The Elements of Interactive Interface Design

Web Development & Interactive Media
Instructor: Tony McEachern, Assistant Professor

What is an *Interactivity?*

Interactivity is the relationship between media users and the medium that allows each individual user to influence and react to the media source.

The following are some examples ways users can interact with online media:

- **Text Links,**
- **Graphic Buttons,**
- **Email,**
- **Online Forms**
- **Web Logs (Blogs)**
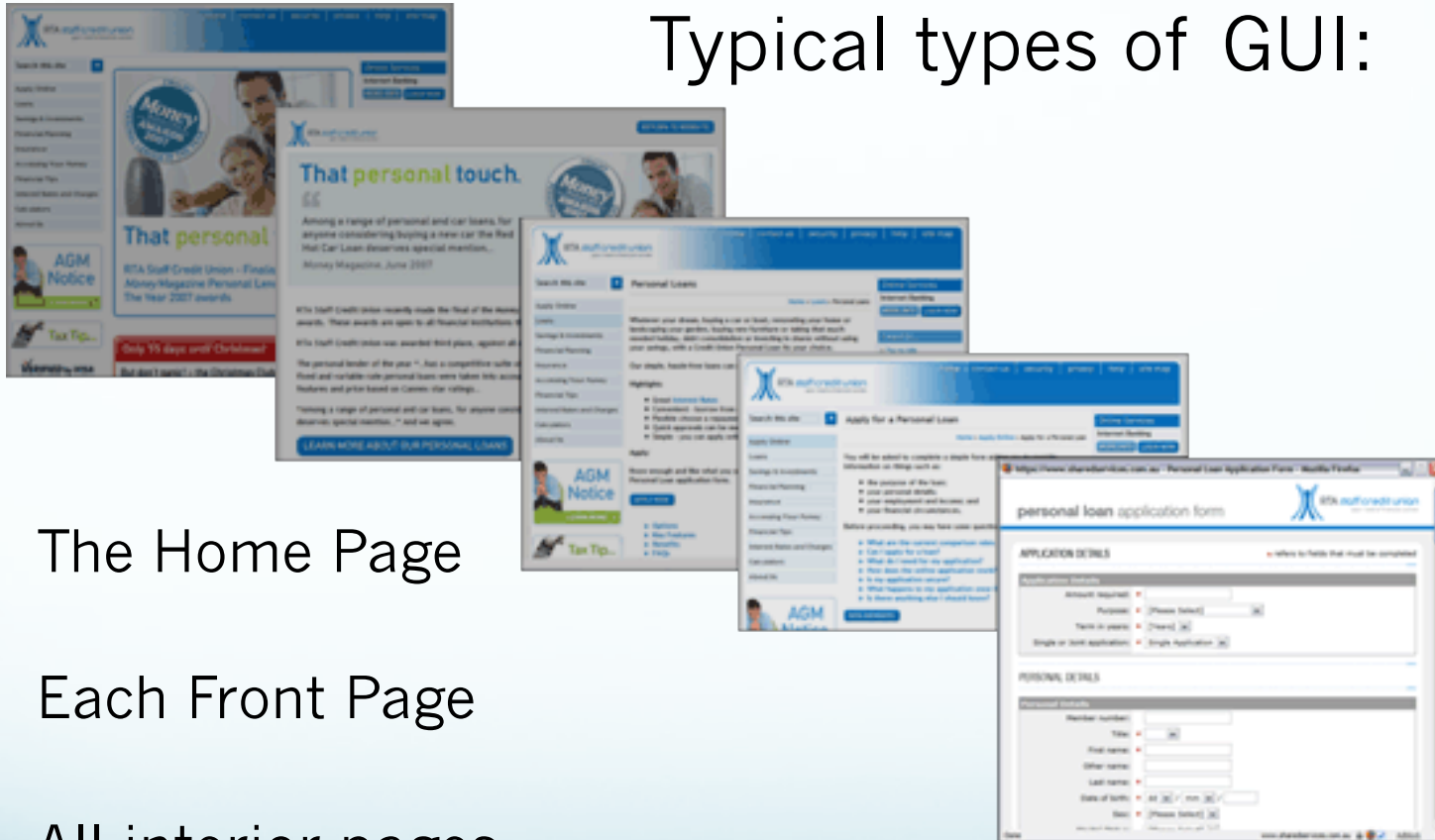
What is an *Interface*?

A *graphical user interface* (GUI or Goo–ee) is the 1st point of contact with the website by the site visitor.

