

<http://www.fluidproject.org/>

# The Fluid Project

An Open Source Community for Inclusive Design

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*Funded by a grant from*  
The  
Andrew W. Mellon  
Foundation

Fluid

# What we'll talk about

what are Fluid's products?

what and who is Fluid?

what is Fluid's approach?

how does Fluid work?

how can you use Fluid?

# what problem are we solving?

- Systemic problem of poor and inconsistent user interface
  - Often left to programmers
  - Tackled at the end
  - Redundantly developed
  - Inadequately tested and refined
- UX designers not well integrated into development culture
- Poor UX an impediment to adoption
- Academic communities are very diverse
- Differ greatly in our preferences, needs, habits, concepts, comforts, convictions....

# what problem are we solving?

- UX is a challenge for all open source projects and all institutions
- Cross-project collaboration:
  - Share scarce UX resources across projects
  - Solve common challenges
  - Recognize recurring user interface idioms and needs
- Fluid is looking at common problems:
  - How do non-technical people get involved in OSS?
  - How can we help designers and developers speak the same language?
  - How do you do user testing in a distributed environment?

# What is Fluid?

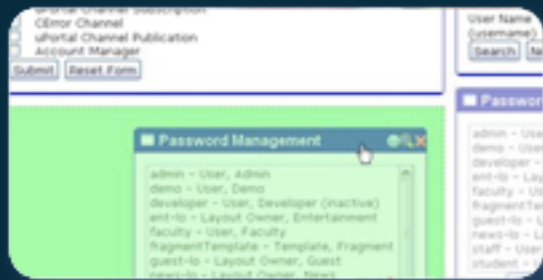
*A community source project that creates user experience tools and software capable of addressing the needs of diverse users.*

- Rich, flexible, reusable user interface components
- Lightweight JavaScript development tools
- User Experience Toolkit
- Accessible Interaction Designs
- Design Pattern Community

# What is a **Fluid** Component?

- Components are recurring interactions
- Encompass familiar activities on the Web:
  - Working with files, uploading, finding stuff
  - Navigating through content and tools
  - Rich interactions: drag and drop, etc.
- Activities and contexts, not just controls and widgets...

