

jQuery UI in Drupal 7

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Ivan Sutherland's Sketchpad system is demonstrated on the console of the TX-2 at MIT (1963)

jQuery UI in Drupal 7

- Using Javascript to improve UI
- Javascript in Drupal 7
- jQuery UI widgets
- Building complex interactions

HTML + Javascript

- HTML defines a set of standard form elements
- Javascript allows us to build new interactive widgets
- jQuery UI provides widgets, interactions and effects

Javascript widgets

- Reduce errors in data entry
- Quicker/more efficient
- More engaging/fun
- ...

Block	Region	Operations
Content		
Main page content	Content	0 configure
Sidebar first		
Navigation	Sidebar first	0 configure
User login	Sidebar first	1 configure
Management	Sidebar first	2 configure

Block	Region	Operations
Content		
>Main page content	Content	configure
Sidebar first		
Navigation	Sidebar first	configure
User login	Sidebar first	configure
Management	Sidebar first	configure
Sidebar second		
No blocks in this region		

Progressive Enhancement

- Create widget using jQuery
- Hide old widget
- Fill in value in the background
- Transparent to Drupal, nice and safe
- Non-js friendly

Before Active Tags



- Multiple tagging methodologies
- Some people just expect to use spaces
- <http://drupal.org/node/91074>
- Character-delimited system

Active Tags



- Action-delimited system
- Autocomplete
- Original widget hidden
- http://drupal.org/project/active_tags

Javascript in Drupal 7

- Theme or Module?
- Scope?
- Module specific or reuseable?
(Javascript Library)
- How and where to include code?

theme.info

name = My theme

description = Theme developed by me.

core = 7.x

engine = phptemplate

scripts[] = my_script.js

`drupal_add_js($data, $options)`

`$data` is either:

- path to Javascript file to include
- Javascript code to include ‘inline’
- absolute path to external JS code
- array of settings for Javascript

`$options` includes type, location, caching, ...

hook_preprocess_page()

```
function mytheme_preprocess_page(&$vars, $hook) {  
  if (true) {  
    drupal_add_js(  
      drupal_get_path('theme', 'mytheme') . '/scriptname.js',  
      'theme');  
  
    $vars['scripts'] = drupal_get_js();  
  }  
}
```

hook_library()

- Used in Core for jQuery UI
- Use to include other third-party plugins
- Define your own reusable Javascript

The screenshot shows the official jQuery UI website. The top navigation bar includes links for "jQuery", "Plugins", "UI", "Blog", "About", and "Donate". Below the navigation is a secondary menu with options like "Download", "Demos & Documentation", "Themes", "Development", and "Support". A dropdown menu titled "Theme: UI lightness" is open, showing various UI components: "Default functionality", "Radios" (which is highlighted in orange), "Checkboxes", "Icons", "Toolbar", and "Split Button". On the left side, there's a sidebar with categories: "Interaction", "Widget", and "Effects", each listing several sub-components. The main content area features a large title "Widgets" with a yellow "U" icon. Below it, a list of UI components is displayed: Accordion, Autocomplete, Button, Datepicker, Dialog, Progressbar, Slider, and Tabs. A "View Source" link is located at the bottom of this list. A tooltip or callout box is overlaid on the page, pointing to the "Radios" item in the theme dropdown, with the text "A set of radio buttons grouped together can be used to let the user select one item from a set of options. They are typically used in conjunction with checkboxes to provide a more refined level of control over the data being collected.".

jQuery UI Buttons

[Download](#)[Demos & Documentation](#)[Themes](#)[Development](#)[Support](#)

[View Source](#)

```
<script>
    $(function() {
        $("#dialog").dialog();
    });
</script>
```

Effects

[Color Animation](#)[Toggle Class](#)[Add Class](#)[Remove Class](#)[Switch Class](#)[Effect](#)[Toggle](#)

[View Source](#)

```
<script>
    $(function() {
        $("#dialog").dialog();
    });
</script>
```