GUI uses icons and symbols to establish visual representation with user interactivity. Images are used to instead of simple text to communicate functions to the site user.
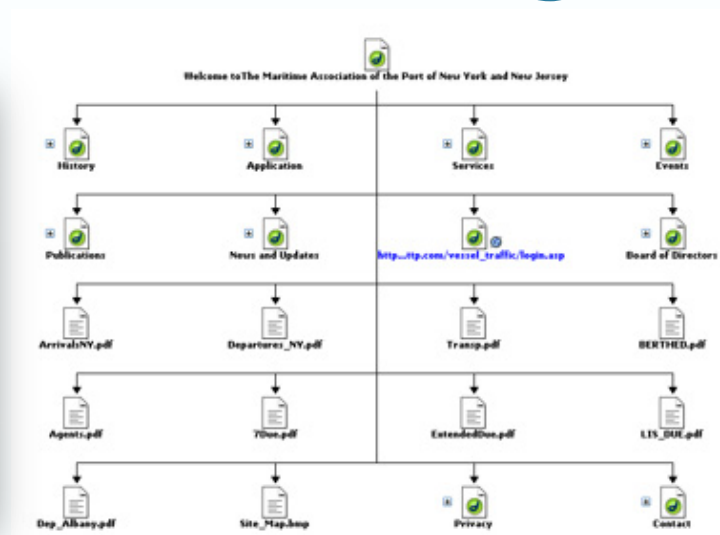
What is an *Interface*?

Typical types of GUI:

- The Home Page

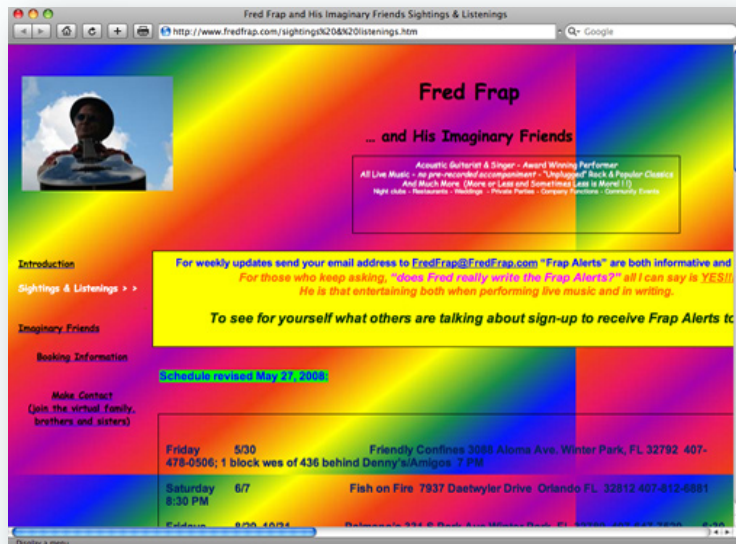- Each Front Page

- All interior pages

What is Navigation?

Term *navigation* refers the act of moving from location to location within a web site, or between web sites.

Navigation is accomplished by clicking on text links or navigation buttons.

Navigation: The Path of Least Resistance

Whether accomplished through *text links* or *graphic buttons*, *Navigation* must be intuitive to the user.

CAUTION: An over-fancifully designed interface can make it difficult for users to find their desired information on your website. Be sure to use clear and consistent navigational elements.

The 3 Degrees of *Navigation?*

There are 3 main types or degrees of navigation within a website:

- **Global** – allows the site visitor to move between the main sections of a particular site. *Global Navigation* should be present on every page of the site.

- **Parallel** – allows the visitor to move in a *parallel manner* between the *subsections* of a particular site section. *Parallel Navigation* should be present on every page of the subsection of the site.

- **Local** – is use to find information within a single. It may be represented as a list or table of contents at the top or side of a page with links to content sections of that same page.

The 3 Degrees of *Navigation?*

There are 3 main types or degrees of navigation within a website:

- **Parallel**

- **Global**

- **Local**

Standard Structure for Promotional Websites

The standard structure for a promotional website is as follows:

