
National Diploma IT Practitioners

Software Development

Unit 31

Website Development

Task3

Techbecks Website

By: Sophie Greene

Tutor: Gavin Bradbury

Date: 14th May 2007

## Table of Content

# 1 Introduction

This report is about the design, implementation and publication of a website for Techbecks, a cyber café based in Leeds.

The size of the website should be less than 1MB, and it should contain at least ten different pages. The website will be built using html in notepad. It should contain dynamic JavaScript and appropriate photographs.

The first stage of building a website is to plan and design its pages. The design is then shown to the client. Once the client approves it, the design is implemented. Then the website is tested and shown again to the client for approval. Once the customer is satisfied with the way the website looks, the website is uploaded to the web server.

# 2 Planning

This is the most important stage of designing a website. A full plan of the website; its pages, images, folders; is created. I have created the plan listed in appendix A.
The plans were very helpful in creating the site. This is because I had the plans to follow so I did not need to think about how the site would look in the implementation. Besides creating the plans and showing them to the client before implementing the site saves time and effort, because changing the plans is much easier and less time consuming than changing the implementation. The planning and design stage importance appears when two different people conduct the design and implementation
I implemented the site to match the designs very closely. I just added one additional page, altered the place of the page heading, added a different background and added a JavaScript clock in the background as shown in figures 1 and 2

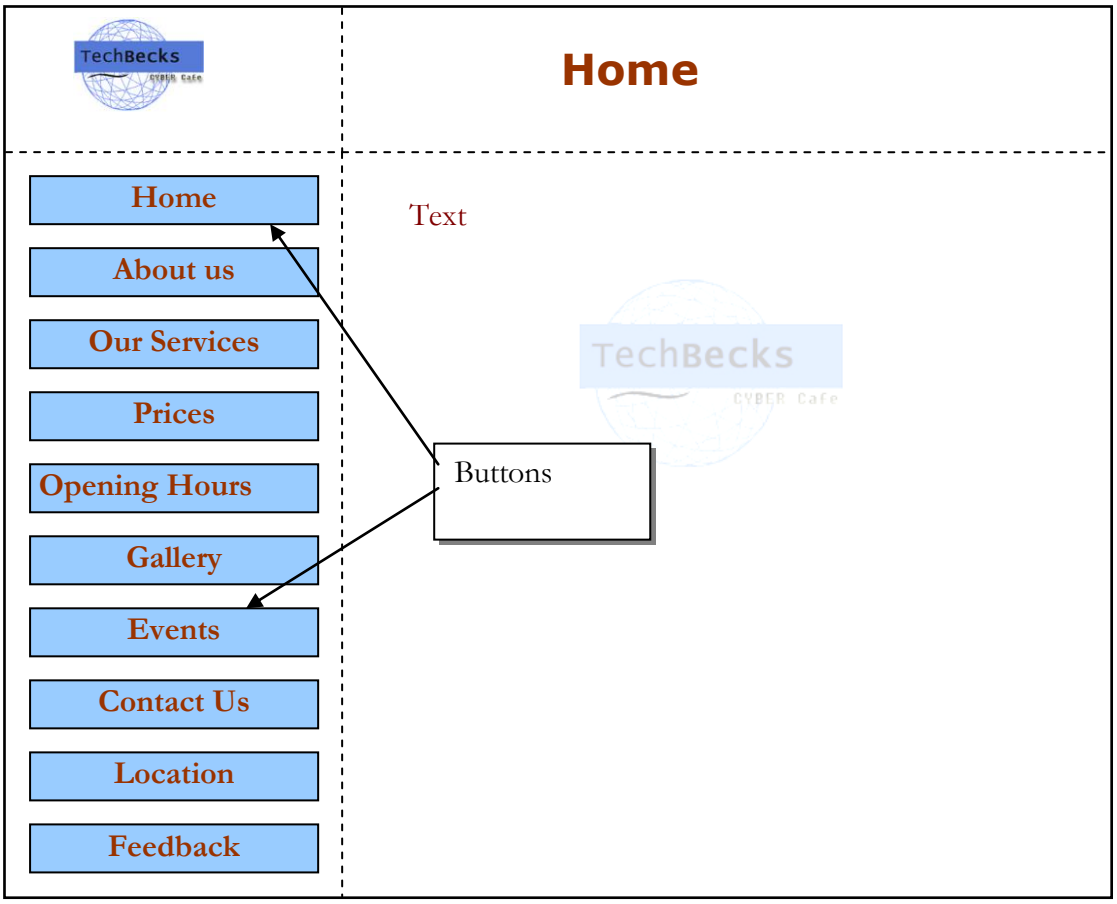


**Figure 1(home page design)**


**Figure 2(screen dump of the implemented home page)**

The alterations made the site look more professional and suitable to be shown at any screen resolution. The added images enhanced the look of the pages, and clarified the text content to the viewer. I added a games page which helps attract people to view the site.

