

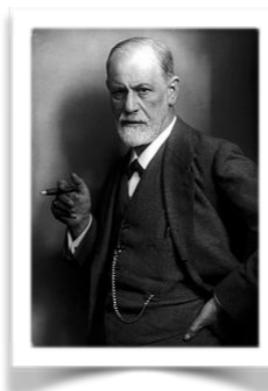
# Contact Info Sharing Web App

J. David Beutel  
2014-12-04

# J. David Beutel

hard to pronounce: German **eu** = oi

- Sigmund **Freud**

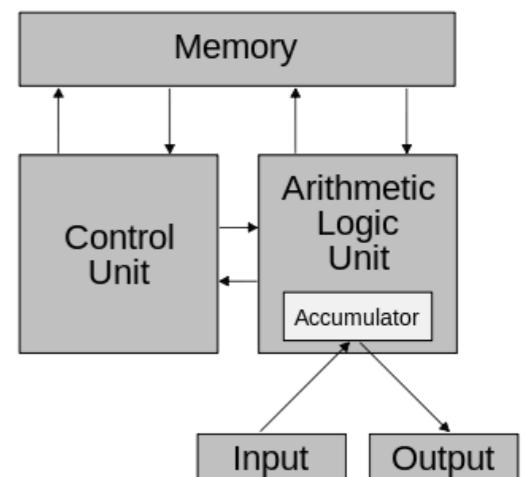


- **Reuters** news agency



- **Euler's** number  $e = \lim_{n \rightarrow \infty} \left(1 + \frac{1}{n}\right)^n$

- Von **Neumann** computer architecture



# ICS master's degree

- 2008 - 2014: 7 years!?
- my last requirement: this presentation



©Warren Photographic



# ITS MIS web developer

UH System



UNIVERSITY  
*of HAWAII*  
SYSTEM

Information Technology Services



Management Information Systems



web applications group

↓  
me

# web apps we made

- eCAFE
- Student Employment
- Pay Statements
- Leave
- eTravel
- ePayment
- 2nd-level authentication
- Timesheet & Payment System

# eCAFE



**eCAFE STUDENT**  
Course and Faculty Evaluation  
UNIVERSITY OF HAWAII

[Student Home](#) | [FAQ](#) | [Feedback](#) | [Contact](#) | [Logout](#)

**Student: eCafe**  
Welcome, Lili Johnson

**Your Surveys: Summer II 2009**

All information about individual students and courses will be held in strict confidence.

MATH 100(242): Survey of Mathematics  
John Smith  
12 students. 15 questions. [Do Survey Now](#) [Opt-out](#)

PSY 212(701): Survey of Research Methods  
Maximillian Cassidy  
22 students. 0 questions. There is no survey being given for this class.

PSY 352(701): Psychology of Human Sexuality  
Mary Washington  
19 students. 15 questions. [Do Survey Now](#) [Opt-out](#)

[Opt-out of my all surveys](#)

# Student Employment



**sece**  
Student employment & cooperative education  
UNIVERSITY OF HAWAII

**Search for a Job** You must login to obtain Employer Contact Information

**Student / Alumni Login**

Username:  Password:  LOGIN

- [Login Help](#)
- [Job & Eligibility Info](#)

**Employer Login**

Username:  Password:  LOGIN

- [Login Help](#)
- [Non-UH Employer Registration!](#)

[<< Home Page](#)

**Keyword(s)** :

**Job Program** : All Programs ▾

**Island Location** : All Locations ▾

**Campus Location** : All Campuses ▾

**Category** : All Categories  
Accounting/Fiscal  
Administrative/Clerical  
Agriculture  
Aquaculture  
Architecture

**Special Classification** : All Classifications ▾

**Postings Since** : All Postings ▾

**Job Number** :  - AXX

**SEARCH**

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all use is subject to University of Hawaii Executive Policy E2.210.

Copyright © 2009 University of Hawaii  
Need Help? Email [sece-help@lists.hawaii.edu](mailto:sece-help@lists.hawaii.edu)

# Pay Statements

UNIVERSITY OF HAWAII  
**Pay Statements**

- Statements
- State Message
- FAQs
- Feedback
- Contact Us
- About
- Logout

Pay Date		
Year:	2014 ▾	
November 20, 2014	<a href="#">View</a>	<a href="#">Download</a>
November 05, 2014	<a href="#">View</a>	<a href="#">Download</a>
October 20, 2014	<a href="#">View</a>	<a href="#">Download</a>
October 03, 2014	<a href="#">View</a>	<a href="#">Download</a>
September 19, 2014	<a href="#">View</a>	<a href="#">Download</a>
September 05, 2014	<a href="#">View</a>	<a href="#">Download</a>
August 20, 2014	<a href="#">View</a>	<a href="#">Download</a>
August 05, 2014	<a href="#">View</a>	<a href="#">Download</a>
July 18, 2014	<a href="#">View</a>	<a href="#">Download</a>
July 03, 2014	<a href="#">View</a>	<a href="#">Download</a>
June 20, 2014	<a href="#">View</a>	<a href="#">Download</a>
June 05, 2014	<a href="#">View</a>	<a href="#">Download</a>

# Leave

UNIVERSITY OF HAWAII  
**LEAVE SYSTEM**

MY ACCOUNT: [Request Leave](#) [Work Schedule](#) [Logout](#)

**Application for Leave of Absence**

Create Transaction

Inclusive Dates of Leave: From:  MM/DD/YYYY Thru:  MM/DD/YYYY

Leave Type:

Position: 0081905 - INFORMATION TECHNOLOGY

Comments:

QUICK SUBMIT: for full work days

NEXT: for partial days, non-consecutive workdays, or multiple leave types on the same day.

[Leave History / Current Balances / Cancel or Correct Requests ▾](#)

2017 | 2016 | 2015 | **2014** | 2013 | 2012 | 2011 | 2010 | 2009 |

	Description?	Status?	Leave Type?	Dates		VACATION			SICK			OTHER	
						Taken HRS:MIN	Earned HRS:MIN	Balance HRS:MIN	Taken HRS:MIN	Earned HRS:MIN	Balance HRS:MIN	Taken HRS:MIN	Earned HRS:MIN
2013 Balance								261:00		1160:00			
<input type="radio"/>	Request	A	V	01/02/2014	01/03/2014	16:00		245:00		1160:00			
	Earned (Jan)	A		01/31/2014			14:00	259:00		14:00	1174:00		
	Earned (Feb)	A		02/28/2014			14:00	273:00		14:00	1188:00		
<input type="radio"/>	Request	A	S	03/27/2014	03/28/2014			273:00	16:00		1172:00		
	Earned (Mar)	A		03/31/2014			14:00	287:00		14:00	1186:00		
<input type="radio"/>	Request	A	V	04/14/2014	04/14/2014	8:00		279:00		1186:00			

Calendar:SELECT DATE

about:blank

SELECT DATE

November 2014

[<<] [<] [Print] [Today] [>] [>>]

Sun	Mon	Tue	Wed	Thu	Fri	Sat
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30	1	2	3	4	5	6

# eTravel

**University of Hawai'i**  
**eTravel**

Welcome John Beutel (jbeutel)

**Main Menu**

**Create**

- New Travel Request - Taking a trip
- New Travel Completion - Returned from a trip

**Existing Documents**

T

- Search All

**ACTIVE DOCUMENTS**

Status - Person(s) Responsible	Requests	Req+Advance
InProcess - Traveler, Preparer	0	0
Submitted - Business / Fiscal Office	0	0
Approved - Disbursing Office (Advances only)	0	0
Vouchered (manually entered into KFS)	--	0
Awaiting Processing	--	0
Released (electronically fed into KFS)	--	0

**Completions**

	Requests	Req+Advance
InProcess - Traveler, Preparer	0	0
Submitted - Business / Fiscal Office	0	0
Approved - Disbursing Office	0	0
Awaiting Processing	0	0

**Gross Income Reporting**

	Requests	Req+Advance
For Completions 60 Days Overdue	--	0

**Help**

- Bargaining Unit Rules
- Reports
- System Status
- Quarter Day Calculator

**Other**

- eTravel Home Page
- Section Overview & Help Links
- Tutorials & User Guides
- Contact Information:  
etravel-help@lists.hawaii.edu (general info)  
etravel-tech@lists.hawaii.edu (tech problems)

# ePayment



**ePayment**  
UNIVERSITY OF HAWAII

Back to Main Menu    Logout

You are logged in as John Beutel

Your session will timeout if you go longer than 20 minutes without moving the mouse or typing.

