Web Authoring

Fetac Level 5 Module

Assignment 1

Research on Building

a

Portfolio Style Website

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Contents

HISTORY OF HTML FROM HTML 1 TO HTML VERSION 5

HyperText Markup Language is a simple programming language which web browsers use to interpret and compose text, images and graphics into visual or audible web pages. Default characteristics for every HTML tags element are defined in the browser, and these characteristics can be altered or enhanced by the web page designer's additional use of CSS – Cascading Style Sheets.

HTML has evolved over the past 20 years or so from a simple language with a small number of tags to a complex system of mark-up, enabling web authors to create elaborate Web pages complete with animated images, sound and all manner of enhancements.

In 1989, Tim Berners-Lee, working at the European particle physics institute known as CERN (Centre European pour la Recherche Nucleaire), proposed a system to allow scientists to share papers with other using electronic networking methods. His idea became what is called the World-Wide Web. Since these documents were to be shared, some common method coding them needed to be developed. Tim Berners-Lee suggested that it be based on the already existing SGML which was a specification describing markup languages.

Marc Andreesen, who was working at the National Center for Supercomputing Applications, created a browser called Mosaic which was released in 1993. Shortly after that, he left NCSA to found Netscape. The first version of the Netscape browser implemented HTML 1.0

In 1992, Berners-Lee and the CERN team released the first draft HTML 1.0, which was finalized in 1993.

In 1994, HTML 2.0 was developed by the Internet Engineering Task Force's HTML Working Group. This group later was disbanded in favor of the World Wide Web Consortium (http://www.w3.org), which continues to develop HTML

in 1996 a consensus version, HTML 3.2, was issued which was supported by all main browsers although proprietary tags introduced by Netscape and Microsoft were omitted. This version added features like tables and text flowing around images to the official specification   n.

The W3C released the HTML 4.0 specification at the end of 1997, and followed with HTML 4.01 in 1999, which mostly corrected a few errors in the 4.0 specification

HTML 4.0 was different than HTML 3.2 in a big way. HTML 3.2 contained several tags and attributes for styling things like text and links which made it onerous for web developers to apply styling tags and attributes. HTML was designed to specify the

logical organization of a document so the inclusion of styling tags breached this original intention. With HTML 4.0 this concept became actualized, as styling tags and attributes were deprecated and CSS was introduced where styling could be defined separately for all linked HTML pages.

HTML 4.0 provided new tags for stylesheets, scripts, frames, embedded objects, more complex tables, more complex forms, and improved accessibility features for people with disabilities.

XHTML 1,0 was originally thought to be the successor to HTML. The "X" stands for Extensible. This is a reformulation of HTML 4.01 within XML (Extensible Markup Language), which is far more rigorous, and is intended to start moving the creation of Web pages away from HTML. But eventually, after XHTML 2 became unrealistic it was clear that a new approach was needed.

It was around this time that a group of pragmatic web technology fans, browser programmers and specification writers started building something of their own, outside of the usual W3C procedures. They called themselves the Web Hypertext Application Technology Working Group (WHATWG), and developed a HTML spec. After some soul-searching, the W3C decided that HTML was still the future of the web. XHTML 2 was discontinued and HTML5 became the new specification that everyone's effort should be put into.

HTML EXAMPLES

HTML Tag

USE

```
<html>
<head>
<title>Title of the document</title>
</head>

<body>
The content of the document......
</body>

</html>
```

PURPOSE
The HTML root element (<html>) represents the root of an HTML or XHTML document.

APPLICABLE ATTRIBUTE

Like all HTML elements, this element supports the global attributes which are common to all HTML elements. There are two other attributes *manifest* and *version* which were introduced later than HTML 1. *Version* attribute is obsolete in HTML 5

BODY Tag

USE

```
<html>
<head>
<title>Title of the document</title>
</head>

<body>
The content of the document......
</body>

</html>
```

PURPOSE

The <body> element contains all the contents of an HTML document, such as text, hyperlinks, images, tables, lists, etc.

APPLICABLE ATTRIBUTE

Like all HTML elements, this element supports the global attributes which are common to all HTML elements.

Alink - Specifies the color of an active link in a document but is no longer available in HTML5.

<A> Tag

USE

```
<a href="http://www.w3schools.com">Visit W3Schools.com!</a>
```

PURPOSE

The <a> tag defines a hyperlink, which is used to link from one page to another.

APPLICABLE ATTRIBUTE

href - Specifies the URL of the page the link goes to

IMPORTANTCE OF CSS IN WEB DESIGN AND OUTLINE ITS EVOLUTION

Cascading Style Sheets or CSS enable the fonts, text, colors, backgrounds, margins, and layout to be specified in a stand-alone file separate from the HTML.

It allows the content to be consistent throughout the website as all styling information is contained within the CSS stylesheet, So to make changes it is only necessary to make them in one location for each platform.

