

Creighton4Good

Request for Proposal (RFP)

Version 1.1

Project Name:	<i>Creighton Food Surplus App</i>
Product Owner:	<i>CSD&J, Creighton4Good Program, and Ed Gauhari (sponsor/client)</i>
Date:	<i>08/25/2025</i>

Notes: This Application Package RFP specifies the requirements for an application package and related services. It is distributed to solicit vendor solutions in the form of a proposal. This requires vendors to demonstrate their ability to meet the organization's requirements.

Project Background and Requirements

Request: Creighton Application to Reduce Food Waste

CSDJ and Creighton University seek proposals for the design and development of a mobile and web-based application to reduce food waste on campus. This project will leverage Creighton's Jesuit mission and commitment to service learning by engaging students, faculty, and community partners in a project that addresses sustainability, food insecurity, and responsible resource management.

The software application will enable students, faculty, and staff to:

- Receive real-time notifications about available surplus food from campus dining services, events, and other sources (only Sodexo Catered Events).
- Facilitate easy, equitable access to leftover food through a secure and user-friendly platform.
- Provide analytics and reporting to support campus sustainability initiatives.
- Offer a framework that can be adapted by other universities, reinforcing Creighton's leadership in applying academic knowledge to social good.

Reference Examples

The "Hungry Hawks" app, developed by students at Lehigh University, provides a successful model for campus-based food waste reduction. Hungry Hawks offers surplus food notifications, user authentication, and broad student adoption. References and resources from the Hungry Hawks initiative include:

- <https://thebrownandwhite.com/2022/02/22/students-launch-an-app-to-reduce-food-waste/>
- <https://hungryhawks.lehigh.edu/>
- <https://hungryhawks.lehigh.edu/Identity/Account/Login>
- <https://play.google.com/store/apps/details?id=com.lehighstudentprojects.leftoverfood>
- <https://apps.apple.com/us/app/hungry-hawks/id1583419718>
- <https://acm.cse.lehigh.edu/>
- <https://github.com/luacm>

Leftover Textover is another example, in use at the University of Oregon. The program alerts students via text message when food leftover from events is available on campus. *"Leftover Textover helps reduce food waste on campus while providing students with free food!"*

- <https://emu.uoregon.edu/leftover-textover>

General Requirements

The Creighton Food Surplus Application should include the following:

- **Core Features:** Surplus food notifications, event details, secure login (Creighton SSO), and mobile compatibility (iOS and Android).
- **User Roles:** Students, faculty/staff, and administrators with appropriate authentication and permissions.
- **Sustainability Reporting:** Metrics on food waste reduction and participation to support institutional reporting and improvement.
- **Open-Source Development:** Code and documentation available for reuse and adaptation by other universities.
- **Service-Learning Integration:** Opportunities for student involvement across computer science, design, and journalism programs.

Statement of Work (includes detailed Requirements)

Project Purpose

The purpose of this project is to design, develop, and deploy a mobile and web-based application that reduces food waste on Creighton University's campus by connecting students, faculty, and staff with real-time information about surplus food. The solution will advance Creighton's Jesuit mission of service, sustainability, and social justice while providing a replicable open-source framework that can be adopted by other universities.

Scope of Work

The contractor will be responsible for the following activities:

1. Discovery and Planning

- Conduct stakeholder interviews with dining services, sustainability staff, faculty, and student representatives.
- Survey of audience (e.g., students') perceptions regarding a potential solution to the problem
- Define functional and technical requirements for the application.
- Produce a detailed project plan, including milestones, resources, and risk mitigation strategies.
- Develop a strategic plan for a promotional campaign for the target audience.

2. Design

- Develop user experience (UX) and user interface (UI) designs, including wireframes and mockups.
- Ensure accessibility compliance (WCAG 2.1 AA or higher).
- Present designs for review and approval by Creighton stakeholders.

3. Development

- Build core application functionality, including:
 - Real-time surplus food notifications.
 - Secure login and user authentication.
 - Role-based access for consumers and administrators.
- Develop analytics and reporting features to track food waste reduction.
- Ensure compatibility with web, iOS, and Android platforms.
- Implement appropriate data privacy and security safeguards.

4. Testing and Quality Assurance

- Conduct usability testing with student and faculty participants.
- Perform functional, security, and load testing.
- Resolve identified issues before launch.

5. Deployment

- Deploy production-ready applications to Creighton’s web, iOS, and Android environments.
- Creighton SSO integration is required
- Define process or integrate with existing campus dining/event systems for real-time updates.
- Configure and launch the analytics dashboard for administrators.

6. Application Support - Promotional Campaign, Documentation, and Training

- Provide technical documentation, including architecture, code, and integration guides.
- Develop end-user training materials for students, staff, and administrators.
- Deliver training sessions and application presentations for campus staff and student leaders.
- Content production and implementation of the proposed promotional campaign

7. Open-Source Release

- Publish the application code and documentation to a public GitHub repository.
- Establish clear licensing for open-source use and contributions.
- Provide guidelines for adoption by other universities.

8. Evaluation and Final Reporting

- Conduct post-launch evaluation to measure adoption, usability, and sustainability outcomes.
- Deliver a final report summarizing project outcomes, lessons learned, and recommendations for future enhancements.

Exclusions

The following activities are outside the scope of this SOW unless otherwise agreed upon:

- Long-term hosting, monitoring, and maintenance of the application beyond the project term.
- Major new feature development is not outlined in the approved requirements.
- Integration with third-party systems not owned or licensed by Creighton University.