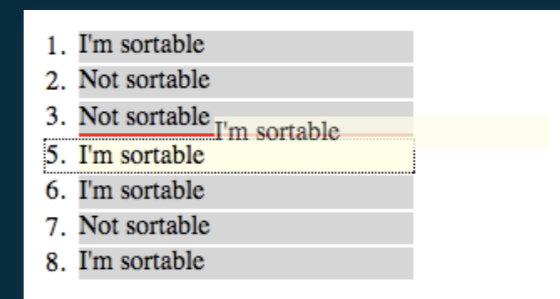
# The Reorderer Family



layouts



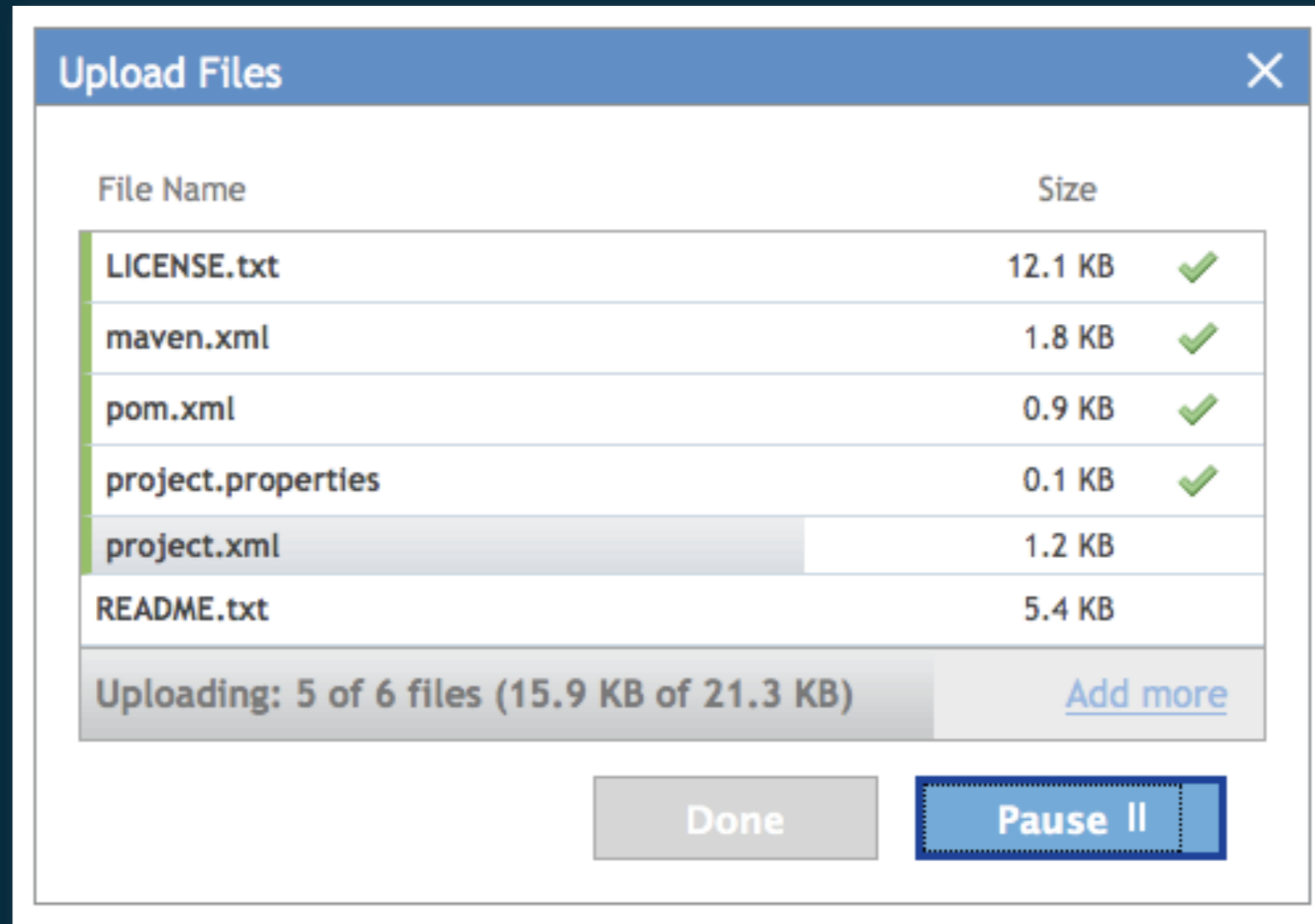
grids



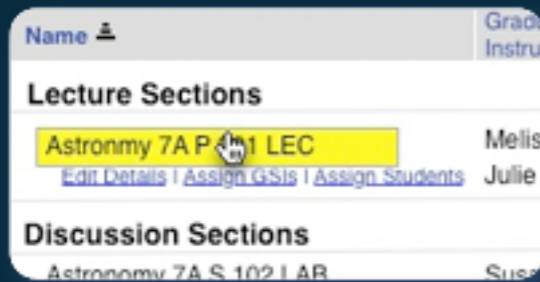
lists



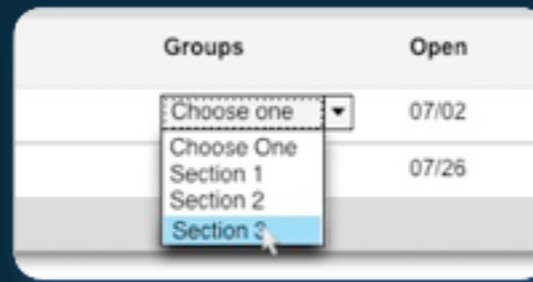
# Uploader



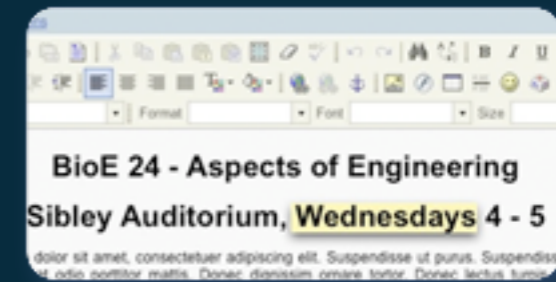
# Inline Edit Family



simple text

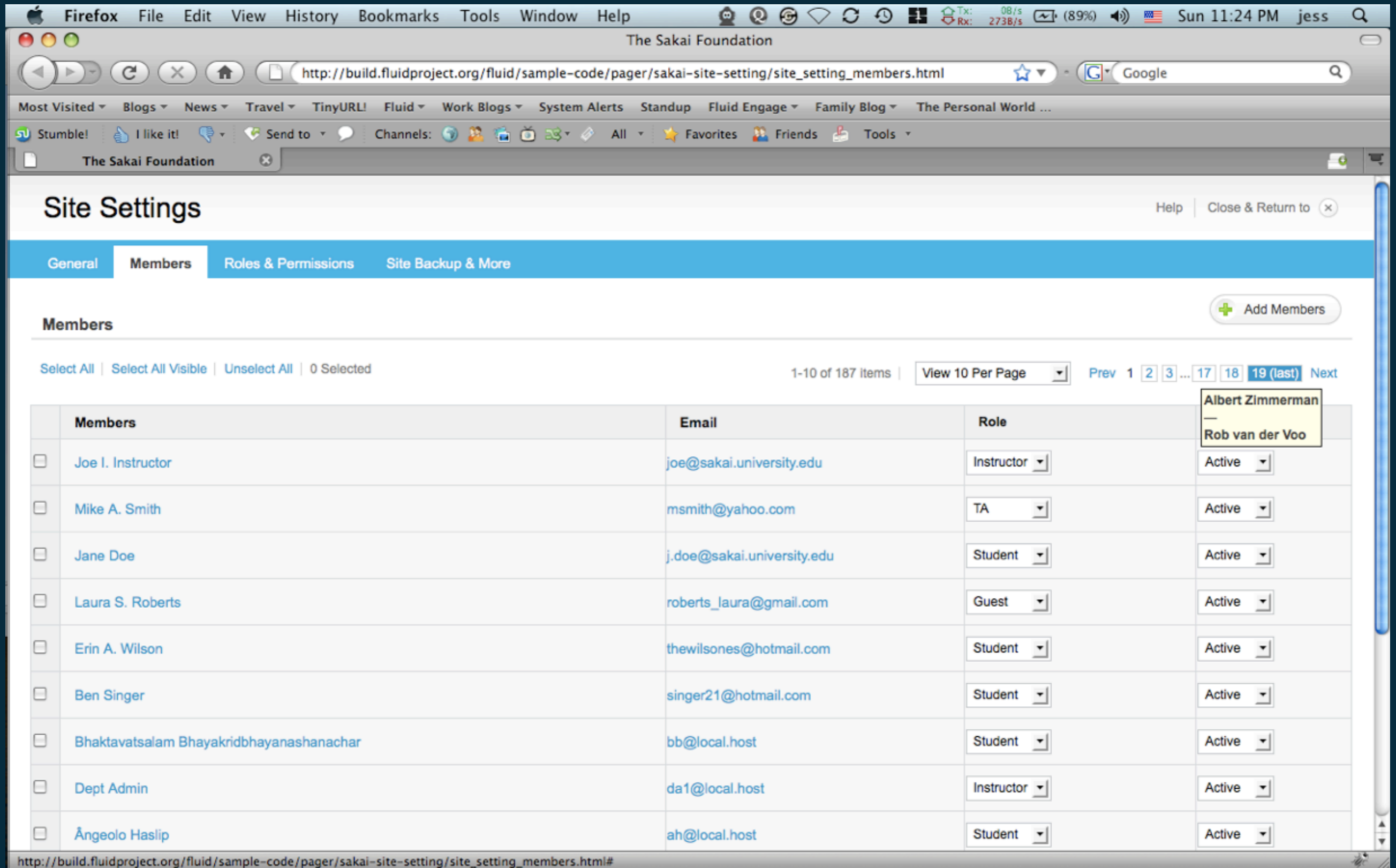


dropdown



rich text

# Pager



The screenshot displays a web browser window with the following details:

- Browser:** Firefox
- Address Bar:** [http://build.fluidproject.org/fluid/sample-code/pager/sakai-site-setting/site\\_setting\\_members.html](http://build.fluidproject.org/fluid/sample-code/pager/sakai-site-setting/site_setting_members.html)
- Page Title:** The Sakai Foundation
- Page Content:**
  - Site Settings** (Header)
  - Members** (Active Tab)
  - Members** (Section Header)
  - Buttons:** Select All, Select All Visible, Unselect All, 0 Selected, 1-10 of 187 Items, View 10 Per Page, Prev, 1, 2, 3, ..., 17, 18, 19 (last), Next
  - Table:**

