The jQuery UI CSS Framework & ThemeRoller

An in-depth overview of theming and design in jQuery UI.

Todd Parker & Scott Jehl
hello.

Todd Parker             Scott Jehl
A Boston-based design firm specializing in complex web application design & development.

Official Sponsor and Design Team

The jQuery UI CSS Framework & ThemeRoller
A brief history of

Theming in jQuery UI

how we got to where we are today...
how things used to be...
hand-coded themes
The jQuery UI CSS Framework & ThemeRoller
This is my title

Hey, check it out!
I'm a dialog box!!!!
CSS + Photoshop + Firebug skills required
A step towards

Simpler theming

(ThemeRoller v.1.0)
A GUI for theming jQuery UI widgets
Keep it simple
focus on the design, not editing CSS
tmi...
But not *too* simple

pre-built themes are limited
A middle ground
simple, but powerful
good. but not without few problems...
Not separated.

Widget + Theme CSS intertwined
.ui-dialog-title {
    background-color: ...;
    margin: ...;
    padding: ...;
    color: ...;
}

Not static.

PHP in our CSS
.ui-dialog-title {
    background-color: <?=$defaultBGColor; ?>;
}

Not versioned.

CSS lives on the web server.
Not easily integrated.

Where do I download widgets AND themes?
Not well supported.
Do we support Flora or ThemeRoller? Both?
...and a bit limited
needs more levers, more control
September ‘08

joins the jQuery UI team as sponsor and design lead
Big changes underway!

jQuery UI version 1.7

including ThemeRoller V2 & UI CSS framework
jQuery UI 1.7
refactored widgets, simplified markup
jQuery UI CSS Framework
Consistent system for theming all widgets
and

**ThemeRoller v2.0**

built to manipulate the new framework
Consistency across UI
common classes for global control
New levers added
header, highlight, error, overlay, shadow
More design flexibility

colors + PNG textures = millions of combos
Flat color

Image texture w/ variable opacity

PNG Composite image
CSS3 rounded corners
fewer requests, more flexible, less markup
Corner Radius

Corners: 6px

Note: ThemeRoller uses CSS3 border-radius for corner rounding, which is not currently supported by Internet Explorer.
Flexible CSS units

esms and % allow proportional scaling
Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua. Ut enim ad minim veniam, quis nostrud exercitation ullamco laboris nisi ut aliquip ex ea commodo consequat.
Icon sprites

173 free, themable icons, 1 request per color
New themes!
24 total: new and refreshed
Scott J’s creation
Google CDN hosting
for all gallery themes!
Development Center

The jQuery UI Team is proud to be a part of a vital and active community of developers. We encourage everyone who is interested to jump in and participate in the development of the library. We aim to quickly fix bugs, implement new features, and grow the jQuery UI library into an innovative, useful, and accessible resource for developers of all skill levels.

Development Status
Last updated June 21, 2012
jQuery UI 1.7.2 has been released.
To see the latest project updates, please visit the project tracker.
Please let us know if you have any feedback or development ideas.

Bug Tracker Tickets
To see the latest updates and browse latest source code, please visit the project tracker.
To help us fix tickets, please visit the project tracker.

NOTES: if you see an error in the documentation.

Tickets for Next Release
These are the most important tickets to focus on:

Blockers, Critical, Open

Tickets needing Triage
New, Triage, New, Milestone:
Triage Bugs
Triage Features & Enhancements

Google CDN for jQuery UI

Multiple stable versions of jQuery UI are hosted on Google's CDN as well as all the ThemeRoller themes: base, black-tie, blitzer, cupertino, dark-hive, dot-luv, eggplant, excite-bike, flick, hot-sneaks, humanity, le-frog, mint-choc, overcast, pepper-grinder, redmond, smoothness, south-street, start, sunny, swanky-purse, trontastic, ui-darkness, ui-lightness, vader.

http://www.jqueryui.com/development
Permanent theme URLs

bookmark, email, tweak
The jQuery UI CSS Framework & ThemeRoller

ui.theme.css

```css
/*
 * Component containers
 *----------------------------------------*/

.ui-widget { font-family: Verdana, Arial, sans-serif; font-size: 1.1em; }
.ui-widget input, .ui-widget select, .ui-widget textarea, .ui-widget button { font-family: Verdana, Arial, sans-serif; font-size: 1em; }
.ui-widget-content { border: 1px solid #a6c9e2; background: #fcedf0 url(images/ui-bg_inset-hard_100_fcedf0_1x100.png) 50% bottom repeat-x; color: #222222; }
.ui-widget-content a { color: #222222; }
.ui-widget-header { border: 1px solid #42997d; background: #2191c0 url(images/ui-bg_gloss-wave_75_2191c0_50x50.png) 50% 50% repeat-x; color: #eaf5f7; font-weight: bold; }
```