## View Active Bank Information

Account Information Currently In Use for Electronic Payments	
Account Type	: CHECKING
Bank ABA Routing Number (9 digits)	: 121301028
Bank Name	: BANK OF HAWAII
Bank Account Number	: *****4674

# 2nd-Level Authentication

**Web Login Service**  
UNIVERSITY OF HAWAII

**Level 2 Authentication**

**Your security image:**



If this is not the image you chose, do not answer the second-level security question; contact the ITS help desk instead.

**Answer this second-level security question:**

Name of the lead character of your favorite TV show?

Edit security questions / image after login?

**LOGIN**

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# Timesheet & Payment

The screenshot shows the TAPS Timesheet and Payment System interface. At the top, there is a banner with a background of US dollar bills. The banner features the TAPS logo (orange letters 'TAPS' with a stylized 'A'), the text 'Timesheet and Payment System' and 'UNIVERSITY OF HAWAII', and a 'MAIN MENU' button.

The main header includes the word 'DEV' in green, a search bar with a magnifying glass icon, and a help icon with a question mark. Below the header, a message says 'You are logged in as Craig Shinsato | [Resume as jbeutel](#) | [Logout](#)'.

The interface is divided into several sections:

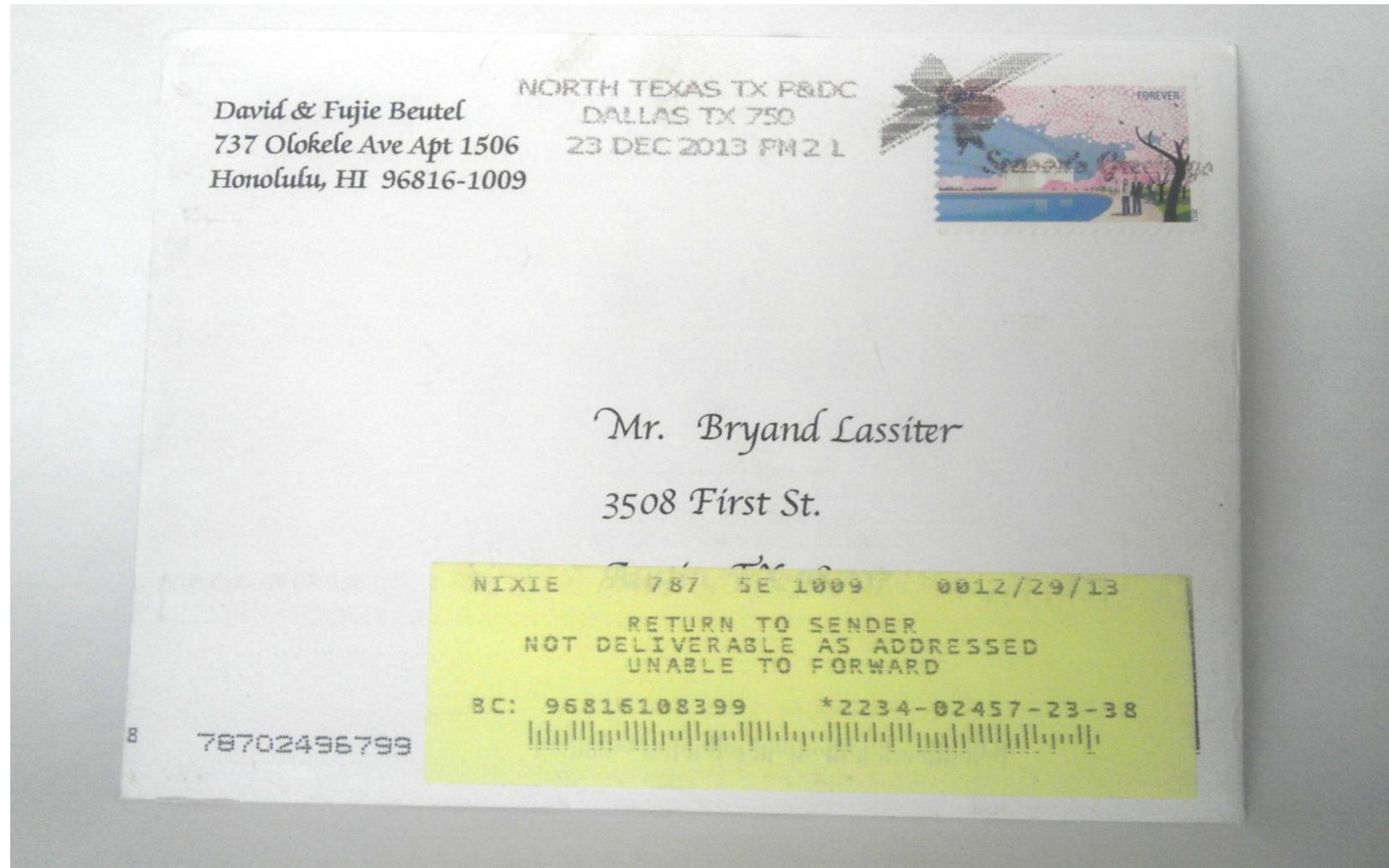
- SUPERVISOR / APPROVING AUTHORITY**: Contains links to 'Create Timesheet or Payment for Employee', 'Pending My Submission (2)', and 'Pending My Approval As Business Office (4)'. It also displays the message 'BO for FO codes: [001, 002, 003, 013, 024, 066]'.
- REPORTS**: Contains links to 'Pay Period Schedule' and 'Holiday List'.
- CONTACT INFORMATION**: Contains the message 'For General Assistance' and the email address '[uh-taps-help@lists.hawaii.edu](mailto:uh-taps-help@lists.hawaii.edu)'.

At the bottom, a footer notes: '© 2010 - 2014 University of Hawaii, Maintained by [Information Technology Services](#)'.

# agenda

- who I am
- my project
- implementation
- lessons

# Contact Info Sharing Web App



# previous work

- agile usage-centered design
- literature review
- partial UI prototype

# Usage-Centered Design

- Constantine & Lockwood
- agile version
- index cards for:
  - roles
  - tasks (essential use cases)
  - visual & interaction scheme
  - paper prototype
- collaborative usability inspection

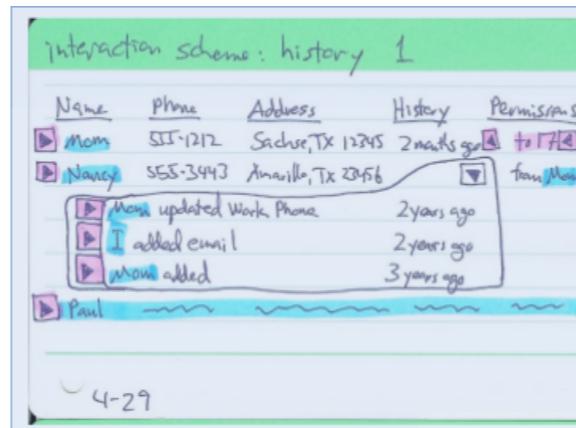


Illustration 10: Interaction scheme - history 1.

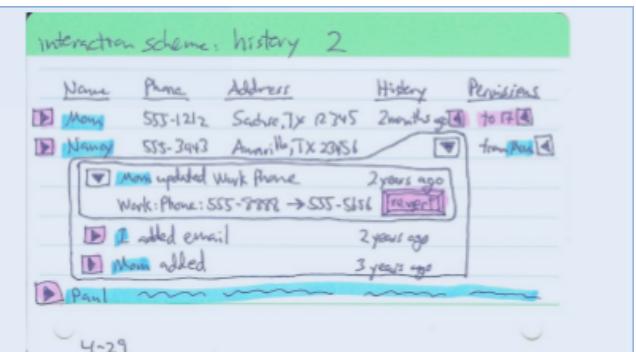


Illustration 11: Interaction scheme - history 2.

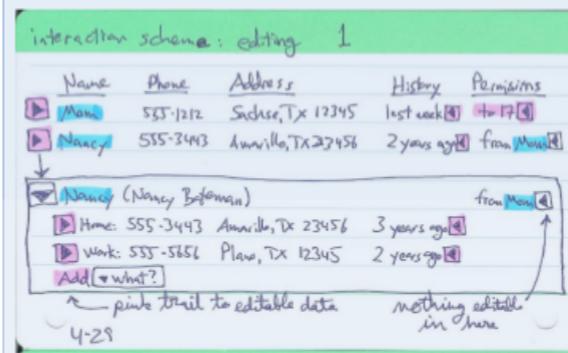


Illustration 12: Interaction scheme - editing 1. Illustration 13: Interaction scheme - editing 2.