Members	Email	Role	Active
<input type="checkbox"/> Joe I. Instructor	<a href="mailto:joe@sakai.university.edu">joe@sakai.university.edu</a>	Instructor	Active
<input type="checkbox"/> Mike A. Smith	<a href="mailto:msmith@yahoo.com">msmith@yahoo.com</a>	TA	Active
<input type="checkbox"/> Jane Doe	<a href="mailto:j.doe@sakai.university.edu">j.doe@sakai.university.edu</a>	Student	Active
<input type="checkbox"/> Laura S. Roberts	<a href="mailto:roberts_laura@gmail.com">roberts_laura@gmail.com</a>	Guest	Active
<input type="checkbox"/> Erin A. Wilson	<a href="mailto:thewilsones@hotmail.com">thewilsones@hotmail.com</a>	Student	Active
<input type="checkbox"/> Ben Singer	<a href="mailto:singer21@hotmail.com">singer21@hotmail.com</a>	Student	Active
<input type="checkbox"/> Bhaktavatsalam Bhayakridbhayanashanachar	<a href="mailto:bb@local.host">bb@local.host</a>	Student	Active
<input type="checkbox"/> Dept Admin	<a href="mailto:da1@local.host">da1@local.host</a>	Instructor	Active
<input type="checkbox"/> Angelo Haslip	<a href="mailto:ah@local.host">ah@local.host</a>	Student	Active
  - Tooltip:** Albert Zimmerman, Rob van der Voo

# User Interface Options

## User Interface Options

Make it work for you.

Help ?

### ▼ Easier to see

Font, Contrast, Images, Layout

Font Style:

Minimum Text Size:

Text Spacing:

Contrast:

Background Images:  Yes  No

Layout:

### ► Easier to find

Contents, Links, Inputs, Actions

### ► Easier to control

Buttons, Shortcuts, Controls

### ► In my language

Languages, Text Alternatives


### ► More efficient

Menus, Toolbars, Functions

### Preview Window (updates automatically)

#### Standard

Lorem ipsum dolor sit amet, consectetur adipiscing elit. Curabitur interdum, mi sed ultricies vehicula, nibh tortor hendrerit tellus, ut feugiat pede nunc in eros. Nullam convallis arcu quis ante.



Sed nisi. Fusce at nulla ut nulla euismod posuere. Curabitur id nulla id neque faucibus.

- [Quisque consectetur](#)
- [Enim ac magna](#)
- [Sed quis ipsum eu lorem cursus scelerisque](#)
- [Nam a mi id eros pharetra suscipit](#)

#### Fusce at nulla ut nulla

Lorem ipsum dolor sit amet, consectetur adipiscing elit. Curabitur interdum, mi sed ultricies vehicula, nibh tortor hendrerit tellus, ut feugiat pede nunc in eros. Nullam convallis arcu quis ante.

Reset Save and Apply Cancel

# Fluid Skinning System (FSS)

Home | Site Map | Help | Sign Out

**uPortal** Welcome Demo User. [Sign out](#)

Google Search


Welcome Entertainment Demos Development

Welcome My Weather Bookmarks Google Search Calendar

## Welcome

**Welcome** Maximize

- [Lorem Ipsum 1](#)
- [Lorem Ipsum 2](#)
- [Lorem Ipsum 3](#)



### Lorem Ipsum 1

Lorem ipsum dolor sit amet, consectetur adipiscing elit. Sed eget neque consequat sapien commodo ultricies. Mauris commodo lobortis elit. Mauris euismod. Fusce ac dui. Nullam in arcu. Morbi pulvinar. Vivamus lacinia ligula et dolor. Phasellus hendrerit nulla. Aliquam feugiat eleifend tellus. Nullam tristique nisi et est. Sed luctus magna ut dui. Nam aliquet metus laoreet tortor.

Duis erat mi, placerat vel, vulputate ac, commodo vel, mauris. Duis molestie. Sed urna erat, viverra sit amet, aliquam ut, facilisis a, magna. Nullam suscipit posuere justo. Curabitur ac cursus. Moris egest orsi. Aenean et nunc.

**Calendar** Maximize Remove

Customize My Portal

- [Add Content](#)
- [Page Layout](#)
- [Select Skin](#)
- [Add tab](#)

Quicklinks

- [Bookmarks Portlet](#)

components

javascript

UX toolkit

DPL

fluid

# Fluid Skinning System (FSS)

Firefox File Edit View History Bookmarks Tools Window Help

Sakai

http://build.fluidproject.org/fluid/sample-code/shared/sakai/sakai.html#

Most Visited Blogs News Travel TinyURL! Fluid Work Blogs System Alerts Standup Fluid Engage Family Blog The Personal World ...