The advanatages of CSS include :-

1. Web pages are quicker to load and require less bandwidth. As modern webpages don't use tables for formatting, the load speed is improved.
2. HTML complements well with CSS and results in a technically enhanced website.
3. CSS allows web developers to position content more easily. So if they feel that the links or columnt of text are not positioned properly then they are able to change that quite quickly without need for significant testing overhead as functionally the page would perform in the same way.
4. CSS is compatible with all web browsers so websites appear similar. During development of site, it is important to include browser compatibility testing to cater for differences between browsers.
5. With CSS developed websites, webpages which are printed are much better formatted. The colours, images and other things that are difficult to be printed can be easily printed in CSS based sites.
6. Website owners can update the content more easily as the styling information is distinctly separate from the content. So, making changes is more logical and easily understood in a web editor like Dreamweaver and can be made with only a basic HTML knowledge.
7. CSS Style sheets allows the positioning of text to be more suitable for parsing by web spiders which capture the key content for retrieval by search engines.
8. CSS enables the content to be tailored for different platforms. So, if a mobile friendly version has to be created, the web developer need only create a new CSS Stylesheet and the content will then be formatted correctly for the new platform.

CSS EVOLUTION OUTLINE

CSS 1

The first CSS specification to become an official W3C Recommendation is CSS 1, published in December 1996. Among its capabilities are support for:

- Font properties such as typeface and emphasis
- Color of text, backgrounds, and other elements
- Text attributes such as spacing between words, letters, and lines of text
- Alignment of text, images, tables and other elements
- Margin, border, padding, and positioning for most elements
- Unique identification and generic classification of groups of attributes

The W3C no longer maintains the CSS1 Recommendation.

CSS 2

CSS level 2 specification was developed by the W3C and published as a Recommendation in May 1998. A superset of CSS1, CSS2 includes a number of new capabilities like absolute, relative, and fixed positioning of elements and z-index, the concept of media types, support for aural style sheets and bidirectional text, and new font properties such as shadows.

CSS level 2 revision 1 or CSS 2.1 fixes errors in CSS2, removes poorly-supported or not fully interoperable features and adds already-implemented browser extensions to the specification.

CSS 3

Instead of defining all features in a single, large specification like CSS2, CSS3 is divided into several separate documents called "modules". Each module adds new capability or extends features defined in CSS2, over preserving backward compatibility. Work on CSS level 3 started around the time of publication of the original CSS2 Recommendation. The earliest CSS3 drafts were published in June 1999.

Due to the modularization, different modules have different stability and are in different status. As of March 2011, there are over 40 CSS modules published from the CSS Working Group. Some modules such as Selectors, Namespaces, Color, Media Queries are considered stable and are in either Candidate Recommendation or Proposed Recommendation status. Once CSS 2.1 is finalized and published as Recommendation, they are likely to go to Recommendation as well.

Note: Above excerpt taken from Wikipedia

Below is an example of CSS where the background colour is set, the Heading 1 colour is set to orange and paragraph font set to Times New Roman with font size of 20px.

```
body
{
background-color:#d0e4fe;
}
h1
{
color:orange;
text-align:center;
}
p
{
font-family:"Times New Roman";
font-size:20px;
}
```

OUTLINE 4 STEPS INVOLVING IN DEVELOPING A WEB SITE

PLANNING

Many people fail to plan their websites which can result in a website being developed which does not satisfy the needs of the business and also does not attract the necessary customers to buy the products or services to increase sales. Sometimes the busy dynamic nature of a business is to blame, there are so many other demands that not enough time is devoted to building the website.

Common Problems in Failing to Plan

- The designer is forced to make assumptions about the website which may not be correct
- There can be a lot of back and forth communication to clarify details which causes extra delay and missed deadlines.
- Unplanned work which is outside of original loose plan results in project going over budget
- The client can be disappointed with the end results because the original plan was not clear.

The planning stage involves setting a budget, identifies project goals, content requirements, available resources and considers any third-party suppliers—such as writers, photographers or specialised programmers.

SET-UP A BUDGET

Setting a budget will help keep costs under control and help focus on the goals the website design must achieve to produce a website which is fit for purpose intended. The following costs should be budgeted for :-

1. Website Design
2. Domain Name Registration
3. Website Hosting
4. Software and Licensing
5. Advertising

PROJECT GOALS

Goals are important to have in life and are especially important for website design as they direct the efforts of the design team to produce a website which is fit for the purpose intended.

When setting goals it is necessary to think of them from two points of view – the website owner and the visitors perspective.

The goals of the website owner may be to get a certain amount of web traffic, sell products or let people know about your company's services. While the goals of the vistor may be to find information about a service, purchase a specific product or get information on a specific topic.

DESIGN

Web design is the planning and creation of websites. This includes the information architecture, user interface, site structure, navigation, layout, colors, fonts, and imagery. All of these are combined with the principles of design to create a website that meets the goals of the owner and designer.

