



# Is Your Content Ready For the Web?

Rob Amos  
Senior Services Consultant





# Agenda

- Planning the Web Site
- Determining Content
- Selecting Development Tools
- Designing Individual Components
- Publishing Your Content
- Questions and Answers



# Planning The Web Site

- What are the goals and purposes of the site?
- What is the desired look and feel of the site?
- Who is the intended audience of the site?
- What is the target environment?
- What resources are available for site development?



# Goals and Purposes

- Attract new customers?
- Introduce a new product to market?
- Provide marketing and technical information to prospects and customers?
- Provide on-line technical support?
- Share information across departments?  
Divisions? Companies?
- Just to have a presence on the web?





# Intended Audience

- Determine your target audience
  - ✓ Prospects
  - ✓ Customers
  - ✓ Employees
  - ✓ Business partners?
- Cross-cultural, language support needed?
  - ✓ Where does your target audience reside?
  - ✓ Remember that the Internet can bring the entire world in to your local “neighborhood”
  - ✓ International borders are no longer obstacles



# Target Environment I

- Determine what is the lowest technical platform your Web site will support
  - ✓ Server
  - ✓ Browsers
  - ✓ JavaScript, Java, ActiveX
  - ✓ Secure Socket transmissions
  - ✓ Screen resolution and color



# Target Environment II

- Once you decide on that level, make sure that you tell your audience what they need (if not there)
  - ✓ Provide links to required tools
  - ✓ Verify whenever possible that the requirements are there



# Site “Look and Feel”

- How do you want the site to look?  
Complexity?
  - ✓ Have you seen other Web sites that have your desired “look and feel”
  - ✓ What makes these sites interesting?
  - ✓ How would this look assist you in reaching the goals and purposes of the site?
- Plan on using browser safe colors to obtain a common color palette for pages
  - ✓ [Browser Safe Colors](#)





# Development Resources I

- What are budget restraints?
  - ✓ Hardware
    - ✓ Can existing platform support planned system load?
  - ✓ Software
    - ✓ Do you need to obtain new software, upgrade or extend licenses?



# Development Resources II

## ■ Personnel

- ✓ What experienced personnel do you already have on board?
- ✓ Can you hire or train to cover technical exposure?

## ■ Legal

- ✓ Do you own the domain?



# Typical Project

- Intranet site for cross department support
  - ✓ Should allow for sharing project information
    - ✓ Documents
    - ✓ Spreadsheets
  - ✓ Graphics (images, charts) should be available to assist reader
- Needs to support Internet Explorer 4.0 +
  - ✓ 800x600 resolution, 256 color support
  - ✓ JavaScript and Java support



# Determining Content

- Text
- Graphics
- Multimedia
- JavaScript
- Java Applets





# Text Content

- Could consist of static documents and files
  - ✓ Word processing files
  - ✓ Presentations
  - ✓ Spreadsheets
- Dynamic documents provide for a Web site that is a “living entity”
  - ✓ Extract information from databases
  - ✓ Links to existing documents that are updated frequently
  - ✓ Direct application support



# Graphics Content

## ■ Graphic images can be

- ✓ Images
- ✓ Titles and logos
- ✓ Icons
- ✓ Buttons
- ✓ Rules

## ■ Graphics heavy Web pages increase download time

- ✓ What access methods will your intended audience use to connect to your site?



# Multimedia Content

- What video and audio components do you need to help you realize your site's objectives?
- Pre-recorded or real-time video?
  - ✓ Company meetings?
  - ✓ Project meetings?
- Pre-recorded or real-time audio?
  - ✓ Teleconferences?
  - ✓ Real-time discussions?



# JavaScript

- Browser-side scripting language
  - ✓ Not to be confused with Java!
- Advantages
  - ✓ Fast
  - ✓ Less burden on web server and network
- Provides means of using user's workstation to pre-process input
  - ✓ Use to validate data input fields
  - ✓ Provide field sensitive help
  - ✓ Used to create Dynamic HTML (DHTML)

