

#### 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



#### **EXPERIENCE**

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

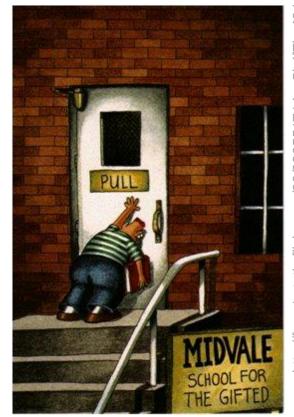
#### Use "tiers" to arrange documents in a web site

- 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



Source: http://farm1.static.flickr.com/83/229551714\_a5b4f7bc43.jpg



#### 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

- 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

- 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

- 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 stylesheet on a site

- 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 CONS

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

- No WYSIWYG
- Requires A LOT of coding by hand
- Sometimes more difficult to detect errors
- Hard to read code



#### **IMAGES**

- 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



#### 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)



#### 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



#### 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



#### 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 wikispace.

- 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 flamewars 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**

- 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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