http://build.fluidproject.org

http://wiki.fluidproject.org



# The Fluid Project

An Open Source Community for Inclusive Design

Colin Clark, Fluid Project Technical Lead, Adaptive Technology Resource Centre, University of Toronto Jess Mitchell, Fluid Project Manager





### What, Where, and Who is Fluid?

What is it? What does it do?

Where is it? How do I find Fluid? (more than urls)

Who is it? Who is working on Fluid?



### 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

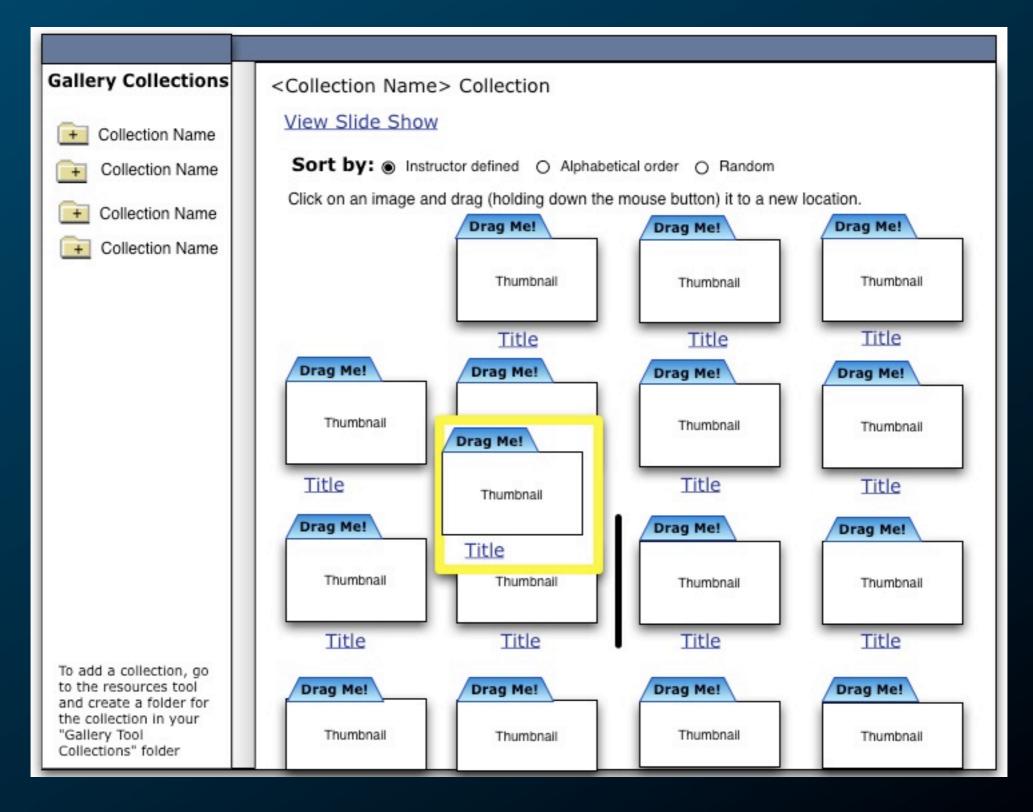


# What is a Fluid Component?

- 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...



### Reorderer





DPL

# Lightbox

#### **Gallery Collections**

arks\_(5)

wich Village (6)

(9) (yscrapers

ork City (all) (27)

Manhattan (11)

a collection, go to the es tool and create a folder collection in your "Image Collections" folder.

#### Lower Manhattan Collection

Start Slide Show

Sort order 
Instructor default 
Alphabetical



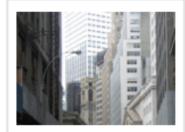




View an image by pressing Enter. Move an image us

CTRL+Arrow Key.

