

# Designing and Planning Web Pages

## Designing & Planning WebPages – Part 1

### Designing and Planning Web Pages

#### Introduction:

- It is tempting in a web design course to start creating and developing web pages right away.
- The main purpose of any website is to deliver specific information or services in an organized and user friendly manner.
- The success of the website is measured in terms of the number of visitors to the site and the ease with which the visitors find the required information.
- An effective and efficient website is highly influenced by how well interface is designed and managed.

#### What is a web site?

A Website is a collection of documents written in the HTML code for an individual, a business house or any other organization. It is typically dedicated to some particular topic or purpose.

- Based on their functionality, there are two types of website
- Static Website
- Dynamic Website
- In static website contents are not expected to change frequently whereas in dynamic website contents are changing frequently.

#### COMPONENTS OF A WEBSITE:

- **Home Page and site-wide template design** to ensure an attractive, functional and consistent appearance of your website.
- **Integrated site navigation** to provide clear and consistent access to your site's content.
- **Look and feel** of your website, including colors, text and graphics, as well as the way it functions.
- **A Logo:** to be displayed in the left corner of each page of your website.
- **A site map** to provide a list of all pages on your site.
- **Website Search features** allowing user to search the website for content relevant to their specific interests.
- **About page** that includes:
  - A complete description of you and / or your company
  - Your website and / or company objectives
  - Your name, address, phone numbers and e-mail addresses
- **Feedback:** that facilitates the customers to ask some queries about your Products and Services.

- **A domain name:** Your 'address' on the internet, what people type into their browser to find you. You choose a word or phrase (Example:- mywebsite) and an extension (Example:- .com, .net, .edu), your domain name could be mywebsite.com
- **Web Hosting:** The physical place your website resides; includes the computer (called a server) as well as the connection to the Internet and the technology that makes your website work.
- **Copyright:** Displaying your copyright information at the bottom of each page. Your copyright might look like this: **Copyright @ Year CompanyName**

### **WEBSITE PLANNING:**

The basic steps that help in planning a website are:

- Define your target audience:
  - You can tailor almost every aspect of your web site to your target audience - from the way you organize information to the kinds of fonts and images you use.
- Organize your concepts and materials:
  - You should be clear about the aim of creating your site, whether the aim of the site is:
    - to inform
    - to promote a product
    - to educate audience
    - to entertain the audience
- Create a directory structure (also called site map)
  - if the site is going to be very large and complex, then you will need to organize files into separate directories and sub-directories.
  - Developing a logical directory structure is an essential part of planning your web site.
- Design and refine the look and feel of the site
  - Some of the factors you can take into consideration to improve the look and feel of the web site are:
    - **Space and Balance:** Every thing should look proportionate and proper.
    - **Color:** The colors should look pleasant to the eyes.
    - **Font type and size:** Type face of the text and size of the text in the Web pages should be comfortable to read and make the matter easy to understand.
    - **Textures:** Background graphics or textures can be annoying while reading text. So be very careful and selective.
    - **Special Effects:** Multimedia can be added to your site to make your site appealing. More animation, graphics, sound may cause delay while accessing through a browser.
    - **Consistency:** Using a single color scheme throughout is a good way to achieve consistency.

### **Designing & Planning Webpages – Part 2**

#### **WEB PAGE DESIGNING:**

Following are some principles about web page designing which will help you to design an effective web page.

- Present your web page in such a way that the user gets impressed within the first few seconds of visit.
- Keep on updating web pages on regular basis by providing fresh and latest information.
- Keep your web pages focused. Don't show everything on one page, use separate pages for separate topics.
- Make sure that the features used in the web site are compatible to all browsers.
- Ensure that buttons and links in the web site behave as expected.
- Use compressed images so that web page gets quickly loaded.

### **Five step process for effective website design**

#### **1. Analyse**

- Info / content
- Target Audience
- Top 10 Checklist

#### **2. Organise**

- Navigation
- Content
- Page layout
- Page design

#### **3. Develop**

- Web page layout
- Site layout
- Web page construction
- Graphics techniques

#### **4. Implement**

- User Interaction
- Final Checklist
- FTP
- Fine Tune

#### **5. Maintain**

- Marketing
- Optimisation
- Traffic analysis

Analyse

### **Why do I want to create this web site?**

- promote your ideas, hobbies, or beliefs
- To advertise your company or product
- Make loads of money really fast
- Provide customer services and support
- To keep your customer base informed
- Give or sell information
- Create an 'Extended Business Card' for your company
- Provide internal information and services for your company

### **Analyse: Web Site Content**

Before you can start deciding what content the site is going to contain you need to determine

- Who your target audience is.
- What age group are your users?
- What is their skill level with the Internet?
- How can I communicate effectively
- You also need to determine the purpose of your site. What is the site for?

