CHALLENGES OF CREATING ONLINE CONTENT

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Overview

• Who am I?

• The Joys of Technical Communication

• Challenges
  – Web page editors
  – Images
  – Other Types of Content
  – Web 2.0

• Tools of the Trade

• Questions and Answers
Who am I?
**EDUCATION**

- B.A. in English with minor in Technical Communication
  - Pseudo-minors in Physics and Math
Experience

- Over 8 years working for Missouri S&T as web-content developer
- Oversaw numerous incarnations of IT web site
- Responsible for migration of hundreds of pages from one incarnation to the next
- Designed and implemented a knowledge-map based web site for mathematics (braintrax.mst.edu)
- Created thousands of web pages and hundreds of thousands of graphics for web
- Close to a million pieces of content for the web
Currently working for Educational Technology at Missouri S&T:

• Maintaining EdTech web site(s)
  – edtech.mst.edu: Main web site for EdTech
  – edtechconnect.mst.edu: Blog about Educational Technology concerns

• Working with instructors adding content to web

• Supporting use of Blackboard/Wimba/Other instructional technologies
The Joys of Technical Communication
Three Important Considerations

1. Audience
   – Who will be using your web site?

2. Purpose
   – What is the goal of the audience?
   – What is your goal for having people visit your site?

3. Organization
   – How will readers navigate your content?
AUDIENCE

• Try to find a shared outlook between you and your audience
  – Cultural, social, organizational requirements
• Focus on why the audience needs the information
• The information is for them, not you, so keep their convenience in mind
• Primary, secondary, even tertiary audiences should be considered
Purpose

• Address the “So what?” of audience – How is the information meaningful or relevant to the audience?
• Anticipate reader’s questions
• Most communication has both an explicit and implicit purpose
  – Explicit purpose: stated objective in the document/page/site
    • EX: “How to” web pages
  – Implicit purpose: underlying reason for the creation of the document
    • EX: Policy page created due to legal considerations (also could be helpful to audience)
Organization

Whitespace is your friend – use it well!
- Helps the reader find the important information
- Separates the information, keeping the message from being “lost”

Use headings to break up information into manageable “chunks”
- Shows relationship between content items on a page
- Heading and subheadings can be linked in online documents to provide another navigation tool
Organization

Lists can effectively convey related items

• Use ordered (numerical) lists when sequence is important
• Use unordered (bullet) lists when sequence unimportant

Use “tiers” to arrange documents in a web site

• **Top tier:** Home page
• **Second tier:** Navigation pages
• **Third tier:** Content pages
• **Fourth tier:** Contains supporting files for content pages (e.g. images, printable documents, etc.)
Challenges

- Web page Editors
- Images
- Other Types of Content
- Web 2.0
WEB PAGE EDITORS – MS WORD

**PROS**
- Save directly to HTML
- Supporting content packaged into convenient folder
- Ideal WYSIWYG editor
- Also has single-file HTML page option
- Very good for quick production of content

**CONS**
- Extremely bloated code
- Difficult to add interactive content
- Files are typically much larger due to code bloat
WEB PAGE EDITORS – MS POWERPOINT

PROS

• Save directly to HTML
• Supporting content packaged into convenient folder
• Also has single-file HTML page option
• Very good for quick production of content

CONS

• Inconsistencies across browsers (IE v. Firefox)
• Formatting changes in finished product
• Doesn’t preserve transitions or animations
Web Page Editors – Dreamweaver

**PROS**

- Easy to use
- Allows Remote and Local view of files at same time
- Supports interactive content
- See pages in Code and Design view
- Very “clean” code compared to MS Word

**CONS**

- Less-friendly formatting options than MS Word
- Advanced features can be difficult to use
WEB PAGE EDITORS – DOCUMENTUM

PROS
• Good for static web pages that won’t change often
• Create many documents in a short time frame
• Manage many different sites
• Impose a global style-sheet on a site

CONS
• Not good for dynamic pages
• Does not handle interactive content well
• Does not do “batch” importing of files
• Requires intensive programming to make global changes
• WYSIWYG editor is flawed
WEB PAGE EDITORS – TEXT-BASED EDITORS
(WordPad, NotePad, TextPad)

PROS
• Best control over code
• Insert any kind of code desired
  – Style sheets, JavaScript, Includes, etc.
• Offer the best flexibility for pages

CONS
• No WYSIWYG
• Requires A LOT of coding by hand
• Sometimes more difficult to detect errors
• Hard to read code
Three main types:

- GIF
  - Flat (8-bit) colors, lossless compression, support for transparency

- JPEG, JPG
  - Photorealistic (24-bit) colors, lossy compression

- PNG
  - Most colors available, lossless compression, support for transparency

Resizing images affects quality and file size.
Images: GIF

• Characteristics:
  – Good for images of “flat” color, i.e. few color transitions
  – Good for line art, logos, simple illustrations
  – Supports transparency in images