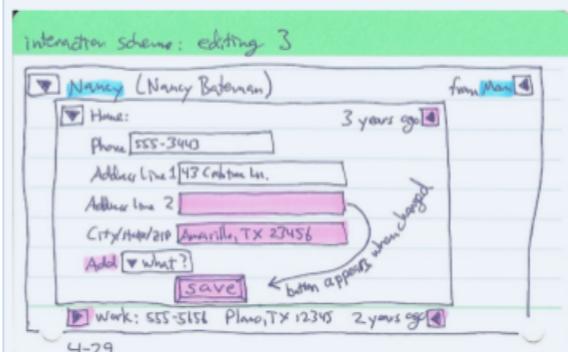
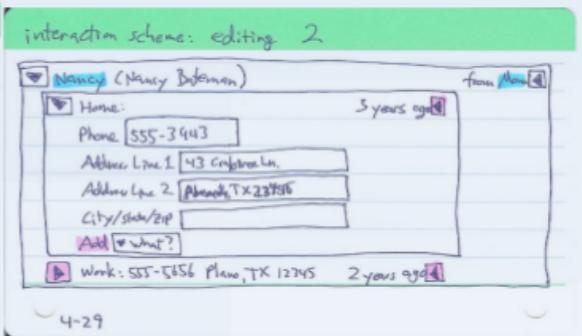


Illustration 14: Interaction scheme - editing 3.

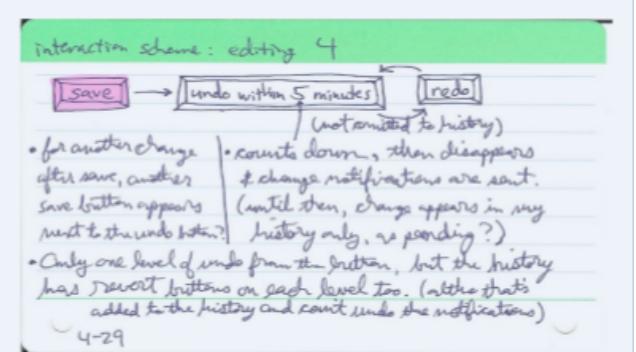
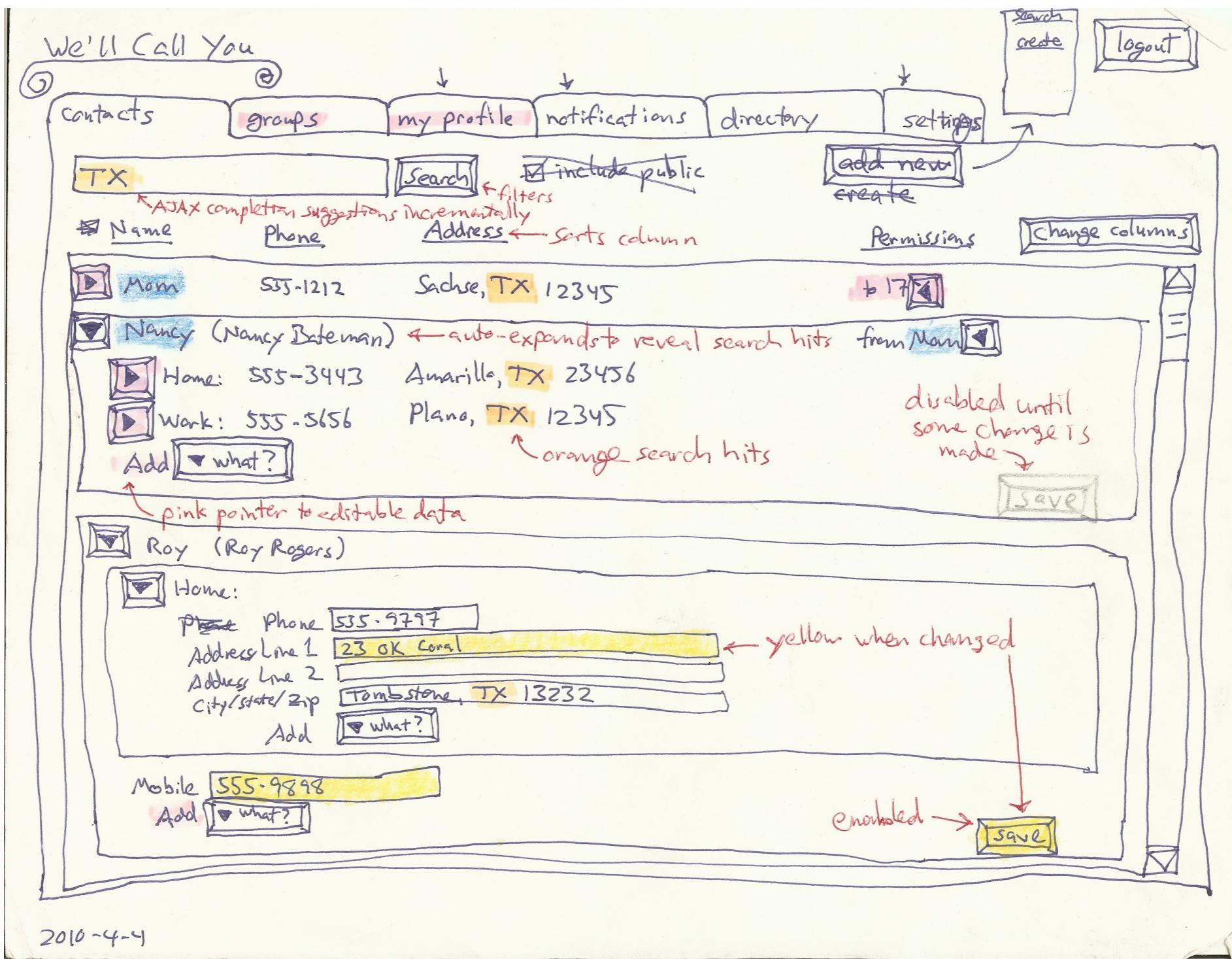


Illustration 15: Interaction scheme - editing 4.

# literature review

- on managing privacy for transitive sharing on a social networking site
- wicked problems with privacy and complexity
- contextual integrity (appropriateness & distribution)
  - "information is always tagged, as it were, with the context in which it is revealed: there is no such thing as context-free information." (Lipford et al., 2009) referencing (Nissenbaum, 2004)
  - The scope of privacy norms depends on the context.
- design guidelines to make the flows of information more visible

# UI prototype



# UI prototype

We'll Call You

logout

contacts groups my profile notifications directory settings

Search New Contact

Name	Email	Phone	Address
> Alex McFee	WORK coworker@example.com	WORK MOBILE 555-3333 x123	WORK 76 Pensicola Ave. Honolulu, HI
> Bertha Cool		HOME LANDLINE 555-2222	HOME 333 Date St. Honolulu, HI
> Hal Homeless		MOBILE 555-8888	
> J.C. Cool			HOME 123 King St. Honolulu, HI

V Jane Cool > ( Ms. Jane (Jane) Minerva Cool, Ph.D. )