- ❑ **Splash page**
- ❑ **Home page**
- ❑ **About us page**
- ❑ **Services page**
- ❑ **Experience page**
- ❑ **Product/Work Samples page**
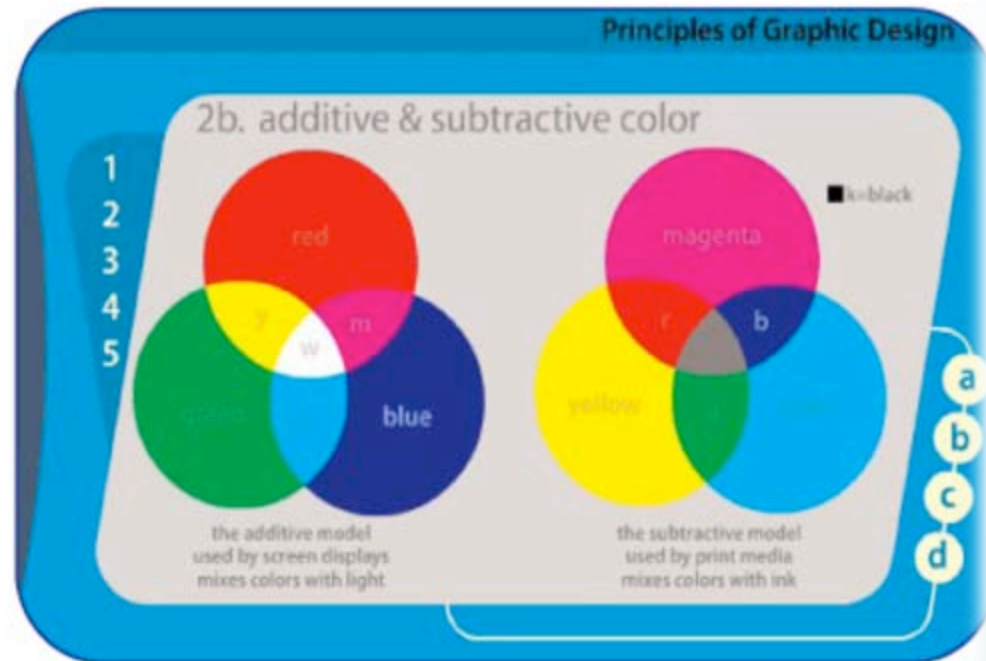- ❑ **Contact page**

Color Modes

There are several established color modes used in computer graphics, but the two most common are the RGB model (Red-Green-Blue) for computer display and the **CMYK model (Cyan-Magenta-Yellow-blacK) for printing.**

RGB Color Mode

Additive color model
For computer displays
Uses light to display color
Colors result from transmitted light
Red+Green+Blue=White

CMYK Color Mode

Subtractive color model
For printed material
Uses ink to display color
Colors result from reflected light
Cyan+Magenta+Yellow=Black

Principles of Graphic Design

2b. additive & subtractive color

1
2
3
4
5

red

magenta

■=black

w

m

blue

r

b

green

yellow

the additive model
used by screen displays
mixes colors with light

the subtractive model
used by print media
mixes colors with ink

a

b

c

d

Hexadecimal Color

The *hexadecimal system* is a six-digit, alpha-numerical RGB color system. It consists of a combination of the six (hex) alpha-characters from A-F and the ten (deca) numerical-digits from 0-9. This various combinations of these characters and digits create the 256 *Web Safe* colors.

Graphic File Formats

There are 4 main types of graphic image file formats to know when designing a website:

- **JPEG** – Joint Photographic Experts Group.

- **GIF** – Graphics Interchange Format.

- **PNG** – Portable Network Graphics.

- **SWF** – Shockwave Flash File (Scalable Vector Graphic)

Graphic File Formats

JPEG

Joint Photographic Experts Group
Used for photographic (continuous tone) images. Unlike GIF files the JPEG format can take advantage of the full spectrum of colors available to your monitor. The JPEG format also uses compression for smaller files and faster downloads.

NOTE!!! unlike the compression method used in GIF files, the JPEG compression is "lossy" which means it discards data in the process.

Once a file is saved in JPEG format the data is permanently lost.

Graphic File Formats

GIF

Graphics Interchange Format - Images using a fixed color palette (limited to only 256 colors - not the full spectrum of colors available to your monitor). This format uses compression for smaller files and faster downloads. This format is best for images with solid colors or areas of uniform color such as illustrations and logos.

Graphic File Formats

PNG

Portable Network Graphics

PNG is a raster (bitmapped) graphical format that uses lossless data compression. This is the native file format for Adobe Fireworks and was designed to replace the GIF because of its versatility. It supports grayscale and web safe colors but does not support CMYK. PNG also supports transparent backgrounds, unlike JPEGs.

Graphic File Formats

SWF

Shockwave Flash File

SWF is a scalable vector-based graphical format that is resolution independent.

This is the native file format for Adobe Flash and was designed to make web animation most efficient. SWF supports raster (bitmapped), vector, audio and video-based content.
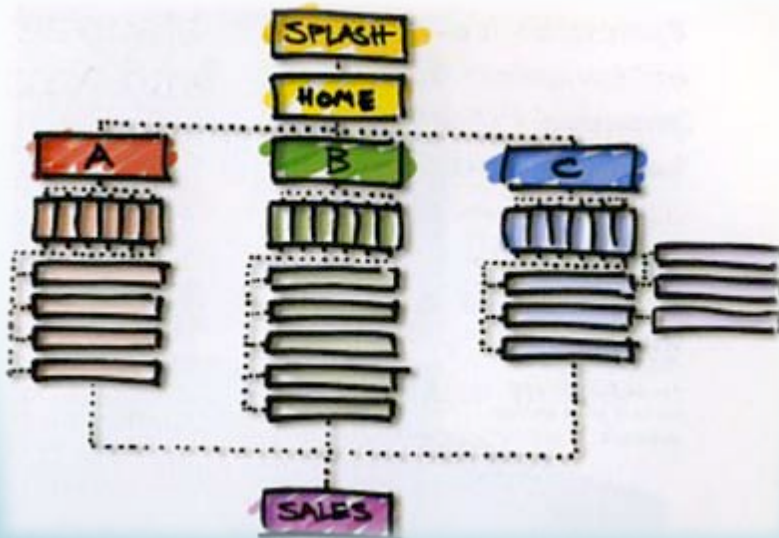
Compression: Lossy vs. Lossless

