Starlight - Library Digital Exhibits Platform for UC Santa Barbara & UC San Diego

Open-source, cross-campus collaborative project to create attractive, image-rich websites for library collections.

Larry L. Sautter Award Proposal 2020

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What is Starlight?

The Starlight project was an open-source, cross-campus collaborative project to create a UC-specific platform that enables librarians, curators, and others who are responsible for digital collections at the UC libraries to create attractive, image-rich websites that highlight these collections.

Why Starlight?

UC Santa Barbara and UC San Diego had the same problem: they needed library-specific exhibit software to show off the collections that each library had worked hard to digitize. However, either the software available was either out-of-date, complicated, or required a lot of work to create new features. Both teams didn't have enough developer time to roll a custom site for each exhibit and didn't have enough time to train each librarian that needed an exhibit on complicated software.

After discussing their needs together, UC Santa Barbara and UC San Diego decided that their needs were enough alike that tackling the problem alone would cost the UC system more money and effort than if they pooled their resources and their respective expertise together.

The Starlight project is part of a larger collaborative effort of the UC San Diego, and UC Santa Barbara libraries nicknamed Project Surfliner after the Amtrak route that links our campuses together. Project Surfliner is more than shared code, or even shared objectives, it is the collaborative effort. It is building and leveraging the strengths, experiences, and resources of each campus partner to focus on shared concepts and products in a sustainable way.

We have been trying to approach the collaboration in a thoughtful manner, mindful that what we are developing might be of interest to other folks within the UC system or within the larger open-source community. So keeping that in mind, we have come up with three general approaches to help guide the collaboration.

The first is the idea of shared code, separate installations. Ideally this means that each campus does not have to maintain their own code. Rather, we are working toward a truly shared code base that each campus worked on collaboratively with the other campus and is deployed using their own standalone systems. We did a lot of work up front to figure out how to make it easy for each campus to deploy on their own infrastructure without needing local code changes. Our first product, Starlight, succeeded in doing this by having a shared code base that was developed together with a Product Owner from UC Santa Barbara and a lead developer from UC San Diego. We worked as a unified, cross-campus team that ran sprints, solved problems, and communicated together. It was deployed at each campus successfully.

We also know that each campus has unique needs. So rather than trying to design a single monolithic stack we are working to develop a suite of products that are designed to work together but can be mixed and matched based on campus need. Starlight is the first of these projects to be put into production at the UC Santa Barbara and UC San Diego campuses.

Finally, we wanted everyone who was interested in the project UC-wide to feel invited to participate. We know that not everyone can work on the same timeline as us and may want to join this effort but can’t do so at this time. We made all of our communications public in our blog. In our agile practice, we created a sprint summary for our stakeholder but we put it on a public website so that anyone interested could see the current status of the work we were doing. We also ran all of our project communications out of the UCTech Slack in a public channel (#surfliner). Our tenent of “radical transparency” meant that our successes and failures were public for the community to see. We wanted other campuses (and other universities) to know what was working for us and what wasn’t, even if they weren’t part of the same project. We presented at the UC-wide tech conference (UCTech) and at the UC-wide Library technology conference (UCDLFx), and the open-source community conference (Samvera Virtual Connect) to get the word out about our project and invited other campuses to participate.

The Impact of Starlight

UC Santa Barbara migrated over 18 public digital exhibits into the Starlight product. UC San Diego has moved many of their special collections digital exhibits off of outdated custom websites that had constraints in mobile viewing and required all custom coding to their new platform. The standardization of the platform across websites has meant hundreds of hours saved in training end-users and shared documentation. This standardization is evident in the “look and feel” that appears as part of a more cohesive library-branded product. However, it is

not just the visual aesthetic that has unified. It also means a wealth of shared knowledge between the staff, encouraging future collaboration between the campuses, and sharing experiences and successes with the software. We have made 273 commits (code changes) to the Starlight repository in 2019 which demonstrates the collaborative effort of the cross-campus team, including helm charts for standardized container deployment representing saved time due to shared code and significant cost savings for developer time and resources. However, in the end, the results are best showcased as the digital exhibits themselves; rich, easy-to-product exhibits, without having to use a proprietary system (see before/after below).