Acceptance Criteria

The project will be considered complete when:

- The web, iOS, and Android applications are deployed, functional, and accessible to the campus community.
- The analytics dashboard produces accurate sustainability reports.
- Documentation and training materials are delivered.
- Code is published in a public open-source repository.
- The final project report is submitted and approved by Creighton4Good Program

Deliverables and Timeline

Deliverables

The selected proposer will be responsible for providing the following:

1. Open-Source Repository

- Public GitHub repository including code, documentation, and instructions for adaptation by other universities.
- Clear licensing terms for open-source use and contribution.

2. Project Plan & Design Documentation

- Detailed project schedule, milestones, and resource plan.
- Technical and design specifications (system architecture, user flows, and wireframes).

3. Application Prototype (Beta Release)

- Functional prototype demonstrating core features:
 - Surplus food notifications.
 - Secure login and authentication.
 - Web and/or Mobile responsiveness (Android/iOS).
- Audience research: evaluation of target audience needs
- User testing plan with students, faculty, and staff.
- User experience, interface research, and design

4. Final Application (Production Release)

- Fully functional web and mobile applications deployed to Creighton University environments.
- Integration with campus dining/event systems for real-time surplus food notifications.
- Accessibility compliance (WCAG 2.1 AA or higher).
- Documentation for ongoing maintenance and open-source distribution.

5. Analytics and Reporting Dashboard

- Administrative dashboard to track food saved, meals served, and sustainability metrics.
- Exportable reports for Creighton's sustainability and service-learning offices.

6. Promotional Campaign Research and Design

- User guides, training, and support material for students, faculty, and administrators.

- Campus presentations and training sessions for designated staff and student leaders.
- Promotional material development and dissemination plan
- Implementation of the proposed promotional campaign

Timeline

The project is expected to be completed in **four phases** over the course of one academic year:

- **Phase 1: Planning & Design (Months 1–2)**

- Requirements gathering, stakeholder interviews, design prototypes, and finalization of technical architecture.

- **Phase 2: Development & Beta Release (Months 2–4)**

- Core feature development, system integration, and release of the beta version for limited user testing.
- Release of beta code and documentation to open-source repository.
- Iterative improvements based on feedback.

- **Phase 3: Final Deployment & Open-Source Release (Months 5-9)**

- Production-ready deployment to web, Android, and iOS platforms.
- Launch of analytics dashboard and reporting tools.
- Release of code and documentation to open-source repository.
- Iterative improvements based on feedback.

- **Phase 4: Training & Evaluation (Months 10–12)**

- Delivery of training and support materials.
- Campus-wide rollout and evaluation of impact on food waste reduction.
- Iterative improvements based on feedback.
- Final project report including sustainability outcomes and service-learning impact.

Response to RFP Proposal Evaluation Criteria

All proposals will be evaluated based on the following criteria.

1. Technical Capability (30%)

- Demonstrated experience in developing web and mobile applications (Browser, iOS, and/or Android).
- Ability to integrate real-time data from campus dining/events.
- Adherence to accessibility standards (WCAG 2.1 AA or higher).
- Proposed architecture and approach for sustainability, scalability, and security.

2. Alignment with Service-Learning and Creighton Mission (25%)

- Integration of student and faculty participation in the development process.
- Commitment to interdisciplinary collaboration across computer science, design, and journalism.
- Demonstrated understanding of Creighton's Catholic and Jesuit mission and values.

3. Sustainability and Impact (20%)

- Clear strategy for measuring food waste reduction and campus sustainability outcomes.
- Potential to replicate and scale the framework for adoption by other universities.
- Contribution to long-term cultural change around food resource management.

4. Project Management and Timeline (15%)

- Realistic and detailed project plan with defined milestones and deliverables.
- Evidence of capacity to complete the project within the proposed timeline.
- Risk mitigation strategies for delays, technical issues, or adoption challenges.

5. Cost Effectiveness and Value (10%)

- Transparent budget proposal including all development, testing, deployment, and training costs.
- Demonstrated value relative to scope and deliverables.
- Opportunities for cost-sharing, in-kind contributions, or student engagement to reduce expenses.

Submission Instructions (Response to RFP Proposal)

Proposal Format

Proposals must be submitted in electronic format (PDF preferred) and include the following sections:

1. **Cover Page** – Solicitation title, organization name, contact person, and date.
2. **Executive Summary** – High-level overview of the proposed solution and alignment with project goals.
3. **Technical Proposal** – Description of technical approach, architecture, development process, and accessibility compliance.
4. **Project Management Plan** – Timeline, milestones, staffing plan, and risk mitigation strategies.
5. **Institutional Alignment** – Explanation of how the proposal supports service-learning, sustainability, and Creighton's Jesuit mission.
6. **Past Experience** – Team bios and past project work, examples of similar projects, references, and relevant case studies.
7. **Cost Proposal** – Detailed budget, including labor, software, hardware, training, and any optional services.
8. **Deliverables and Timeline** – Confirmation of ability to meet project deliverables and schedule as outlined in the RFP.

Submission Deadline

- Proposals must be received by **[Insert Date and Time]**.

Submission Method

- All proposals must be submitted electronically via BlueLine

Questions and Clarifications

- All questions regarding this solicitation should be submitted emailed to Kevin Lumbard kevinlumbard@creighton.edu and Waseq Rahman waseqraman@creighton.edu
- Responses to questions will be shared with all prospective proposers to ensure fairness and transparency.