Personal Email jane.cool@rr.net

Personal MOBILE 555-5555

> HOME LANDLINE 555-1111 222 Kapiolani Blvd. Honolulu, HI

> WORK DIRECT jane@foo.com LANDLINE 555-3333 x123 42 Nuuuanu Ave. Honolulu, HI

Photo 

Browse... \*

Birth Date 10 May 2010

Add what? ▾

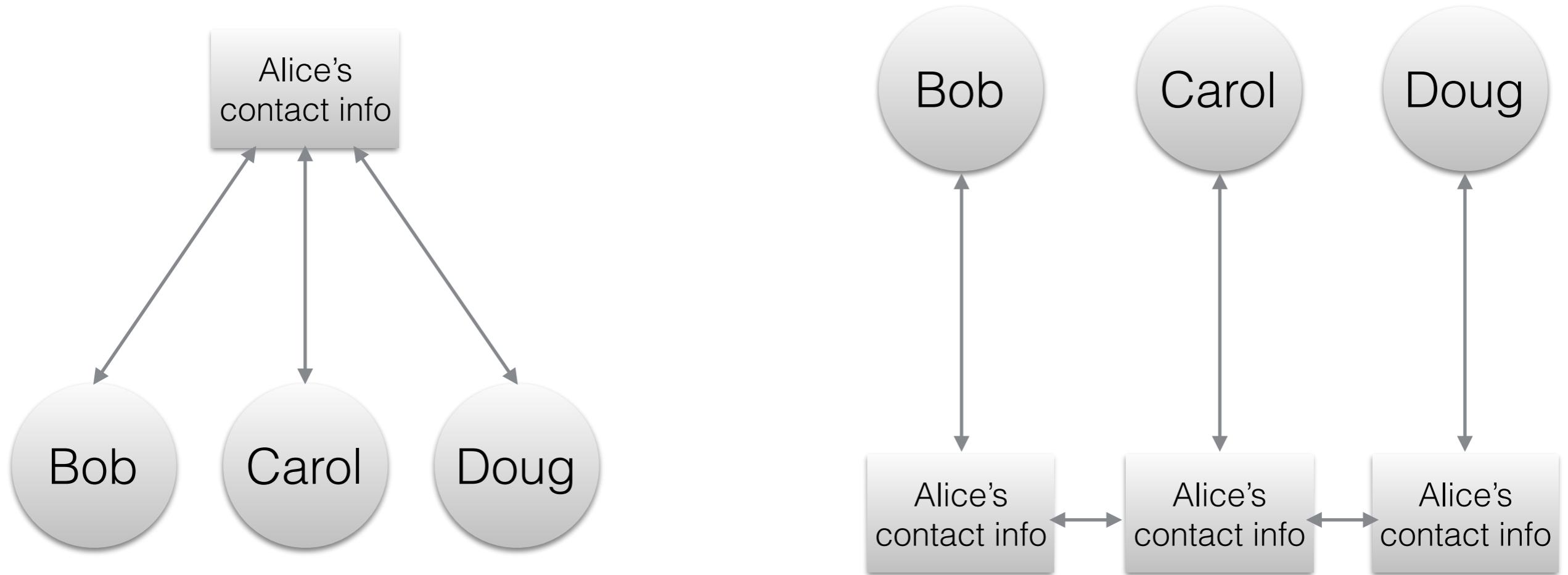
Save

# current project

- started with the previous UI prototype
- user testing
- updated design & data model
- redid the UI into a modern, “rich” web app
- implemented some additional features...

# data model update

old, Wikipedia model → new, GitHub model



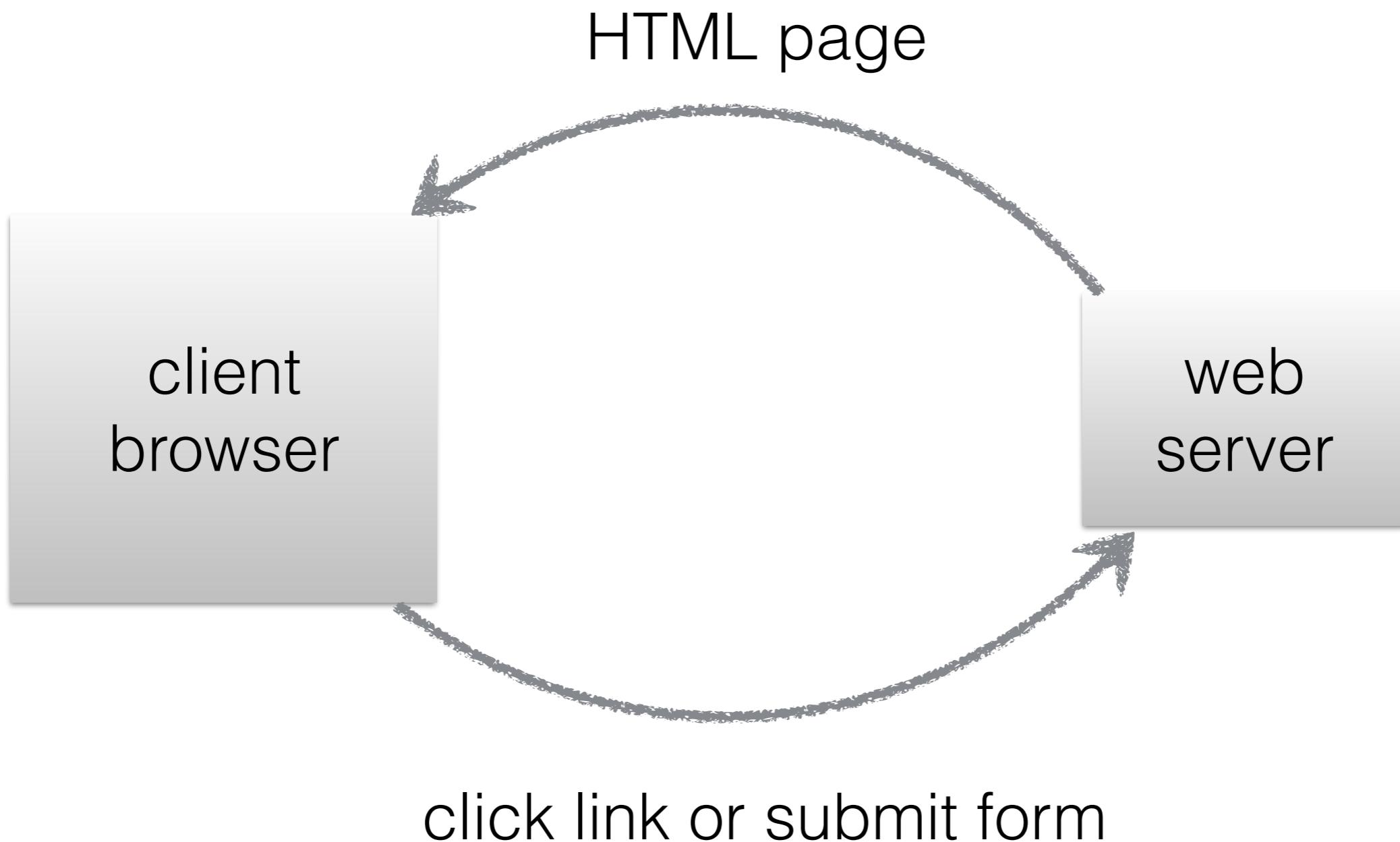
# user testing

- initially tested the previous UI prototype (a traditional web app)
- 4 users from target demographic (older family members)
- revealed fundamental problems with the UI
  - e.g., trying to login before registering
  - e.g., difficulty getting past the registration page

# agenda

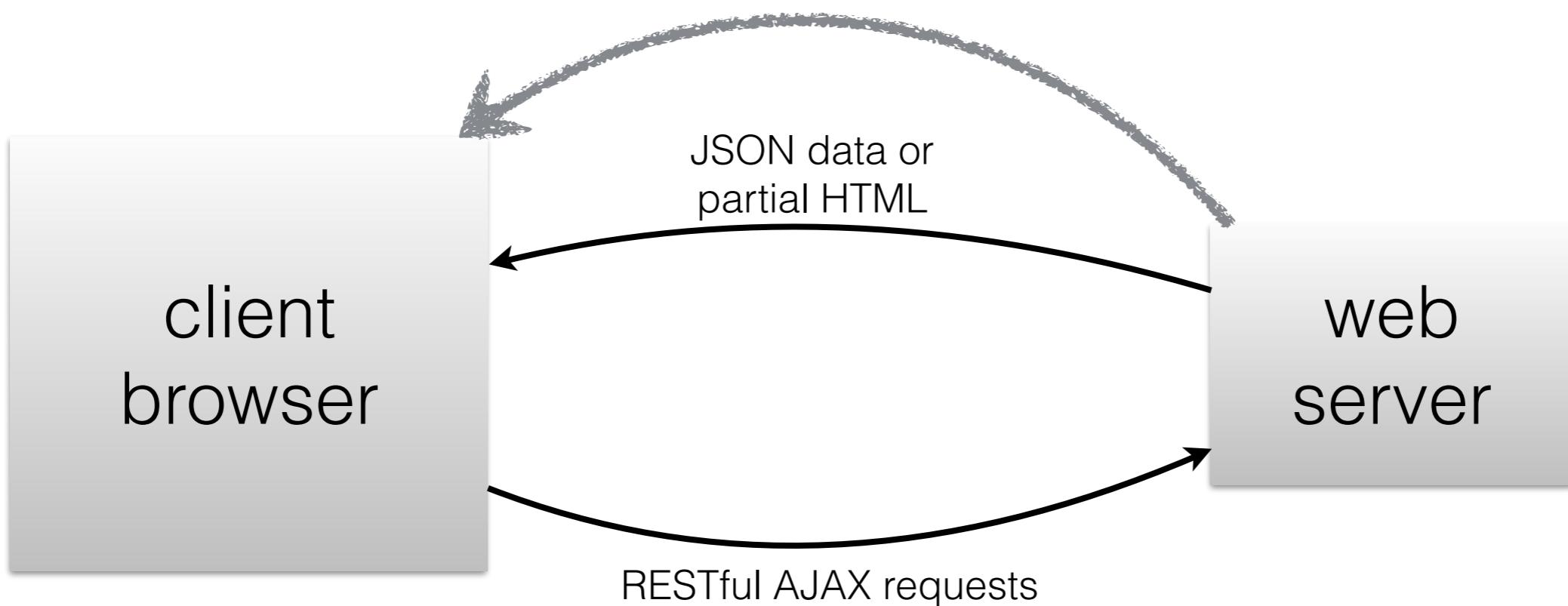
- who I am
- my project
- implementation
- lessons