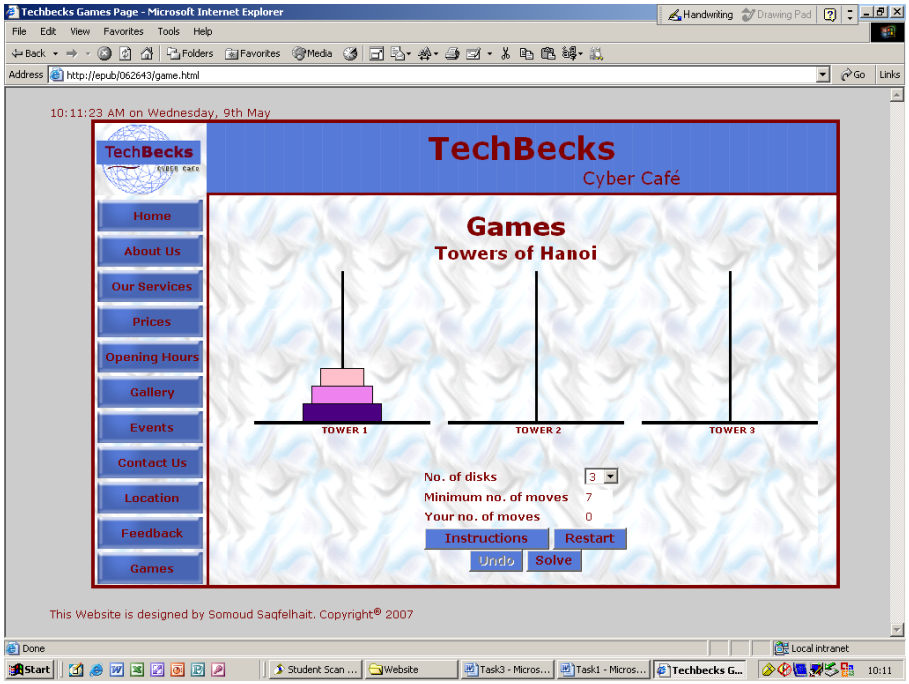


**Figure 3(Games Page)**

Once the plan was created and improved by the client, the home page was created which acted as a template for the rest of the site; the most difficult task was to implement the navigation buttons, feedback page and the games page.

I had no experience in using cascading style sheets or writing JavaScript code and I needed those to implement the navigation buttons and the feedback page. I also needed to understand JavaScript code in order to edit the games page.

To create the navigation buttons, I first used JavaScript code and twenty images. Ten of these were for "on" and ten for "off".

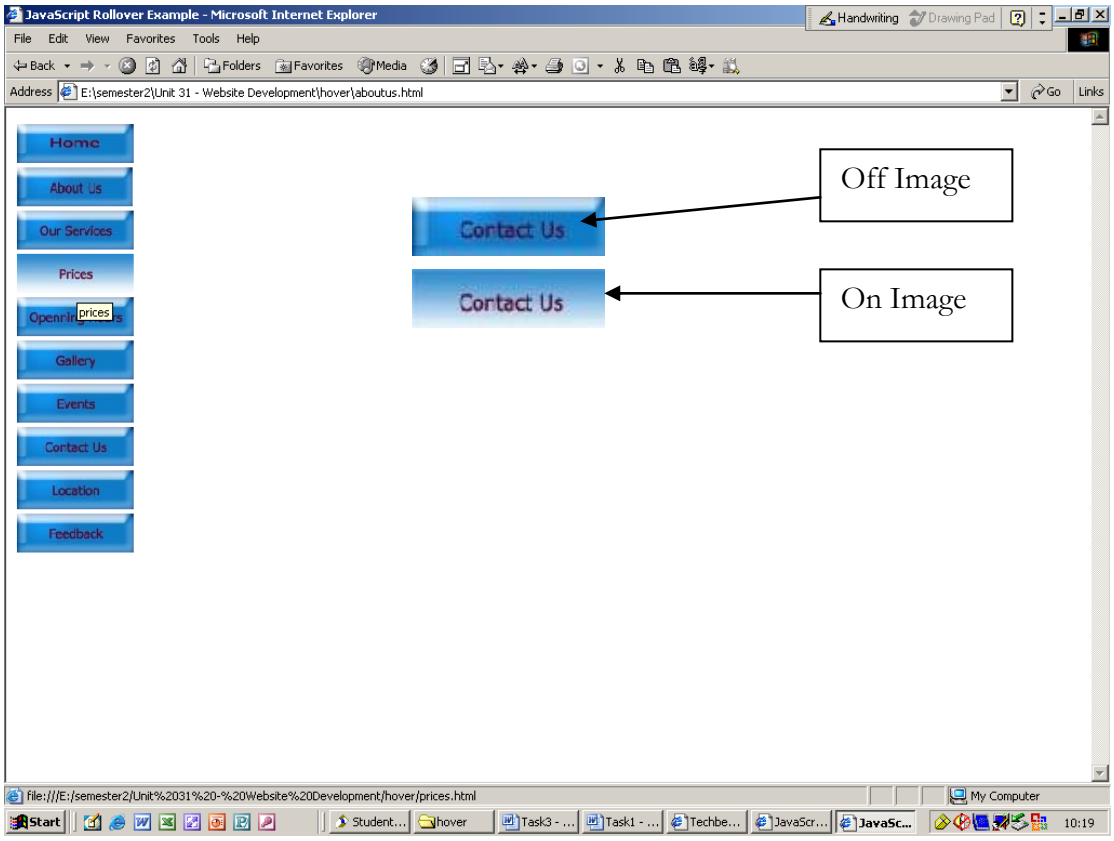


**Figure 4(JavaScript navigation system)**

The code is listed in appendix B.

This method was not practical as I needed to use 20 images which would slow the download of the page, besides the fact that some operating systems do not support JavaScript, and some users do not have JavaScript enabled for security reasons.

The solution to this problem was in using cascading style sheets (CSS). CSS are used to describe the presentation of a document written in html. This way, only two images, one for "on" and one for "off", is used for the whole navigation system, and the look of the pages is highly improved.

