Announcements

- Make sure that your scores in grades.cs.umd.edu are correct (We will not address any errors after Wed May 9)
- Reference:
  “Web Designer’s Guide to Adobe Photoshop”
  Author: Chris Tull
- Reference
  - http://www.howstuffworks.com/
- GNU Image Manipulation Program (GIMP)
  - http://www.gimp.org/
Electronic-commerce

- What is electronic-commerce (e-commerce)?
  - The buying and selling of goods and services on the Internet, in particular the Web
  - Typically involves a shopping cart system and a payment processing system.
- Sales Estimates
  - e-commerce sales (fourth quarter of 2006) $29.3 billion
- According to eMarketer, biggest product categories are:
  - Computer products, books, music, financial services, home electronics, apparel, gifs and flowers, travel services, others.
Electronic-commerce

- Advantages of e-commerce
  - Transaction processing costs are lower
  - Provide more information to customer than previously available
    - Where is your package?
  - Larger catalogs
    - Can you image sending over mail Amazon’s catalog?

- Difficulties with e-commerce
  - Getting people to come and return to a site
  - Getting people to buy

- Success stories
  - Amazon.com
    - [http://money.howstuffworks.com/amazon.htm](http://money.howstuffworks.com/amazon.htm)
  - Dell.com
Electronic-commerce

- Affiliate Programs (Associate Programs)
  - Pioneered by Amazon
  - Amazon allows a person to set up a specialty book store
  - When someone buys from the specialty store the owner receives a commission
- CPC Link (CPC=Cost Per Click)
  - If you put a link to a company on your site the company pays you when someone clicks on the link.
Electronic-commerce

- Recommendations for Setting an e-commerce site
  - Might want to look for a web hosting company supporting e-commerce
    - The company should provide support for credit card payments
    - Reasonable disk capacity that can change easily
    - Good network connection to the internet’s backbone
    - Security support for transactions
    - Reasonable support software
Images

- Two types of Images: Bitmap and Vector

Bitmap Images
- Pixels in a grid
- File Formats for Bitmap Images
  - JPEG (Joint Photographic Experts Group)
  - GIF (Graphics Interchange Format)
  - PNG (Portable Network Graphics)
- GIF
  - Appropriate for images with large flat areas and single colors (e.g., diagrams)
  - Provides support for transparency
- JPEG
  - Photographs
Images

- **Vector Images (Raster Images)**
  - Each component object defined by mathematical statements
  - Resolution independent
  - Appropriate for logos and graphics without photographic elements
- **Common Formats**
  - CDR (CorelDRAW)
  - SWF (Shockwave Flash)

- **Rasterizing**
  - Conversion of a vector image to a bitmap

- **Resolution of images for the web**
  - Use images between 72 and 96 ppi (pixels per inch)
Photoshop

- Main elements
  - Menu Bar
  - Palettes
    - One of them is the Layer’s palette
  - Toolbox
    - Small arrow in lower right corner provides more options
- To reset workspace (Window → Workspace)
- For web design change units of measurements to pixels
  - Edit → Preferences → Units&Rulers
    - Change Rulers and Type to pixels
Photoshop

- Let’s create an image by
  - File ➔ New
- Let’s create a layer
  - Layer? – Like old plastic transparencies
  - You should create your designs using layers
- Adding Text
  - Select Horizontal Type Tool (T in toolbox)
  - Window ➔ Character
  - To move text click on Move Tool (Top Right), select layer
- To add custom shape
  - Select custom shape from toolbox (under rectangle if not visible)
  - CTRL-T to transform
Layers

- Each layer can be seen as an image by itself
- A combination of layers forms your final image
- A layer can have
  - Text
  - Logo
  - Other elements
- Opening of Layers Palette via Window → Layers
- Any time you create or paste something into an image Photoshop creates an image
- You need at least one layer in Photoshop
- You can lock a layer to avoid any modification
- To unlock the background layer double-click and provide a name
- Layer styles are visual effects you can add to a layer
- Layer styles are accessible in the layer palette (under f )
- Let’s see some of the style options
Marquee Tools

Creating a ellipse/rectangle
- Select elliptical marquee
- Dragging creates elliptical or rectangular area
- Dragging and holding down shift key → creates perfect square or circle
- Dragging and holding down alt key → creates an elliptical or rectangular area center at the point your first click
- You can combine shift/alt
- CTRL-D to deselect element or Select→Deselect

Adding color
- Select Foreground Color Square on toolbox
- Select Paint Bucket Tool
Accessing Preset Styles

- Select a layer and the layer style (f)
- Select “Style” at the top (rather than “Blending Options”)
- Now you will see style (small right arrow will provide additional styles)
Extracting Part of an Image

- Bring in some images (UMD images .jpg)
- Create image with dimensions 700x400
- Make sure the background is transparent
  - You will see the checkerboard pattern representing a transparent background
- You can select a portion of the image using Marquee Tools, the “New Selection” button (leftmost button on the options bar), move option, and dragging selected area
- You can select an irregular area by using the lasso tools.
  - Magnetic lasso tool recommended
  - A complete selection is made once you work your way around
  - Use ESC to remove selections
Cropping

- Select the crop tool (third icon on leftmost column)
- Select area of an image you want to keep
- Press enter
Pen Tool

- Extremely useful
- Let’s take a look at the options bar
- Let’s use the path option in one example
  - Click outside of image area
  - Click on image area and adjust curvature
  - Once you have desired curvature hold ALT key and click on the darken anchor
  - Repeat to complete the path