

Welcome

To Advance through Presentation
Use Page Up and Page Down Keys



99 | Worldwide
Developers
Conference

WebObjects



“This year’s Software Product of the Year is Apple Computer’s WebObjects 4.0... Along with substantial power and flexibility, WebObjects brings an ease of development rarely seen in industrial-strength development environments.”





Advanced Interface Techniques

Matthew Firlik

Systems Engineer,
Apple Computer, Inc.



Advanced Interface Techniques

Matthew Brown

Third Party Relations Manager,
Macromedia

Interface Options

- HTML
- PDF/FDF
- Java Client



Enhancing HTML

- Client-side services and technologies can be utilized and molded into components to enhance any HTML interface

JavaScript

Java Applets

ActiveX



DHTML

XML

Others...



Enhanced HTML

- The same HTML you know,
just in ways you might not
 - Dynamic image sizing
 - Table backgrounds
and alternating colors
 - Section anchors



JavaScript

- Powerful language for dynamically manipulating and enhancing most HTML elements
 - Image and text fly-overs and interactions
 - Form-field validations
 - Window and message management



Java Applets

- Add in pre-packaged and configurable Applets for a more powerful interface or window
 - Text and message banners and windows
 - Calculators and calendars
 - Menu-ing panels and bars



ActiveX



- Through Microsoft specific language and implementation, benefits exist with ActiveX:
 - Multimedia viewers and players
 - Windows-like interfaces and add-ons
 - Close desktop integration



DHTML

- The power of a number of combined functionalities...
 - Cascading style sheets
 - Document object model
 - Client-side scripting



DHTML

- The power of a number of combined functionalities...for powerful results:
 - Layering of HTML elements
 - Global formats and changes
 - Cross-browser special effects



XML

- An emerging technology for interface and logic and connectivity development
- Generating it works like HTML, integrating with it is coming soon...



Others

- Technologies worth mentioning...



QuickTime VR



Flash




Shockwave



Enhanced PDFs

- Combine the ability to embed URLs in PDFs and DirectActions to create interactive and self-serviceable documents

Updated Form



Form 1040EZ Department of the Treasury - Internal Revenue Service
Income Tax Return for Single and Joint Filers With No Dependents (99) 1998 CMB No. 1543-9673

Use the IRS label here

Your first name and initial Last name
If a joint return, spouse's first name and initial Last name
Home address (number and street). If you have a P.O. box, see page 1. Apt. no.
City, town or post office, state, and ZIP code. If you have a foreign address, see page 1.

Your social security number
Spouse's social security number

Presidential Election Campaign (See page 7.)

Note: Checking "Yes" will not change your tax or reduce your refund.
Do you want \$3 to go to this fund? Yes ☐ No ☐
If a joint return, does your spouse want \$3 to go to this fund? Yes ☐ No ☐

▲ IMPORTANT! ▲
You must enter your SSN(s) above.

Income

1 Total wages, salaries, and tips. This should be shown in box 1 of your W-2 form(s). Attach your W-2 form(s). 1

2 Taxable interest income. If the total is over \$400, you cannot use Form 1040EZ. 2

3 Unemployment compensation (see page 8). 3


4 Add lines 1, 2, and 3. This is your **adjusted gross income**. If under \$10,030, see page 9 to find out if you can claim the earned income credit on line 8a. 4

5 Can your parents (or someone else) claim you on their return?
Yes. Enter amount from worksheet on back. No. If single, enter \$,990.00. If married, enter 12,500.00. See back for explanation. 5

Note: You must check Yes or No.

6 Subtract line 5 from line 4. If line 5 is larger than 6

Dollars Cents





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Programming Techniques

Useful Tactics

- Handy methods and procedures to have around...with some examples
 - Unique-Naming methods for components
 - Bindings vs. no bindings
 - Minimal primitives
 - PageAction
 - Form submission from an action
 - ResourceManager
 - Component Content



Unique Names

- Some components need unique identifiers, for functionality and to enable the use of multiples on the same page—use `NSProcessInfo`

`uniqueID = [NSProcessInfo processInfo];`



Bindings

- Rather than having a variable for each API within a component, utilize ‘^’ notation, ‘hasBinding’, and ‘valueForBinding’

WOS:

```
someVariable =  
    [self valueForBinding: “myBinding”]
```

WOD:

```
someAttribute = ^myBinding
```



invokeAction

- Use the invokeAction attribute in your components to handle actions or pageNames programmatically

```
- invokeAction {  
    WOComponent* anActionResult = nil;  
    if ([self hasBinding:@"action"])  
        anActionResult =  
            [self performParentAction:  
                [self valueForKey:@"action"]];  
}
```



Component Content

- In addition to attributes, components can utilize specified content from the parent

Parent HTML:

```
<WebObject Name=MenuView>  
    <H1>Quick Menu Title</H1>  
</WebObject>
```



Component Content

- In addition to attributes, components can utilize specified content from the parent

Child HTML:

```
<WebObject Name=MyContent>  
</WebObject>
```

Child WOD:

```
MyContent: WOComponentContent { }
```



Resource Manager

- Manages an application's resources, and defines methods that retrieve resources from standard directories.
 - `urlForResourceNamed:` is handy for local image resources needed in client side scripts



WO Primitives

- When the functionality you require is not quite provided by default...
 - Use `WOGenericElement` and `WOGenericContainers`
 - Use the minimal primitives in the WebObjects ComponentElements framework and extend in your own ways



Form Submissions

- Use the 'onChange' (JavaScript) attribute for form elements to enable auto-submission of forms

- WOD:

```
TextField: WOTextField {  
    value = someValue;  
    onChange = 'this.form.Submit';  
}
```





Demo

Interactive and
Additive Interfaces

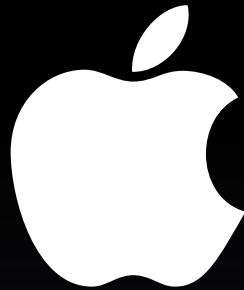


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DREAMWEAVER 2



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