Stumble! I like it! Send to Channels: All Favorites Friends Tools

Directions Fluid - Infusi... Starting a Co... weather.com ... The Eyes of M... Flickr: The Th... Sakai Sakai

## My Dashboard

Tools

Add Tools

- Home
- Profile
- Membership
- Schedule
- Resources
- Worksite Setup
- Preferences
- Account

Add Widgets Edit Appearance

Sakai © 2004-2008 The Sakai Foundation. Portions of Sakai are copyrighted by its contributors.

Done

**Easier to see**

- Font style: No Preference
- Minimum text size: No Preference
- Text Spacing: No Preference
- Contrast: Mist
- Background Images:  Yes  No
- Simplified Layout:  Yes  No

Preview window (updates automatically)

Tools

Add Tools

- Home
- Profile
- Membership
- Schedule
- Resources
- Worksite Setup
- Preferences
- Account

Reset Save and apply Cancel

# Date Picker



# Technology

- Fluid components are:
  - Accessible and customizable
  - Compatible with lots of technologies
  - Easy to write and adapt



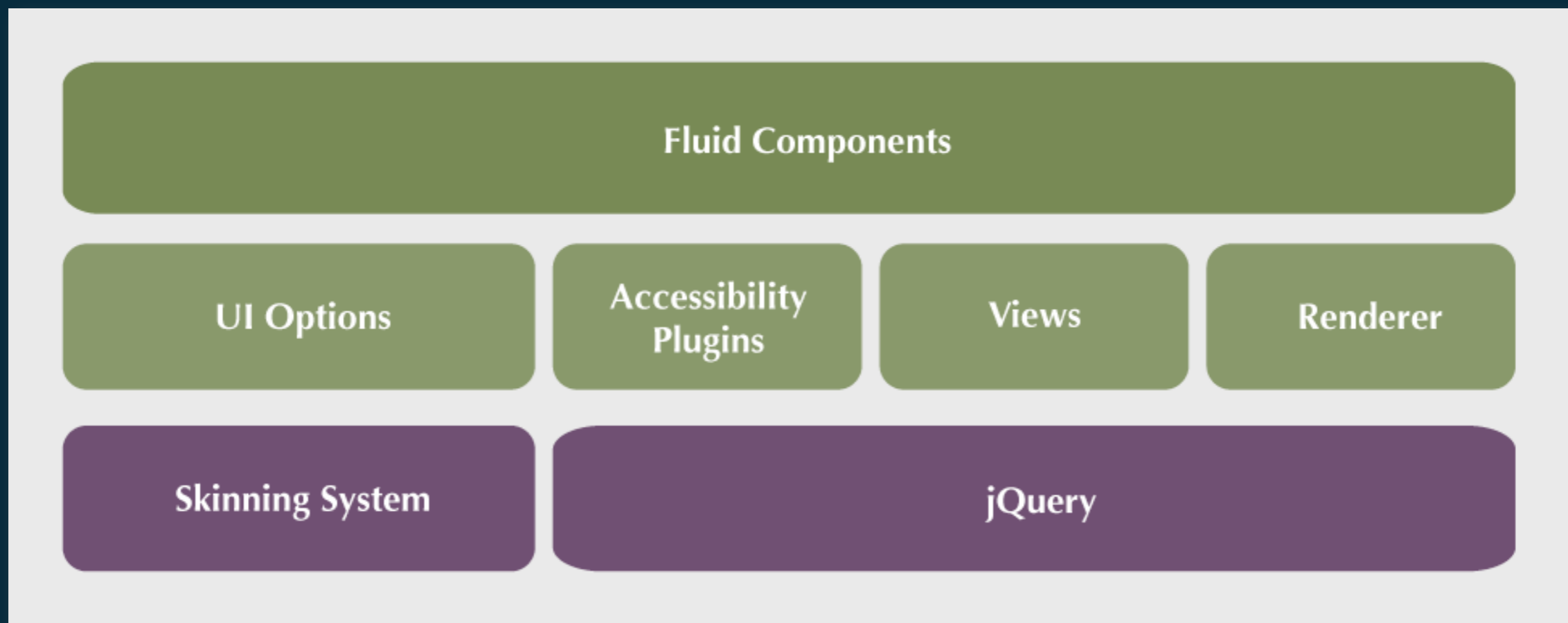
# Fluid Framework

- Built with jQuery
- Lightweight MVC
- Client-side template rendering
- Plugins to make accessibility easier
- Highly declarative: reconfigure, rewire, extend

# Accessible

- Flexible layouts and skins
- Inject navigational enhancements
- Customizable keyboard support
- UI Options: user preferences
- jQuery UI a11y effort

# Fluid Framework



# UX Toolkit

The Fluid User Experience Toolkit provides resources, tools, and documentation to help make user interface design and implementation easier. The toolkit includes personas and scenarios for common use cases within higher education, user interface design patterns, testing protocols, and accessibility guidelines intended to simplify the design process.