The principles of design include :-

- Balance – the distribution of heavy and light elements on the page as larger darker elements appear heavier in the design than smaller, lighter elements.
- Contrast – Most people think of contrast between different colours like black and white but it is also possible to have contrasting shapes (square vs circle), or contrasting sizes, or contrasting textures (smooth vs rough)
- Emphasis – this is where the eye is drawn to in a design. Equal emphasis to all elements can look bland so it better to determine the hierarchy of the page and then apply the emphasis to the elements based on this hierarchy.
- Rhythm – repetition can bring a consistency in design which makes the site easier to follow.

http://webdesign.about.com/od/webdesignbasics/a/aa053007.htm

DEVELOPMENT

This is the stage at which the design has been signed off and it is now necessary to actually get down to building the website. The development stage of a website build is where you write your code that make up your webpage.

Web development can range from developing the simplest static single webpage to the most complex web-based internet applications, eBusiness websites and social networks.

An ever growing set of tools and technologies have helped developers build more dynamic and interactive websites. Web developers now produce web applications which were traditionally only available as applications on a desk-based computer.

There are three main steps to launching a website which will be covered in this section, they are :-
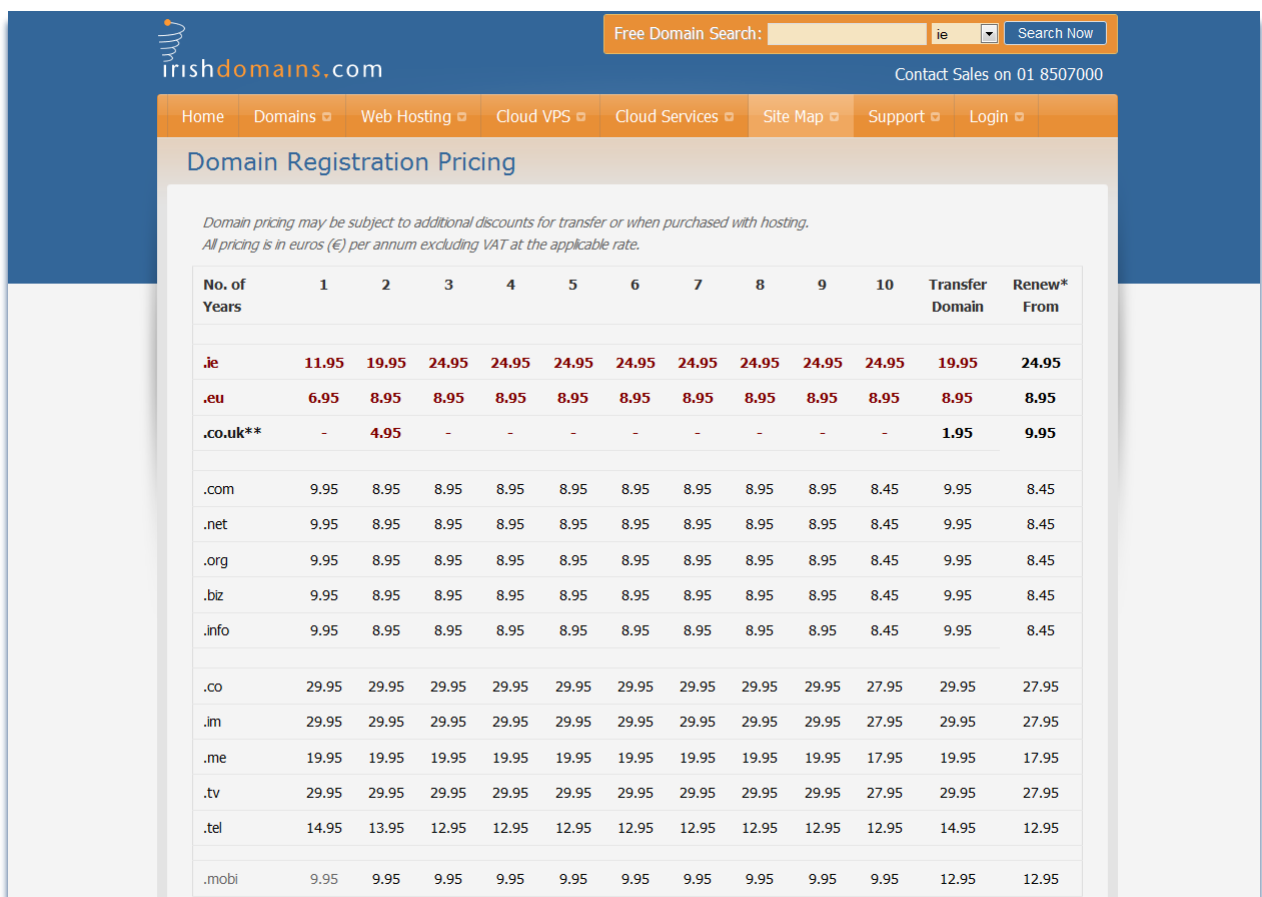
- Creating a Domain Name
- Finding a Web Host
- Uploading to server

CREATING A DOMAIN NAME

Choosing the right domain name is very important as it will give the website an identity and presence on the internet which is in effect an advertisement and enticement for people to visit the site. Its best to choose a name that is short and snappy that's easy to remember but which also clearly represents your company or website.