# traditional web app



# modern web app

single HTML5 page w/ Javascript



# registration: old

We'll Call You

Please sign up

Email	not-an-email*
Password	******
Confirm password	***
Nickname	
Honorific (e.g., Mr.)	
First Name	*
Middle Names	
Last Name	Bar*
Suffix (e.g., Jr.)	
Photo	<input type="button" value="Choose File"/> No file chosen *
Birth Date	29 October 2014 *
Home City	Honolulu*
Home State	

\* required fields

# registration: new

A screenshot of a web browser window titled "Sign up". The address bar shows "localhost:9090/auth/signup?id=1919". The page content is for "Bendy contact manager". It displays a welcome message "Welcome, Fujie Beutel!" and a password creation request. The "Email Address (for sign in)" field contains "fujie.beutel@example.com". The "Password" field contains "foo", which is highlighted with a red border and accompanied by the error message "Please enter at least 6 characters.". The "Confirm Password" field is empty. A blue "Sign up" button is at the bottom.

Bendy contact manager

Welcome, Fujie Beutel!

Please choose a password.

Email Address (for sign in) fujie.beutel@example.com

Password foo

Please enter at least 6 characters.

Confirm Password

Sign up

# components

server

- Grails 2.3.11
- Groovy 2.1.9
- Elasticsearch 1.2.1



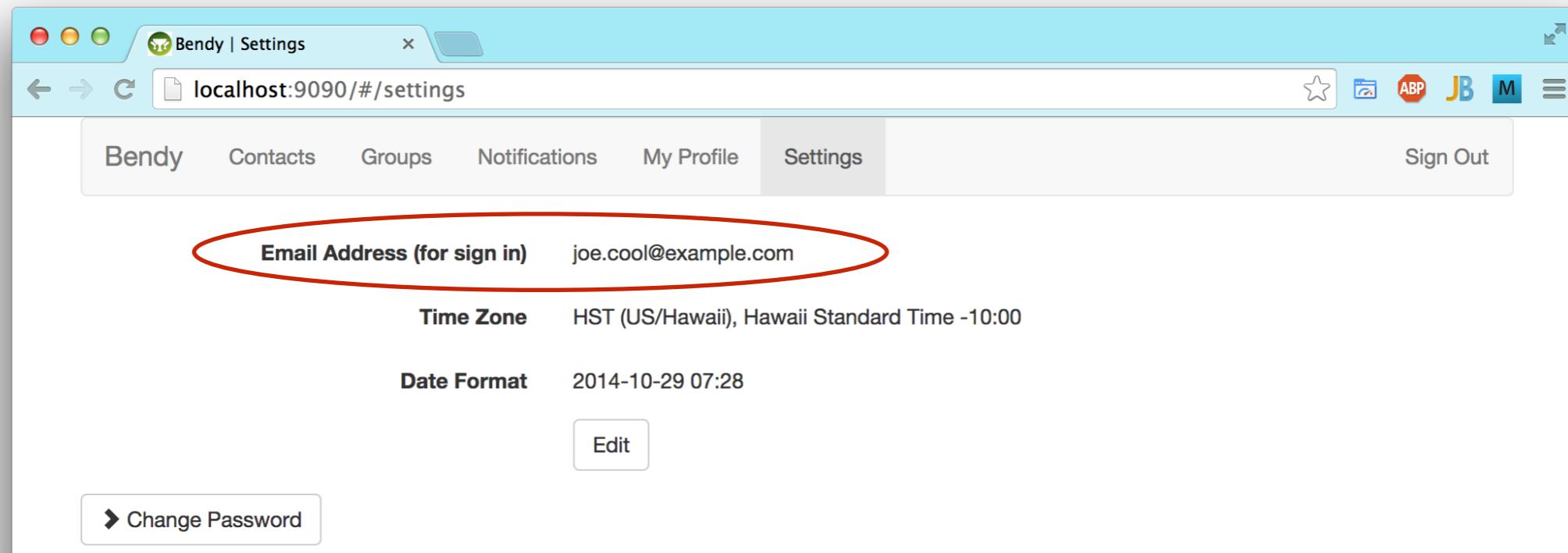
browser

- Bootstrap 3.0.3
- jQuery 1.11.1
- AngularJS 1.2.14
- AngularUI Bootstrap 0.10.0
- Webshim 1.12.5



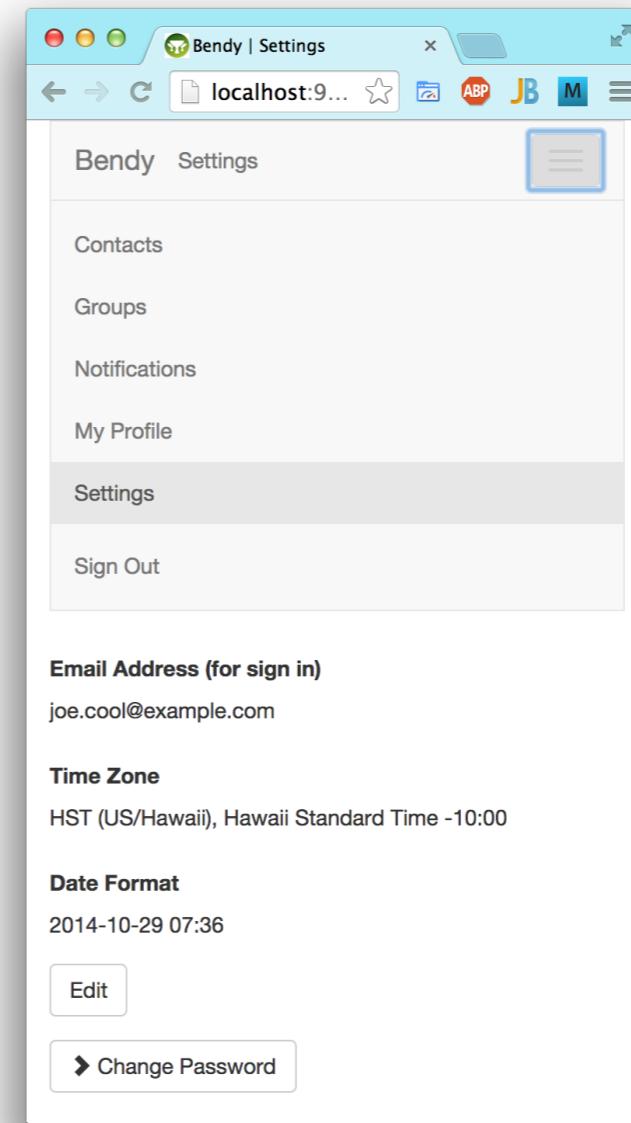
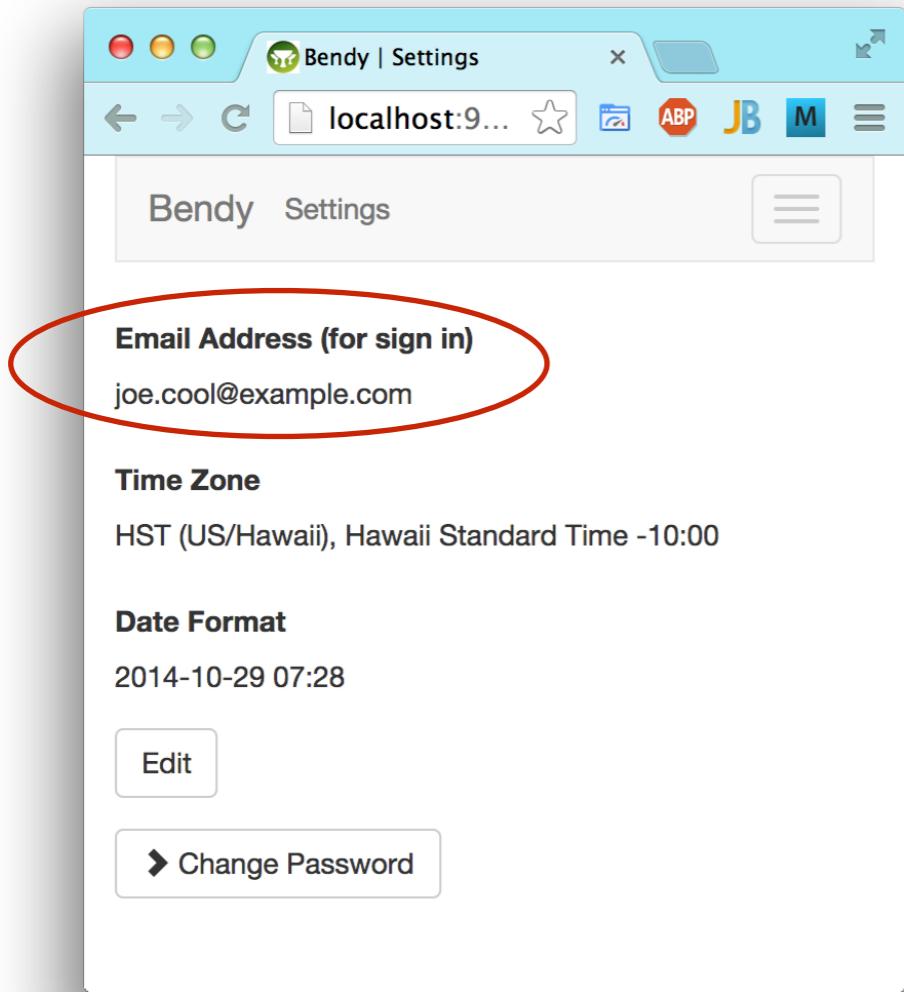
# Bootstrap 3 (CSS)

```
<div class="form-group">
  <label for="loginEmail" class="col-sm-4 control-label">Email Address (for sign in)</label>
  <div class="col-sm-8" ng-show="editing" ng-cloak>
    <input type="email" class="form-control"
      id="loginEmail" name="loginEmail" ng-model="settingsCommand.loginEmail" bendy-dirty
      size="42" required placeholder="john@example.com"/>
  </div>
  <div class="col-sm-8" ng-hide="editing" ng-cloak>
    <p class="form-control-static">{{settingsCommand.loginEmail}}</p>
  </div>
</div>
```



