Larry L. Sautter Award for Innovation in Information Technology
2018 Application

Project title
UC Santa Cruz Meal Plan Donations Application

Submitter’s name, title, and contact information
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Names of project leader(s) and team members
- David Turner - Project Sponsor
- Shashank Nimje - Project Manager
- Henry Heikkinen - Lead Developer
- Jeff Rosczyk - Web Application Architect
- Nan Ferris - Client Stakeholder, Student Housing Services
- Josto Puddu - Client Stakeholder, Dining Systems Manager
- Rosalinda Gallegos - Client Stakeholder, Dean of Students Coordinator
- Laura Wishart - Client Stakeholder, Student Volunteer Center Director
- Lydia Jenkins-Sleczkowski - Client Stakeholder, Student Volunteer Center Project Lead

Brief Description
This project produced a new custom mobile-friendly web application that enables students at UCSC to donate meals from their dining plan to those in need, both on campus and nationwide.

Project Narrative:
UC Santa Cruz students have always been generous. Consistently donating more than 50,000 pounds in food and cash equivalent has often put UCSC in the top three nation-wide contributors to the annual Second Harvest national food drive. Building on that success, the Student Volunteer Center wanted to expand philanthropic opportunities on campus. They worked with the Web Applications team in ITS to develop a tool that lets students donate not only to Second Harvest, but to students in need on their own campus as well.

The new UCSC “Swipes for Slugs” campaign helps students donate to a pool of meals for use by students in need. The Student Volunteer Center markets the drive and provides kiosks in dining halls where students can donate. The new “Meal Plan Donation Application” (MPDA) lets them donate meals to other students, in-person at the kiosk or online any time.

The same online interface also replaces a legacy tool for collecting meal donations to the annual Second Harvest drive, making it easier than ever for the campus community to maintain our philanthropic reputation. Users can configure the application to support the specific parameters of each drive.
The complexities of meal plans, local “Flexi dollars,” and campus donation policies made development challenging. The team had to integrate with a vendor-hosted campus dining system that tracks student meal plan balances, and come up with an innovative design that shows the donor how many meals they have and what they are allowed to donate.

The project team was small and the complexity high, so the approach was to target a set of functionality for release with each quarterly food drive. That meant the first drive was simplified and largely hand coded, while later drives are managed fluidly by the client, using the configuration interface. This approach allowed us to hit the deadline for the very first drive, and then improve the application every quarter thereafter.

A flexible approach allowed us to hit deadlines, but excellent collaboration was required to make the project a success. The team worked with a diverse set of client departments, including the Dining Systems team that manages meal plans, the Student Volunteer Center that supports the Second Harvest Food Bank drive, Student Housing Services which manages meal plans, and the Dean of Students organization that supports the Swipes for Slugs drive. Regular meetings, requirements tracking, and strong communication and negotiation ensured that key requirements were met and the interests of each business unit were incorporated into the project.

Another critical success factor was our use of the “Base Application” developed by the Web, Mobile & Project Management team (WMPM). This handy tool is a “template” application, pre-developed using PHP, HTML, Javascript, and CSS, and ready to go off the shelf with a number of features including our preferred Shibboleth authentication, user management, and a graphical user interface built right in. The WMPM Base App allowed us to skip a list of early development tasks that otherwise would have cost the project months.

Still early in its life, MPDA is already providing hundreds of meals for hungry students. Most donations are made at cash registers, so MPDA makes the drive available to a large, untapped population. In our first year, the application processed more than 2,100 donated meals - enough to feed one person three meals a day for more than five years!

Future efforts will enhance the creation and management of new food drive campaigns, and eliminate the final hard-coded parameters so that all configurations are supported.

The application is designed to work with the vendor product in use at UC Santa Cruz, and could be quickly adapted by other UCs using the same vendor (CBORD’s Odyssey PCS), or customized to integrate with other meal plan / card management solutions.

This project brought together familiar and new stakeholders in a strong partnership with a valiant cause. Our success shows how we can use technology to rapidly implement programs that help our students improve the lives of their peers and others in the community.