rebuilding.jpg



approaching wall street.jpg



lower manhatten.jpg



near city hall.jpg



wtc whats left.jpg



battery park.jpg



wtc subway.jpg



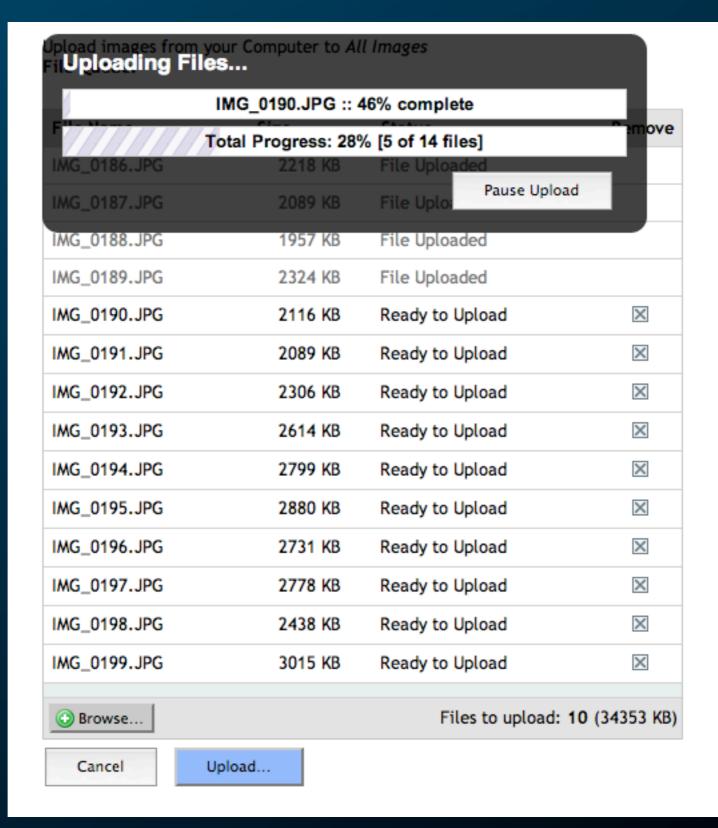
UX toolkit designs javascript components