## User Research

Contextual Inquiry  
Personas

## Accessibility

Accessibility Resources

## Evaluation and Assessment

UX Walkthroughs  
User Testing

## Visual Design

Fluid Brand

## Interaction Design

Design Patterns  
Components  
Comparative & Competitive  
Analysis

## Design Process & Management

Agile Planning - Goals, benefits and  
details  
UX Resources

# UX Toolkit

- UI Design Patterns
- UX Walkthroughs
- Testing techniques
- User profiles
- All the stuff you need to design great interfaces!

# Design Pattern Library



Home >

## Register

Quick and easy! Create patterns and join discussions on draft patterns! Go here to Register

## Login

Already a member? Go here to Login now.

## Browse Patterns

- Content Management
- Information Organization
- Input Forms
- Navigation
- All Patterns

## Top Rated Patterns

- Drag and Drop - List Ordering  
★★★★★
- Comprehensive File Upload  
★★★★★
- Drag and Drop - Layout Preview  
★★★★☆
- List Builder



Contribute a Design Pattern  
View / Edit My Patterns



Join a Discussion



- About the OSDPL
- What is a Design Pattern?
- How to Write a Pattern FAQ
- General Design Pattern FAQ
- Open Examples Guide
- Glossary

## Under Development

Submit feedback

## Recent Comments

- Good question  
1 week 4 days ago
- Should our patter focus on websites as well as web applications?  
2 weeks 1 day ago

Changes to comment system  
2 weeks 2 days ago

Re: Activating keyboard selection  
2 weeks 2 days ago

more

## Who's online

There are currently 0 users and 1 guest online.

## Who's new

glennswest

## Recently Modified Patterns

### Drag and Drop - List Ordering

★★★★★ Comments: 2



Time updated: 2 weeks 2 days ago

### Comprehensive File Upload

★★★★★ Comments: 0



## Latest News

- OSDPL downtime for testing of workflow (Updated)  
02/21/2009 - 05:16
- Front page modifications, improvements to discussion display  
02/12/2009 - 05:56
- What is a Design Pattern?  
02/12/2009 - 02:35
- About the OSDPL  
02/11/2009 - 05:36