The jQuery UI CSS Framework & ThemeRoller
Downloader integration
custom & gallery theme selector built-in
The jQuery UI CSS Framework & ThemeRoller

Build Your Download
Customize your jQuery UI download by selecting the version and specific modules you need in the form below or select a quick download package. A range of current and historical jQuery UI releases are also hosted on Google's CDN.

Quick downloads: Current stable (1.7.3 for jQuery 1.3.x); Legacy (1.8 for jQuery 1.2.x)

Components (35 of 35 selected)

UI Core
A required dependency, contains basic functions and libraries.

Interactions
These add basic behaviors to any element and are used by many components below.

Widgets
Pull-requested UI Controls - each has a range of options and is fully themable.

Theme
Select the theme you want to include or design a custom theme.

UI darkness
No Theme
UI lightness
Smoothness
Start
Redmond
Sunny
Overcast
Le Frog
Flick
Pepper Grinder

The jQuery UI CSS Framework & ThemeRoller

filament group
let's see this thing already!

Using ThemeRoller
Video Demo Slide (not available in this format)
Try ThemeRoller live at:
http://themeroller.com
cool. so...

what’s in the zip?
Welcome to jQuery UI!

This page demonstrates the widgets you downloaded using the theme you selected in the download builder. We've included and linked to minified versions of jQuery, your personalized copy of jQuery UI (js/jquery-ui-1.7.2, custom.min.js), and css/custom-theme/jquery-ui-1.7.2, custom.css which imports the entire jQuery UI CSS Framework. You can choose to link a subset of the CSS Framework depending on your needs.

You've downloaded components and a theme that are compatible with jQuery 1.3+. Please make sure you are using jQuery 1.3+ in your production environment. If you need jQuery UI components that work with an earlier version of jQuery, you can choose an older version in the jQuery UI download builder.

YOUR COMPONENTS:

Accordion

- First

  Lorem ipsum dolor sit amet. Lorem ipsum dolor sit amet. Lorem ipsum dolor sit amet.

- Second

- Third

Tabs

- First
- Second
- Third

  Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua. Ut enim ad minim veniam, quis nostrud exercitation ullamco laboris nisi ut aliquip ex ea commodo consequat.

Dialog

- Open Dialog

Overlay and Shadow Classes (not currently used in UI widgets)

Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua. Ut enim ad minim veniam, quis nostrud exercitation ullamco laboris nisi ut aliquip ex ea commodo consequat.
development-bundle
The bird's eye view:

jQuery UI CSS Framework

Using ThemeRoller as our guide
Clean separation
of widget and theme styles
Class Breakdown:

widget-specific

theme-specific

The jQuery UI CSS Framework & ThemeRoller
Widget-specific classes

dimensions, visibility, positioning, margins, padding
Theme-specific classes

text colors, backgrounds, fonts, icons
Global font settings apply with .ui-widget
7 primary theme “levers”

Generic, semantic names
Containers

.ui-widget-header

.ui-widget-content
Clickable states

**ui-state-default**

**ui-state-hover**

**ui-state-active**

Nam dui erat, auctor a, dignissim quis, sollicitudin eu, felis. Pellentesque nisi urna, interdum eget, sagittis et, consequat vestibulum. lacus. Mauris porttitor ullamcorper auelve.
System states

ui-state-highlight

Hey! Sample ui-state-highlight style.

ui-state-error

Alert: Sample ui-state-error style.
Overlay elements

`ui-widget-overlay` `ui-widget-shadow`
theme levers define

color & texture only
Icon classes

.ui-icon-arrowthick-1-n
.ui-icon-trash
.ui-icon-icon-calendar
etc, etc, etc
Plus a few framework goodies...
Interaction cues

.ui-state-disabled
.ui-priority-primary
.ui-priority-secondary
Layout helpers

.ui-helper-hidden
.ui-helper-hidden-accessible
.ui-helper-reset
.ui-helper-clearfix
And Rounded Corners!
using CSS3 border radius