# Layout Customizer





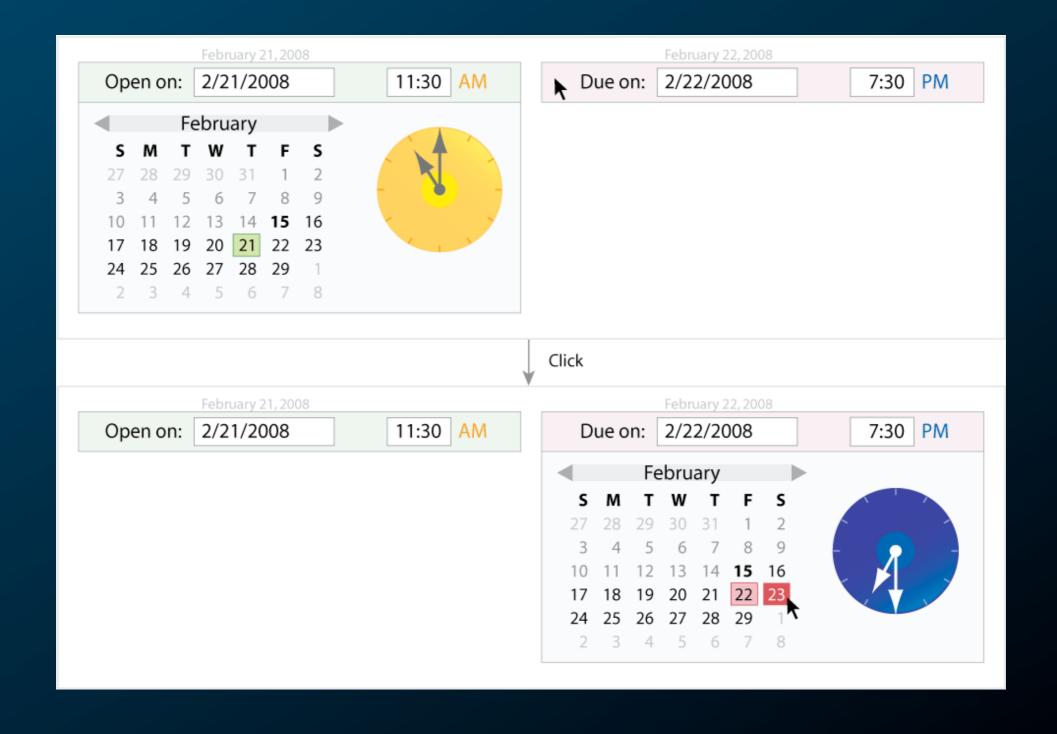
# Uploader





DPL

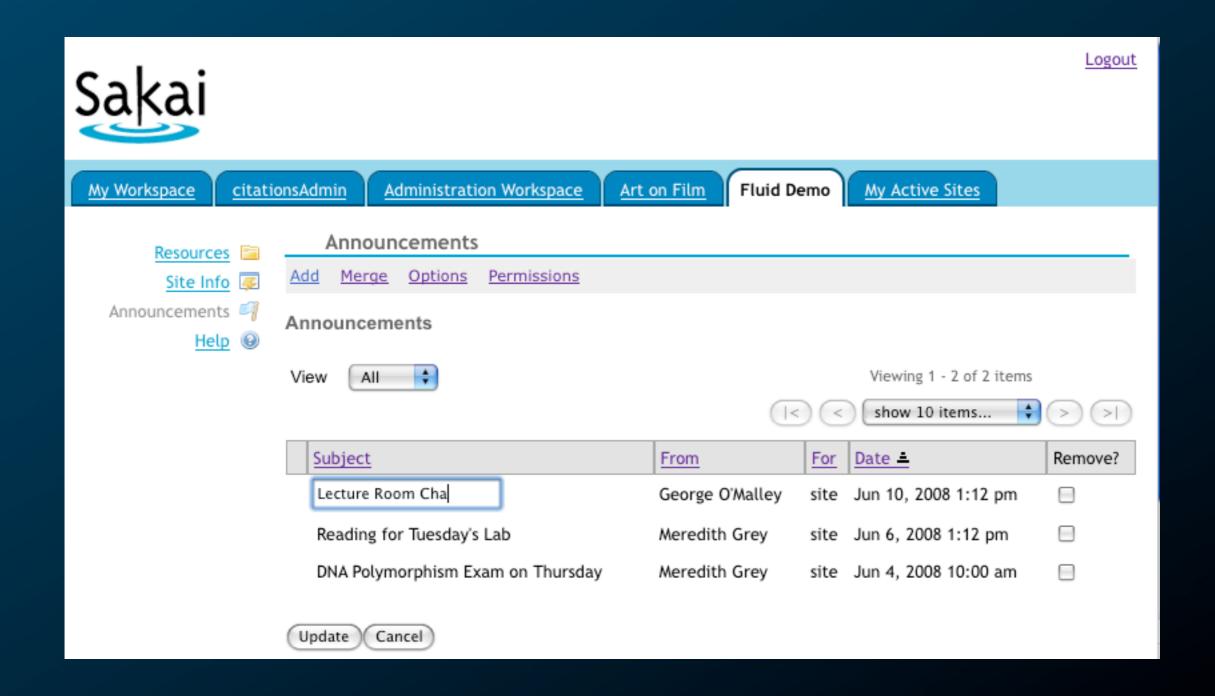
### Date Picker





DPL

### Inline Edit





**DPL** 

# Pager

Start typing a name Find			
< <u>≤</u> Page 2 of 19 <u>≥</u> ≥			Show 10 ▼ per page
<u>Name ≛</u>	<u>User ID</u>	Email Address	Role
Campeau, Patrick Capovilla, Megan Catania, Natalie Chalhoub, George Chan, Julie Choi, Daniel Clarkson, Ian Cole, Paul Colgate, Abbey	15234314 19269508 19435570 19206726 19206726 16984247 19286942 19446940 14644786	pcampe@berkeley.edu megan@berkeley.edu ncatania@berkeley.edu gchalhoub@berkeley.edu jchan@berkeley.edu dchoi@berkeley.edu iclarkson@berkeley.edu pcole@berkeley.edu acolgate@berkeley.edu	Student Student Student Student Instructor Student Student Student Instructor
Colville, Tony    < Page 2 of 19 > >	19283731	tcolville@berkeley.edu	Student Viewing 11-20 of 194



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# Technology

### Fluid components are:











# JavaScript Framework

- Plugins to make accessibility easier
- Client-side template rendering
- May DOM Binder: friendly ways access to the DOM
- User preferences and UI adaptation
- Framework services: reordering, undo, and more...



