A Deep Dive into Enyo

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ENYO
A JavaScript framework for mobile, desktop, and the web
We need 500 apps for the TouchPad, stat!
We want apps from devs that aren’t HTML+CSS experts.
How?
Components.
As seen in Visual Basic.
They’re not sexy.
They work.
All source is on github.com/enyojs
Apache 2.0 forever.
Enyo 2.0: The Core Parts
boot - load all the source
/* package.js */

enyo.depends(
    "app.js",
    "../css/app.css",
    "$lib/onyx");
kernel - OOP, there it is
enyo.kind() is a constructor factory
enyo.kind({
    name: "FireFly",
    kind: "TelevisionShow",
    show: function() {
        this.inherited(arguments);
        system.play("ObjectsInSpace.mp4");
    }
});

var ff = new FireFly();
// wait 10 weeks
delete ff;
enyo.Object provides property publishing
enyo.kind({
    name: "UPC",
    kind: enyo.Object,
    published: { productID: "0000000000" },
    create: function() {
        this.productIDChanged();
    },
    productIDChanged: function(oldValue) {
        this.barcode = generate(this.productIDID);
    }
});
var x = new UPC({
    productID: "123456789X"
});

x.setProductID("5678900002");

pID = x.getProductID();
enyo.Component enables encapsulation and events
enyo.kind({
    name: "SithLord",
    kind: "Jedi",
    events: { onSpeak: "" },
    scream: function(message) {
        doSpeak({
            message: message,
            tone: "whiney" 
        });
    }
});
enyo.kind({
    name: "SithLords",
    components: [
        { kind: SithLord, name: "DarthVader",
          onSpeak: "listenToToys" },
        { kind: SithLord, name: "Palpatine" },
        { kind: SithLord, name: "DarthSidious" }
    ],
    listenToToys: function(inSender, inEvent) {
        alert(inEvent.message);
    }
});
var toys = new SithLords;

```javascript
  toys.$.DarthVader.setWeapon(lightsaber);
toys.$.DarthVader.throw(toys.$.Palpatine);
toys.$.DarthVader.scream("NOOOOOOO!");
```
enyo.UIComponent provides hooks for layout control
enyo.Signals is routing for app-level events
lang.js - utilities
log.js - logging
job.js - setTimeout wrapper
animation.js - math + reqFrame
macroize.js - templates
PhoneGap.js - app event support
platform.js - platform-detection code
dom - dealing with HTML
enyo.Control:
a rendering engine for HTML
enyo.kind({
  name: "BumperSticker",
  kind: enyo.Control,
  tag: "div",
  content: "I’m Fluent in JS!",
  style: "color: blue; font-size: 96pt"
});

var bs = new BumperSticker();
bs.renderInto(document.body);
dispatcher.js:
hooks all the standard DOM events into the Enyo event system
enyo.kind({
    name: “BumperSticker”,
    content: “I’m Fluent in JS!”,
    style: “color: blue; font-size: 96pt”,
    tap: function() {
        alert(“someone bumped me!”); } 
});

var bs = new BumperSticker();
bs.renderInto(document.body);
ajax - data-access through XHR & JSONP
function apiOK(inAsync, inValue) {
    alert(“success: “ + inValue); }
function apiFAIL(inAsync, inError) {
    alert(“FAIL: “ + inError); }

var a = new enyo.Ajax({ url: “http://example.org/api” });
a.response(apiOK);
a.error(apiFAIL);
a.go({ q: searchString });
ui - building blocks for making themed widgets
touch - enyo.Scroller & touchscreen support
enyo.Scroller handles showing 10 lbs of content in a 2 lb box with tweaks to scroll smoothly on modern browsers and touch screens
The Layout Libraries
fittable - responsive app layouts
list - optimized scrolling through 1000s of items
<table>
<thead>
<tr>
<th>Name</th>
<th>Title</th>
<th>Phone</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aboic Loylyc</td>
<td>Dynamic Program Executive</td>
<td>(415) 711-1234</td>
</tr>
<tr>
<td>Ajob Pebuvodba</td>
<td>International Marketing Assistant</td>
<td>(415) 711-1234</td>
</tr>
<tr>
<td>Baeo Bivfa</td>
<td>Direct Configuration Executive</td>
<td>(415) 711-1234</td>
</tr>
<tr>
<td>Beys Tohtlaw</td>
<td>Central Solutions Producer</td>
<td>(415) 711-1234</td>
</tr>
<tr>
<td>Bhrot Jhfixp</td>
<td>Direct Configuration Executive</td>
<td></td>
</tr>
</tbody>
</table>
panels - configurable app layouts
tree - collapsable display of structure information
...and now, let’s introduce Onyx
if enyo is jQuery (i.e. very useful by itself)
then Onyx is our jQuery UI
(a library that extends the core to do great things)
CSS themes +
JS behavior +
composite controls
Button, Checkbox, Drawer, FlyweightPicker, Grabber, Groupbox, Icon, Input, Menu, Toolbar, Picker, Popup, ProgressBar, ProgressButton, RadioButton, RichText, Scrim, Slider, Spinner, SwipeableItem, TabPanels, TextArea, Tooltip

Phew!
Samples
Onyx Sampler - 
live views of all Onyx controls & sample code

enyojs.com/samples/onyxsampler
Flickr Search - find pictures from search terms

enyojs.com/samples/flickr
Bing Maps - wraps external JS library with Enyo control

enyojs.com/samples/maps
API Viewer - pulls inline docs from source tree

enyojs.com/api
CryptoTweets -
game using enyo & onyx & web services

tenyojs.com/samples/cryptotweets
Community Gallery - listing of developer-contributed controls

enyojs.com/gallery
The Enyo Community
Developer Forums - forums.enyojs.com
Blog - blog.enyojs.com
Twitter - @enyojs
Email - enyojs@palm.com
github - github.com/enyojs

fork, modify, send us pretty pull requests
submit components to the community gallery
participate on the forums
We’re hiring great JavaScript engineers. Know about cross-platform mobile web? Worked on your own frameworks?

Talk to us!
email enyojs@palm.com