The Irish Domain Registry look after registration in Ireland and they have very strict rules regarding the registration process. Domain applications must be accompanied by a signed letter outlining the reasons for obtaining the name and should include a business or company number.

On the www.irishdomains.com website, the following prices list is available :-

Domain Registration Pricing

Domain pricing may be subject to additional discounts for transfer or when purchased with hosting.
All pricing is in euros (€) per annum excluding VAT at the applicable rate.

No. of Years	1	2	3	4	5	6	7	8	9	10	Transfer Domain	Renew* From
.ie	11.95	19.95	24.95	24.95	24.95	24.95	24.95	24.95	24.95	24.95	19.95	24.95
.eu	6.95	8.95	8.95	8.95	8.95	8.95	8.95	8.95	8.95	8.95	8.95	8.95
.co.uk**	-	4.95	-	-	-	-	-	-	-	-	1.95	9.95
.com	9.95	8.95	8.95	8.95	8.95	8.95	8.95	8.95	8.95	8.45	9.95	8.45
.net	9.95	8.95	8.95	8.95	8.95	8.95	8.95	8.95	8.95	8.45	9.95	8.45
.org	9.95	8.95	8.95	8.95	8.95	8.95	8.95	8.95	8.95	8.45	9.95	8.45
.biz	9.95	8.95	8.95	8.95	8.95	8.95	8.95	8.95	8.95	8.45	9.95	8.45
.info	9.95	8.95	8.95	8.95	8.95	8.95	8.95	8.95	8.95	8.45	9.95	8.45
.co	29.95	29.95	29.95	29.95	29.95	29.95	29.95	29.95	29.95	27.95	29.95	27.95
.im	29.95	29.95	29.95	29.95	29.95	29.95	29.95	29.95	29.95	27.95	29.95	27.95
.me	19.95	19.95	19.95	19.95	19.95	19.95	19.95	19.95	19.95	17.95	19.95	17.95
.tv	29.95	29.95	29.95	29.95	29.95	29.95	29.95	29.95	29.95	27.95	29.95	27.95
.tel	14.95	13.95	12.95	12.95	12.95	12.95	12.95	12.95	12.95	12.95	14.95	12.95
.mobi	9.95	9.95	9.95	9.95	9.95	9.95	9.95	9.95	9.95	9.95	12.95	12.95

So if I was to go with a portfolio website called www.btreacy.ie, it would cost €24.95 for 3 years which is a reasonable fee.

<u>FINDING A WEB HOST</u>

Web Hosting companies enable individuals and companies to make their website accessible via the internet by providing space on a server which is used to host the website. The website is developed on a Networked PC and uploaded to the hosting site where it resides on the server which is publically accessible via the internet.

There is basically five main types of hosting (although there are other lesser known alternatives)

1. Free Web Hosting
2. Standard Web Hosting
3. Dedicated, Virtual and <mark>Shared Hosting</mark>
4. Co-Location
5. eCommerce Web Hosting

With Shared hosting, domains share a common pool of server resources. The features available with this type of service can be quite basic and not flexible in terms of software and updates but is a first step for many new websites and would be probably be adequate for a portfolio website. On the positive side, the price can be quite low when compared to other types of hosting so that is also an important factor.

So if we look at a hosting provider like www.letshost.ie, it provides the following package for its shared hosting package which is one which would be suitable for a portfolio website like www.btreacy.ie

- 15GB Linux Web Space
- 150Gb Monthly Data Transfer
- Unlimited Email addresses
- Unlimited MySQL Databases
- Host up to 35 websites
- Cloud based Irish hosting
- 4 Full Daily Backups

The following steps should be carried out to upload the portfolio website to the www.letshost.ie server :-

1. **Download a File Transfer Protocol (FTP) application**. These programs are used to upload information to servers.

2. **Install the FTP application**. You may need to get information from your web host, such as the FTP name needed. They may also have specifics as to where and how to save your website files.

3. **Connect to your web server using your FTP application**. Enter the user name and password and server information provided by your web host. If you are uncertain about this information, contact your web host.

4. **Open the FTP client on your computer**. Some FTP programs will display 2 windows, which is called FTP transfer. Some will require you to use an upload feature, which is called FTP upload.