# Design Pattern Library

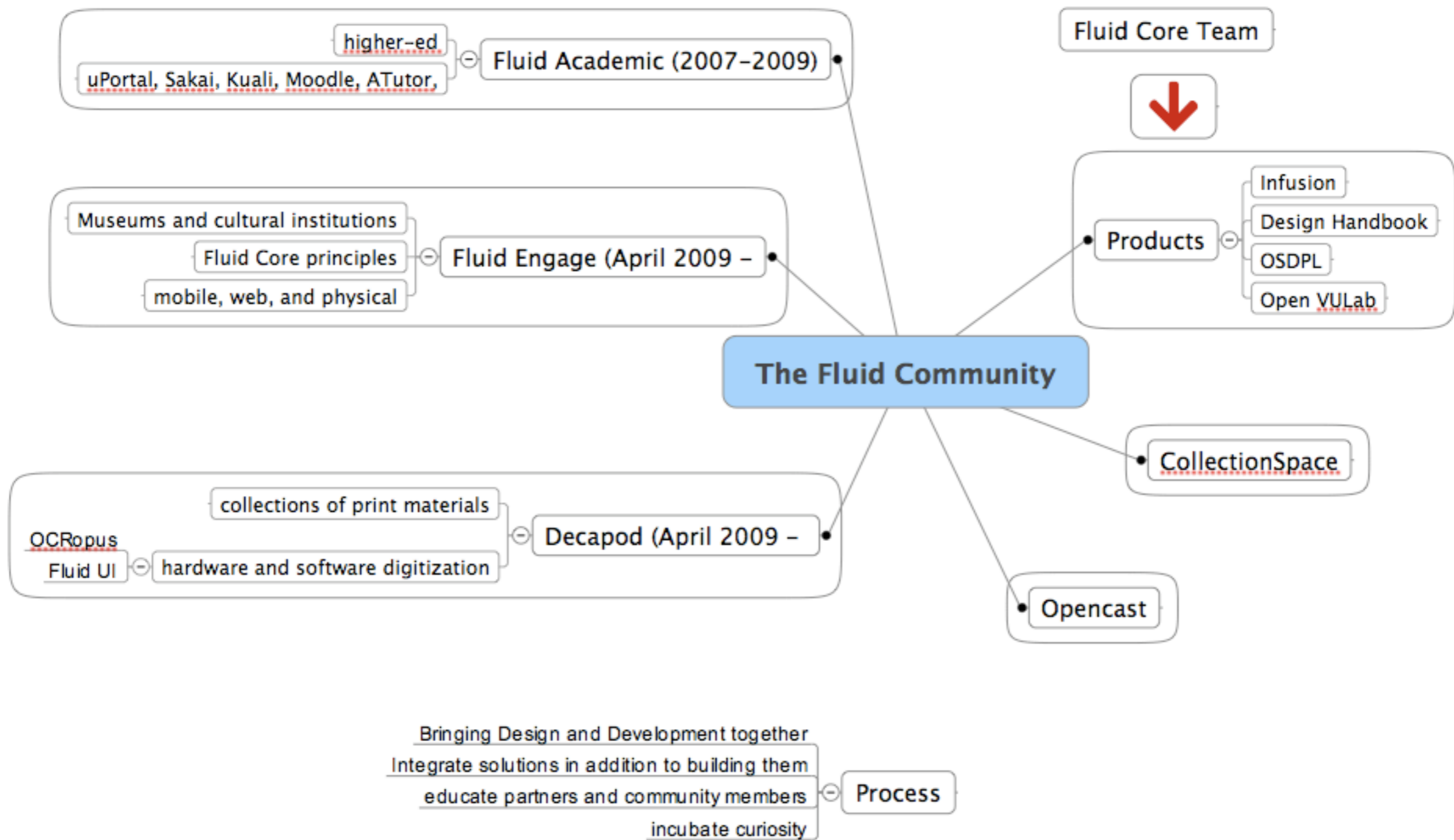
- a collection of user experience designs -- a collection of reusable design knowledge put together by people who have thought about a particular interaction in depth.
- Open Source Design Patterns Library:
  - The first truly open, collaborative pattern repository

# What is Fluid?

*A community source project that creates user experience tools and software capable of addressing the needs of diverse users -- from a holistic perspective.*

- Rich, flexible, reusable user interface components
- Lightweight JavaScript development tools
- User Experience Toolkit
- Accessible Interaction Designs
- Design Pattern Community





# Where is Fluid?

Fluid Academic

Fluid Engage

Decapod

CollectionSpace

Opencast

## Institutions



University of British Columbia



University of Toronto



University of Cambridge  
University of California, Berkeley



York University



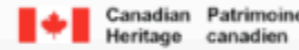
University of Colorado, Boulder



University of Michigan



Michigan State University



Canadian Heritage



Ontario Ministry of Research and Innovation

## Corporations



IBM



Sun Microsystems



Yahoo!



Mozilla



Unicon

## Projects



uPortal



Sakai



Moodle



ATutor



Kuali Student



CollectionSpace



# Our Approach

*hint: be flexible*

- tools
- teamwork
- leadership

tools

teamwork

leadership



# how are we organized?

- Tools
  - IRC, Skype, Mailing lists
  - daily stand-up video meetings
  - wiki, blog, website
  - SVN, JIRA
  - Google calendar
  - commit processes and clear licensing (ECL 2.0/BSD)

# how are we organized?

- bridging the Design + Development gap
- highly distributed
- collaborative
- common vision

# how are we organized?

- transparent
- thorough
- self-motivated
- Team-building
  - communicative
  - open
  - mentor
  - patient
  - visionary

# Community Culture

- How do we...
  - make decisions?
  - grant commit access?
  - ensure code quality?
  - cut releases?
  - handle licensing and contributions?

