionality options to investigate

- Format of posts are student posts primarily text-based? Do they require images, linking, and text formatting options?
- Organization of posts date based? ranking by voting? ranking by comments? Ranking by state, such as "open" and "closed"?
- Filtering projects by course? by cohort? by topic? by skill-level?
- Search options limitations of search? ability to filter in search?

User Stories

- As an Exeter Student, I want to post my project idea and discuss it with other Exeter Students, so that I can find fellow students to collaborate on my project idea.
- As an Exeter Student, I want to find projects I can collaborate and participate on, so that if I don't want to work alone, or I'm overwhelmed with options I can narrow down my choices.
- As an **Exeter Instructor**, I want to see my students' project ideas, so that I can assist on projects when needed or suggest changes to a project idea if it will not fit an assignment.
- As an Exeter Mentor, I want to see which of my students are participating in collaboration, so that I can identify students that may need more assistance or encouragement on coursework.
- As an Exeter Career Coach, I want to see how my students are collaborating and interacting with other students, so that I will have hiring recommendations for jobs that require teamwork, project management, and team management skills.

Personnel requirements

These are the recommended roles for accomplishing this project:

- Project Manager: Heather Walker
- UI Designer
- UX Researcher
- UX Designer
- Web Developer(s) (environment dependent on Exeter's requirements)
- Quality Assurance team member from Development Team
- Quality Assurance team member from Exeter staff

Delivery schedule

It's often helpful to break a project out into phases or milestones. In this section list out any logical checkpoints where you would like to see the project demonstrated to ensure that expectations are being met. Describe the phase, and the functional requirements required for completion.

- 1. **Phase 1 Requirements:** TBD, completed when:
 - a. Exeter team approves Business Requirements Document (BRD)
 - b. The Contract and Scope of Work (SOW) document are signed and returned
 - c. We received 50% payment at Contract signing
- Phase 2 Design: + 1 months, completed when:
 - a. Design documents are completed
 - b. UI/UX demo is completed
- 3. **Phase 3 Implementation:** + 1 months, completed when:
 - a. Alpha version of web application tool is live
- 4. **Phase 4 Verification:** + 2 month, completed when:
 - a. Beta version of web application has been tested
 - b. Release candidate version of web application is live
- 5. Launch: 4 months after contract signing
 - a. 40% payment due at launch
- 6. **Phase 5 Maintenance:** 1 month; after 1 month, maintenance and further development is out of scope.
 - a. 10% payment due thirty days after launch

Other requirements

- Must be mobile- and desktop-friendly
- Must be browser agnostic (on current deployment versions of Chrome, Safari, Microsoft Edge, Firefox, etc.)
- Must follow W3C Web Accessibility Initiative (WAI) recommendations
- Multiple language support is out-of-scope for this project, but considerations should be included for adding this functionality later.

Assumptions

Exeter will provide:

- deployment environment requirements
- domain registration and any platform/deployment environment resources
- legal requirements, language, and disclaimer(s) to be used on the site
- provide timely input during verification and maintenance phases
- provide functional and security requirements during requirements and implementation phases
- provide functional or security changes as soon as possible

Limitations

Communication limitations:

Monday through Friday, from 8am to 5pm Central: We will respond within 1 hour of emails or calls. For communication outside of these time windows, we will respond within 12 hours.

We require that our clients communicate directly and solely through the Project Manager to mitigate information siloing and missed critical updates.

Events affecting timeline:

Delayed communication from Exeter for requests for information or input will affect the timeline of this project.

Other events on our team that may affect the delivery timeline, such as personnel changes, equipment malfunctions, or personal emergencies, will be addressed immediately with Exeter. We will outline our resolution plan, and, if applicable, changes to the timeline.

Limitations (continued)

Events affecting project cost:

Exeter team signing contract, SOW, and approving the Business Requirements Document sets the scope for this project. Additions to scope, or failed expectations and assumptions on Exeter's part, will add additional fees to project cost. Our full fee structure is provided upon request.

Risks

- **RISK:** Major version revisions of the Exeter LMS that may affect the deployment environment of the web application.
 - MITIGATION: We will update the Exeter team with our progress frequently between completions of phases. We propose regular contact with Exeter's developers as well.
- RISK: Personnel changes on our team or on Exeter team.
 - MITIGATION: We will keep thorough documentation, and our updates to Exeter will include a brief overview of the history of the project up to the current state. We require Exeter to communicate solely through the Project Manager to mitigate information siloing and missed critical updates.

End of document.