Dialog Example

```
function dproj_form_user_login_block_alter(&$form, $form_state) {  
  drupal_add_library('system', 'ui.dialog');  
  
  $dialog_js =  
    '$("#block-user-login").dialog({title: "User login"});';  
  
  $dialog_js =  
    'jQuery(document).ready(function () { (function ($) {' .  
    $dialog_js . ' })(jQuery)); });';  
  
  drupal_add_js($dialog_js,  
    array('type' => 'inline', 'scope' => 'footer',  
      'weight' => 5));  
}
```



Username *

Password *

- [Create new account](#)
- [Request new password](#)

[Log in](#)

Welcome to Site-Install

No front page content has been created yet.

Navigation

» Add content

- Issue
- Project

Management

» Administration

Create Issue

Title *

Description

Issue tags

Issue type *

- Bug report
- Task
- Feature request
- Support request

Save

id="#edit-field-issue-type-und"

```
$("#edit-field-issue-type-und").buttonset();
```

drupal_add_library()

```
function dproj_form_issue_node_form_alter(&$form, $form_state,
$form_id) {
  $language = $form['#node']->language;
  $form['field_issue_type'][$language]['#after_build'][] =
    '_dproj_button_helper';
}

function _dproj_button_helper($element, &$form_state) {
  $button_js = '$("#' . $element['#id'] . '") .buttonset();';
  $button_js = JS_PREFIX . $button_js . JS_SUFFIX;
  drupal_add_library('system', 'ui.button');
  drupal_add_js($button_js, array('type' => 'inline', 'scope' =>
  'footer', 'weight' => 5));
  return $element;
}
```

[Add content](#)

navigation

[Add content](#)

Issue

Project

management

Administration

Create Issue

Title ***Description****Issue tags** **Add****Issue type ***

Bug report

Task

Feature request

Support request

Save



darrenmothersele

Dashboard

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17

[Code](#)[Network](#)[Pull Requests 0](#)[Issues 9](#)[Stats & Graphs](#)Auto-resizing textareas and input elements! — [Read more](#)[Clone in Mac](#)[ZIP](#)[HTTP](#)[Git Read-Only](#)<https://github.com/padolsey/jQuery.fn.autoResiz>[Read-Only access](#)[Files](#)[Commits](#)[Branches 1](#)[Tags](#)[Downloads](#)

Current branch:

[master](#)[Latest commit to the master branch](#)

Bunch of changes. Details in readme. Affects #13, #19, #26, #24



padolsey authored November 17, 2011

commit 5025b4a5c3

[jQuery.fn.autoResize /](#)

name	age	message	history
README.md	November 17, 2011	Bunch of changes. Details in readme. Affects #13, #19, #26, #24 [padolsey]	
demo.html	November 17, 2011	Bunch of changes. Details in readme. Affects #13, #19, #26, #24 [padolsey]	
jquery.autoresize.js	November 17, 2011	Bunch of changes. Details in readme. Affects #13, #19, #26, #24 [padolsey]	

[README.md](#)

<https://github.com/padolsey/jQuery.fn.autoResize>

hook_library()

```
function dproj_library() {  
  $path = drupal_get_path('module', 'dproj');  
  
  return array('autoresize' => array(  
    'title' => 'AutoResize',  
  
    'website' => 'https://github.com/...'  
  
    'version' => '1.14',  
  
    'js' => array(  
      $path . '/jquery.autoresize.js' => array(),  
    ),  
  ));  
}  
}
```



Home » Add content

Navigation

- ▼ Add content
 - Project

Management

- ▶ Administration

`id="edit-field-project-desc-und-0-value"`

Create Project

Title *

Description

Save

`$("#edit-field-project-desc-und-0-value").autoResize();`

```
function dproj_form_project_node_form_alter(&$form,
$form_state, $form_id) {

$language = $form['#node']->language;

$form['field_project_desc'][$language]['#after_build'][]
= '_dproj_autoresize_helper';

}

function _dproj_autoresize_helper($element, &$form_state) {
$id = $element[0]['value']['#id']

$autoresize_js = '$("#' . $id . '").autoResize();';

$autoresize_js = JS_PREFIX . $autoresize_js . JS_SUFFIX;

drupal_add_library('dproj', 'autoresize');

drupal_add_js($autoresize_js, array('type' => 'inline',
'scope' => 'footer', 'weight' => 5));

return $element;
}
```

sample project has been created.

