

Project: Trinity

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Description

Trinity is a re-invention of Sakai's user interface. Inspired by modern, consumer web applications and their user experiences; it is a direction-setting, stake in the ground for the next several years of front end development to create a consistent, streamlined, and beautiful LMS.

Trinity contains a set of values, standards, and artifacts for all upcoming front end Sakai development; enabling more community members to understand and participate in the collaborative discussion and development of Sakai's look and feel.

Trinity is an opportunity to completely re-imagine how a modern LMS might look and what learning experiences it might enable.

Mandate

1. Design a consistent, streamlined, and beautiful user experience
2. Build a new technical infrastructure to support the development of that user experience
3. Implement that experience across the portal and high priority user flows

Requirements

User Experience & Design Phase

1. Conduct research across the community on what users do in Sakai
2. Create personas for major user archetypes based on research
3. Create user experience maps for the flows in scope for this redesign
4. Define the necessary UI patterns and components needed

Infrastructure Development Phase

5. Create a living style and component library in Bit.dev/Storybook.js
6. Review all front end libraries including Bootstrap and jQuery and remove any that are unnecessary
7. Output all SASS variables to CSS Variables
8. Create a rapid front end development maven workflow, similar to <https://youtu.be/jC0uZUVHbVk>

Implementation Development Phase

9. Develop the flows using the new infrastructure
10. Decouple portal front end from back end

Unknowns

1. What do we do with all the tools that don't get touched in the first release of this?
2. How do we manage change? Faculty don't like change; how do we ease the change?

Inspiration

We will review the LMS market for inspiration. However, our primary sources for inspiration will be consumer web applications that are best of breed in their market sector.

Category	Relates to	Name	URL
File Management	Resources, Dropbox	Google Drive	https://drive.google.com/
Real time communication	Forums, Chat, Commons	Slack	https://slack.com
Real time communication	Forums, Chat, Commons	Microsoft Teams	https://teams.microsoft.com
Real time communication	Forums, Chat, Commons	Facebook	https://facebook.com
Real time communication	Forums, Chat, Commons	Twitter	https://twitter.com
Integration	Basicliti, Lessons	Zapier	https://zapier.com
Social profile	Profile, Commons	Facebook	https://facebook.com
Asynchronous communication	Forums, Commons	Reddit	https://reddit.com
One way messaging	Announcements, Email, Email Archive, Messages	Gmail	https://gmail.com
One way messaging	Announcements, Email, Email Archive, Messages	Outlook	https://outlook.com

<https://lion-web-components.netlify.com/?path=/story/intro-lion-web-components--page>

<https://projects.invisionapp.com/share/JDVL8D2UXGS#/screens/401100867>

<https://material-components.github.io/material-components-web-catalog/#/component/tabs>

<https://www.carbondesignsystem.com/components/UI-shell-header/code/>

<https://designsystem.quickbooks.com/component/tabs/>

<https://atlassian.design/guidelines/product/components/tabs>

<https://boltdesignsystem.com/pattern-lab/?p=viewall-components-tabs>

<https://canvas.hubspot.com/components/navigation#tabs>

<https://design-system.futurelearn.com/molecules>

<https://www.lightningdesignsystem.com/components/tabs/>

<https://polaris.shopify.com/components/navigation/tabs#navigation>

<https://design.gitlab.com/components/tabs/>

<https://primer.style/css/components/navigation#tabnav>

<https://stackoverflow.design/product/components/navigation>

<https://garden.zendesk.com/css-components/tabs/>

Design Team Workflow

This workflow is designed to take advantage of everyone's expertise and divide the work so we can move quickly.

1. Create a ticket in _____
 - a. Anyone can start a workflow off, same as normal community procedure
2. Research and analysis of user behavior, competitive systems, and broader web application patterns
 - a. Charles, Michael, Shawn, Wilma will review, request community help if necessary, perform research, and scope the request
3. Low fidelity sketching and ideation
 - a. Drawings
 - i. anyone can submit, must be converted to PDF and submitted to _____
 - ii. Jillian, Michael, Nathan, Shawn will review and hand off for prototyping
 - iii. Ticket created in _____
4. High fidelity design prototyping
 - a. Sketch/Zeplin
 - i. Jillian creates prototypes
 - ii. Uploads to Zeplin
 - iii. Community input and iteration
 - iv. Finalized designs are approved by _____
5. Finalized design implementation
 - a. sakaproject/sakai-web-components
 - i. Create a github issue with zeplin link
 - ii. Assign to Nathan
 - iii. Build out in web component, vue component, and Storybook.js for others to leverage
 - b. sakaproject/sakai
 - i. Create a JIRA with zeplin link
 - ii. Assign to Miguel
6. Write Cypress.io tests

What does a new UI mean? An opinion by Michael

- The app is reorganized around the flows/tasks the user wants to do instead of strictly tools as dictated by code. That's why there's lots of suggestions about combining tools in the lists below.

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Views needed

- List
 - Functions available here (if applicable)
 - Delete
 - Should every tool get a trash option? +1
 - Reorder/Organize
 - Sort, filter, search
 - Merge
 - Bulk edit
 - Create
 - Import
 - Single Edit
 - Choose columns in view
 - Switch view
 - Calendar by week/month
 - Assignments by student
- Create
 - Also edit screen
- Settings
 - Permissions
 - Add/edit fields
 - Set template/default settings
 - Watch
 - Is this a view or a panel on the create/edit view?

Tools that fit this pattern

- Announcements
- Calendar
 - Has other views than list of course
- Resources
- Forums
- Assignments
 - Change to a broader, single communications tool
 - Has other views
- Tests & Quizzes
 - Do you move question pools out?
 - Event log to site stats
 - User Activity Report to site stats?
- Gradebook

- I'm kind of surprised, but why couldn't it fit? Maybe there's other views
- Dropbox
- Section Info
- Podcasts
- Polls
- Roster
- Rubrics

Tools that feel like exceptions to this pattern

- Lessons/Wiki/Blog
 - Do you want a list view as the default view? Probably not, but you still want one for content management. So maybe they do fit the model better than I originally thought.
 - Perhaps list view is the faculty/creator default view. But the Student/consumer default is different?
- Overview
- Chat
 - No list view per se. Could have a list of members for DMs, but would still need the chat UI in the main view
- Commons
- Web content
- Site Info
- Contact Us
- News
- Search

Tools to remove

- Syllabus
 - Merge into lessons or overview
- Email Archive
 - Could this somehow be merged into announcements?
- Email
 - Could this be merged with announcements?
- Messages
 - Could this be merged with announcements?
- Postem
 - Could this be merged with Gradebook to create a Grades & Feedback tool?
- Sign Up
 - Could this be merged with Calendar? With Joinable Groups?
- Site Stats
 - Could this be merged with Site Info?

