



# Intelligent (Web) Design

# THE STATE OF AFFAIRS

Graphic design on the corporate web is largely bland, passionless, and unengaging.

**Why is this?**

- It is the constant mantra of today's usability expert that a site requires more than front-end style to succeed.
- The usability experts got together and basically dismissed large elements of creative web design completely.
- They declared rigorous site-building 'laws' rather than the mere 'guidelines' they claim to offer.

- Corporations became very wary of bad usability.
- The bad mentality that the web is only big enough for a few types of sites has been persistent. After all, why reinvent the wheel?
- To dismiss front-end design as mere 'icing' is to jeopardize the success of any site.

# The Solution: Personal Passion

- In order to move beyond a conservative, copycat style, you must look beyond the inbred corporate web to the personal sites of today's leading web designers.
- Visitors should be able to 'feel' your sites. The web is not a database. It is a **communications medium.**

- The purposes of this talk are to:
  - Discuss the design process that will help you to design a valuable website/interface/service.
  - Outline do's and don'ts.
  - Discuss graphic design concepts that will help improve the aesthetics of your projects.
  - Point you in the right direction for further help.
  - Help you to ***think critically about websites and interactive services.***

# Web Design

## Coming Up:

- The design process
- Intelligent design
- Important considerations
- Beware Flash
- Do's and don'ts

# The Design Process

## ■ Stages:

- Develop the concept. It's here at the beginning of the project that you have to answer some critical questions.
- Design phase: choosing technologies that make sense for the project, gathering content.
- Production. Combine content effectively into a comprehensive interface
- Testing & Redesign ...

# Time Considerations

- Everything about designing and producing an interactive project takes time:
  - time to learn what works on the web
  - time to learn the tools of site production
  - time to produce the finished product
- Achieving a good design is **HARD!** It doesn't come naturally to most, and you won't get it first time.

# Identify Purpose

- Target the problem you want the website/interactive service to solve.
- Be problem specific. The better you are at defining the desired target, the better you'll be at developing a solution that works, and recognizing when it doesn't work.
- Choose the right delivery method. Why the Web?

# Identify Audience

- You need to determine the audience you are targeting so that you can make your design solution as relevant and aesthetically compelling to your particular viewers as possible.
- You'll also need some practical information about the equipment your audience uses to connect to the Web.

# Shaping the Solution

- If your client needs to improve brand awareness, then your strategy will be to ensure that visitors leave the site with the knowledge that your client's brand is equal to or better than the competition.
- For a nonprofit organization, or even for the customer support division of a for-profit business, the environment you design will be different still – one that ensures that the information and resources that your visitors seek are easily available.
- ***Always design with a goal in mind. Don't get carried away in aesthetic fluff, and ornamental irrelevance.***

# Shaping and Reshaping

- You can't just design a site, hand it over to your clients, and walk away.
- Built into your site should be a way of assessing whether you are attracting the audience you want to reach, and whether they are getting your message.
- Be flexible from the start.
- Make simple prototypes. Run your creations by your group members/peers.

# The Other Kind of Content

- The client's message isn't the only content that's important to the website. Web visitors are not a captive audience. **You must grab their attention!**
- In exchange for the time they spend at your site or using your service, visitors want information they can apply, tools they can use, beauty they can enjoy, games they can play, freebies they can download, or links to other interesting sites they can visit.

# Technology Is Not Content

- It can be tempting to show off your up-to-the-minute technological prowess by embellishing a service with 'bells and whistles'.
- Too many bells and whistles can make a site's content harder to get to.
- **Nothing you build into the experience should dilute or detract from your project goals.**

# What Technology Can Do

- Motion, sound, interactivity, and the standard well-designed static graphics, can help engage visitors in your site, and can also help them remember it.
- Technology, when used intelligently, can reinforce your message, or present information in new and interesting ways.

# Matching the Technology to the Audience

- High-tech audience → high-tech website with all the latest gadgets and plugins.
- General audience → tried and tested technologies. Using the latest technology could isolate your site from visitors who aren't well equipped to experience it.

# Other Technological Considerations

- User computer connection and processor speeds.
- Screen size.
- Browser version.
- HTML tag issues.

# Beware Flash

- Macromedia Flash is a wonderful graphical tool for enhancing your project when used properly.
- Unfortunately, Flash is one of the most abused technologies out there (see examples later).

As one of my favorite web design authors succinctly put it:

*“What happened was that Flash came along, and all these punk teen designers abandoned user-friendly interfaces to run amuck in a swamp of whirling polygonal irrelevance.” – Curt Cloninger*

# Metaphor

- Establish a unified metaphor for your project site/service.
- Once the concept has been developed, it's time to design the front-end that you'll use to deliver the site's content to its visitors.
- If your site design uses a metaphor, it will provide a sort of physical reality for the mental space that visitors inhabit while they are there.
- Consider not only how well the metaphor will work to carry your message and appeal to your audience, but also whether the metaphor is one you'll be able to use consistently throughout the site.

# Personality

- Your service will need its own unique identity and personality for it to stand out.
- Will the delivery of your information be funny, techy, hip, grungy, or formal?
- Whatever you choose, **be consistent.**

# Style

- One of the most important contributors to the flavor of your design is its style – its layout, graphics, typefaces, colors, and so on.
- The layout of the site needs to be flexible enough to support changing content and different media types.
- Make use of dimensionality – the human world isn't flat.
- Try to match your metaphor with your style.