Once you have determined these factors you can start to plan the content your site will have. Remember who your target will be when deciding on content:

### **Who is my target audience?**

What type of visitors do I want my site to attract? What will be their age, sex and education? Will they search for my site because we share a hobby, like the same television shows or are they looking for specific information?

### **How can I communicate effectively?**

Now that I know who the audience will be, what is the best way to communicate with them?

### **What information do I need?**

If you are designing a **site for a client**, you will need to know the answers to the preceding questions as well as what their vision is for this site. Do they have a logo they want you to use, do they have specific colors in mind, do they want to include phone and fax numbers on their pages? If this is your own business site, these are questions you should answer also.

### **What content (data, graphics, photos, etc.) will be included?**

This is the "big" job...gathering all the content that you want to include on your web site. Are you going to use photos? What kind of graphics do you want? And what information or data are you putting online?

Make a list of the items you think you will want to have on your website.

### **Audience analysis**

Audience analysis is the starting point for any project. You need to figure out your audience's demographics:

- how old they are
- where they work
- what they earn
- where they live, anything that's appropriate

### **Your content has to have a goal**

The key thing to remember about **audience analysis** is the goal: *to have a well-defined audience at the end of the process*. The only good audience definition is a specific target definition. The better you can pigeon-hole or niche your audience, the more likely your site will succeed.

### **A checklist for type of Content you may wish to include on your website**

- Frequently updated information
- Product and Company articles

- Question and answers
- Online purchasing of products
- Guest book that your guests to your site can sign and add their own comments
- Web site forum or chat room to generate conversation between your web site users
- Web site search → very useful for larger sites
- Weekly poll, to poll your visitors on a particular question
- Quizzes and sweep stakes, with prizes to promote your products
- Free offers
- News
- Unique information
- Location maps
- Contact and Booking forms

## **Designing & Planning Webpages – Part 1**

### **Organisation**

Next to Analyse, organisation is one of the key tools to website design. We've discussed who you feel your audience will be and what kind of information they will be looking for and what questions they will be asking. Now we need to help them find the information and the answers hopefully, by the shortest route possible.

There are three main elements in the organization of a web site. They are:

- 1 - **Structure:** The form of your web site and its navigation
- 2 - **Content:** The substance of your web site
- 3 - **Layout:** The theme or method of presenting your web site

### **Organisation - Structure**

Now we're going to look at the overall design of a web site and "how to structure a website".

This is different from the individual pages within the site (i.e. content).

Site design includes the structure of your site, the different sections and navigation within those sections. It also encompasses the theme you choose.

**As the diagram shows a web site is composed of three main areas:**

- The Home Page
- The Main Sections
- The Subsection

### **Organisation - Structure**

#### **HomePage Do's**

- Visitors first impressions
- Should tell the visitors what your site is about
- Answer questions on the 5 Ws
- Should provide index or table of contents
- Keep the home page short and to the point

#### **Homepage don'ts**

- Should not contain a lot of text
- Don't present your users with a huge list of links to every single page

### **Main Sections**

Determining and naming the main sections of your site is very important. Sections should contain material grouped according to visitor needs - in other words, these are sizeable chunks of related information. For example, if you are creating a site for a tourist visiting Dublin, you would want to make it easy for the visitor to find the right information.

### **The main sections might include:**

The main section is your site index on your homepage, it is the foundation to your navigation of the website.

Once you have divided your content into main sections, decide their order of importance

Travel Restaurants Pubs Accommodation

### **Subsections**

Not all main sections necessarily need to have subsections, but most will require a further breakdown of information. It really depends on the amount of content on your site. When designing a new web site, keep in mind that the content will increase as you

update and add information to the site. Build in room to expand as you determine your main and sub sections.

Once you have established the home page, main sections and subsections of the web site, organise them into order of importance and note it. This is the basic layout of your web site.