Example project

[View](#) [Edit](#)

Description:

This is an example project. Demonstrating how this field expands to fit the content No lon

Building a more complex interaction

- Drupal Behaviors
- jQuery ui.draggable
- jQuery ui.droppable
- jQuery AJAX
- Contrib modules:
Page manager (ctools), Rules, Relation

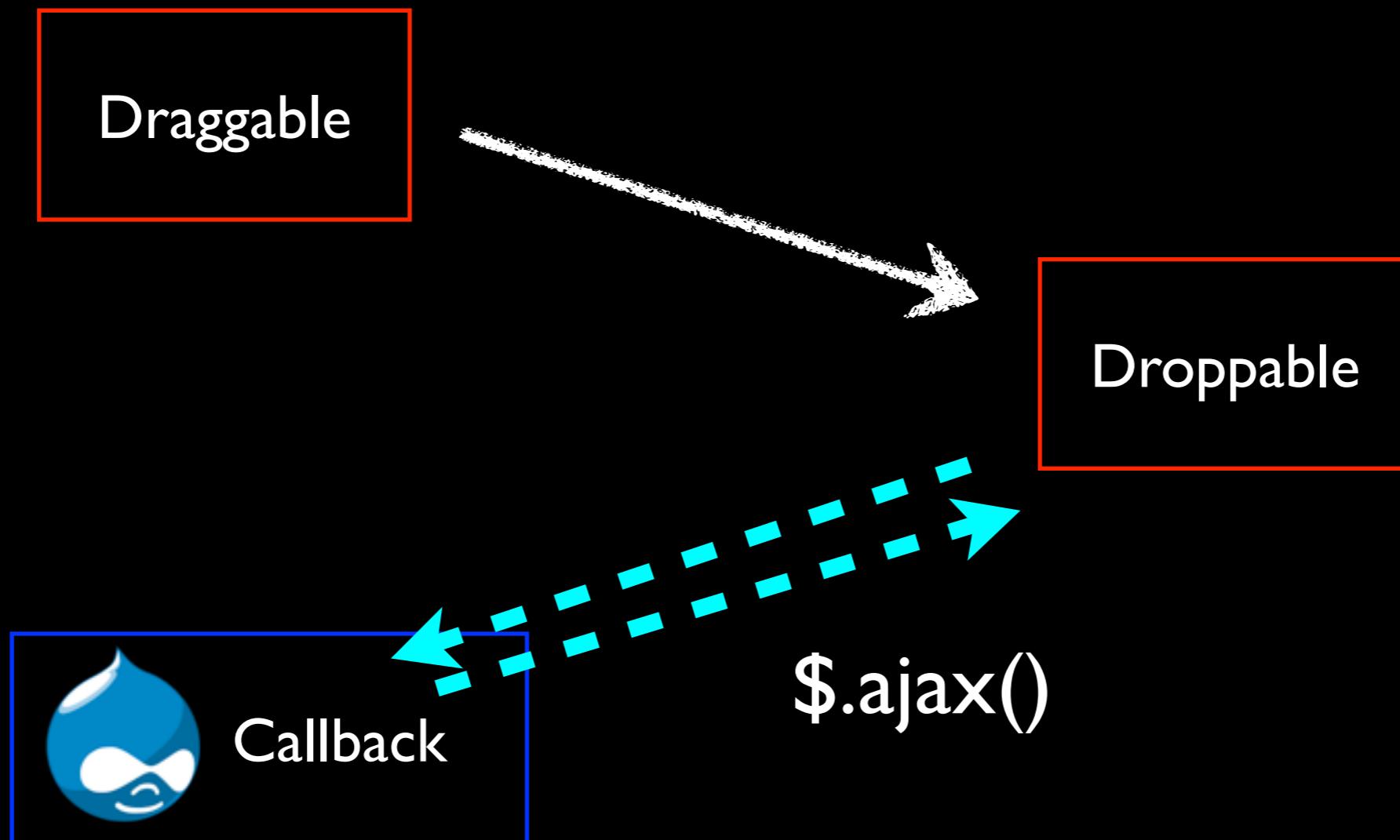
Behaviors

- Replacement for `$(document).ready();`
- Use attach function:

```
(function ($) {  
  
  Drupal.behaviors.exampleModule = {  
    attach: function (context, settings) {  
  
      $('.dproj', context).draggable();  
  
    }  
  };  
  
})(jQuery);
```

- AJAX safe
- Detachable

Drag and Drop



Drupal London

[View](#) [Edit](#)

Date:

Monday, December 12, 2011 - 18:00 to 21:30

Attendees:

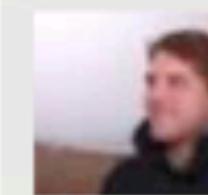
+ drag and drop user here to add

Location:

No location has been set for this meeting.

[Set location](#)

Staff members



Darren



Robert



Vamory



John

Drupal London

[View](#)

[Edit](#)

Date:

Monday, December 12, 2011 - 18:00 to 21:30

Attendees:

+ drag and drop user here to add

Location:

No location has been set for this meeting.

[Set location](#)

.dproj-draggable

Staff members

Darren



Robert



Vamory



John

.dproj-droppable

```
$('.dproj-draggable').draggable();  
$('.dproj-droppable').droppable();
```

Drupal London

[View](#)

[Edit](#)

path1 =
add-attendee/ [uid]

Date:

Monday, December 12, 2011 - 18:00 to 21:30

Attendees:

+ drag and drop user here to add

Location:

No location has been set for this meeting.

path2 =
/ [nid]

[Set location](#)

Staff members



Darren



Robert



Vamory



John

callback = path1 + path2