To implement the feedback page I needed to use forms and JavaScript code to validate the user input.

I used a free code generation website to generate the Perl/CGI code needed for submitting the form by email. The server in college did not support forms or Perl/CGI code.

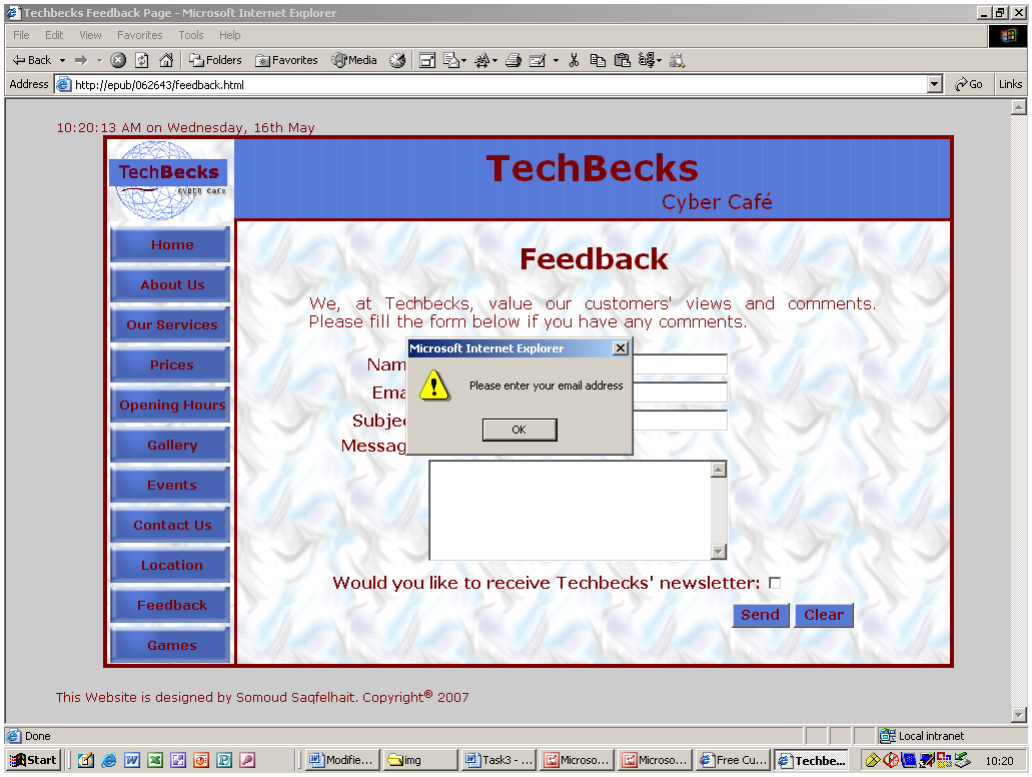


**Figure 5(feedback page, data entry verification)**

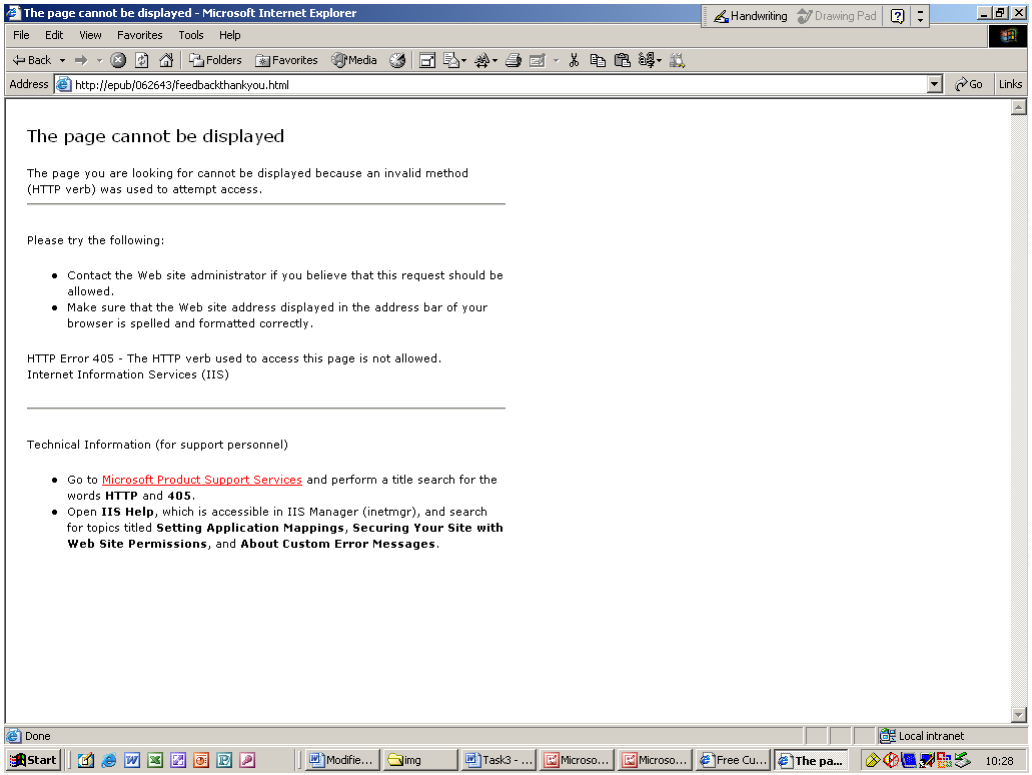


**Figure 6(error message, the web server does not support forms)**

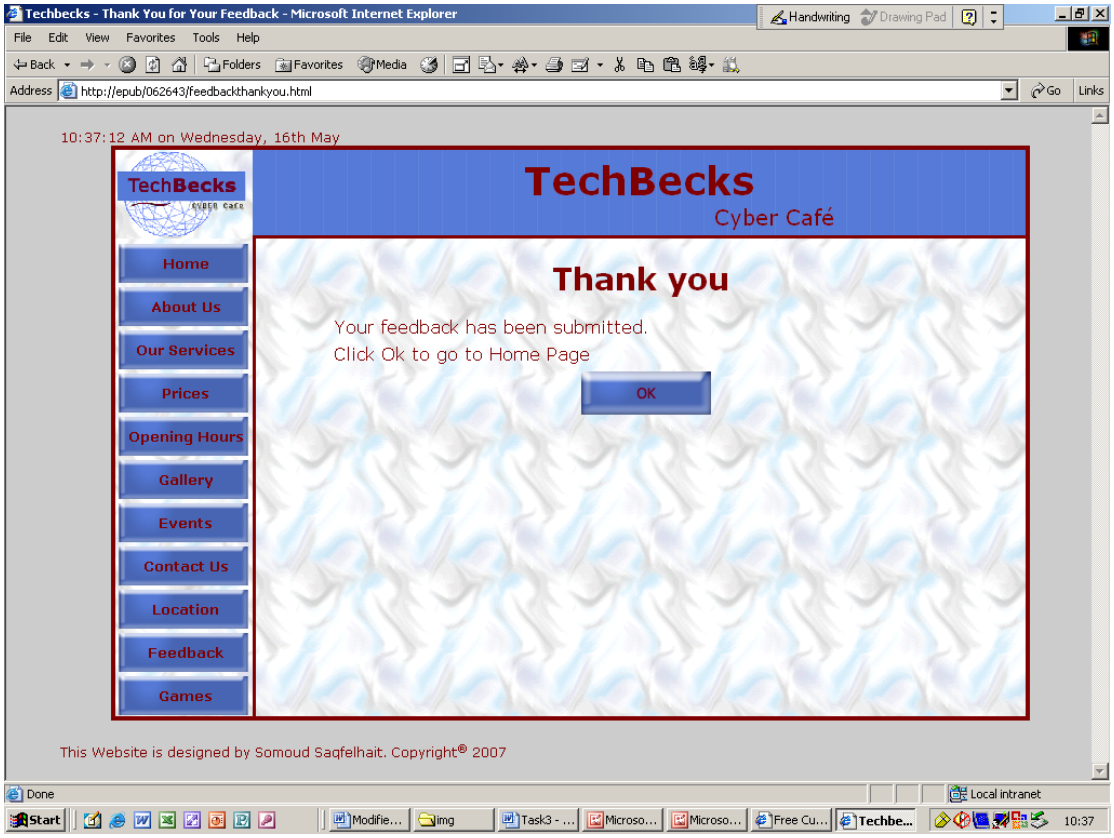


**Figure 7(result of submitting feedback if using forms was supported)**

When I tried to implement the games page I got the script from DynamicDrive.com. I found it difficult to place the game in the position I wanted. I solved the problem by using the" iframe" tag and I edited the content of the game page so it is harmonised with the site appearance.

If I were to repeat the task again I would use a database to store the feedback. I would produce the same site, but with the skills and experience I have gained I would implement it much faster. I am satisfied with the way the site looks.

# 3 Client Review

When I completed the website, I met the client to get feedback about the site. The client liked the site but had some comments about some pages of the site. I have done the changes the client asked for, showed him the site again, got his approval and uploaded the site to the web server. The following diagrams show the changes that were requested by the client.