   - For FTP transfer programs, select the files from your computer containing the website pages. Click and drag the files from the window containing your computer's files to a similar folder in the other window displaying the files on the web server.
   - For FTP upload programs, the left pane will contain the files on your computer. The right pane is a view of the server. Create a folder in the right pane for your website pages. Click on the appropriate files in the left pane and click the upload button. If the program does not have an upload button, right click on the file and click upload.

5. **Check to ensure that all files have loaded properly through your web browser**. If not, you may need to repeat FTP transfer or upload process.

Steps above courtesy of :- http://www.wikihow.com/Upload-a-Website

One of the reasons that web development has become so popular is due to the availability of open source software. A well-known example is LAMP (Linux, Apache, MySQL, PHP) suite which allows websites to be developed at low cost. Also, most web developers would be familiar with this suite so there would be a good supply of suitable candidates available to take on work.

Another important factor to the growth of the industry has been the rise of easy-to-use WYSIWYG web-development software such as Adobe Dreamweaver, WebDev, and Microsoft Expression Studio. Knowledge of HTML and other programming languages is still required to use this type of software, but the basics can be learned and used quickly with the use of help files, technical books, internet tutorials, and one-to-one training

An alternative to WYSIWYG web-development is to use content management systems such as joomla, Drupal and XOOPS and TYP03 which provide an easy-to-use interface for users to manage content while also allowing it to be updated soon afterwards without having to get caught up in the technical aspects.

http://en.wikipedia.org/wiki/Web_development

DISCUSS HARDWARE AND SOFTWARE REQUIRED TO BUILD A WEBSITE

HARDWARE TO BUILD A WEBSITE

With the software readily available, a few inexpensive hardware components are all that are required to create a website.

COMPUTER
Most current computers and laptops have high enough specifications to be used to create a website. The computer should have a high amount of RAM perhaps 4GB to ensure that programs like web editors and video editors can run smoothly. Also perhaps a good Graphics Card and Monitor would be required to present the true colour and design of website to improve readability and facilitate spending long hours spent in front of computer without eyestrain.

INTERNET
Access to a high-speed internet connection is vital as this would allow you to transfer files to the online server that will be hosting the website. It will also be necessary to regularly update website and look at it live online to make sure it is displaying correctly and can be found by search engine.

EXTERNAL HARD DRIVE FOR BACKUP
You should always keep a current backup with different versions on a portable hard drive as they are quite reliable and can withstand handling in a case or car boot. In

case the hard drive on your computer becomes corrupt, you will have a recent backup to restore to.

COMPUTER VIDEO CAM

A camera may be useful to include video tutorials or presentations on a website. These could be used to present information which would give the visitor a more personal feel as they can see who they will be dealing with.

SERVER

You will need a server computer to host your website on to make sure that it is available all the time for anyone trying to access it. It is possible to set-up a computer to act as a server but it is better to purchase a hosting package from a web hosting company.

SOFTWARE TO BUILD A WEBSITE

There are different types of Web Development which include the following as a guideline:-

1st Develop system in html, css, javascript etc

2nd Develop using a tool like Dreamweaver

3rd Develop with CMS like Joomla, Wordpress

4th Basic Development with wix.com or Google Sites

The 1st option is a more tailored solution using programming languages which are quite technical. The main benefits are that it would enable the developer to produce a website which would meet the requirements more exactly and utilise latest web technologies. The downside is that it would require the services of the web development company on an on-going basis to maintain the website and update the content.

For the 2nd option, this is a tool which pushes the technical side into the background and allows a web developer to concentrate more easily on the design and functionality of the website rather than getting bogged down on technical details. It has the advantage that Dreamweaver as a tool is more easily learnt by non-technical people so in theory it should be possible for the website owner to make changes to content quite easily and add new products etc but it probably would still require the services of a web development company to make more complex changes.

For the 3rd option, Joomla or Wordpress are Content Management Systems which enable the content to be more easily updated by the website owner without the

intervention of the website administrator so with this option the content can easily be amended and immediately uploaded to hosting server where it would become available to visitors. The downside is that design may be more limited to standard templates which might not provide fully the functionality that is required. It is open-source which means that there is no license required to use them but would still require a web administrator to install and do initial set-up of website.

The 4th option is a quick and easy approach to producing a website but it would be very basic and it would not be possible to include more advanced features that might make the website standout from the competition. This approach might be useful for producing basic websites like portfolio or brochure types sites which are very static in nature.

From this point onwards, the assignment concentrates on portfolio website…

TARGET MARKET

As this will be a Portfolio Type website, the target market will be the following :-

- Recruitment Agencies who want to assess my suitability for positions they have on their books
- Prospective Employers in response to an advert on irishjobs.ie, monster.ie etc
- Business Partners who may want to join forces with me to develop business ideas into full blown Websites, Smartphone Apps, Books, Courses etc
- Enterprise Boards for funding of business plan

A link will be placed on the first page of the CV where it can be easily seen and once clicked upon, the home page of the Portfolio Website will be displayed.