### Accessible

- **Flexible layouts**
- \* Navigational enhancements
- Customizable keyboard support
- User preferences for styling
- **\*** jQuery UI a11y effort



### **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

- **W** UI Design Patterns
- \* UX Walkthroughs
- \* Testing techniques
- User profiles

All the stuff you need to design great interfaces!



# Design workflow (iterate!)

\* scope

What problem are we solving?

\* context

Who are we designing for?

**\*** flow

What needs are we meeting?

\* test

Did we meet those needs?

\* implementation



# Design

- \* scope
- **\*** context
- **X** flow
- \* test
- **\*** implementation

- **\*** initiating
- **X** planning
- \* executing
- \* monitoring & controlling
- **\*** closing



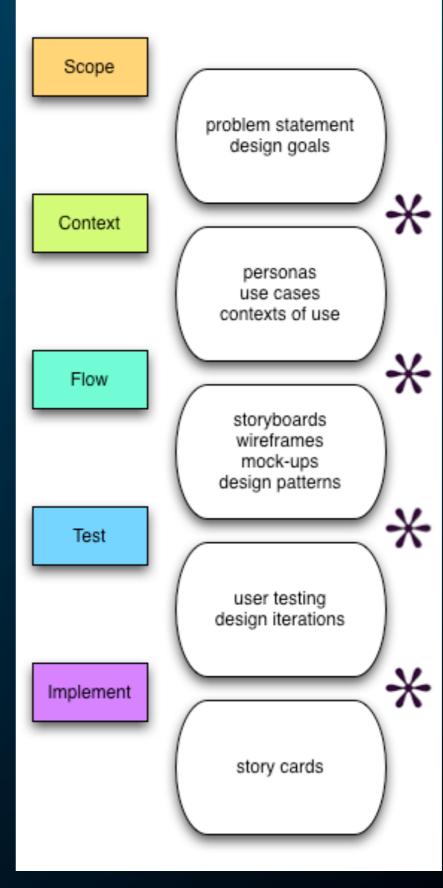
### Design

http://wiki.fluidproject.org/display/fluid/Pager+Design+Overview

http://wiki.fluidproject.org/display/fluid/Inline+Edit



# Design outputs





DPL

# Design Pattern Library



#### **Open Source Design Pattern Library**

#### UI Design Patterns

in

Home

#### Content Management ▶

- Forms
- Information Organization
- Navigation
- Profile Management
- Search

#### Community

- Forums
- Contact OSDPL
- Recent posts

#### User login

Username: \*

Password: \*

#### Log in

- · Create new account
- · Request new password

Who's online

#### Welcome to the Open Source Design Pattern Library!

The Library is a place for communities to create, collaborate on, and share their open source user interface design patterns. Our current members include the communities involved in the Kuali Student, Moodle, Open Collection, Sakai, & uPortal. If you are interested in sharing your design patterns, please contact us.

#### What is a design pattern?

A design pattern was described by architect Christopher Alexandar as a "proven solution to a common problem in a specified context." Application designers and developers can use user interface design patterns to create usable, high-quality user interfaces that are most helpful and appropriate in a particular situation.

#### What is The Fluid Project?

The Fluid Project is a worldwide collaborative project to help improve the usability and accessibility of community open source projects with a focus on academic software for universities.

#### **More Info**

**Much more information on design patterns** can be found on the Design Patterns section of the Fluid Project wiki, including the Open Source Design Pattern Library Working Group space. Join the ongoing discussion about the OSDPL by subscribing to the fluid-talk mailing list.

→ Printer-friendly version

#### **W**

#### Find patterns by tag

content management drag and drop file upload Flash forms

labels layout list progress text

uportal validation

more tags

Search

#### OSDPL News

#### DATE CHANGE: Next OSPDL Full Group meeting: Thursday, June 19th at 12pm PDT/3pm EDT

Posted June 4th, 2008 by pattern\_admin

The meeting was postponed to Thursday, June 19th at 12pm PDT/3pm EDT because the Fluid wiki was down.