## 3.1 Spelling mistake in the navigation buttons text

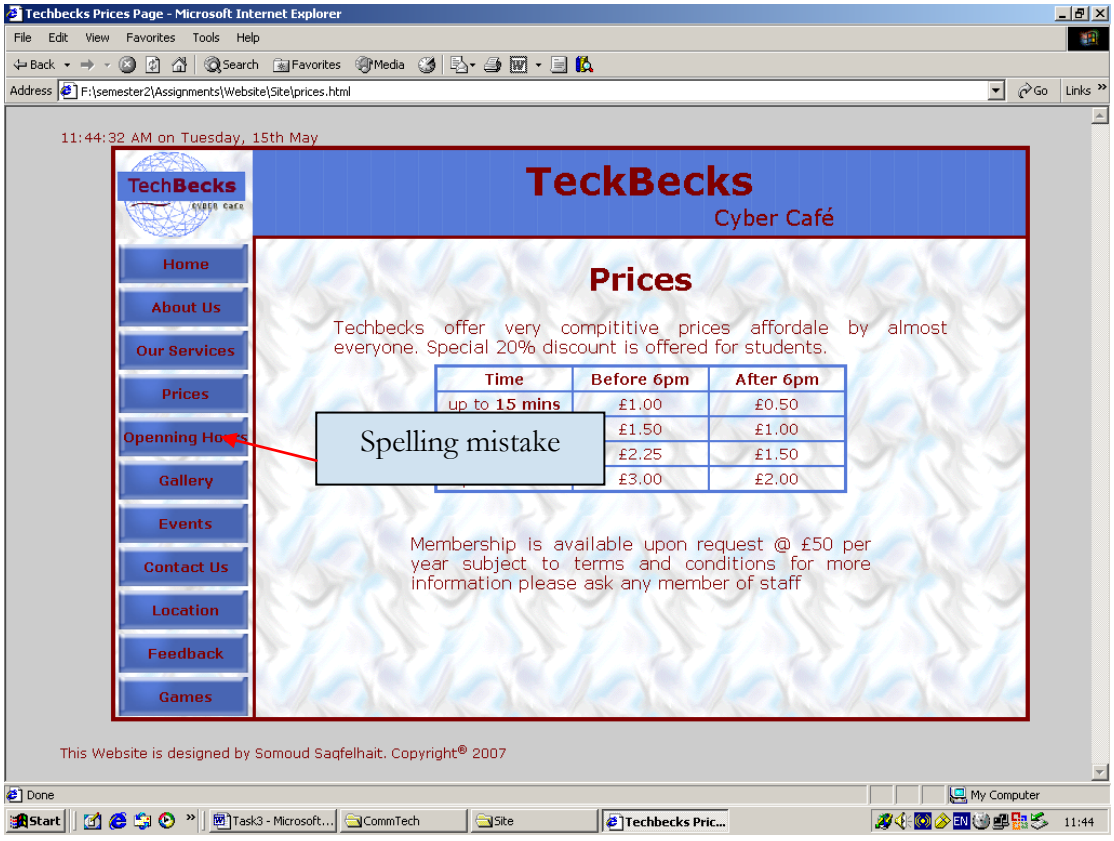


**Figure 8(before)**

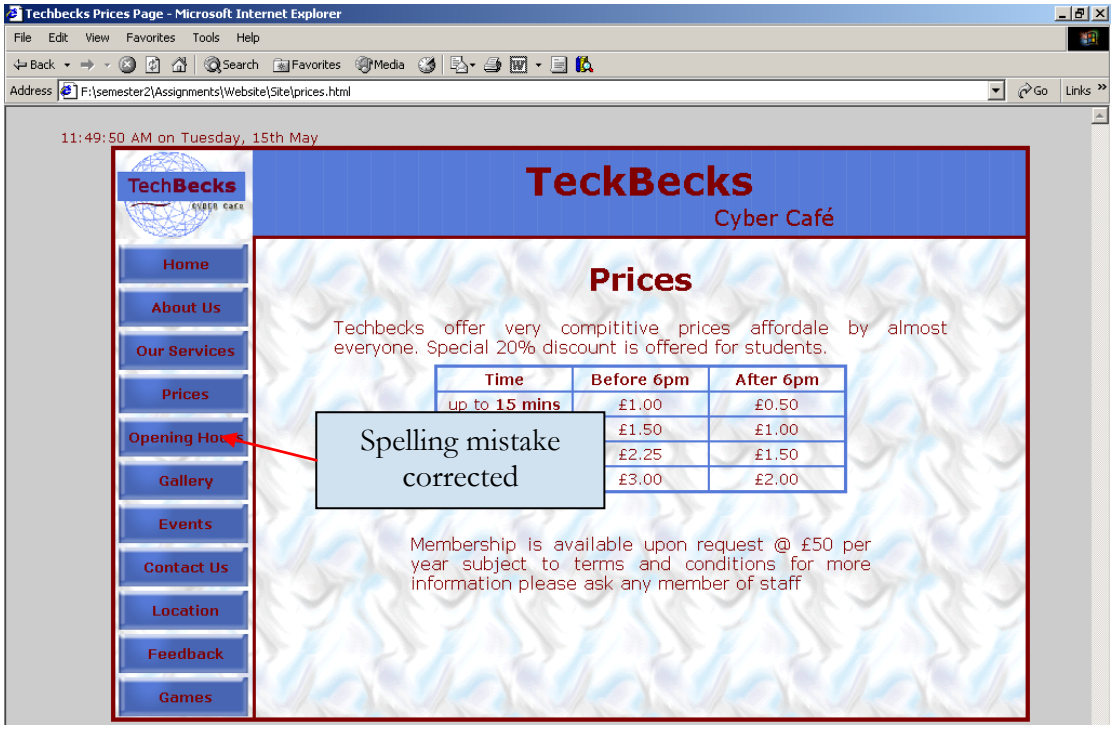


**Figure 9(after)**

## 3.2 Spelling mistake in the feedback page

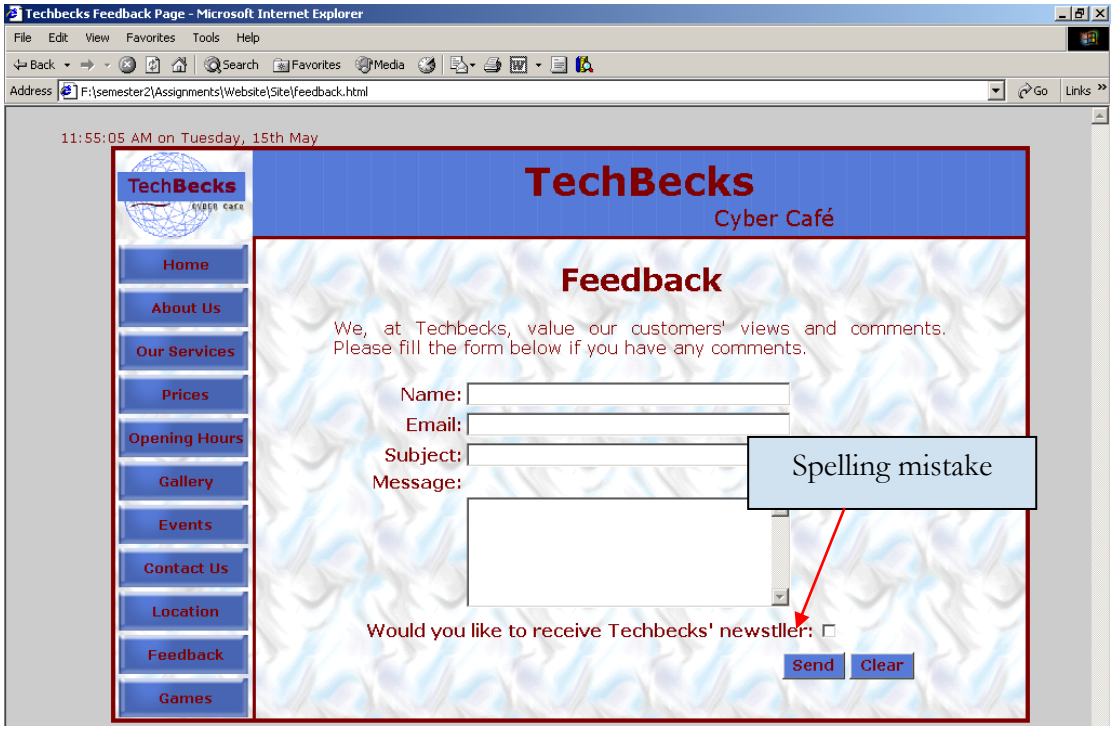


**Figure 10(before)**

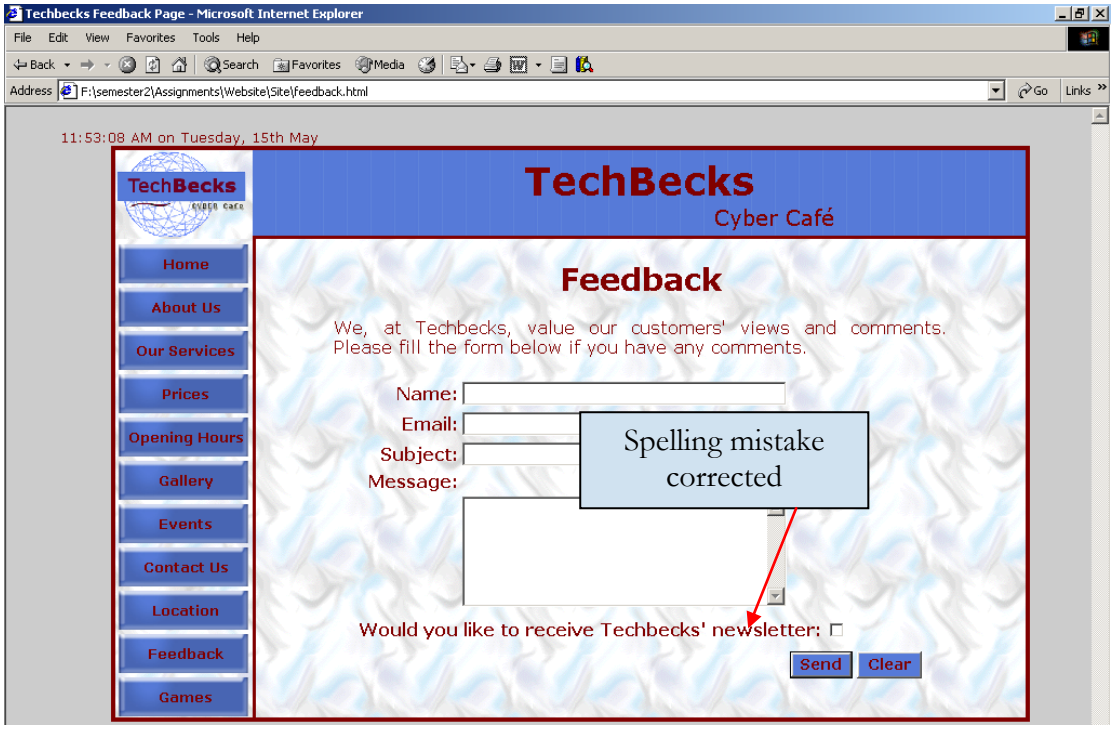


