What You Need to Know about Images

Tom Kelliher, CS 102 Oct. 24, 2005

1 Administrivia

Announcements

Web search assignment due Wednesday.

Assignment

No reading.

Final two assignments: paper, personal Web site.

From Last Time

FrontPage Lab I.

Outline

- 1. Basic definitions.
- 2. Basic concepts.
- 3. If time, finish Frontpage Lab I. Otherwise, finish on your own.

Coming Up

FrontPage Lab II.

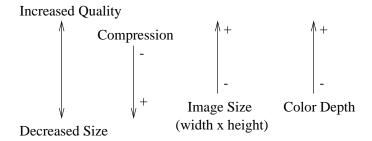
2 Basic Definitions

- 1. TWAIN: Scanner communication protocol.
- 2. Pixel: PIcture ELement.
- 3. JPEG: Joint Photograph Experts Group.
- 4. GIF: Graphics Interchange Format.
- 5. Transparency: As in transparent GIFs.
- 6. Cropping: Removing extraneous background material.
- 7. WYSIWYG: What You See Is What You Get.
- 8. Image dimensions: width, height, depth.

These determine image size and, therefore, download time.

3 Basic Concepts

1. Image quality vs. image size:



(Demo with a couple of images.)

2. The effect of scanning resolution.

No quality problem when re-sizing smaller. "Blockiness" when re-sizing larger.

Demo with an image.

- 3. GIF vs. JPEG
 - (a) GIF palette size: 256 colors.
 - (b) JPEG palette size: unlimited.
 - (c) GIF is better for line art; JPEG for photos.
- 4. Paint Shop Pro demonstrations of:
 - (a) Changing color depth.
 - (b) Varying JPEG compression ratio.
 - (c) Changing image size.
 - (d) Image cropping.
- 5. Discuss: From our discussion of evaluating web pages, what key items should Web pages you design contain to assure others of the usefulness of your Web pages? Do any of these represent security risks? If so, how would you reconcile the need to have the information on your Web pages vs. your security needs?
- 6. Discuss: List three design principles for producing effective, visually appealing Web pages. Briefly explain the importance behind your design principles.

(In book: quality content, reader convenience, artistic composition.)

- 7. Discuss: Describe a situation in which we would prefer to use FrontPage's HTML editor rather than its WYSIWYG editor.
- 8. Discuss: What must must you do with your Web pages before others can view them?