Login or register to post comments | Read more |

POSTPONED:

components javascript UX toolkit designs DPL FLUIC

# 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



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### Where is Fluid?

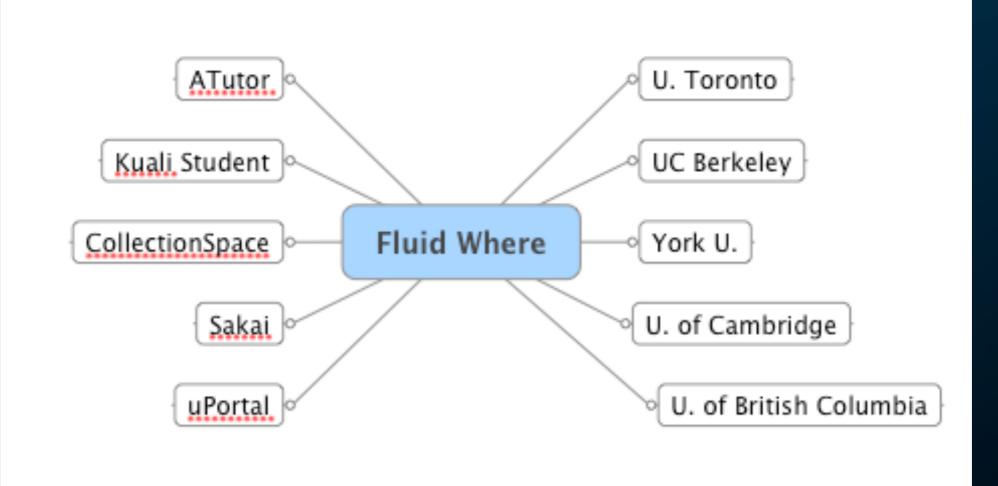
Core Institutions: University of Toronto | UC Berkeley | York University | University of British Columbia | University of Cambridge

Other Participating Institutions: Michigan State | University of Colorado | University of Michigan | Georgia Tech | UK Open University | Your University Here

Participating Projects: uPortal | Sakai | CollectionSpace | Kuali Student | Moodle | ATutor