### **Organisation - Navigation**

Now we need to help them find the user find the information and the answers to their questions and we hope we can do this by the shortest route possible

There are three different navigation methods.

- **Linear navigation** - Moving in a straight line.
- **Database navigation** - Many branches from your main page.
- **Hierarchical navigation** - A completely connected website.

### **Surveying the Possibilities**

The purpose of Surveying the Possibilities is to begin considering what makes a high-quality website.

- Our goal is learn to develop high-quality websites, we first must spend some time developing an understanding of what "quality" means.
- This is important because if websites aren't developed with quality in mind, visitors might be unable to find the content or features they're looking for, or they may be unable to access or use these features.

- Users don't give websites many chances. If they don't like a site, they may leave quickly and never return. If they like a site, they'll return to it again and again, plus they'll tell others about it.
- In addition to understanding website quality, you must spend some time planning a website before you begin to develop its content. Just as there are pre-writing steps that ought to be done prior to writing an essay, there are pre-coding steps to do before you create a website.
- Planning ahead will reduce the number of mistakes you'll make while constructing the site. In the work world, this will save you time and money.

### **Why Evaluate Websites?**

- Anyone can publish on the Internet.
- Many facts and resources are not verified.
- Websites are often used to give one point of view.
- Many sites have no editors.
- Many sites are market orientated.
- Sites are a mix of entertainment, information, and advertising.

### **Evaluation Criteria**

- Accuracy
- Authority
- Objectivity
- Currency
- Coverage
- Presentation

#### **Accuracy**

- Is the author(s) listed?
- Is the information organized with well-developed ideas and themes?
- Is the information free of spelling and grammatical errors?
- Is the writing clear?
- Are all the facts correct and verified?
- Are sources listed?

#### **Authority**

- Who published the document, and it is separate from the “webmaster”?
- Does the site offer an “in-site” search engine?
- Are the publisher’s credentials listed?
- Are the author’s credentials appropriate?
- Site’s domain is a preferred source (e.g., .org; .edu; .gov;)

#### **Objectivity**

- Is there bias present?
- Is fact and opinion clearly stated?
- Is hateful, defamatory, and/or inflammatory language used?
- Is the purpose of the website clearly stated?

#### **Currency**

- How current is the information on the website?
- How often is the information updated?
- Are any embedded text links or hyperlinks up-to-date?

### **Coverage**

- Do the document's links, graphics, and/or multimedia features compliment the document's theme?
- Is any special software required to view any documents? If so, is there a "text-only" option?
- Do all site features function for all browsers?
- Does the site require the user to become a member to view any contents?

### **Presentation**

- Are the menus and navigation tools easily visible?
- Do the pages load quickly?
- Is the site's layout logical?
- Is there a site map?
- Does the site use "pop-up" ads and/or is the advertising unobtrusive?

### **Assignment**

- Examine your favourite website and determine
  - Its usefulness
  - Its reliability
- Complete the Website Evaluation Rubric with your overall conclusions

## **Designing & Planning Webpages – Part 4**

### **COLOR THEORY**

- Color Theory is a set of principles used to create harmonious color combinations. Color relationships can be visually represented with a color wheel — the color spectrum wrapped onto a circle:

#### **Colors on the Web**

- When many people first start building their Web pages, they create pages in colors that they like.
- It's very easy to set up a color scheme that clashes and is difficult for your readers to view for long periods or at all.
- Create visuals that are intended to be read
- Offering the viewer enough contrast between the background (paper or screen) and the text is important.

#### **Colors and Contrast**

- Text presentations ideally offer at least an 80% contrast between figure and ground. (Black text on a white background is ideal.)
- If there is not enough contrast between figure and ground, a viewer will squint to view the text, causing eye fatigue.

### **PRIMARY COLORS**

- In traditional color theory, Red, Yellow and Blue are the 3 colors that cannot



be formed by any combination of other colors.

- All other colors are derived from these 3 hues

### **SECONDARY COLORS**

- Green, orange and purple
- These are the colors formed by mixing the primary colors.