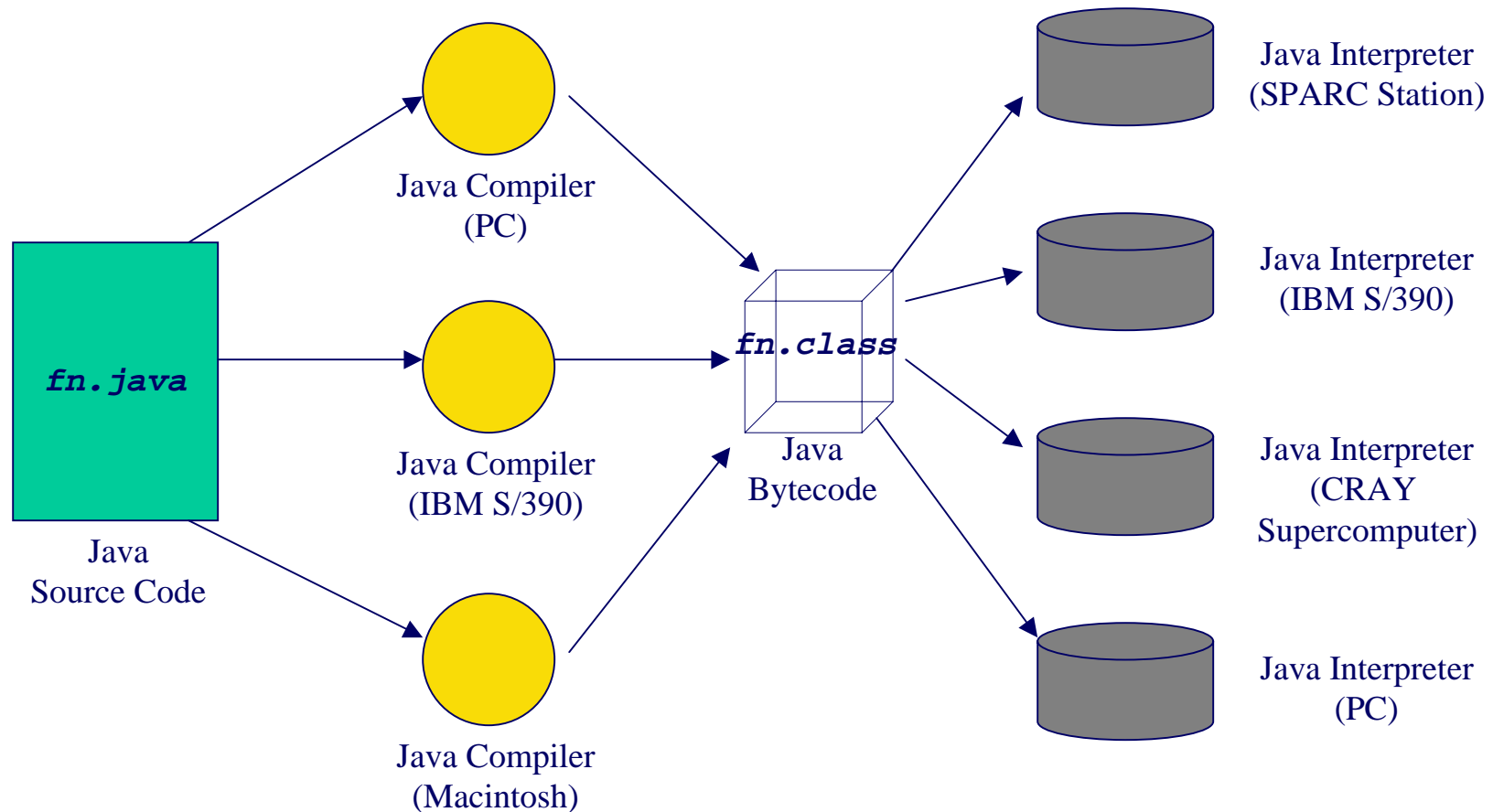




# Java Applets

- Object-oriented programming language
  - ✓ Developed by Sun Microsystems in 1994
  - ✓ Excellent general purpose language for writing small Web applications called “applets” or for larger, more general purpose applications
- Major strengths include
  - ✓ Platform-independent, at both source and binary level
  - ✓ Simplicity

# Java Applet Components



# Java Applet

**Java Boutique**  
The Ultimate Java Applet Resource - Netscape

File Edit View Go Communicator Help

Bookmarks Location: <http://javaboutique.internet.com/eFloys/> What's Related

Java News  
Latest Applets  
Applet Categories  
Applet Index  
Applet Help  
Submit Applets  
Other Resources  
How-To Java  
Java Reviews  
Java FAQs  
Java Forum  
Java IDEs

**WEB DEVELOPER.COM**

Mecklermedia  
Internet.com

Engine Watch

How do they find you? Search

## Evolving Floys

The eFloys Aquarium

Show Numbers		Show Help			
Turn Sound Off		Show Rules			
Move Slower		Show Log			
Move Faster		Predefined			
Continue		Show Info			
Limited Ranges		Edit Properties			
Restart		Scramble	Breed	Start Evolution	Insert Stranger



# Site Development Tools I

- Xedit, Notepad, WordPad
  - ✓ Basic Web page editing tools
  - ✓ Difficult to visualize how your changes look
  - ✓ Be sure to save files as text format files
    - ✓ .TXT doesn't guarantee file format!