Corporate Partners: Mozilla Foundation | Sun Microsystems | IBM | Unicon







### Who is Fluid?

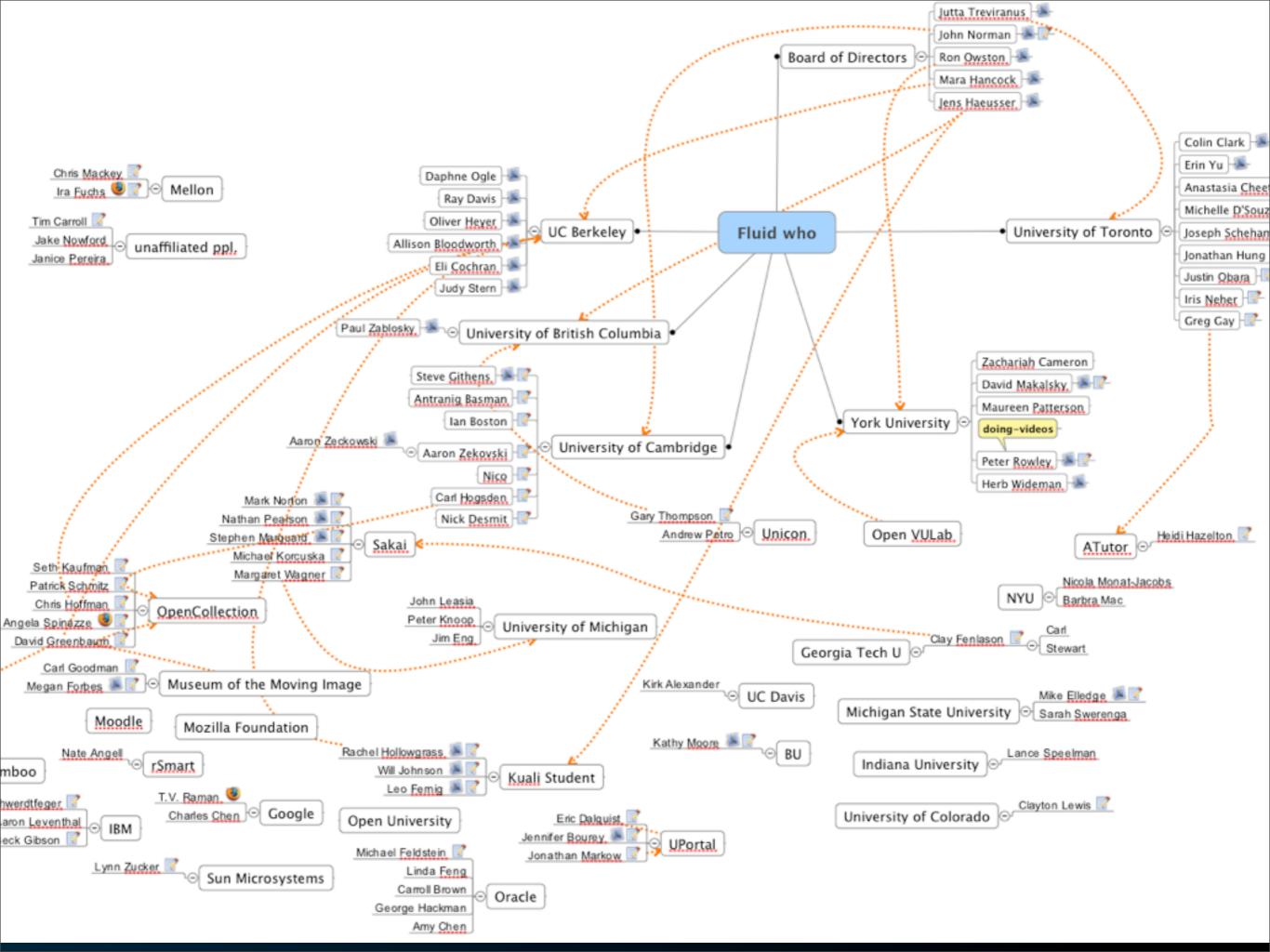
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## what problem are we solving?

- \* 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 institutionsCross-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?



### do we know how to do that?

hint: be flexible











- IRC
- wiki
- blog
- website
- mailing lists
- daily stand-up video meetings





- transparent
- thorough
- self-motivated
- common vision



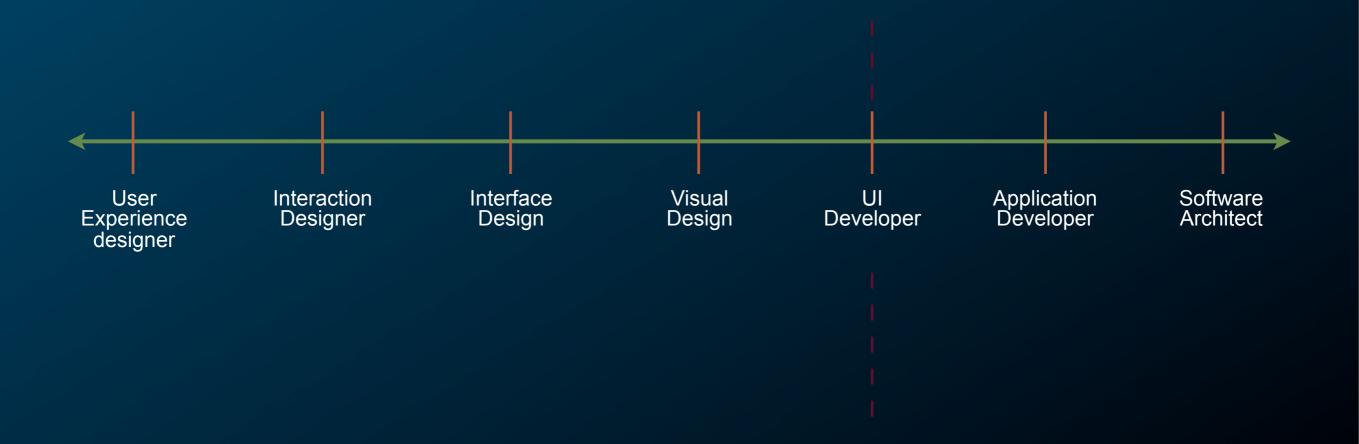
### \* Team-building

- Technical Lead Colin
  - group paired programmers
- Design Lead Daphne
  - group paired designers
- everyone works to fill in the gaps