.ui-corner-all
.ui-corner-top
.ui-corner-bottom
.ui-corner-right
.ui-corner-left
.ui-corner-tl
.ui-corner-tr
.ui-corner-bl
.ui-corner-br

Note: ThemeRoller uses CSS3 border-radius for corner rounding, which is not currently supported by Internet Explorer.
if IE *really* needs rounded corners *it doesn't.*

Script them in!

```javascript
DD_roundies.addRule('.ui-corner-all', '8px');
```

* it doesn’t.
the worm’s eye view:

jQuery UI CSS Framework
UI tabs deconstructed:

Lorem ipsum dolor.
Tabs Markup
<div id="tabs">
  <ul>
    <li><a href="#tabs-1">First</a></li>
    <li><a href="#tabs-2">Second</a></li>
    <li><a href="#tabs-3">Third</a></li>
  </ul>
  <div id="tabs-1">Lorem ipsum dolor.</div>
  <div id="tabs-2">Lorem ipsum dolor.</div>
  <div id="tabs-3">Lorem ipsum dolor.</div>
</div>
Add Widget-specific classes
Tabs HTML

```html
<div id="tabs" class="ui-tabs">

<ul class="ui-tabs-nav">

  <li class="ui-tabs-selected"><a href="#tabs-1">First</a></li>
  <li><a href="#tabs-2">Second</a></li>
  <li><a href="#tabs-3">Third</a></li>

</ul>

<div id="tabs-1" class="ui-tabs-panel">Lorem ipsum dolor.</div>
<div id="tabs-2" class="ui-tabs-panel ui-tabs-hide">...</div>
<div id="tabs-3" class="ui-tabs-panel ui-tabs-hide">...</div>

</div>
```
.ui-tabs.css

.ui-tabs {
    padding: .2em;
}

.ui-tabs .ui-tabs-nav {
    list-style: none;
    position: relative;
    padding: .2em .2em 0;
    margin: 0;
}

.ui-tabs .ui-tabs-nav li {
    position: relative;
}
Lorem ipsum dolor.
Add theme-specific classes
Add `ui-widget` to parent
sets theme font and size
Tabs HTML

```html
<div id="tabs" class="ui-tabs ui-widget">
  <ul class="ui-tabs-nav">
    <li class="ui-tabs-selected"><a href="#tabs-1">First</a></li>
    <li><a href="#tabs-2">Second</a></li>
    <li><a href="#tabs-3">Third</a></li>
  </ul>
  <div id="tabs-1" class="ui-tabs-panel">Lorem ipsum dolor.</div>
  <div id="tabs-2" class="ui-tabs-panel ui-tabs-hide">...</div>
  <div id="tabs-3" class="ui-tabs-panel ui-tabs-hide">...</div>
</div>
```
First  Second  Third

Lorem ipsum dolor.
Add container classes

sets color, border, background,
Tabs HTML

```html
<div id="tabs" class="ui-tabs ui-widget ui-widget-content">
  <ul class="ui-tabs-nav ui-widget-header">
    ...
  </ul>
  <div id="tabs-1" class="ui-tabs-panel ui-widget-content">...</div>
  <div id="tabs-2" class="ui-tabs-panel ui-tabs-hide ui-widget-content">...</div>
  <div id="tabs-3" class="ui-tabs-panel ui-tabs-hide ui-widget-content">...</div>
</div>
```
Lorem ipsum dolor.
Add state classes

clickable, hover, active, etc
Tabs HTML

```html
<div id="tabs" class="ui-tabs ui-widget ui-widget-content">
  <ul class="ui-tabs-nav ui-widget-header">
    <li class="ui-tabs-selected ui-state-active"><a href="#tabs-1">First</a></li>
    <li class="ui-state-default"><a href="#tabs-2">Second</a></li>
    <li class="ui-state-default"><a href="#tabs-3">Third</a></li>
  </ul>
</div>
```
Lorem ipsum dolor.
Smooth it out
decide what corners to round
Tabs HTML

```html
<div id="tabs" class="ui-tabs ui-widget ui-widget-content ui-corner-all">
  <ul class="ui-tabs-nav ui-widget-header ui-corner-all">
    <li class="ui-tabs-selected ui-state-active ui-corner-top"><a href="#tabs-1">First</a></li>
    <li class="ui-state-default ui-corner-top"><a href="#tabs-2">Second</a></li>
    <li class="ui-state-default ui-corner-top"><a href="#tabs-3">Third</a></li>
  </ul>
</div>
```
Done.