SITE OBJECTIVES

The objectives of the site will be as follows :

- To showcase my talents and skills by presenting examples of the documents, spreadsheets and office procedure websites and photographs that I have produced over the past 10 years.
- To enable a member of target audience to view each item of work in a manageable way and proper format so that the work is presented at its best and not hampered by downloading problems, application not available or link not available etc.
- To be well thought out in terms of design and content so that it is a pleasurable experience and the viewer comes away with a feeling that the site was carefully planned and implemented which are qualities I would like to demonstrate.

NAVIGATION

The Navigation approach taken within the Portfolio Website is to use a simple sidebar menu for each of the main webpages. From these menu items, the users will be able to access pages which are in the best sequential order to lead a user through the website where they get the best impression of the candidate in question.

From each of the linked pages from the menu, it can be seen on the Structure Diagram above, that there are sub-sections within the pages which will be set-up as anchor links.

Also on the Structure Diagram for the I.T Career Projects page, it can be seen for some of the projects that there will be links to the deliverables which I was directly

involved in producing e.g Technical Specs. These deliverables will be stored in PDF format and will open within the browser itself.
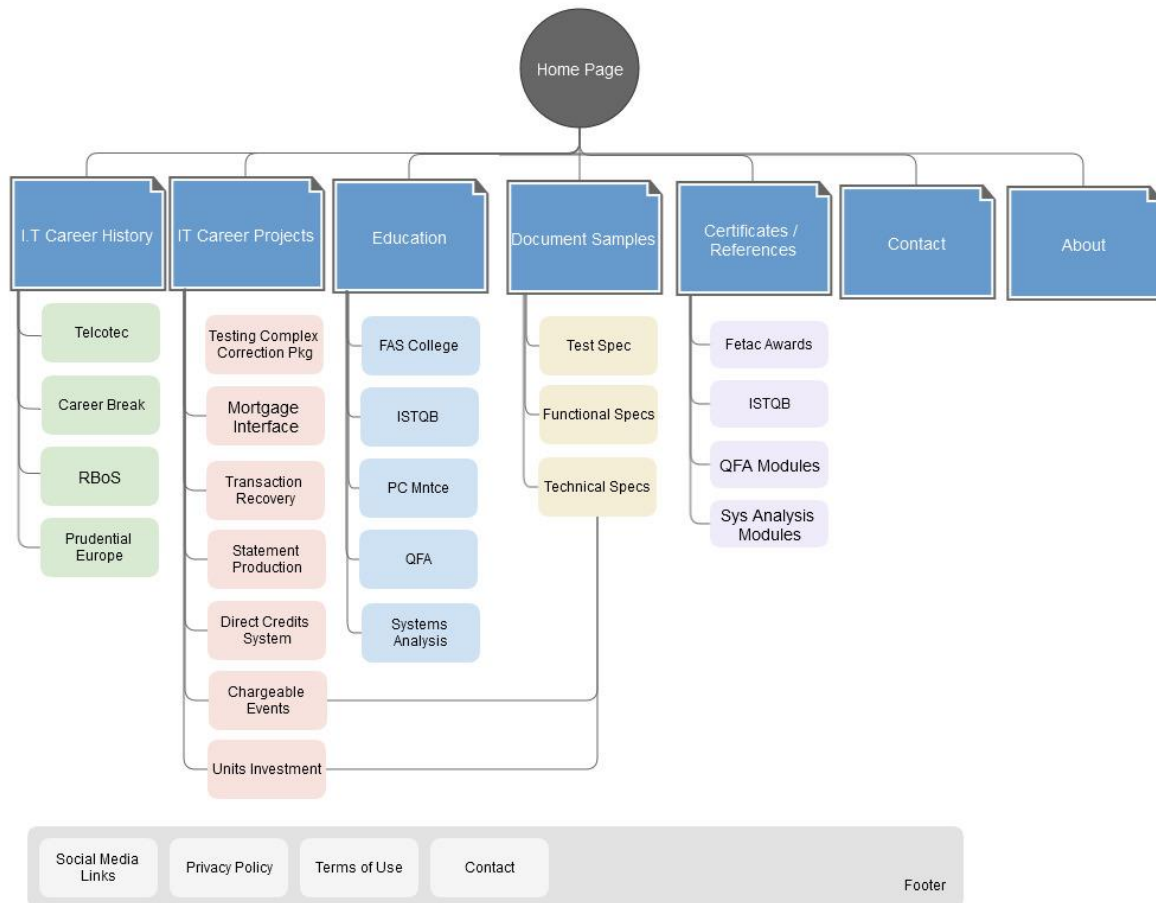
The following Webpages will be included in my Portfolio website :-

- **I.T Career History:** showcase of my work from the Computer Business and from Roslyn Park
- **I.T Career Projects:** Projects that I worked on while in the I.T business from 1993 - 2008
- **Career Plan / Studies:** Details of my plans on return to I.T Business which includes Studies
- **Document Samples:** Copies of documents which best demonstrate the work that I have done in the past including studies from Roslyn.
- **Certificates References:** ISTQB, Fetac 5 Awards etc
- **About:** brief biography
- **Contact:** contact info

Other possibilities include…

- **Employers:** A list of companies that I have worked for with profile
- **CV:** make available a standard format CV will be useful to prospective employers or clients.