### **TERTIARY COLORS**

- Yellow-orange, red-orange, red-purple, blue-purple, blue-green and yellowgreen.
- These are the colors formed by mixing a primary and a secondary color. That's why the hue is a two word name, such as blue-green, red-violet, and yelloworange
- In design, you basically use two types of color schemes – **RGB** (red, green, blue) or **CMYK** (cyan, magenta, yellow, key/black).
- **Contrast** refers to the variance in illumination that makes an object distinct, and is measured in a scale of Contrast Ratio. Higher the contrast, more the distinction the object has (red text on a white background). Lower the contrast, lower the distinction the object has (medium blue text on a dark blue background).
- **CMYK** is the subtractive color model, meaning you need to take colors away to get to white; the more colors you add, the closer you get to black. CMYK works on a scale of 0 to 100. If C=100, M=100, Y=100, and K=100, you get black; if all four colors = 0, you get white.
- **RGB** displays are more suited for digital displays; the more color you add, the closer you get to white, and vice versa. In computer design, RGB is created with scales ranging from 0 to 255. So, black is made when R=0, G=0, and B=0; White when R=255, G=255, and B=255.

### **Color Schemes**

The way in which we perceive colors depends on the way in which they are used. There are different color schemes like:

- **Analogous:** This scheme is created by pairing one main color with the two colors right next to it on the color wheel.
- **Monochromatic:** It's basically one color, but you can use different tints and saturations for a neat, professional look.
- **Triadic:** Use this scheme to create a high contrasting scheme without changing tone. This is created by picking colors equally placed in lines around the color wheel.
- **Complementary:** This color scheme provides the highest contrast; choose this scheme to highlight important elements in your website design.
- **Split Complementary:** A slight variation of the complementary scheme, this scheme uses one dominant color and the two colors directly next to that color's complement.

### **Choosing the Best Color Combinations for your Website**

- Now we have some basic knowledge of how colors are created and represented on computers, and how people more or less view colors, we can use these bits of knowledge to create the best color combinations for websites.
- you can also use your aesthetic sense, and of course, not losing sight of the branding requirements, to see what colors go well together.
- There should be harmony among the colors you choose. Start out with a limited set of colors, and add to it only if and when necessary.
- Too many colors will overwhelm both you, and the viewer.
- There are also various tools available to help you pick the best colors for your website design, in case you still feel confused or lost. Some of the best are Adobe Color CC, Mudcube Colour Sphere, Color Hunter, and the Color App.

### **Web standards & Accessible Design**

- With all this diversity in the way people access the web, there's a very high probability that your website will look different to many of your visitors than it does to you.
- Despite these differences, the most important part of your website is its content, and all users should be able to access that. The only way to ensure that websites work across all devices and configurations is to develop in accordance with web standards.
- **Web standards** are the core set of rules for developing websites. It might be possible to develop sites that do not comply with standards, but doing so increases the likelihood that many people will be unable to access your site.
- The central organization who is responsible for creating and maintaining web standards is the [World Wide Web Consortium \(W3C\)](#). The W3C has defined dozens of standards, including the standard markup languages we use to build websites. The standard markup languages we'll be using in this course are:
  - **HTML** - Stands for *HyperText Markup Language*. HTML is the language that has historically been used to create documents on the web. It is plain text, but includes a variety of tags that define the structure of the document, and allow documents to include headings, paragraphs, images, links, lists, tables, and other features.
  - **CSS** - Stands for *Cascading Style Sheets*. CSS is a language that is used in conjunction with HTML to control how web pages are displayed. The difference between HTML and CSS is that HTML defines the structure and content of the document, and CSS controls the presentation.
  - **XML** - Stands for Extensible Markup Language. XML is a "meta language", a markup language that is

used to create other markup languages. Hundreds of XML languages are in use today, including GML (Geography Markup Language), MathML, MusicML, and RSS (Really Simple Syndication). Since each of these languages was written in XML, their content can easily be shared across applications.

- **XHTML** - XHTML is a rewrite of HTML as an XML language. XHTML is very similar to HTML, but has stricter rules. HTML was relaxed about things such as case sensitivity (XHTML elements must be in lower case) and closing tags (all XHTML elements must be closed). Strict rules are necessary for all XML languages, because without it, interoperability between applications would be impossible. XML is the way of the future, and XHTML is the future language of the web

**Web accessibility** is about designing sites so as many people as possible can access and interact with them effectively and easily

**Why is it an issue?**

- Lack of standards in the early days of the web
- Ignorance of the needs of disabled web users
- Development tools were very poor at creating accessible website
- Limited advice and support available