

# dojo.walkthrough

# dojo.basics

- namespaced (dojo.lang, dojo.fx, dijit.form)
- dojo, dijit, dojox, yournamespace
- package system
- build system (incl. your namespaces)
- i18n

# out of the box

- dojo.\*
  - lang, string, array, dom, coords, data, back, behaviour, date, dnd, i18n, io, rpc, ...
- dijit.\* - stable widgets
  - form.\*, Editor, Tree, Dialog, ProgressBar, ...
- dojox.\* - dojo extended (experimental)
  - charting, comted, crypto, data, dtl, fx, gfx, grid, lang, math, widget, ...

# dojo basics (system)

- `dojo.require()`, `dojo.declare()`, `dojo.provide()`
- `dojo.hitch()`, `dojo.mixin()`, `dojo.extend()`
- `dojo.[dis]connect()`, `dojo.publish/subscribe()`
- `dojo.xhr()`, `dojo.xhrPost()`, `dojo.xhrGet()`
- `dojo.forEach()`, `dojo.map()`, `dojo.filter()`
- `dojo.toJson()`, `dojo.isString()`, `dojo.isIE`, ...
- `dojo.data`

# namespace, class

## Create namespace and singleton

```
dojo.provide("phpr");  
// Register namespace relative to dojo.js  
dojo.registerModulePath("phpr", "../../phpr");  
phpr.send = function(params) {};
```

## Declare a class

```
dojo.provide("phpr.Main");  
dojo.declare("phpr.Main", phpr.Component, {  
  constructor: function() {},  
  render: function() {}  
});
```

# dojo.hitch

```
dojo.connect(  
    domNode, "onclick",  
    dojo.hitch(this, "handleClick")  
);
```

```
dojo.xhr({  
    load:  
        dojo.hitch(this, function() {  
            // handle onLoad stuff  
        })  
})
```

# dojo basics (dom)

- `dojo.byId()`, `dojo.query()`, `dojo.attr()`
- `dojo.coords()`
- `dojo.addClass()`, `dojo.removeClass()`,  
`dojo.hasClass()`
- `dojo.addOnLoad()`

dijit



# dijit - dojo widgets

The screenshot displays the Dojo Toolkit theme tester interface. On the left is a 'Dojo Tree from Store' showing a hierarchical view of continents and countries. The main area is divided into several sections:

- Sliders:** Two sliders are shown. The first is a percentage slider from 'lowest' to 'highest' with a value of 10.0%. The second is a size slider with 'small', 'medium', and 'large' labels.
- ProgressBar:** A progress bar showing 10% completion, with an 'Indeterminate' section below it.
- Form Elements:** A panel titled 'Various Form Elements:' containing:
  - Three checkboxes: 'Standard Dijit CheckBox' (checked), 'Disabled Dijit' (unchecked), and 'Checked and Disabled Dijit' (checked).
  - Two radio groups: 'Radio group #1' with options 'news', 'talk' (selected), and 'weather (disabled)'; 'Radio group #2' with the option 'top 40'.
- Calendar:** A calendar for the month of February 2008, with the 7th highlighted.
- Buttons:** A row of buttons: 'Create', 'Edit' (with a dropdown arrow), 'Save' (with a dropdown arrow), and 'Disabled'.
- Sizing:** A section titled 'Sizing' showing a 'big' button, a 'small' button, and a 'long' button, with a vertical arrow labeled 'tall' indicating button height.

At the bottom of the main area, there are tabs for 'Info', 'Alternate Themes', and 'Bottom 3'.

<http://archive.dojotoolkit.org/nightly/dojotoolkit/dijit/themes/themeTester.html>

# written vs. rendered HTML

you write

```
<input id="cb1" name="cb1" type="checkbox"
  dojoType="dijit.form.Checkbox" />
```

you get

```
<div class="dijitReset dijitInline dijitCheckBox"
  wairole="presentation" role="wairole:presentation"
  widgetid="cb1">
```

```
<input id="cb1" class="dijitReset dijitCheckBoxInput"
  type="checkbox"
  dojoattachevent="onmouseover:_onMouse,
  onmouseout:_onMouse,onclick:_onClick"
  dojoattachpoint="focusNode" name="cb1" value="foo"
  tabindex="0" style="-moz-user-select: none;"/>
</div>
```