**Figure 11(after)**

## 3.3 Wrong address in contact us page

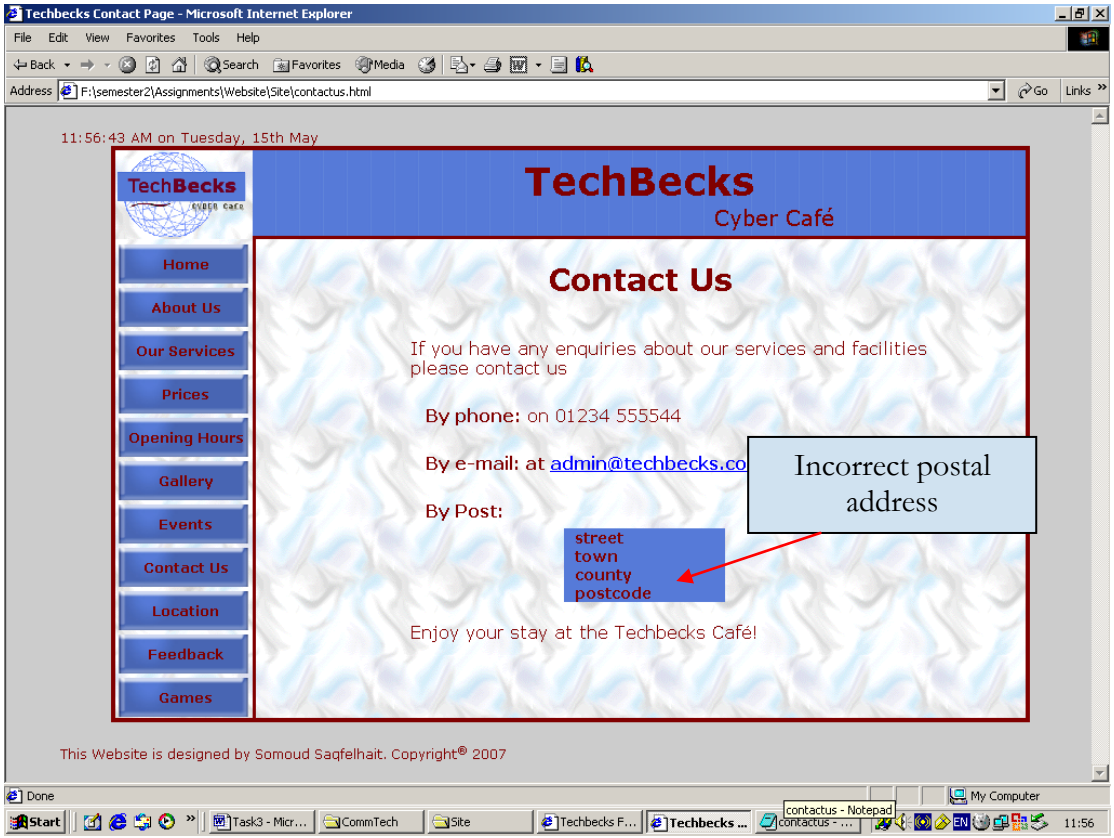


**Figure 12(before)**

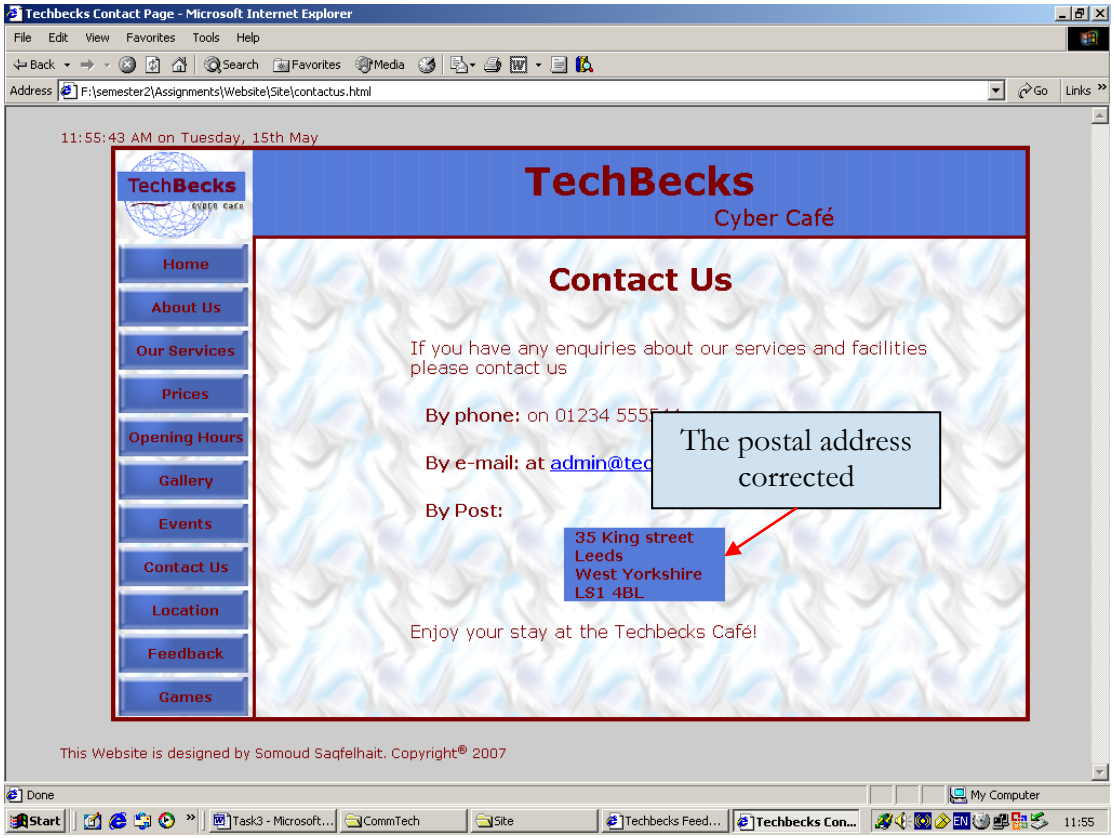


**Figure 13(after)**

# 4 Software

## 4.1 Graphics and Multimedia Software

The use of images is very important for any website; it helps clarify the ideas and information described in text. A clear example in the site I designed is the map in the location page.

### 4.1.1 Adobe ImageReady

I used Adobe ImageReady to design the Techbecks logo which I used in all the pages of the web site. I got the initial image from the Web.

I used the brush tool in conjunction with the magic wand tool to delete all the unwanted text and background, and then I used the type tool to add the text I needed.