# Bootstrap 3 (CSS)

```
<div class="form-group">
  <label for="loginEmail" class="col-sm-4 control-label">Email Address (for sign in)</label>
  <div class="col-sm-8 ng-show="editing" ng-cloak>
    <input type="email" class="form-control"
      id="loginEmail" name="loginEmail" ng-model="settingsCommand.loginEmail" bendy-dirty
      size="42" required placeholder="john@example.com"/>
  </div>
  <div class="col-sm-8 ng-hide="editing" ng-cloak>
    <p class="form-control-static">{{settingsCommand.loginEmail}}</p>
  </div>
</div>
```



# AngularJS

## HTML

```
<div class="form-group">
  <label for="loginEmail" class="col-sm-4 control-label">Email Address (for sign in)</label>
  <div class="col-sm-8" ng-show="editing" ng-cloak>
    <input type="email" class="form-control"
      id="loginEmail" name="loginEmail" ng-model="settingsCommand.loginEmail" bendy-dirty
      size="42" required placeholder="john@example.com"/>
  </div>
  <div class="col-sm-8" ng-hide="editing" ng-cloak>
    <p class="form-control-static">{{settingsCommand.loginEmail}}</p>
  </div>
</div>
```

## Javascript

```
bendyControllers.controller('BendySettingsCtrl', ['$scope', 'Settings', 'Password', '$timeout', 'BendyUtil',
  function ($scope, Settings, Password, $timeout, BendyUtil) {
    $scope.editing = false;
    $scope.resetSettingsCommand = function(settingsCommand) {
      $scope.resetAlerts();
      $scope.settingsCommand = settingsCommand;
      $timeout(function() { // after current cycle, so bendyDirty gets updated $modelValue
        $scope.settingsForm.$setPristine();
        $('#settingsForm').trigger('resetvalue');
      });
    };
    $scope.refreshSettings = function() {
      $scope.settingsCommand = settingsCommand;
      $timeout(function() {
        $scope.settingsForm.$setPristine();
        $('#settingsForm').trigger('resetvalue');
      });
    };
  }
]);
```

# AngularJS in Javascript on browser

## REST resource

```
bendyServices.factory('Settings', ['$resource',  
function($resource) {  
    return $resource('/settings.json', {}, {  
        update: {method:'PUT'}  
    });  
}]);
```

## Angular controller

```
bendyControllers.controller('BendySettingsCtrl', ['$scope', 'Settings', 'Password', '$tim  
function ($scope, Settings, Password, $timeout, BendyUtil) {  
    $scope.editing = false;  
    $scope.resetSettingsCommand = function(settingsCommand) {  
        $scope.resetAlerts();  
        $scope.settingsCommand = settingsCommand;  
        $timeout(function() { // after current cycle, so bendyDirty gets updated $mod  
            $scope.settingsForm.$setPristine();  
            $('#settingsForm').trigger('resetvalue');  
        });  
    };  
    $scope.refreshSettings = function() {  
        var settings = Settings.get(function() { // SettingsModel  
            $scope.timezoneOptions = settings.timezoneOptions;  
            $scope.timezoneOptionsMap = BendyUtil.optionsToMap(settings.timezoneOptions);  
            $scope.dateFormatOptions = settings.dateFormatOptions;  
            $scope.dateFormatOptionsMap = BendyUtil.optionsToMap(settings.dateFormatOptions);  
            $scope.resetSettingsCommand(settingsCommand);  
        });  
    };  
    $scope.refreshSettings();  
}
```

# Grails RESTful controller in Groovy on server

```
@Transactional(readOnly = true)  
class SettingsController { // similar to RestfulController  
  
    def authenticationService  
  
    // used by login.gsp (kludge?)  
    def appIndex() {  
        redirect uri: '/'  
    }  
  
    def show() {  
        assert authenticationService.isLoggedIn(request) // otherwise the filter would have redirected  
        // not using params.id because one can edit only one's own Settings  
        User user = (User) authenticationService.userPrincipal  
        respond new SettingsModel(settingsCommand: new SettingsCommand(user), myPerson: user.person)  
    }  
  
    @Transactional  
    def update(SettingsCommand cmd) {...}  
  
    class SettingsModel {  
        SettingsCommand settingsCommand  
        Person myPerson // for profile  
        def dateFormatOptions = WcyTagLib.dateFormatOptions()  
        def timeZoneOptions = WcyTagLib.timeZoneOptions()  
    }  
  
    class SettingsCommand {  
        String loginEmail  
  
        String dateFormat  
        String timeZone  
  
        static constraints = {  
            loginEmail size: 6..40, email: true, blank: false, nullable: false  
        }  
  
        @SuppressWarnings("GroovyUnusedDeclaration")  
        SettingsCommand() {} // used by Grails binder  
  
        SettingsCommand(User user) {  
            loginEmail = user.login  
  
            dateFormat = user.settings.dateFormat  
            timeZone = user.settings.timeZone.ID  
        }  
    }
```

# AngularUI Bootstrap

- replaces Bootstrap's Javascript controls
- to provide “rich” UI controls in Bootstrap style
- that work with Angular bindings.
- I used Alert, Buttons, Collapse, Datepicker, Dropdown, and Progressbar.