# Site Development Tools II

## ■ Microsoft FrontPage

- ✓ WYSIWYG Web site administration, creation, and management tool
- ✓ Interfaces with Microsoft Office Suite and database products

## ■ Netscape Composer

- ✓ Similar to FrontPage
- ✓ Doesn't support Web site management - just creating and updating

# Microsoft Front Page

FrontPage Explorer - appletree (http://rob/appletree)

File Edit View Tools Help

New Page Publish [Icons]

Views

Folders - appletree

All Folders:

- http://rob/appletree
  - \_private
  - catalog
  - images

Contents of 'http://rob/appletree'

Name	Title	Size	Type	Modified Date	Modified By	Comments
_private			folder			
catalog			folder			
images			folder			
at2000325.htm	The Apple Tree: Scottie Fo...	5KB	htm	2/7/00 1:18:13 AM	raa	
atclassapr.htm	The Apple Tree: April Class...	14KB	htm	2/6/00 5:16:19 PM	raa	
atclasses.htm	The Apple Tree: Upcoming...	5KB	htm	2/5/00 11:22:48 PM	raa	
atclassfeb.htm	The Apple Tree: February ...	15KB	htm	2/6/00 3:59:26 PM	raa	
atclassmar.htm	The Apple Tree: March Cla...	23KB	htm	2/6/00 4:16:18 PM	raa	
athours.htm	The Apple Tree: Store Hours	5KB	htm	2/5/00 10:01:34 PM	raa	
atnewsletter.htm	The Apple Tree: Newslette...	15KB	htm	2/6/00 12:53:28 AM	raa	
atseminars.htm	The Apple Tree: Upcoming...	5KB	htm	2/5/00 9:20:27 PM	raa	
index.htm	The Apple Tree: Home Page	4KB	htm	2/7/00 1:29:44 AM	raa	

Navigation Hyperlinks Hyperlink Status Themes Tasks

Office

Microsoft

NUM



# WS-FTP

FTP WS\_FTP95 LE 199.0.83.43

Local System: C:\Program Files\WS\_FTP

Name	Date	Size
..		
complete.wav	961101 01:00	
connect.wav	961101 01:00	
error.wav	961101 01:00	
license.wri	960505 21:43	
prorder.wri	970527 11:41	
whatsnew.txt	970517 14:08	
WS_FTP.GID	991021 08:19	
WS_FTP.hlp	970521 16:33	
WS_FTP.ini	000307 09:46	
WS_FTP95.exe	970517 14:03	2
WSFTP32.dll	970517 14:03	3
[-a-]		

Remote System: VMA:RAA.

Name	Date	Size
TAPEQA	940318 13:46	
TEMPLATES	930907 17:04	
TEST	981012 14:05	
TEST2	981012 14:05	
TOOLS	930907 17:10	
TRAINING	970311 11:35	
VMARCHIVER	960912 17:01	
VMBACKUP	930910 10:11	
VMMIGRATE	941216 10:56	
VMSINEWS	961212 22:54	
VMWEBSERVER	970611 11:41	
VMX_FIXES	990709 13:08	
VMZCONSOLES	960821 10:40	

125 List started OK  
Received 22724 bytes in 1.9 secs, (118.82 Kbps), transfer succeeded  
250 List completed successfully.