- \* Team-building
  - communicative
  - open
  - mentor
  - patient
  - visionary







### who leads?

leadership, not ownership



## processes & coming together

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



# Infusion: a complete package

- Components for managing your files and more
- \* Framework: everyone can build components
- Ul design patterns
- \* User research you can use
- Documentation and lots of sample code

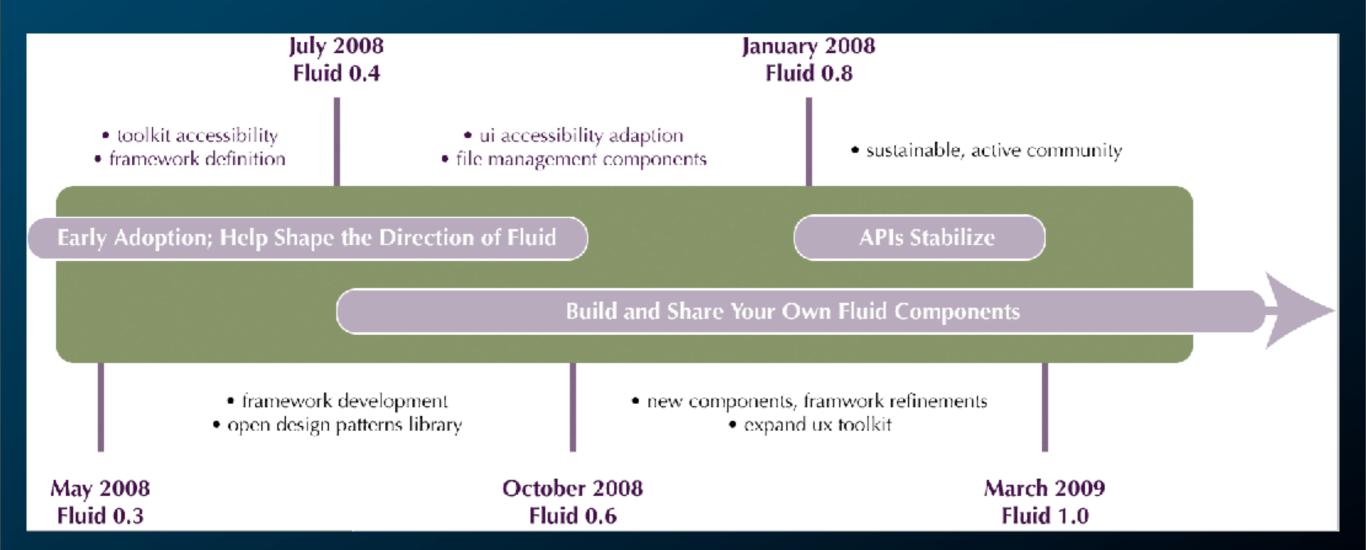


# what about your roadmap?

- how do we decide which components to work on next?
- \* who sets our priorities?



### Release Plan





### Release Plan

monthly releases (iterate!)

work with Nathan to identify components in his UX Initiative work



### How Fluid Can Help You

- We Use Fluid components in your applications
  - Accessibility & great design for free
- Here are the Build new UIs using Fluid's techniques and plugins
  - Robust strategies for UI development
- **X** UX Walkthroughs
  - Assess and improve your user experience
- Open Source Design Patterns
  - Advice on common UI design considerations
- High 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
- We use and extend Fluid components in your tools
- Write your own Fluid components
- **X** User testing
- \* Share design patterns



### Links

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

colin.clark@utoronto.ca jess@jessmitchell.com