When compressing files for the web, color information is what's altered:

- **Lossy** – reduces the file by permanently eliminating certain color information. JPEGs are lossy.

- **Lossless**– reduces the file by converting the colors to 256 or less. When the file is uncompressed all the original data can be recovered. GIFs and PNGs are lossless.
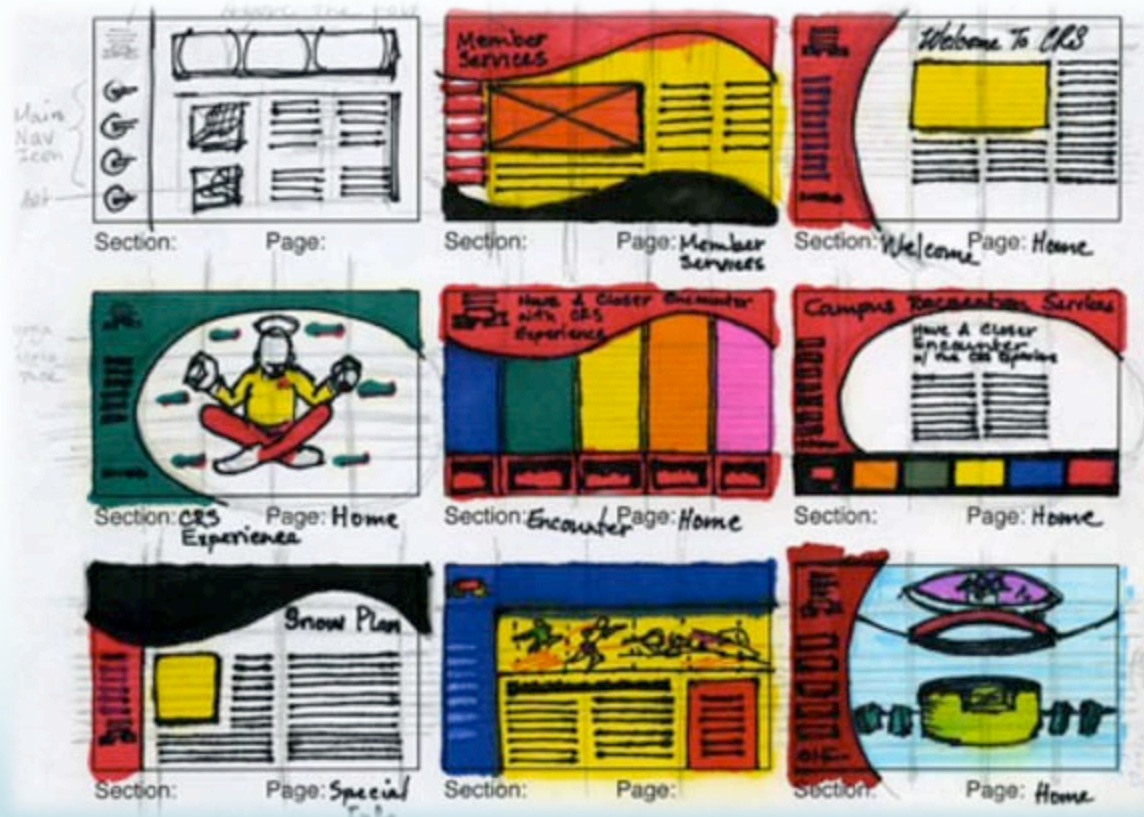
Storyboarding: Mocking-up & Prototyping

Storyboarding is a technique used by visual communicators to convey the main sections and interactivity of a website.

Mocking up and organizing potential components of an interface helps confirm that you have all the information and navigation tools you need to represent the desired content in as transparent a manner as possible. It's not the *medium* that's important—it's the *message*.

Storyboarding:
Mocking-up & Prototyping

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Assignment No. 3

Planning the Website (Due Monday Oct. 31):

1. **Concept Development:** Develop a concept in the form of a theme or metaphor that describes you, your product, or the service you intend on rendering. Describe your concept in treatment format (1-3 paragraphs).

2. **Site Functionality & Page Relationship:** Create a site map & flow chart that lists the main sections and relationships between the pages of your site (clean & computer generated).