Close Cancel LogWnd Help Options About Exit



# Graphic Development Tools

- JASC: Paint Shop Pro 6.0
- Xara: Xara3D3
- Jalapeno: Hot Buttons

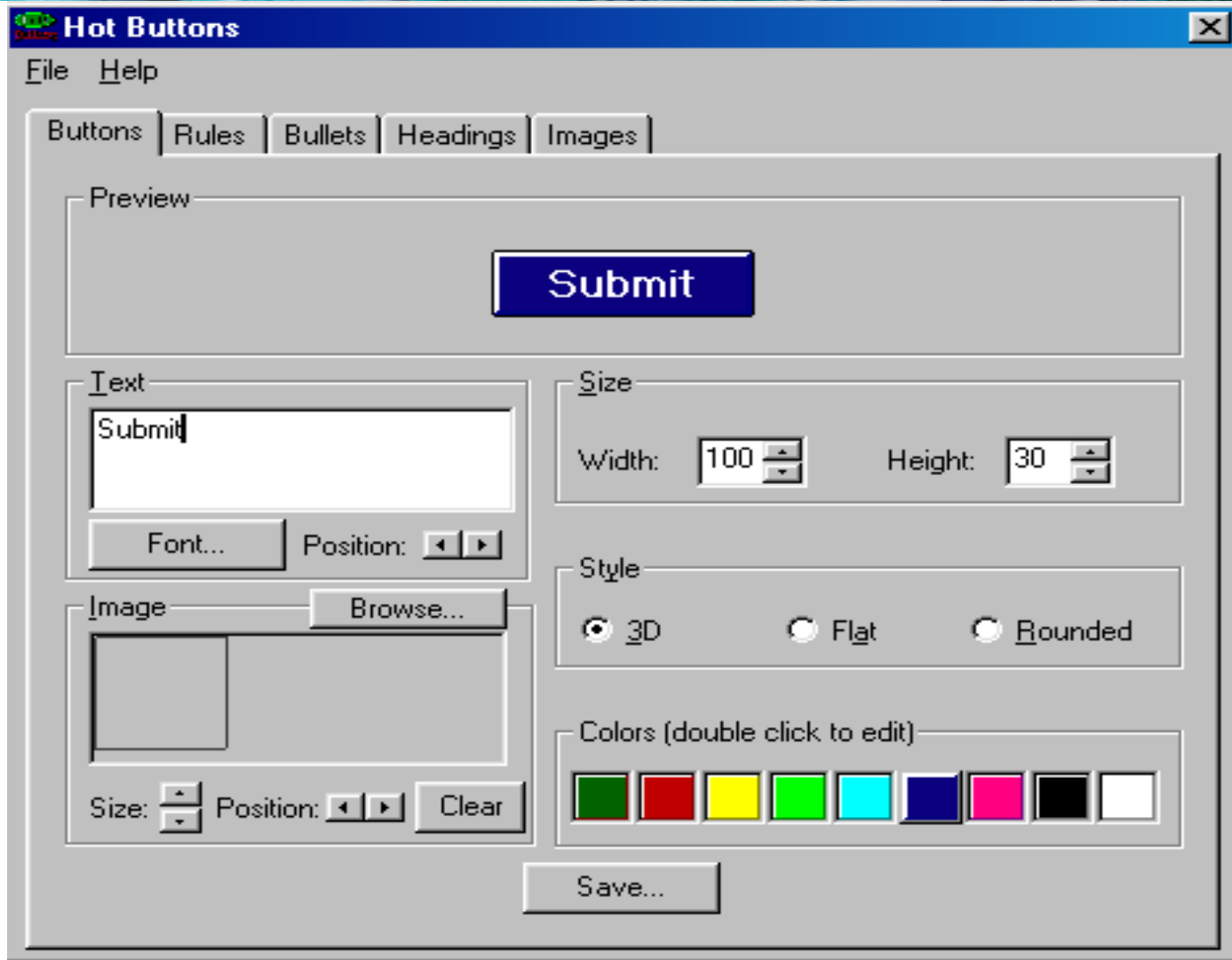




# Web Graphic Formats

- ***GIF (.gif) - Graphic Interchange Format, 8-bit, indexed 256 color palette, supports transparency and animation***
- ***JPEG (.jpg, .jpeg) - Joint Photographic Experts Group, 24-bit, millions of colors, great for photographs***
- ***PNG (.png) - Portable Network Graphics, 48-bit, billions of colors, supports alpha transparency and gamma correction, combines benefits of both GIF's and JPEG's without the weaknesses...but not currently supported by many browsers***

# Jalapeno Hot Buttons





# Static Audio Formats

- ***MIDI (.mid)*** - Musical Instrument Digital Interface, mathematical representation of notes contains no audio information, music only, super compact (a thousand times smaller than WAVE file) but poor quality
- ***WAVE (.wav)*** - Waveform Audio File Format, originated on Windows but now cross-platform, supports arbitrary sampling rates, large file size
- ***AIFF (.aif, .aiff)*** - Audio Interchange File Format, originated on Macintosh but now cross-platform, similar to WAVE
- ***u-LAW (.au)*** - Unix standard audio format, supports a variety of sampling rates, gaining popularity because of Java



