

## I Topics

- Component Development
- States and Transitions
- States and Transitions in Components  
Trigger Effects
- Skinning and Styling

## II Reason for these topics

### Component Development

To quote Adobe™ Flex Builder 3™ Training from the™ Source

- Flex is considered to be a component based development model. Supporting the original design
- Components are reusable. Save you time
- Components make it easier when working on a team
- Easier to maintain as changes propagate through every instance
- Styles are inheritable
- etc

### States and Transitions

- Easy and powerful navigation model
- States provide a model for the use of transitions
- Transitions provide complete control over the visual and auditory behavior of your application
- States and Transitions are the recommended model Adobe has chosen for future development  
Note: Adobe and Adobe Flex engineers also make applications for clients
- Thermo™ is Adobe's™ investment in the future of this model

Thermo News

[http://www.onflex.org/ted/2008/06/thermo-screenshot-exclusive\\_856.php](http://www.onflex.org/ted/2008/06/thermo-screenshot-exclusive_856.php)

Screenshots

[http://onflex.org/images/max.adobe.com/Adobe\\_MAX\\_2008\\_Thermo\\_1.png](http://onflex.org/images/max.adobe.com/Adobe_MAX_2008_Thermo_1.png)

[http://onflex.org/images/max.adobe.com/Adobe\\_MAX\\_2008\\_Thermo\\_2.png](http://onflex.org/images/max.adobe.com/Adobe_MAX_2008_Thermo_2.png)

[http://onflex.org/images/max.adobe.com/Adobe\\_MAX\\_2008\\_Thermo\\_3.png](http://onflex.org/images/max.adobe.com/Adobe_MAX_2008_Thermo_3.png)

[http://onflex.org/images/max.adobe.com/Adobe\\_MAX\\_2008\\_Thermo\\_4.png](http://onflex.org/images/max.adobe.com/Adobe_MAX_2008_Thermo_4.png)

[http://onflex.org/images/max.adobe.com/Adobe\\_MAX\\_2008\\_Thermo\\_5.png](http://onflex.org/images/max.adobe.com/Adobe_MAX_2008_Thermo_5.png)

## III Demonstration

### HTML Component

Current issues regarding HTML in the Flash Player / Flex SDK

- Limited support for html markup in Text Components
- No support for iframe like features (embedding a url or html page)
- Lacking abilities of a full feature browser (css, frames, divs, js, etc)
- Poor Rich Text Editor

Why when the rest of the framework is much tighter?

A lot of work would be required to fix up text rendering engine in the Flash Player

Example, Buzzword, made up of word processing professional developers spent 6 mo+ building a working prototype in Flex / AS3 and spent another 6 months in development adding features.

To solve these issues

- HTML Markup  
<http://drumbeatinsight.com/examples/htmlcomponent4/HTMLMarkupInApplication.html>
- HTML Embedded URL  
<http://drumbeatinsight.com/examples/htmlcomponent4/HTMLURLInApplication.html>
- HTML Fit to Height  
<http://drumbeatinsight.com/examples/htmlcomponent4/HTMLFitToHeight.html>
- HTML Rich Text Editor  
<http://drumbeatinsight.com/examples/htmlcomponent/editor/HTMLWithRTE.html>  
<http://drumbeatinsight.com/examples/htmlcomponent/xinha/HTMLWithXinha.html>
- HTML Pop Up  
<http://drumbeatinsight.com/examples/htmlcomponent4/HTMLInPopUp.html>
- HTML Alert  
<http://drumbeatinsight.com/examples/htmlcomponent4/HTMLAlert.html>
- HTML PDF  
<http://drumbeatinsight.com/examples/htmlcomponent4/HTMLWithPDF.html>

## Icon Component

### Current Issues

- Border skin and styles always on top
- Positioning icons can be tedious
- Unsatisfactory methods to indicate a process is going on
- Unsatisfactory methods to prevent user interaction

### To solve these issues

- Icon Example  
<http://drumbeatinsight.com/examples/icon/IconComponent.html>

## Date and Time Component

### Current Issues

- Easily format and show the date and time at a regular interval

### To solve this issue

- Date and Time Component  
<http://drumbeatinsight.com/examples/date/example/DateTimeComponent.html>

## Countdown Component

### Current Issues

- How do you countdown to a date
- How do you countdown to a time
- Once you get to that date how do you format it
- How do you update that value you and how often

### To solve these issues

- Countdown Example  
<http://drumbeatinsight.com/examples/countdown/example/CountdownExample.html>

## Data Component

### Current Issues

- Easy way to pull in dynamic data
- Updating content for clients
- Adding and pulling in custom data fields for clients
- Formatting the data you pull in
- Creating databases

### To solve these issues

- Data Component  
<http://www.flexcapacitor.com/examples/data/example/DataComponent.html>
- Data Component in Use  
<http://www.flexcapacitor.com/flashusers/>

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## IV Instructional Presentation

### Create Basic Components

Peter Ent's tutorial is invaluable

[http://weblogs.macromedia.com/pent/archives/2008/03/itemrenderers\\_p.html](http://weblogs.macromedia.com/pent/archives/2008/03/itemrenderers_p.html)

- Inline components
  - used mainly for item renderers and item editors
  - scope changes
  - outerDocument
  - data
- MXML components
  - reusable
  - set properties
- AS3 components
  - handle everything yourself

Is AS3 better than MXML?

## States and Transitions

Description of states and transitions

<http://www.judahfrangipane.com/blog/?p=168>

- Create a basic states example
- Show Ribbit project

## Combining States into Components

- Show OC Flex example

## Trigger Effects

- Show Akira Site

## Skinning

- CSS Design View
- Skinning a panel
- Showing Scale 9
- Degrafa  
<http://www.degrafa.com/>  
Show Akira site

## V Looking to the Future

### Flex 4 changes

Flex 4 will introduce changes to states.

<http://opensource.adobe.com/wiki/display/flexsdk/Enhanced+States+Syntax>

- Enhanced State changes

Reduce the complexity of the Flex view-states feature by (1) providing a new syntax that allows state-specific object and/or property changes to be specified inline, as opposed to with

somewhat more verbose, and out-of-context override tags, and (2) eliminating the concept of hierarchical states.

Refine and evolve the view states model such that we support a means of sharing component instances between states without necessitating the use of state hierarchies as we have today.

Promote the states functionality to an MXML language feature, expanding the set of runtime objects that are supported by the stateful document model.

Thermo will be the tool for creating states, transitions and behaviors.