STRUCTURE DIAGRAM

Home Page (top node)

Main sections:
- I.T Career History
  - Telcotec
  - Career Break
  - RBoS
  - Prudential Europe
- IT Career Projects
  - Testing Complex Correction Pkg
  - Mortgage Interface
  - Transaction Recovery
  - Statement Production
  - Direct Credits System
  - Chargeable Events
  - Units Investment
- Education
  - FAS College
  - ISTQB
  - PC Mntce
  - QFA
  - Systems Analysis
- Document Samples
  - Test Spec
  - Functional Specs
  - Technical Specs
- Certificates / References
  - Fetac Awards
  - ISTQB
  - QFA Modules
  - Sys Analysis Modules
- Contact
- About

Footer:
- Social Media Links
- Privacy Policy
- Terms of Use
- Contact

ACCESS SPEEDS

The web pages Document Samples and Certificates/References are the two pages where access speeds need to be taken into account as they will be displaying hyperlinked images to documents and scanned images of certificates.

To improve access speeds for these pages it will be necessary to make sure that all images are resized to the display size for resolution 72dpi which is the resolution of monitor.

Another area where access speeds can be improved is using a single CSS stylesheet. This is then loaded by the browser once and is used to style all linked web pages which reference it. This means that all styling is catered for in one place which makes it easier for web developer to write HTML and is also a more standardised approach to building websites.

USER INTERFACE

The user interface chosen is quite simple and straightforward as I want the viewer to be able to easily navigate the page and access the menu items with ease.

Along the top of the page is a simple header which clearly states that this is an I.T Portfolio as I want it to be obvious from the outset what the purpose of the website is.

On the left hand side is the main menu where I have placed options which provided access to the full hierarchy of webpages. These options are quite straightforward as simplicity is the key in this design and ease of access.

On the bottom left, a photo of myself has been placed which will provide an identity and will give an impression of professionalism as would be suitable for a portfolio website.

The following diagram produced on www.gliffy.com shows the home page which will be displayed when the website is initially accessed.
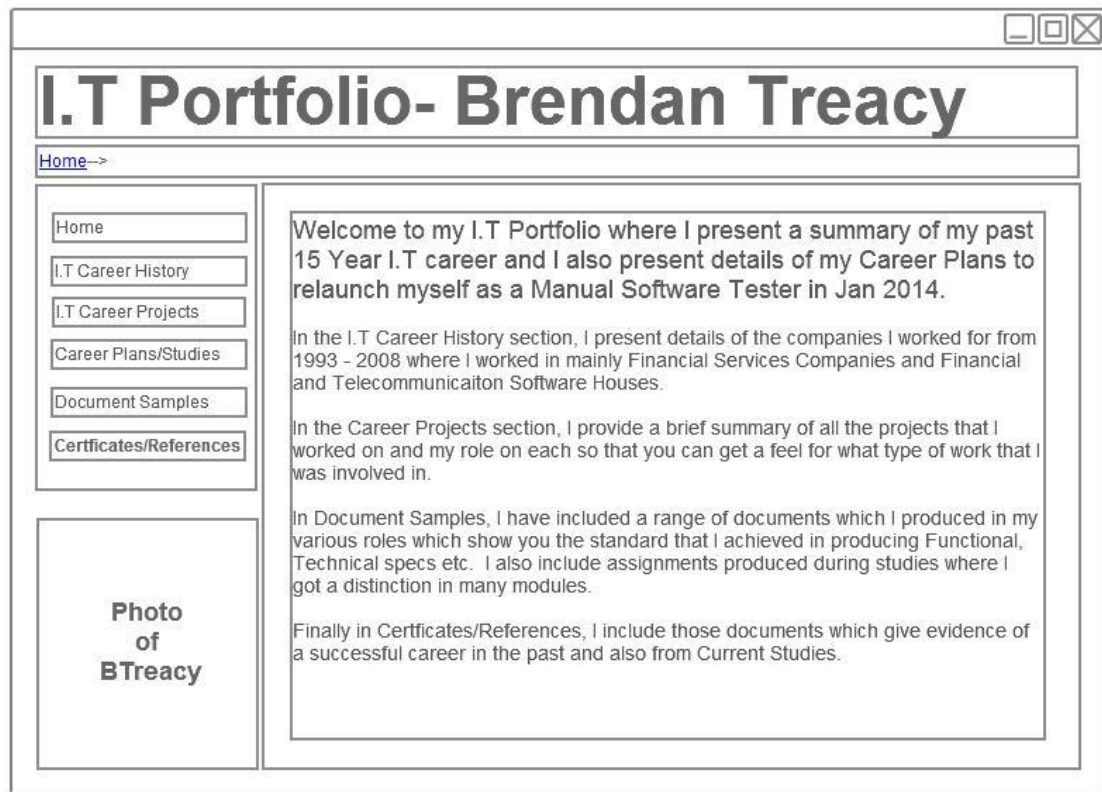
create and share your own diagrams at gliffy.com