*Learn from the best (Apache, Mozilla, etc.)  
and adapt to our needs.*



# Do the stuff that gets done last, first

- Test early
- Get it in front of users
- Use QA as a hub for communication
- Establish a rhythm for your releases
- It's okay to get it wrong the first time

# who leads?

leadership, not ownership

tools

teamwork

leadership



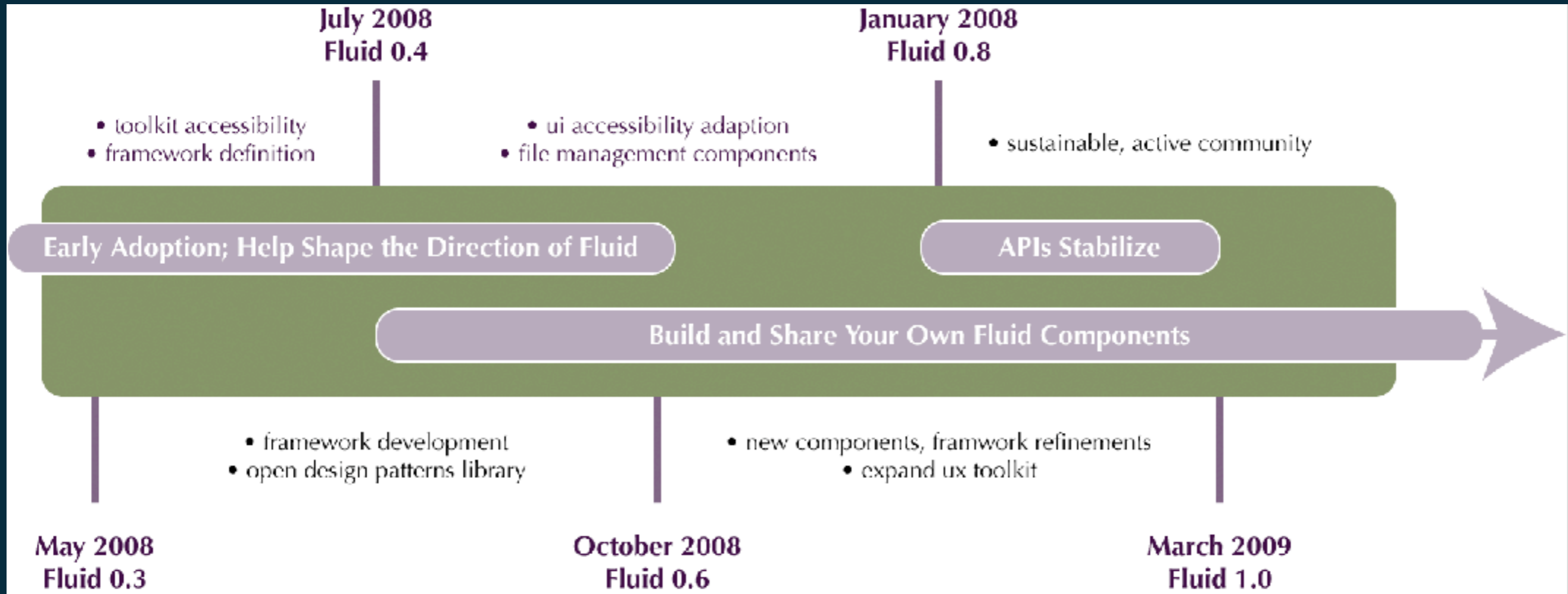
# Fluid Infusion -- shipping goodness *(monthly)*

Infusion is an application framework designed to provide unprecedented flexibility while preserving interoperability.

# Infusion: a complete package

- Components for common interactions
- Framework: everyone can build components
- UI design patterns: everyone can share
- User research you can use and do yourself
- Documentation and lots of sample code

# Release Plan



# processes & coming together

- changing processes so they work for us
  - process for its own sake isn't very useful
  - design/developer reviews
  - retrospectives

# How Fluid Can Help You

- Use Fluid components in your applications
  - Accessibility & great design for free
- Build new UIs using Fluid's techniques and plugins
  - Robust strategies for UI development
- UX Walkthroughs
  - Assess and improve your user experience
- Open Source Design Patterns
  - Advice on common UI design considerations
- Higher Education User Profiles
  - Understand your audience

# How You Can Help

- Join our mailing lists
- Share code
- Help with design effort
  - UX Walkthroughs are fun and easy
  - Contextual inquiry
  - Component design teams
- Use and extend Fluid components in your tools
- Write your own Fluid components
- User testing
- Share design patterns



# Links

- <http://fluidproject.org/>
- <http://wiki.fluidproject.org>
- <http://build.fluidproject.org>
- <http://uidesignpatterns.org/>

# contact us!

- [jess@jessmitchell.com](mailto:jess@jessmitchell.com)
- [colin.clark@utoronto.ca](mailto:colin.clark@utoronto.ca)