• Smaller file size due to limited number of colors (256)

• Lossless compression:
  – Every pixel is preserved during compression process
**Images: JPEG, JPG**

- **Characteristics:**
  - Good for photographs
  - Complex images requiring significant color depth, transitions
- **Many more colors available (several orders of magnitude)**
- **Lossy compression:**
  - JPG files throw out information when resized or saved in different ways
Images: PNG

- Characteristics:
  - Not universally supported (though gaining wide support)
  - Supports transparency

- Many more colors available (several orders of magnitude)

- Lossless compression:
  - Creates larger file sizes than JPG
  - Can create smaller file sizes than GIF
Images: Resizing

• Easier to go from larger to smaller
  – Use higher resolutions for photographs
  – Larger-to-smaller throws out information
    • Can’t add information that wasn’t there to begin with

• MS OFFICE NOTE:
  – Word, PowerPoint resize tool preserves information
  – Should use a third-party application to resize images and then import them back into Office
Other Types of Content

PDF (Portable Document Format)
• Ideal for sending documents via email
• Can be read using Adobe Acrobat Reader (free) or similar compatible PDF readers
• Can be created directly from Office 2007
• Supports form creation
• Can convert web pages to PDF (full Acrobat required)
**Other Types of Content**

Why use PDF?

- Platform independent (Mac, PC, Linux, etc)
- Browser independent
- Great for printed documents that need to be distributed online (manuals, product specifications, how-to-guides, and much, much more).
- Maximum portability
  - Small-medium file sizes, even for very long documents
  - Fit easily onto USB flash drives
Other Types of Content

Flash Video

• High-quality video content streamed through web browser
• Viewable on most operating systems
• Requires a media plug-in for web browser
  – Available for free on the Internet
**Other Types of Content**

Why use Flash video?

- When created using screen-capturing software, can deliver an animated “how-to” guide (e.g. Camtasia)
- Flash player is easy to install, takes up very little space, initializes quickly
- Flash movies can be streamed over the Internet from a dedicated server, making them play quickly
Web 2.0

Encapsulates the idea of the proliferation of interconnectivity and interactivity of web-delivered content

- Blogs
- Wikis
- Podcasts
Web 2.0: Blogs

• Easy to create, often free
  – Blogger.com; WordPress.com; LiveJournal.com

• Express yourself
  – Also invite commenters to share their thoughts on a topic

• Can be topical (e.g. politics) or general interest

• Usually have a WYSIWYG interface to make it easy to create posts
Web 2.0: Blogs

What’s the catch?

• Need to have something to say.
• Can be difficult to use for complex linked articles
• Different ways of handling images
• Owner of the blog engine can make site-wide changes and affect your blog against your will (or knowledge)
Web 2.0: Wikis

Create collaborative content online using a wiki-space.

- Anyone can author the page
  - The owner of a wiki-space can create privileges for users
  - Community tends to police the content
- Can lead to greater breadth and depth on a given topic
- Topic-driven wikis created by dedicated group of users
- Simple interface suitable for novice users
Web 2.0: Wikis

Why use a wiki?

• Class projects on a specific topic
  – Igneous and Metamorphic Petrology

• Internal policies and procedures that may change frequently
  – IT Relationship & Asset Management

• Consolidate resources on a single topic into one web page
  – Wikipedia
Web 2.0: Wikis

What’s the catch?

• Controversial topics can lead to flame-wars in the wiki-space (e.g. politics)
• Requires some oversight to ensure content quality
• Should NEVER be used as authoritative source
  – However, can lead to productive research through use of external links
Web 2.0: Podcasting

Downloadable audio files created by individuals.

- Can be music, conversation, even video files
- Created using off-the-shelf recording software and a computer.
- Available “on demand” through RSS feeds and through web sites such as iTunes
- Can be played on a variety of devices
Web 2.0: Podcasting

Why should I podcast?

- Offer audio content for people “on the go”
- Capture a lecture for later review by students or as an alternative for distance students
- Link a podcast to other web 2.0 technologies (e.g. a blog) for an integrated experience
Web 2.0: Podcasting

What’s the catch?

• Requires time and energy to produce a podcast

• Depending on desired quality, can cost money for equipment
  – A standard computer microphone is sufficient, but has lower sound quality

• Downloading files requires time and disk space
Tools of the Trade
TOOLS OF THE TRADE

• Computer
  – At least 2 GB RAM
  – Good video card
  – Large monitor (20” or bigger)
  – Large hard drive (150 GB or more)

• Multiple web browsers
  – Mozilla Firefox, Internet Explorer, Apple Safari

• Image-editing software
  – Photoshop, Fireworks, Paint Shop Pro, Illustrator

• Adobe Acrobat for creating PDFs
  – Can use Office 2007, but full Acrobat has more options

• Office 2007
QUESTIONS

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