EXPLAIN HOW THE SITE SHOULD BE MAINTAINED AND UPGRADED

Website maintenance includes all the activities to ensure that the website runs smoothly and continues to provide a top class service to users who access the site.

One of the biggest advantages of a website is that it can be changed and updated with ease at anytime. In fact, if a website does not present its users with an ever evolving and new experience, they are less likely to return and visit website on a regular basis.

In the case of a portfolio website, it is important that it is always up-to-date and gives the impression of a person who is continually updating skills and adding to their portfolio. This is vital as knowledge and skills need to be regularly revised and kept current if they are to seen by an employer as useful in a role they are being considered for.

GENERAL MAINTEANCE POINTS

In general, the following points should be considered to maintain a website :-

1. Static content should be reviewed regularly and updates and corrections should be carried out where necessary.
2. Ensure that the most common website maintenance tasks which include errors, bugs, broken links, and browser incompatibilities are dealt with efficiently.
3. Ensuring that all parts of a website are functioning properly in the most commonly-used browsers should be regularly carried out.
4. After features are added or content is updated, web pages should be validated to ensure the markup and styles are put together using best practice.
5. Within the HTML/CSS code, it is easier to manage if classes and IDs are used sparingly. DIVs should also serve a purpose so that they don't clutter up HTML code.
6. CSS files can develop redundancies after frequent updates which make the code unreadable. There are tools available to help with this task e.g W3C CSS Validation Service
7. New and updated content can affect the accessibility of a website for users using screen readers and or other assistive technology. So accessibility testing should be an ongoing process.
8. If the website is for a personal project then ongoing SEO maintenance would have to be done. The specific techniques include optimizing keyword phrases, improving title tags, adding meta descriptions, writing good page titles, and optimizing internal link structure.
9. Analysis of site traffic, bounce rates, traffic sources, and other web analytics-related statistics should be a regular part of a site's ongoing maintenance.

In the case of the Portfolio Website, the following enhancements are considered worthwhile :-

- Optimising for speed – Document Samples Page
- User Feedback – Seek comments from users mentioned above in section ?
- Improve hyper-linking so it appears in searches relevant to the industry on business networking sites like Linkedin.com, Guru.com etc

DESCRIBE HOW THE SITE SHOULD BE TESTED

Web Testing is a type of software testing that focuses on web applications, it includes the following areas :-

1. *Basic functionality of the website*
2. *Accessability to both disabled and fully able users*
3. *Browser Compatability*
4. *Security – protect against hackers*
5. *Ability to handle expected traffic to a website and handle peaks*

To cover the above areas, testing of BrendanTreacyPortfolio.ie will consist of the following types of testing :-

FUNCTIONAL TESTING – TO TEST AREAS 1 & 2 ABOVE

This type of testing is done to establish how the website meets the Requirements as covered above. When the first proper version of the website is released by the Website Development company, this testing could be performed and would cover both the basic functionality like being able to List all Laptops for sale to ensuring that the site can be navigated by those with poor sight or poor manual dexterity.

OPERATIONAL TESTING – TO TEST AREAS 3 ABOVE

This type of testing would be carried out to ensure that all the main technical aspects relating to the website are operable. This includes the following areas :-

1. *Testing on different web browsers like IE, Firfox, Opera and Safari and browser versions as not everybody will be on the latest version.*
2. *Test with different screen resolutions.*
3. *Test with different bandwidths to ensure that the images load in a reasonable amount of time.*

4. Test with many users trying to access the same product and adding it to basket for purchase.

PERFORMANCE AND SECURITY TESTING TO TEST AREAS 4 & 5 ABOVE.

Performance testing is the process where the response time of the website is tested to ensure that it is within acceptable limits so that vistors to the site will not have to wait an unnecessary length of time for a response. Tools are available which produce in-depth analysis on what you can do to optimize the website.

As well as Performance of the website it will also be necessary to test the Security of the website to ensure that the following checks perform satisfactorily:-

1. Check that all links to other sites are fully trusted.
2. Check that all referring links from other websites reputable.
3. Check that the Firewall is blocking access from unknown computers
4. Check that the email accounts are set-up to prevent spam and virus attack.
5. Check that the all customer details are held securely in an encrypted format so that in the unlikely event of a hacking that the data cannot be read.

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