# Site Organization

- Most people approach a website with two questions in mind: “What’s here for me? And how do I get to it?”
- When you organize the information in a Web site, you’ll feel the tension between wanting to make lots of options available on the surface so visitors don’t have to do a lot of digging, and wanting to give visitors a head start on sorting out what’s important.
- In general there should be no more than 6 to 10 main options available on-screen at one time.

# Guide The User

- Create a 'path of least resistance' for the user. No one knows better than the designer the best way to experience the site.
- Make this golden path obvious to users without forcing them into a linear presentation.
- Create a storyboard. **Ask yourself whether the content or organization can be simplified, made more intuitive or powerful.**

# Gathering Assets

- The next step in the process of developing the project is to determine where you will get the all content, or *assets* (all the text, visual, and audio elements).
- As you gather some materials and plan to create or buy others, it will be important to set standard for the way the assets will look and sound, and how everything will be approved, processed, delivered, and backed up.
- To end up with a cohesive Web site, it's important to **establish clear standards for content**, and make sure everyone understands and follows them.
- **Make asset-gathering a group activity.**

# Keeping the Goal in Mind

- As your project is assembled, remember to stay focused on communicating what the visitor needs to take away from the site and on making the visit as positive an experience as possible.
- If you're in doubt how far to push the technology and your capabilities with it, keep in mind that simplicity is often best.



# **The Creative Process & Graphics Design Techniques**

# Laying a Foundation

- Once an overall metaphor or style has been determined for a particular project, the background becomes the visual foundation for all of the other graphics.
- Whether the interactive experience is going to be friendly, high-tech, or surreal is determined in large part by the background graphics.
- There are almost no limits to the imagery, style, and techniques that can be used to create a background.
- Tiled patterns or simplified graphics with large areas of flat color take advantage of lossless compression technologies using run-length-encoding in the file formats such as GIF and PNG.

# Don't Underestimate Text

- Text and its wide range of typefaces can be a very powerful tool in establishing a 'look' for your site.
- Don't automatically assume that you have to have lots of images.
- Text can be made quite versatile. Use graphics programs to incorporate special typefaces, text orientations, dimensional effects, and coloring.
- Use keywords that help deliver your message. The user will naturally be drawn to them.
- If you can combine an intelligent use of text graphics with contrast and color, you'll be well on your way to an attractive solution.

# Content Purpose

- For every graphic or special visual page element you incorporate into your design (e.g. icons, logos, flash elements) ask yourself: **“What message does this element convey?”** **“What is it’s purpose on the page?”**
- If you find yourself dropping in lots of random clipart, unlabelled or non-functional graphics, stop and slap yourself.
- Everything you incorporate into your pages should send a message, and promote consistency with the rest of the design.
- Avoid ornamental embellishments that add no value to your site and just slow the experience for the user as they wait to download it.

# Asset Sources

- One of the biggest challenges in creating a large interactive project is how to create all of the stunning visuals you need to communicate ideas.
- Creative combinations of stock photos and digital clip art can be invaluable.
- Develop your graphics by adapting images you find online.
- If you are up to it, create all your own graphics using Photoshop, Fireworks and other tools like digital cameras.

# Graphics Techniques

- If you are creating your own graphics, consider using the following techniques to enhance the visuals in your projects:
  - Shadowing
  - Beveling, & Embossing
  - Color gradients, Lighting Effects
  - Filtering
  - Motion trails
  - Blurring
  - Stroke effects
  - Rollovers

# Other Graphics Ideas

- Fit text to paths.
- Use text as a mask on other images.
- Punch out shapes from other graphics.
- Use texturing on lines.
- Group similar elements.
- Use vibrant colors & contrasts.
- Combine B&W elements with bright solid color for a stunning effect.
- Combine text with images.

# Other Design Reminders

# The Navigational Interface

- The navigational interface should fit the metaphor you decided upon.
- The navigational interface should be almost transparent, and should not obstruct the information the user is trying to reach.
- The interface should always indicate the current location of the user, and should provide methods of retracing their steps.
- The interface links should be descriptive if they have a text component, and any icons used should reflect the destination page content.

# The Role of The Homepage

- Establishes the purpose and message of the site.
- Reveals the main navigational categories.
- Sets the tone and style for the rest of the site.
- Initiates the metaphor.
- NOTE: avoid unnecessary splash pages – they often add absolutely nothing to the site.

- Communicate with **clarity**. If you are ambiguous you will lose your audience.
- Use a **common syntax** and **clear imagery** and symbols that your audience will be familiar with.
- Maintain design and content **consistency**.
- Take advantage of **contrast**.
- Strive to make your design **uncluttered**.
- Remember the Web is a **dynamic communication** medium with many possibilities for information representation.
- Use the visitor's **senses** to draw them in.

# Other Project Tips

- Schedule weekly 2-hour group meetings to discuss the project progress, design, pending tasks, project roles, technical issues. Come with questions and ideas for your peers.
- Use prototyping to evaluate multiple possible designs, and get feedback from the whole team.
- If you are coding parts of your project, use Concurrent Versioning System (CVS) to solve version issues within your development team, and to streamline backups and module checkouts.

# Extra Help

- See the course website for references & books.
- See either Prof. Barrett or myself for project design advice.
- Visit IS for help with setting up servers on mit.edu



Thinking Critically About Websites &  
Interactive Services  
(class discussion of sites)