Lorem ipsum dolor.
Taking it further...

Multiple scoped themes
Link to UI theme
import the theme CSS in the <head>

<link type="text/css" href="css/redmond/jquery-ui-1.7.2.custom.css" rel="stylesheet" />
Add two datepickers

```html
<div class="datepicker"></div>
<div class="datepicker"></div>
```

```javascript
$('.datepicker').datepicker();
```
Redmond themes all widgets
Let’s theme one differently
wrap one in “.mysection” div for scoping

```html
<div class="datepicker"></div>

<div class="mysection">
    <div class="datepicker"></div>
</div>
```
Back to the download builder!

add theme scoping, get zip
Headaches saved
ThemeRoller adds scope selector to every rule

/* Interaction states
----------------------------------------*/
Grab the theme folder
paste into CSS/ alongside other theme
Link to new theme

<link type="text/css" href="css/redmond/jquery-ui-1.7.2.custom.css" rel="stylesheet" />

<link type="text/css" href="css/mysection/jquery-ui-1.7.2.custom.css" rel="stylesheet" />
2 themes, 1 page.
How 3rd party plugins can be ThemeRoller-ready
Yum.

we’re eating our own dog food
Same theming tools
for official jQuery UI & 3rd party plugins
Easy to use

just use the framework classes
for example...

let’s make a button!
Link to CSS
import the UI theme into your page

<link type="text/css" href="css/start/jquery-ui-1.7.2.custom.css" rel="stylesheet" />
basic markup
with some padding and cursor CSS too

<button>Click me</button>

button { padding:0.5em; cursor: pointer; }
ui-widget class
applies Theme font settings

<button class="ui-widget">Click me</button>
clickable theme class
adds theme’s look and feel

<button class="ui-widget ui-state-default">Click me</button>
hover class replaces default
scripted to make IE happy

<button class="ui-widget ui-state-hover">Click me</button>
disabled class
sets transparency to dim element *

<button class="ui-widget ui-state-default ui-state-disabled">Click me</button>

*combine with disabled="disabled" attr
primary / secondary
priority classes for emphasis

<button class="ui-widget ui-state-default ui-priority-primary">Click me</button>

<button class="ui-widget ui-state-default ui-priority-secondary">Cancel</button>
rounded corners

classes for rounding 1 corner, a side, or all 4!

<button class="ui-widget ui-state-default ui-corner-all">Click me</button>
A few examples

ThemeRoller-ready plugins
jQ Grid

http://www.trirand.com/jqgrid/jqgrid.html
jQuery Finder

http://www.nicolas.rudas.info/jquery/finder/
Button & toolbar

http://www.filamentgroup.com/lab/styling_buttons_and_toolbars_with_the_jquery_ui_css_framework/
Date range picker

http://www.filamentgroup.com/lab/
date_range_picker_using_jquery_ui_16_and_jquery_ui_css_framework
Select to slider

http://www.trirand.com/jqgrid/jqgrid.html
jQuery sheet

http://jqueryplugins.weebly.com/jqerysheet.html
Multi select

http://www.quasipartikel.at/multiselect/
iPod, flyout menus

http://www.filamentgroup.com/lab/jquery_ipod_style_and_flyout_menus
jPlayer

http://www.happyworm.com/jquery/jplayer/0.2.4/demo-07.htm
jScrollPane

http://www.kelvinluck.com/assets/jquery/jScrollPaneUI/
Checkbox & radio

http://plugins.jquery.com/project/ui-checkbox
Time select

http://pttimeselect.sourceforge.net/example/index.html
ChessBomb

http://chessbomb.com/
Peeps

http://www.filamentgroup.com/examples/peeps/
Firefox bookmarklet

pull ThemeRoller into any page
http://www.jqueryui.com/themeroller/developertool/
Theme switcher widget
preview themes on any page on the web!
http://www.jqueryui.com/docs/Theming/ThemeSwitcher
No Javascript required

use framework classes on static markup too
Automatic consistency
Enable developers to easily integrate your plugins!
Give it a try

make it easier for your users
We’ll pimp your stuff
TR-ready plugins will be highly visible
lastly...

Moving forward

new levers, css3, name changes, greater adoption
Thanks!

Questions?
the end...

Thanks Everyone!

for more examples, visit filamentgroup.com/lab