# Streaming Audio Formats

- ***MPEG (.mpa, .mp2, .mp3)*** - Family of multimedia standards developed by Moving Picture Experts Group, high quality sound and video with excellent compression rates (nonstreaming and streaming)
- ***RealAudio (.ra, .ram)*** - RealNetworks offers free client and server software, with additional upgrades available to buy. Available for most platforms. Has capacity to revert to HTTP if UDP connection fails
- ***Streamworks (.mpa, .mp2, .xsm, .xsm)*** - Xing Technologies, commercial encoder and special server software required, aimed at high end connections





# Streaming Audio Examples

## ■ Link to streaming audio

- ✓ *RealSound requires links to be made to special go-between files called metafiles (suffix .ram)*

```
<A HREF="song.ram">Link to the Song</A>
```

- ✓ *The metafile, "song.ram" contains the URL for the RealAudio file:*

```
pnm://[ip.address]/song.ra
```

## ■ Embed streaming audio

```
<EMBED SRC="pnm://[ip.address]/song.ra" WIDTH="100"  
HEIGHT="100" AUTOSTART="false"></EMBED>
```



# Video Formats

- ***QuickTime Movie (.mov)*** - Originated on Macintosh but now cross-platform, cross-browser. Popular because of superior compression and built-in streaming capability
- ***AVI (.avi)*** - Audio/Video Interleaved, originated on Windows but now cross-platform
- ***MPEG (.mpg)*** - Moving Picture Experts Group, high quality sound and video with excellent compression rates (nonstreaming and streaming)
- ***RealVideo (.rm)*** - *De facto* standard for streaming media on web



# Video Examples

- Simple link to video file

```
<A HREF="catdog.avi">Click Here for Movie</A>
```

- Embed audio for use with plug-ins

```
<EMBED SRC="chase.mov" WIDTH="160" HEIGHT="120"  
  AUTOPLAY="false"  
  PLUGINSOURCE="http://cgi.netscape.com/products  
/communicator/plugins/>"  
</EMBED>
```



# Serving Content Using VM:Webgateway I

- Upload content to VM:Webgateway server
  - ✓ FTP
  - ✓ Microsoft FrontPage
  - ✓ Netscape Composer
- Be aware of directory structure and file system of target directories
  - ✓ CMS
  - ✓ SFS
  - ✓ BFS



# Serving Content Using VM-Webgateway II

## ■ Set MIME types

### ✓ Query existing filetype definitions

```
vmweb query filetype *
```

```
Filetype Characteristics
```

```
-----  
AU          FILE TRANSLATE NONE CONTENT-TYPE audio/basic SSI NO  
AVI         FILE TRANSLATE NONE CONTENT-TYPE video/x-msvideo SSI NO  
GIF         FILE TRANSLATE NONE CONTENT-TYPE image/gif SSI NO
```

### ✓ Add new filetype definitions, if necessary

```
config filetype add class file content-type
```

```
    application/octet-stream SSI NO translate none
```



# Publishing Your Content

## Publish

Publish FrontPage Web to:

<Root Web>  
<Root Web>  
<Root Web>

More Webs...

http://www.the-apple-tree.com

Publish changed pages only

Include child webs

OK

Cancel

Help



# Summary

- Plan the Web Site Design
- Select Development Tools
- Design Individual Components
- Publish Content to VM:Webgateway



# Questions and Answers





# Resources

- *Web Design in a Nutshell*, O'Reilly
  - ✓ Jennifer Niederst, 1999
- *UltraEdit-32*, IDM Computer Solutions, Inc.
  - ✓ <http://www.ultraedit.com/>
- *FrontPage 2000*, Microsoft
  - ✓ <http://www.microsoft.com/>
- *Netscape Composer*, Netscape
  - ✓ <http://www.netscape.com/>
- Barry's Clipart Server
  - ✓ <http://www.barrysclipart.com/>
- *Paint Shop Pro 6*, Jasc, Inc.
  - ✓ <http://www.jasc.com/>



# Resources, continued

- *Xara 3D3*, Xara, Ltd.
  - ✓ <http://www.xara.com/>
- *Sound Forge XP 4.5*, Sonic Foundry, Inc.
  - ✓ <http://www.sonicfoundry.com/>
- *RealPlayer G2*, RealNetworks, Inc.
  - ✓ <http://www.real.com/>
- *Java Home Page*, Sun Microsystems, Inc.
  - ✓ <http://java.sun.com/>
- *WS\_FTP LE*, Ipswitch, Inc.
  - ✓ <http://www.ipswitch.com/>



# Contact Information

Rob Amos

Senior Services Consultant

OS/390 Specialty Services

Computer, Associates, Inc.

E-mail: [rob.amos@ca.com](mailto:rob.amos@ca.com)

Phone: 540-362-1408

Fax: 509-272-4451