The Tech

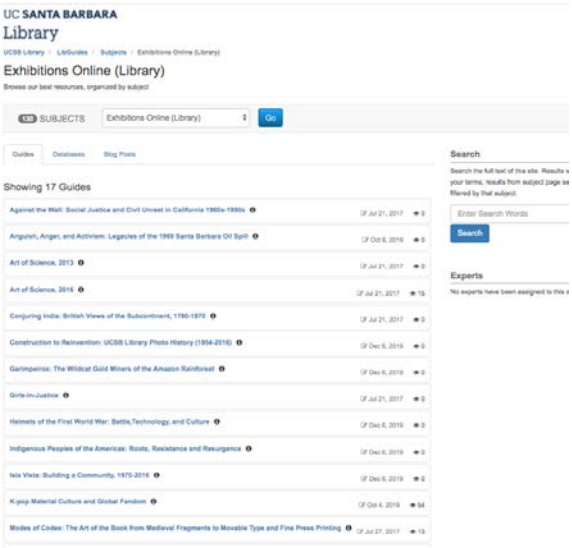
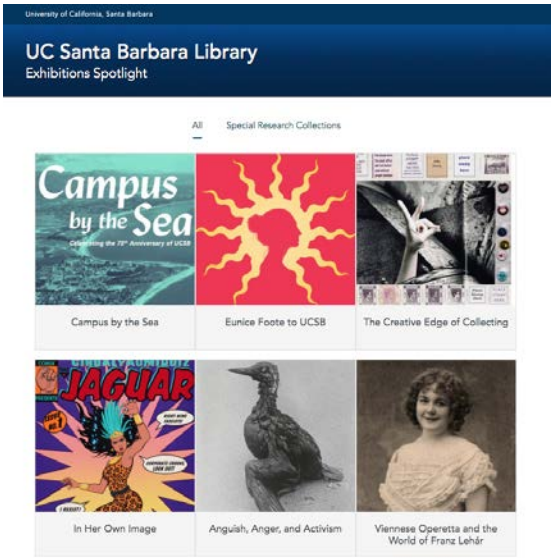
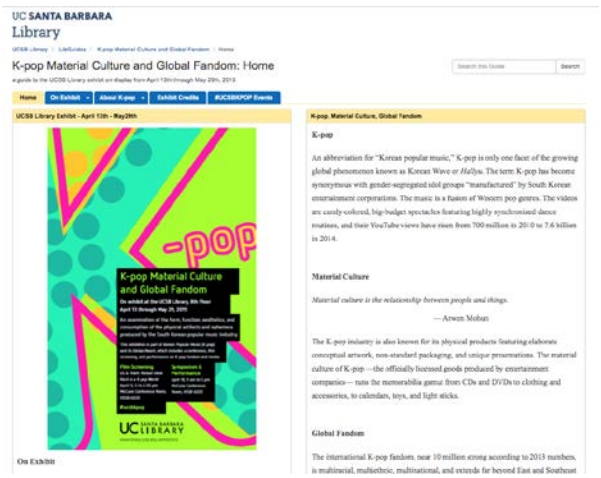
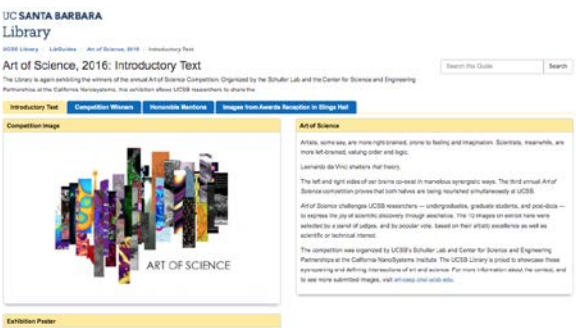
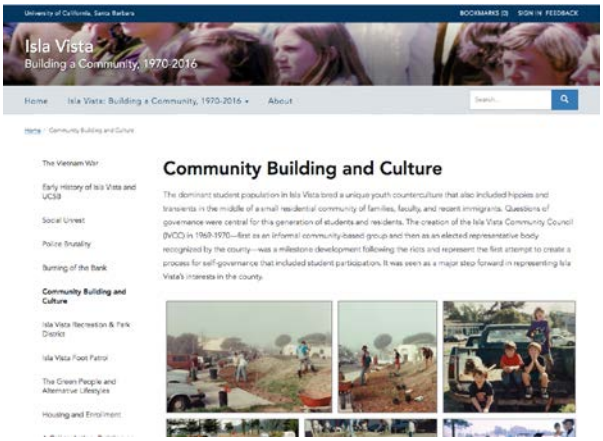
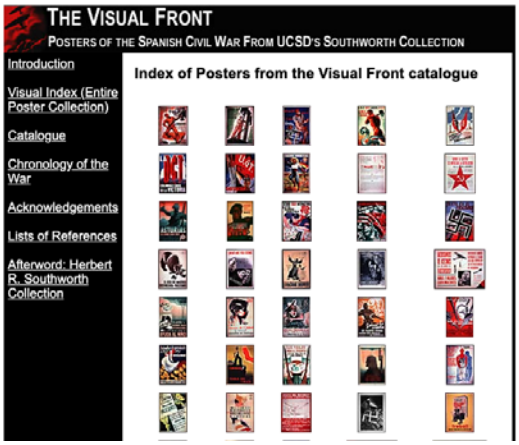
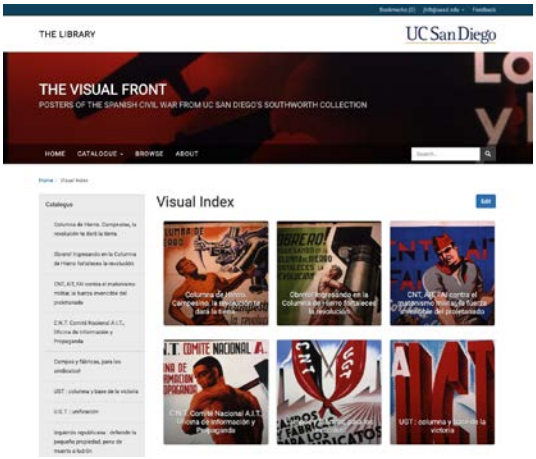
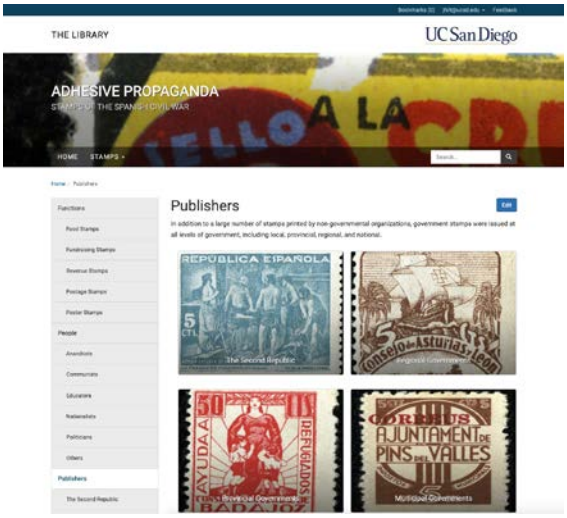
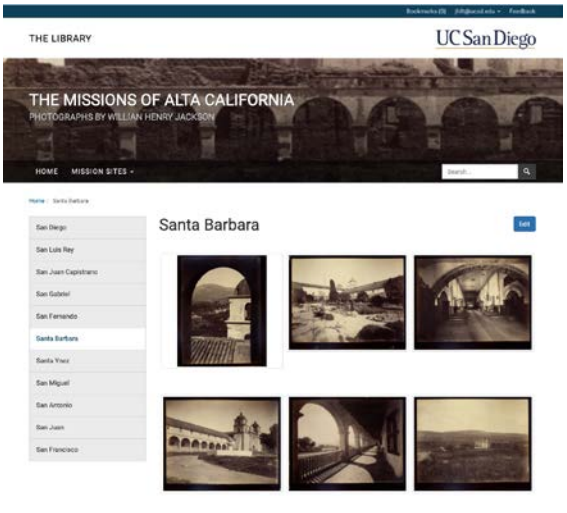
Spotlight - An open-source solution enabling librarians, curators, and others to create attractive, feature-rich websites that highlight digital collections.
Gitlab - A shared code repository and that is available here: https://gitlab.com/surfliner.
UCTech Slack - a team communication platform open to the UC-wide community. (#surfliner)
Ghost - blog software (https://surfliner.ucsd.edu/)
Helm/Kubernetes - Open-source container-orchestration system for automating application deployment, scaling, and management.
Zoom - A video conferencing tool that we used for our daily, 15-minute meetings during sprints, longer planning meetings, and sprint reviews that were recorded and published to YouTube for stakeholders and the public.
Retrium - Sprint retrospective software used to facilitate remote agile retrospectives.

The Time Frame

Our first sprint for Starlight started on February 11, 2019. Starlight was available for librarians and staff in July 2019 for UC Santa Barbara and October 2019 for UC San Diego.

Exhibit examples and screenshots

UC Santa Barbara Library: https://spotlight.library.ucsb.edu/

Before - UC Santa Barbara	After - UC Santa Barbara
	
	
	

Before - UC San Diego	After - UC San Diego