callback = add-attendee/ [uid] / [nid]

Drupal London

[View](#)[Edit](#)**Date:**

Monday, December 12, 2011 - 18:00 to 21:30

Attendees:

+ drag and drop user here to add

**Location:**

No location has been set for this meeting.

[Set location](#)

Staff members



Darren



Robert



Vamory



John

▼ Master details

Title

Title: None

Format

Format: Unformatted list |

[Settings](#)Show: Fields | [Settings](#)

Fields

[add](#) ▾

Content: Nid

(author) User: Name

(attendee) Relation: Rid

Filter criteria

[add](#) ▾

Content: Published (Yes)

Content: Type (= meeting)

Sort criteria

[add](#)

Access: Permission |

[View published content](#)

Header

[add](#) ▾

Global: View area

Footer

Pager

Use pager: [Display all items](#)[All items](#)More link: [No](#)

▼ Advanced

Contextual filters

[add](#) ▾

Content: Nid

[add](#) ▾

dee (node -

**Callback argument
inserted into header**

No results behavior

[add](#) ▾

Global: Text area

Exposed form

Exposed form style: [Basic](#) |[Settings](#)

Other

Comment: [No comment](#)Use AJAX: [No](#)Hide attachments in summary: [No](#)Use aggregation: [No](#)Query settings: [Settings](#)

Meeting drop zone (Content)

Modify the

Displays

Master

Master

Title

Title: No

Format

Format:

Settings

Show: F

Fields

Content: Nid

Filter criteria

Content: Published (Yes)

Content: Type (= meeting)

Sort criteria

Content: Post date (desc)

add ▾

More link: No

Exposed form

Exposed form style: Basic |

Settings

Other

Comment: No comment

Use AJAX: No

Hide attachments in summary: No

Rewrite results

Rewrite the output of this field

Enable to override the output of this field with custom text or replacement tokens.