# DOM to dijit and back

- `dojo.byId(domNodeId)` - node
- `dojo.query(string)` - [node, node, node]
- `dijit.byId(widgetId)` - widget
- `dijit.byNode(node)` - widget
- `dijit.getEnclosingWidget(node)` - widget

# Events (DOM, dijit)

- `dojo.connect(domNode, „onclick“, ...)`
- `dojo.connect(widget, „onClick“, ...)`
- `dojo.connect(widget, „onCustomEvent“, ...)`
- `onclick` vs. `onClick`

## DEMO

`dojo.query`, `dojo.connect`: `onmouseover` vs. `onMouseOver`,  
`dijit.byId/Node`, `dijit.getEnclosingWidget`  
closure

# build

- `svn co http://svn.dojotoolkit.org/dojo/util/trunk`
- `cd util/buildscripts/profiles`
- `cp standard.profile.js phpr.profile.js`
- `adjust phpr.profile.js`
- `run build`

```
> cd util/buildscripts
> ./build.sh profile="phpr" \
    action="clean,release" localeList="en,de" \
    optimize="shrinksafe" \
    releaseDir="../../dojo-build" \
    releaseName=""
```

# fx

- `dojo.fadeIn()`, `dojo.fadeOut()`
- `dojo.fx.wipeIn()`, `dojo.fx.wipeOut()`
- `dojo.toggleClass()`
- `dojox.fx`
  - `sizeTo()`, `slideBy()`, `crossFade()`, `highlight()`, `wipeTo()`, `smoothScroll()`, `Shadow`, `easing`

SHOW OFF

# grid

row #	id	Name	Label	Abbrev.
1	0	Alabama	Alabama	AL
2	1	Alaska	Alaska	AK
3	2	American Samoa	American Samoa	AS
4	3	Arizona	Arizona	AZ
5	4	Arkansas	Arkansas	AR
6	5	Armed Forces Europe	Armed Forces Europe	AE
7	6	Armed Forces Pacific	Armed Forces Pacific	AP
8	7	Armed Forces the Americas	Armed Forces the Americas	AA

- various stores (dojo.data)
- sortable, filterable, dynamic paging
- editable

misc



# Scoping

- `var _this = this`
- `apply()`, `call()`
- `dojo.hitch()`
- closures

```
var els = dojo.query(„#myForm [type=radio]“);
for (var i=0; i<els.length; i++) {
    dojo.connect(els[i], „onclick“,
        dojo.hitch(this, function(el) {
            return function() {/* el copied */}
        })(els[i]))
};
```

# Debugging

- debugger;
- console.debug()
- inline scripting

```
<span id="rating" dojoType="dojox.widget.Rating">  
  <script type="dojo/event" event="onChange">  
    var els = dojo.query('#ratingVal');  
    els[0].innerHTML = this.value;  
  </script>  
  <script type="dojo/event" event="onMouseOver"  
    args="evt,value">  
    var els = dojo.query('#rating1HoverValue');  
    els[0].innerHTML = value;  
  </script>  
</span>
```

# USE your tools

- Autocompletion (Komodo, Aptana, FireBug!...)
- goto source
- FireBug
- #dojo irc.freenode.net

# COPY with pride

- Examples [archive.dojotoolkit.org/nightly](http://archive.dojotoolkit.org/nightly)  
<http://archive.dojotoolkit.org/nightly>
- Search [dojotoolkit.org](http://dojotoolkit.org) (valueable forum)
- Dojo feature explorer  
[http://www.skynet.ie/~sos/js/demo/dojo/dojoc/demos/featureexplorer.html#Dojo\\_Data](http://www.skynet.ie/~sos/js/demo/dojo/dojoc/demos/featureexplorer.html#Dojo_Data)
- API browser (in progress)  
<http://redesign.dojotoolkit.org>
- dojo book  
<http://dojotoolkit.org/book>

# Page loading order

- script tags in `<head>` (incl. files!)
- script tags in body, depending on position dom nodes are available
- first thing after `window.onload` (`dojo.addOnLoad`) the widgets are available
- `dojo.addOnLoad()` stuff is available (don't access widgets before!)

thx

and now

dojo.beer