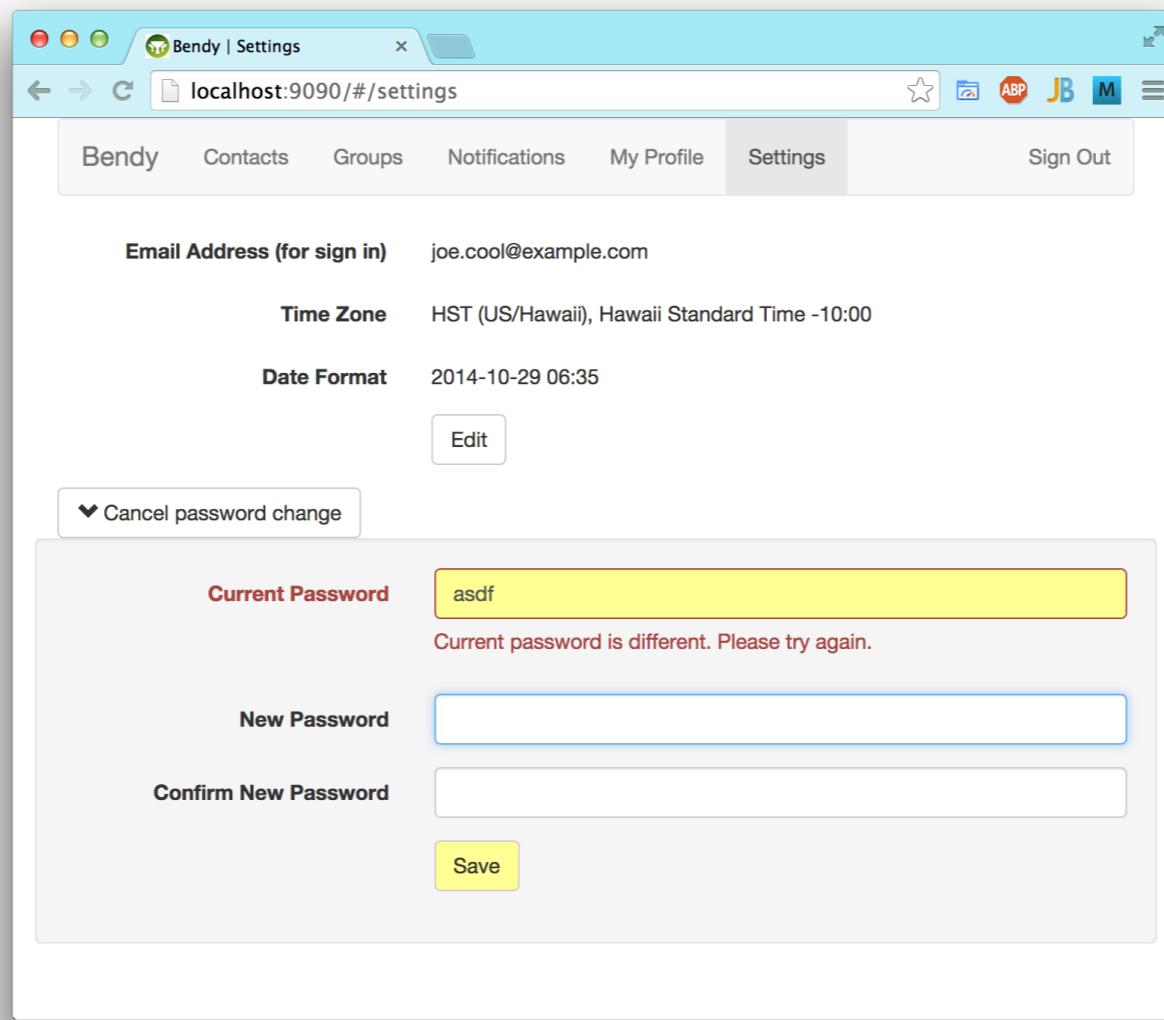
# Webshim interactive validation

```
<form name="settingsForm" id="settingsForm" class="form-horizontal ws-validate" role="form" ng-submit="update(settingsCommand)">
  <div ng-controller="BendyDirtyFormCtrl">
    <div class="form-group">
      <label for="loginEmail" class="col-sm-4 control-label">Email Address (for sign in)</label>
      <div class="col-sm-8 ng-show="editing" ng-cloak>
        <input type="email" class="form-control"
          id="loginEmail" name="loginEmail" ng-model="settingsCommand.loginEmail" bendy-dirty
          size="42" required placeholder="john@example.com"/>
```

```
  webshims.setOptions('forms', {
    lazyCustomMessages: true,
    replaceValidationUI: true,
    addValidators: true,
    iVal: {
      sel: '.ws-validate',
      handleBubble: false,
      recheckDelay: 5000, // after 5 second pause, or immediately on blur
      submitCheck: true,
      // bootstrap specific classes
      ${raw(indent ? "errorBoxClass: 'col-sm-offset-4 col-sm-8', " : '')}
      errorMessageClass: 'help-block',
      successWrapperClass: 'has-success',
      errorWrapperClass: 'has-error',
      fieldWrapper: '.form-group'
    }
  });
  webshims.polyfill('forms');
```

# Webshim interactive validation

```
<input type="text" id="oldPassword" name="oldPassword"
       ng-model="passwordCommand.oldPassword" bendy-dirty autocomplete="off" required
       class="form-control"
       data-ajaxvalidate="password/validateCurrent"
       data-errormessage-ajaxvalidate="Current password is different. Please try again.">
```



# Webshim interactive validation

```
<input type="text" id="newPassword" name="newPassword"
       ng-model="passwordCommand.newPassword" bendy-dirty autocomplete="off" required
       class="form-control" maxlength="40"/>
<script>
  $(document).ready(function() {
    $('#newPassword').on('valuevalidation', function(e, extra) {
      var val = $.trim(extra.value);
      if (val.length < 6) {
        return 'Please enter at least 6 characters.';
      }
    });
  });
</script>
```

▼ Cancel password change

Current Password	<input type="password"/>
New Password	<input type="password"/> foo Please enter at least 6 characters.
Confirm New Password	<input type="password"/>

# Webshim interactive validation

```
<input type="text" id="newPasswordConfirm" name="newPasswordConfirm"
       ng-model="passwordCommand.newPasswordConfirm" bendy-dirty autocomplete="off" required
       class="form-control"
       data-dependent-validation="newPassword"
       data-errormessage-dependent="This does not match your New Password."/>
```

A screenshot of a password change form. At the top left is a button labeled "Cancel password change". Below it are three input fields: "Current Password" (containing "password"), "New Password" (containing "foobar"), and "Confirm New Password" (containing "foo"). A red error message "This does not match your New Password." is displayed below the "Confirm New Password" field. At the bottom is a yellow "Save" button.

# my profile

Bendy | My Profile    localhost:9090/#/profile

Bendy Contacts Groups Notifications My Profile Settings Sign Out

J.C. Cool ( Mr. Joe (J.C.) B. Cool )

**Personal Email** jcc@foo.net

**Personal MOBILE** 555-2323

**HOME**

**Direct Email** cool.at.home@rr.net

**Street Address** 123 King St. Honolulu HI

**Email** cool.family@rr.net

**LANDLINE** 555-2121

Edit

**Photo**

Edit

# contacts: search

Screenshot of a web-based contact management application named "Bendy". The interface is clean and modern, featuring a light blue header bar with the title "Bendy | Contacts" and a search bar containing the query "cool". Below the header, a navigation menu includes "Bendy", "Contacts", "Groups", "Notifications", "My Profile", "Settings", and "Sign Out".

The main content area displays a search results table for contacts matching the query "cool". The columns are labeled "Name", "Email", "Phone", and "Address". The results show three contacts:

Name	Email	Phone	Address
Bertha Cool		555-2222	333 Date St. Honolulu HI
J.C. Cool	jcc@foo.net	555-2323	123 King St. Honolulu HI
Jane Cool		( Ms. Jane (Jane) Minerva Cool, Ph.D. )	

Below the table, detailed contact information for Jane Cool is shown:

Personal Email	jane.cool@rr.net	
Personal Email	jane.cool@gmail.com	
Personal MOBILE	555-5555	
Personal FAX	555-1155	
Home	555-1111	222 Kapiolani Blvd. Honolulu HI
Work	555-3333 x123	4242 Nuuanu Ave. Honolulu HI
Birth Date	1954-03-25	
Photo		

An "Edit" button is located at the bottom right of the contact details section.