Text

```
<span class="callback">/[nid]</span>
```

The text to display for this field. You may include HTML. You may enter data from this view as per the "Replacement patterns" below.

Output this field as a link

If checked, this field will be made into a link. The destination must be given below.

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[View](#) [Edit](#)

```
<span class='callback'>  
  add-attendee/1  
</span>
```

Date:

Monday, December 12, 2011 - 18:00 to 21:30

Attendees:

+ drag and drop user here to add

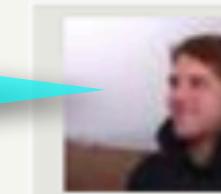
Location:

No location has been set for this meeting

```
<span class='callback'>/20</span>
```

[Set location](#)

Staff members



Darren



Robert



Vamory



John

callback = add-attendee/1/20

```
Drupal.behaviors.dprojdrag = {

  attach: function (context, settings) {
    $('.dproj-draggable', context).draggable({revert: 'invalid'});
    $('.dproj-droppable', context).droppable({
      hoverClass: 'drop-hover', accept: '.dproj-draggable',
      drop: function (e, ui) {
        $(ui.draggable).hide();
        $(e.target).fadeTo('fast', 0.5);
        var view_id = '.' +
          $(e.target).attr('class').match(/view-dom-id-\d+/)[0];
        var href = Drupal.settings basePath +
          $('.callback', ui.draggable).html()
          + $('.callback', e.target).html();
        $.ajax({ url: href,
          success: function (data) {
            $(view_id).html($(view_id, $(data)));
            $(view_id).fadeTo('fast', 1);
          }
        });
      }
    });
  }
};
```



Site-Install

Meetings

Home

Navigation

[Add content](#)

Management

[Administration](#)

Drupal London

[View](#)[Edit](#)**Date:**Monday, December 12, 2011 - 18:00 to 21:30 **Attendees:**[+ drag and drop user here to add](#)**Location:**

No location has been set for this meeting.

[Set location](#)

Staff members



Darren



Robert



Vamory



John

Add attendee

[Clone](#) [Export](#) [Delete](#) [Disable](#) [Add variant](#) [Import variant](#)

Summary	Settings » Basic
Settings	Edit name, path and other basic settings for the page.
Basic	Administrative title <input type="text" value="Add attendee"/> Machine name: add_attendee
Arguments	The name of this page. This will appear in the administrative interface to easily identify it.
Access	
Menu	
Variants	Administrative description <input type="text"/>
Add user to meeting	A description of what this page is, does or is for, for administrative use.
Summary	
General	
Selection rules	
Contexts	
Reactions	
	Path <input type="text" value="http://localhost/project-final/"/> <input type="text" value="add-attendee/%user/%meeting"/>
	The URL path to get to this page. You may create named placeholders for variable parts of the path by using %name for required elements and !name for optional elements. For example: "node/%node/foo", "forum/%forum" or "dashboard/?input". These named placeholders can be turned into contexts on the arguments form.
	<input type="checkbox"/> Make this your site home page. To set this panel as your home page you must create a unique path name with no % placeholders in the path. The site home page is currently set to /node on the Site Information configuration form.

Add attendee

Clone Export Delete Disable Add variant Import variant

Summary

Settings ▶

Basic

Arguments ▶

Access

Menu

Variants

Add user to
meeting

Summary

General

Selection rules

Contexts

Reactions

Settings » Arguments

Set up contexts for the arguments on this page.

