

Introduction to YUI 3

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May 13, 2010

Who am I?

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What is YUI?

- Housed and Developed at Yahoo!
- YUI2 Released in 2006, still actively supported
- YUI3 launched late 2009
- Used across most Yahoo! properties, new development is in YUI3
- Designed to be scalable, fast, secure, and modular

YUI3 Structure

- Core
- Component Infrastructure
- Utilities
- Widgets
- Developer Tools

YUI3 Structure

- Core
 - Lang, UA, Queue, Object, Get, Array, Node, Event
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YUI3 Structure

- Core
- Component Infrastructure
 - Base, Attribute, Plugin, Widget
- Utilities
- Widgets
- Developer Tools

YUI3 Structure

- Core
- Component Infrastructure
- Utilities
 - Animation, Cache, Cookie, DataSchema, IO, JSON, ImageLoader, Internationalization, etc.
- Widgets
- Developer Tools

YUI3 Structure

- Core
- Component Infrastructure
- Utilities
- Widgets
 - Overlay, Slider, TabView, GridView
- Developer Tools

YUI3 Structure

- Core
- Component Infrastructure
- Utilities
- Widgets
- Developer Tools
 - Console, Profiler, Test

Why YUI3?

- Modular: Load only the code you need.
- Flexible: Base functionality provides flexible Attribute and Plugin systems
- Complete: Tons of utilities available now, and widgets are coming
- Fast: Demonstrable faster at common tasks, and fast enough for one of the worlds largest websites.

Why not YUI3?

- Your existing codebase works
- Many widgets haven't been ported yet.

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- Some will not be.

SimpleYUI

- Introduced with YUI 3.2
- Eliminates the Sandbox
- Fastest way to get started with YUI3
- Provides Node/Events, Transitions, IO

Why not use SimpleYUI?

- There are performance benefits to using the module pattern
- There is safety in the sandbox
- You have more control in standard YUI

YUI3 and the Community

With YUI3, the team refocused on open-source. They launched YUI3 with a public bug tracker and forums, and put the source up on GitHub.

In October 2009, the Gallery launched, providing a mechanism for modules to be shared easily outside of the core of YUI, including offering hosting on the Yahoo! CDN for modules, and easy inclusion within YUI3 projects.

In early 2010, the YUI Team began hosting "YUI Open Hours" a periodic conference call.

YUI Resources

- <http://yuilibrary.com/>
- <http://developer.yahoo.com/yui/3/>
- <http://github.com/yui/>
- <http://yuiblog.com/>
- <http://twitter.com/miraglia/yui/members>

Node

```
Y.one('#nav');  
Y.all('#nav li');
```

- Y.one returns a 'Node'
- Y.all returns a 'NodeList'

Node Methods

```
var input = Y.one('input[type=text]');  
input.addClass('hide'); // Add the 'hide' class to the node  
input.removeClass('hide');  
input.toggleClass('hide');  
input.get('value');  
input.getStyle('display');  
  
input.test('.hide'); // Tests if the node matches a selector
```

NodeList Methods

```
var items = Y.one('li');

items.filter('.hidden');

items.even().addClass('even');
items.odd().addClass('odd');

items.item(4); // NOT an array-like object
items.size();

items.each(function(item, index, list) {
    // Treat this kind of like a for loop.
});
```

Events

```
Y.on('click', handler, '#actionButton');  
handler = function(e) {  
    // e is a DOM Event Facade  
    // Same between all browsers  
    e.halt(); // Stop propagation and default action  
    e.preventDefault();  
    e.stopPropagation();  
}
```

- Same syntax as custom events
- Support for touch events

Event Delegation

```
Y.delegate('click', handler, '#container', selector);
```

- Assign one event, on the container, but only call the handler on children that match the selector.

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```

- Assign one event, on the container, but only call the handler on children that match the selector.
- Doesn't fix non-bubbling events, like change-events in Internet Explorer

Server Calls

```
Y.io("/path/to/request", {  
    method: 'GET',  
    data: 'field1=value&field2=3',  
    on: {  
        start: handler,  
        complete: handler,  
        success: handler,  
        failure: handler,  
        end: handler  
    }  
    sync: false,  
    timeout: 2000  
});
```

JSON

```
Y.JSON.stringify({  
    name: "Jeff Craig",  
    nick: "foxxtrot",  
    session: "Intro to YUI3"  
});
```

```
Y.JSON.parse("{'event': 'Palouse Code Camp',  
              'date': '2010.10.30'}");
```


Transitions

```
Y.one('#demo').transition({  
    duration: 1, // seconds  
    easing: 'ease-out',  
    height: 0,  
    width: 0,  
    left: '150px',  
    top: '100px',  
    opacity: 0  
}, function() { Y.one('#demo').destroy(true); } );
```

Links

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