# contacts: add field

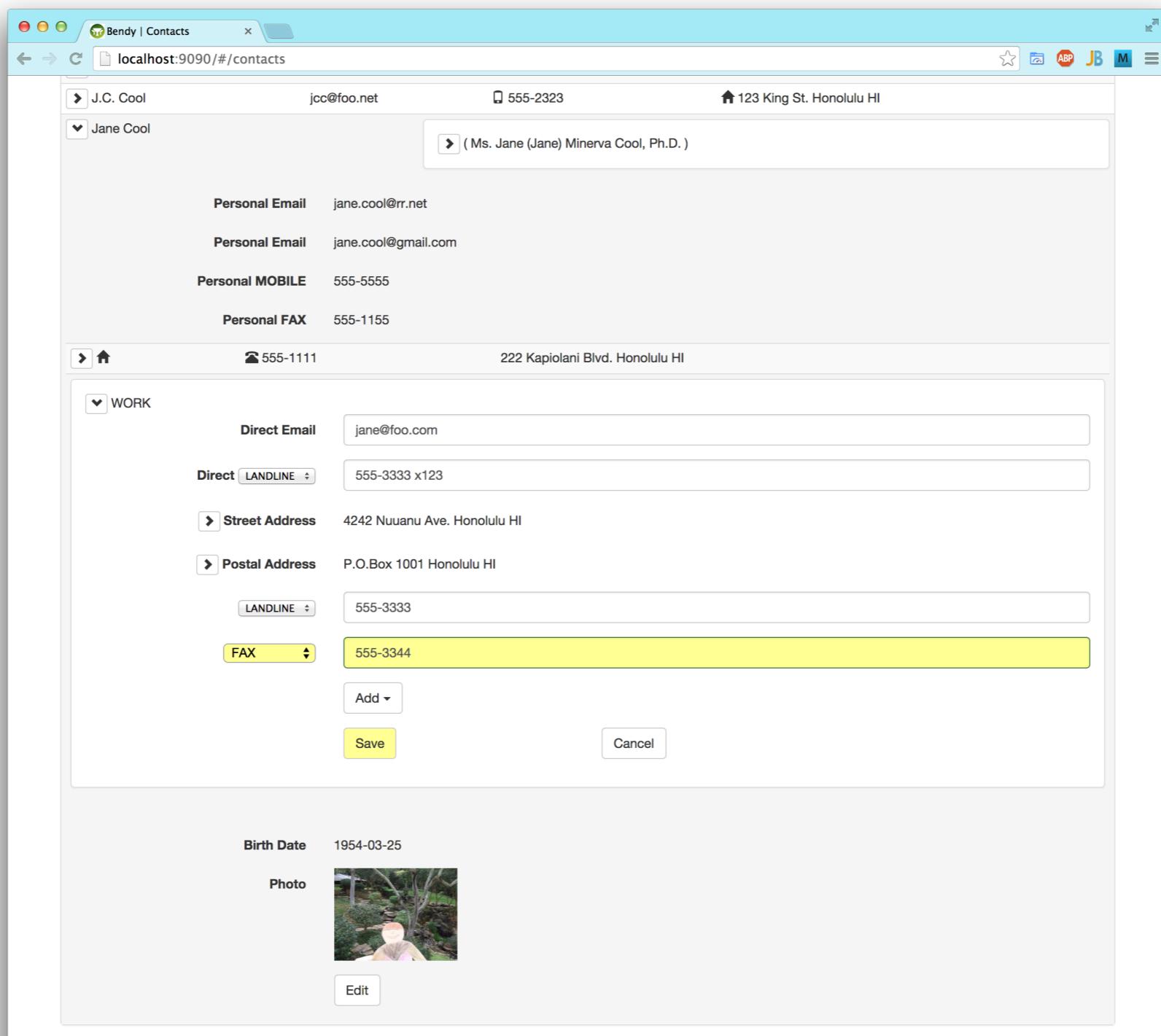
The screenshot shows a web browser window titled "Bendy | Contacts" at the URL "localhost:9090/#/contacts". The interface includes a navigation bar with links for Bendy, Contacts, Groups, Notifications, My Profile, Settings, and Sign Out. A search bar contains the text "cool" and a "Search" button. A prominent "Add Contact" button is located below the search bar.

The main content area displays a list of contacts. One contact, "Bertha Cool", is expanded, showing additional details: "J.C. Cool" (with a note "( Mr. Joe (J.C.) B. Cool )"), "Personal Email" (jcc@foo.net), "Personal MOBILE" (555-2323), and addresses ("cool.at.home@rr.net", "555-2121", "123 King St. Honolulu HI").

A modal window is open in the bottom right corner, titled "Add". It contains fields for "Email", "Phone", and "Birth Date", with "Phone" currently selected. A "Cancel" button is also present in the modal.

The footer of the page shows the URL "localhost:9090".

# contacts: changing field



# agenda

- who I am
- my project
- implementation
- lessons

# user testing: round 2

- after project development was halted
- format similar to original user testing
- 4 users: my friends, 1 the same as before, and my project advisor
- more technical and had more UI knowledge

# user testing: success

- nobody tried to login before registering
- no problems on registration or settings forms (except for one concern with exposed passwords, would like a check-box to un-hide them)
- fast and fluent use of date-picker calendar input
- quickly learned basic modal editing, could add and change fields
- quickly learned and leveraged searching

# user testing: problems

- identifying which Edit or Add button to use for certain fields, given nested data. It was not always the closest button, and not always scrolled within view.
- adding a contact, editing and saving the name first.
- nested data rows mistaken for following contacts.
- wondering what is visible to other users. (sharing is not implemented yet)
- “If I add a contact, do I invite that person?”

# future work: UI solutions

- one Edit button for the whole contact, every level
- Add button for each property type section
- less line spacing in view mode
- indent nested data more, and hover highlight to delineate each contact
- start newly added contact by editing name section

# future work: functionality

- integrate My Profile with authentication
- email/notifications
- history
- permissions/privacy
- duplicates/unify/link
- import/export/sync

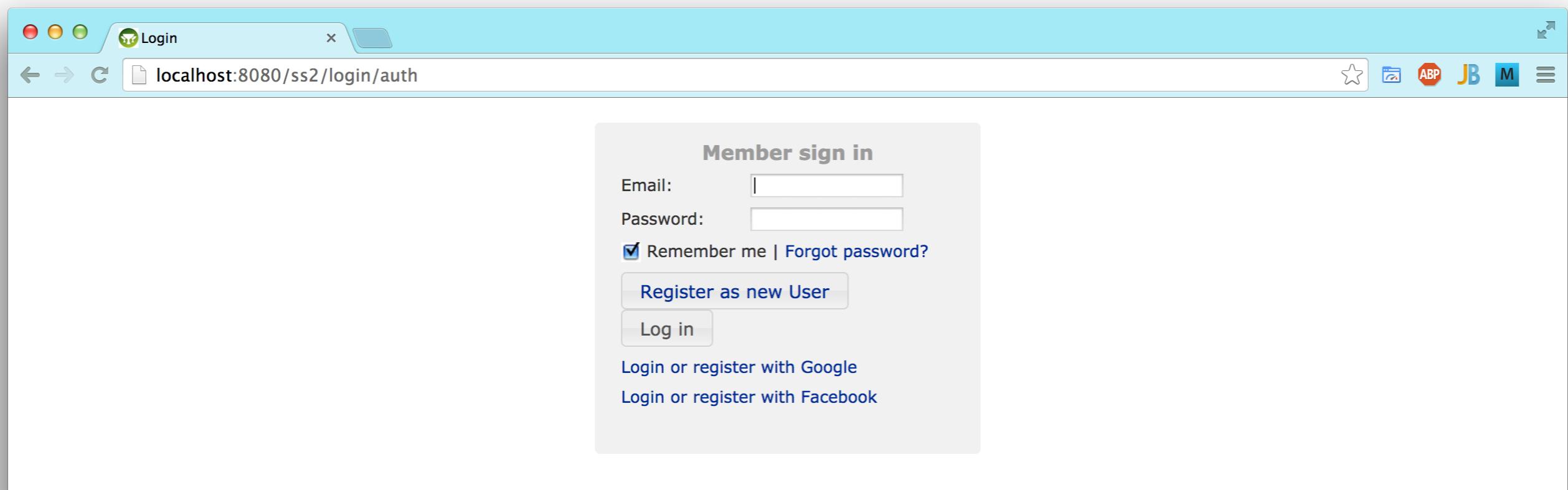
# lessons

- a UI is fundamental and primary
- user testing is crucial (always has surprises)
- I like the components I chose, will continue using
- interactive validation is great!
- thanks for listening!

# authentication

- implemented in separate sandbox app
- in Grails 2.3.7, with these plugins for Spring Security and OAuth:
  - spring-security-core 2.0-RC2
  - jquery-ui 1.10.3
  - mail 1.0.1
  - famfamfam 1.0.1
  - spring-security-ui 1.0-RC1
  - spring-security-oauth 2.0.2
  - spring-security-oauth-google 0.2
  - spring-security-oauth-facebook 0.1

# authentication: login



# authentication: Google

A screenshot of a web browser window titled "Request for Permission". The URL in the address bar is [https://accounts.google.com/o/oauth2/auth?response\\_type=code&client\\_id=536265767129-cheq8nmqj3jds949nudtdp2tj23th5h8.app...](https://accounts.google.com/o/oauth2/auth?response_type=code&client_id=536265767129-cheq8nmqj3jds949nudtdp2tj23th5h8.app...). The page displays a "Google" logo and the email "jdbeutel@gmail.com". It shows a list of permissions being requested by an application named "Bendy":

- Know who you are on Google
- View your email address

Below the permissions, a note states: "By clicking Accept, you allow this app and Google to use your information in accordance with their respective terms of service and privacy policies. You can change this and other [Account Permissions](#) at any time." At the bottom are "Cancel" and "Accept" buttons.

# authentication: Facebook