Argument	Position In path	Context assigned	Operations
%user	1	User: ID Change	Settings
%meeting	2	Node: ID Change	Settings

[Update](#)

[Update and save](#)

Add attendee

<p>Summary</p> <p>Settings</p> <p>Basic</p> <p>Arguments</p> <p>Access</p> <p>Menu</p> <p>Variants ▾</p> <p>Add user to meeting ▾</p> <p>Summary</p> <p>General</p> <p>Selection rules</p> <p>Contexts</p> <p>Reactions ▾</p>	<p style="text-align: right;">Clone Export Delete Disable Add variant Import variant</p> <p>Variants » Add user to meeting » Reactions</p> <p>Variant operations</p> <p>Trigger Rules reactions when this variant is loaded</p> <p><input checked="" type="checkbox"/> Create a Rules event for this variant</p> <p>This option makes this custom page appear as an event in Rules. The configuration of conditions and reactions are made at in the Rules configuration interface.</p> <p style="text-align: center;">Update Update and save</p>
--	---

Rules

Rules

Components

Settings

+ Add new rule

+ Import rule

Reaction rules, listed below, react on selected events on the site. Each reaction rule may fire any number of *actions*, and may have any number of *conditions* that must be met for the actions to be executed. You can also set up [components](#) – stand-alone sets of Rules configuration that can be used in Rules and other parts of your site. See [the online documentation](#) for an introduction on how to use Rules.

▶ Filter

Active rules

Name	Event	Status	Operations				
Add user to meeting Machine name: rules_add_user_to_meeting, Weight: 0	Variant Add user to meeting is rendered	Custom	edit	disable	clone	delete	export
Remove attendee Machine name: rules_remove_attendee, Weight: 0	Variant Remove relation is rendered	Custom	edit	disable	clone	delete	export
Add room to meeting Machine name: rules_add_room_to_meeting, Weight: 0	Variant Locate meeting is rendered	Custom	edit	disable	clone	delete	export

Inactive rules

Name	Event	Status	Operations
There are no inactive rules.			

Editing reaction rule "Add user to meeting"

Events

Event	Operations
Variant Add user to meeting is rendered	delete
+ Add event	

Conditions

Elements	Weight	Operations
None		
+ Add condition + Add or + Add and		

Actions

[Show row weights](#)

Elements	Operations
+ Add a variable Parameter: Type: List of any entity items Provides variables: Added variable (variable_added)	edit delete
+ Add an item to a list Parameter: List: [variable-added], Item to add: [argument-entity-id--node-1]	edit delete
+ Add an item to a list Parameter: List: [variable-added], Item to add: [argument-entity-id--user-1]	edit delete
+ Create a new entity Parameter: Entity type: Relation, Relation type: attendee, Endpoints: [variable-added] Provides variables: Created entity (entity_created)	edit delete
+ Page redirect Parameter: URL: node/[argument-entity-id...]	edit delete
+ Add action + Add loop	

Actions

Elements

+

Add a variable

Parameter: *Type*: List of any entity items

Provides variables: Added variable (variable_added)

+

Add an item to a list

Parameter: *List*: [variable-added], *Item to add*: [argument-entity-id--node-1]

+

Add an item to a list

Parameter: *List*: [variable-added], *Item to add*: [argument-entity-id--user-1]

+

Create a new entity

Parameter: *Entity type*: Relation, *Relation type*: attendee, *Endpoints*: [variable-ad-

Provides variables: Created entity (entity_created)

+

Page redirect

Parameter: *URL*: node/[argument-entity-id-...

+

Add action

+

Add loop

Drupal London

[View](#) [Edit](#)

Date:

Monday, December 12, 2011 - 18:00 to 21:30

Attendees:

Darren [\[x\]](#)

John [\[x\]](#)

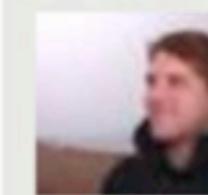


Location:

No location has been set for this meeting.

[Set location](#)

Staff members



Darren



Robert



Vamory



John

Resources

- jQuery UI
[http://jqueryui.com/
demos](http://jqueryui.com/demos)
- Managing Javascript in
Drupal 7
[http://drupal.org/node/
756722](http://drupal.org/node/756722)
- Contrib Modules
- Views
- Relation
- Page manager
- Rules