Seaside

Web 2.0

Lukas Renggli
renggli@iam.unibe.ch
Why should I upgrade?
Collaboration
Design
Liveliness
Sharing
Usability
How can I upgrade?

Can I do it with Seaside?
XHTML
Semantically valid markup
XHTML
Semantically valid markup
CSS
Cascading Style-Sheets
CSS
Cascading Style-Sheets
RSS
Really Simple Syndication
RSS
Really Simple Syndication
AJAX

Asynchronous JavaScript and XML
COMET
HTTP Streaming, Server Push
Seaside
Web 2.0
Challenge
Concentrate onto the Web application
Browser Bugs
Browser Differences

no
Browser Incompatibilities
Tight Integration
Feature Complete
Up-To-Date
Say it in Smalltalk
Avi Bryant
www.smallthought.com

Lukas Renggli
www.lukas-renggli.ch
Say it in Smalltalk
No JavaScript Programming
Still, you need to be aware that your code will result in JavaScript
Think of it as Magic

html effect
id: ‘hint’;
shake

→

new Effect.Shake(‘hint’)
Adding JavaScript Events

```html
html div
  onClick: (html effect toggle);
  with: [ ... ]
```
AJAX – Step by Step

html (updater | periodical | request | evaluator)

[ OPTIONS; ]*
[ HANDLER; ]*
[ TRIGGER; ]*
[ CALLBACK; ]*
Choose a strategy

html (updater | periodical | request | evaluator)
[ OPTIONS; ]*
[ HANDLER; ]*
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AJAX – Step by Step

Choose a strategy

html (updater | periodical | request | evaluator)
[ OPTIONS; ]*
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AJAX – Step by Step

Choose a strategy

html (updater | periodical | request | evaluator)
  [ OPTIONS; ]*
  [ HANDLER; ]*
  [ TRIGGER; ]*
  [ CALLBACK; ]*

Define options

Assign http event handlers
AJAX – Step by Step

Choose a strategy

html (updater | periodical | request | evaluator)

[ OPTIONS; ]*

[ HANDLER; ]*

[ TRIGGER; ]*

[ CALLBACK; ]*

Define options

Assign http

event handlers

Set triggers to

serialize client state
AJAX – Step by Step

Choose a strategy

Define options
Assign http event handlers
Set triggers to serialize client state

Define primary (and secondary) callbacks

html (updater | periodical | request | evaluator)
[ OPTIONS; ]*
[ HANDLER; ]*
[ TRIGGER; ]*
[ CALLBACK; ]*
AJAX Strategies

- Request
- Updater
  - Insertion
  - Periodical
- Evaluator
AJAX Request

• Perform a request and evaluate the callback `ajaxCallback` on the server.
• Note: A bug in your code doesn’t show up in the Web browser, but directly as a debugger within your development image.

```html
html request
    callback: [ self ajaxCallback ]
```
AJAX Updater

• Replace the contents of the DOM element named `domId` with XHTML rendered by `renderAjaxOn:`.

```javascript
html updater
  id: domId;
  callback: [ :r | self renderAjaxOn: r ]
```
Triggers

• `triggerForm: aDomId`
  Trigger the form `aDomId` and all containing form-fields and associated callbacks.

• `triggerFormElement: aDomId`
  Trigger the callback of the form element named `aDomId`. Does not work for checkbox and multi-select list.
Sortable List

- Zork
  - Foo
- Bar
Sortable List

```html
html unorderedList
  id: 'list';
  script: (html sortable
    onUpdate: (html request
      triggerSortable: 'list'
      callback: [ :v | list := v ]));
  with: [
    list do: [ :each |
      html listItem
        passenger: each;
        with: each label ] ]
```

- Zork
- Foo
- Bar
Drag & Drop

- Red circle
- Blue square
- Green triangle
Drag & Drop

html div
  class: 'shape';
  passenger: aCircle;
  script: html draggable
Drag & Drop

(html div
  class: 'shape';
  passenger: aCircle;
  script: html draggable)

(html div
  id: 'dropbox';
  script: (html droppable
    accept: 'shape';
    onDrop: (html updater
      id: 'dropbox';
      triggerPassenger: [ :v | box add: v ];
      callback: [ :r | self renderBox: r ]));
  with: [ html renderBox: r ])

Lukas Renggli
In Place Editing

Click me, edit me.

html paragraph

script: (html inPlaceEditor
 triggerInPlaceEditor: [ :v | text := v ];
 callback: [ :r | r render: text ]);
with: text
What about debugging?
scriptaculous.seasidehosting.st
“It’s more like Web 3.0”