http://www.fluidproject.org/
The Fluid Project

An Open Source Community for Inclusive Design

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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

Upload Files

<table>
<thead>
<tr>
<th>File Name</th>
<th>Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>LICENSE.txt</td>
<td>12.1 KB</td>
</tr>
<tr>
<td>maven.xml</td>
<td>1.8 KB</td>
</tr>
<tr>
<td>pom.xml</td>
<td>0.9 KB</td>
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<td>project.properties</td>
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<tr>
<td>project.xml</td>
<td>1.2 KB</td>
</tr>
<tr>
<td>README.txt</td>
<td>5.4 KB</td>
</tr>
</tbody>
</table>

Uploading: 5 of 6 files (15.9 KB of 21.3 KB)

Done

Pause II

Add more
Inline Edit Family

- simple text
- dropdown
- rich text

components  javascript  UX toolkit  DPL
# Pager

## Site Settings

### Members

<table>
<thead>
<tr>
<th>Members</th>
<th>Email</th>
<th>Role</th>
</tr>
</thead>
<tbody>
<tr>
<td>Joe I. Instructor</td>
<td><a href="mailto:joe@sakai.university.edu">joe@sakai.university.edu</a></td>
<td>Instructor</td>
</tr>
<tr>
<td>Mike A. Smith</td>
<td><a href="mailto:msmith@yahoo.com">msmith@yahoo.com</a></td>
<td>TA</td>
</tr>
<tr>
<td>Jane Doe</td>
<td><a href="mailto:j.doe@sakai.university.edu">j.doe@sakai.university.edu</a></td>
<td>Student</td>
</tr>
<tr>
<td>Laura S. Roberts</td>
<td><a href="mailto:roberts_laura@gmail.com">roberts_laura@gmail.com</a></td>
<td>Guest</td>
</tr>
<tr>
<td>Erin A. Wilson</td>
<td><a href="mailto:thowilsones@hotmail.com">thowilsones@hotmail.com</a></td>
<td>Student</td>
</tr>
<tr>
<td>Ben Singer</td>
<td><a href="mailto:singer21@hotmail.com">singer21@hotmail.com</a></td>
<td>Student</td>
</tr>
<tr>
<td>Bhaktavatsalam Bhayakridbhyanashanachar</td>
<td><a href="mailto:bb@local.host">bb@local.host</a></td>
<td>Student</td>
</tr>
<tr>
<td>Dept Admin</td>
<td><a href="mailto:do1@local.host">do1@local.host</a></td>
<td>Instructor</td>
</tr>
<tr>
<td>Ångsoooi Haslip</td>
<td><a href="mailto:ah@local.host">ah@local.host</a></td>
<td>Student</td>
</tr>
</tbody>
</table>

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### Alphabetical Members

<table>
<thead>
<tr>
<th>Members</th>
<th>Email</th>
<th>Role</th>
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</thead>
<tbody>
<tr>
<td>Albert Zimmerman</td>
<td><a href="mailto:Albert_Zimmerman@yahoo.com">Albert_Zimmerman@yahoo.com</a></td>
<td></td>
</tr>
<tr>
<td>Rob van der Voo</td>
<td><a href="mailto:Rob_vander_voo@gmail.com">Rob_vander_voo@gmail.com</a></td>
<td></td>
</tr>
</tbody>
</table>

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**Source:**

http://build.fluidproject.org/fluid/sample-code/pager/sakai-site-setting/site_setting_members.html
User Interface Options

Make it work for you.

▼ Easier to see

Font Style: Sans serif
Minimum Text Size: 12 pt
Text Spacing: 100%
Contrast: Medium
Background Images: Yes
Layout: Column

Font, Contrast, Images, Layout

Preview Window (updates automatically)

Standard

Lorem ipsum dolor sit amet, consectetur adipiscing elit. Curabitur id nulla id neque faucibus.

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

- Quisque consectetur
- Enimi ac magna
- Sed quis ipsum eu lorem cursus scelerisque
- Nam a mi eros pharetra suscipit

Fusce at nulla ut nulla

Lorem ipsum dolor sit amet, consectetur adipiscing elit. Curabitur id nulla id neque faucibus.

Fusci at nulla ut nulla

Languages, Text Alternatives

Menus, Toolbars, Functions

Reset Save and Apply Cancel
Fluid Skinning System (FSS)
Fluid Skinning System (FSS)

components
javascript
UX toolkit
DPL
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

- Fluid Components
- UI Options
- Accessibility Plugins
- Views
- Renderer
- Skinning System
- jQuery

components javascript UX toolkit DPL
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

Evaluation and Assessment
- UX Walkthroughs
- User Testing

Interaction Design
- Design Patterns
- Components
- Comparative & Competitive Analysis

Accessibility
- Accessibility Resources

Visual Design
- Fluid Brand

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

• 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
The Fluid Community

  - uPortal, Sakai, Kuali, Moodle, ATutor

- Fluid Engage (April 2009 –)
  - Museums and cultural institutions
  - Fluid Core principles (mobile, web, and physical)

- Decapod (April 2009 –)
  - OCRopus
  - Fluid UI
  - Collections of print materials
  - Hardware and software digitization

- Fluid Core Team
  - Products
    - Infusion
    - Design Handbook
    - OSDPL
    - Open VULab
  - CollectionSpace
  - Opencast

- Bringing Design and Development together
  - Integrate solutions in addition to building them
  - Educate partners and community members
  - Incubate curiosity

- Process
Where is Fluid?

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
- CollectionSpace
Who?
Our Approach

hint: be flexible

• 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
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
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
- colin.clark@utoronto.ca