**Figure 14(original logo)**

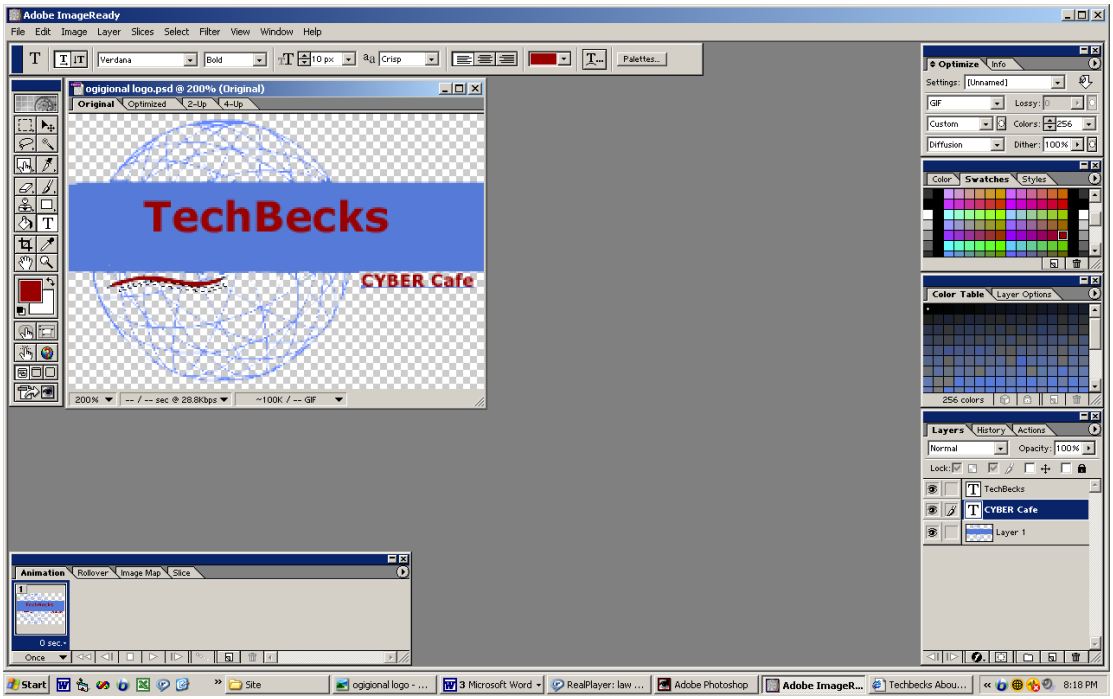


**Figure 15(the logo edited in Adobe ImageReady)**

### 4.1.2 Adobe Photoshop

I used Adobe Photoshop to add the text "We are Here" to the map image I got from multimap.com for the café location.

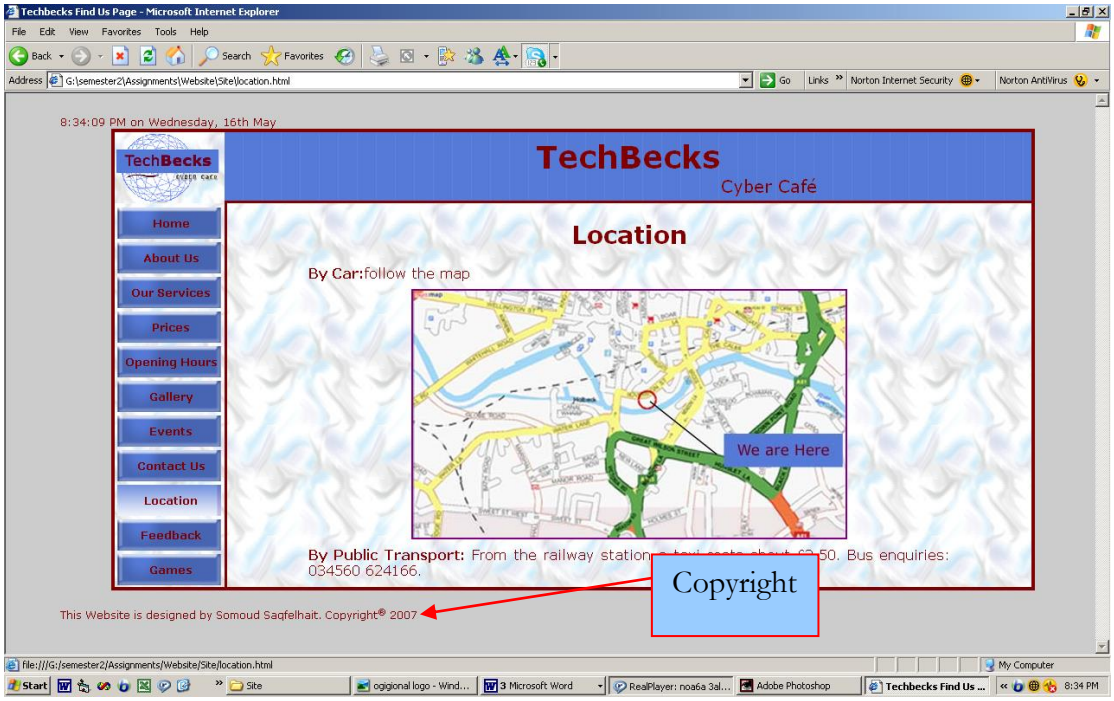


**Figure 16(Photoshop modified map)**

I also used Photoshop to create the images for the navigation system. I used the rectangle tool box to create the buttons and then I applied different styles to create a 3-D effect.

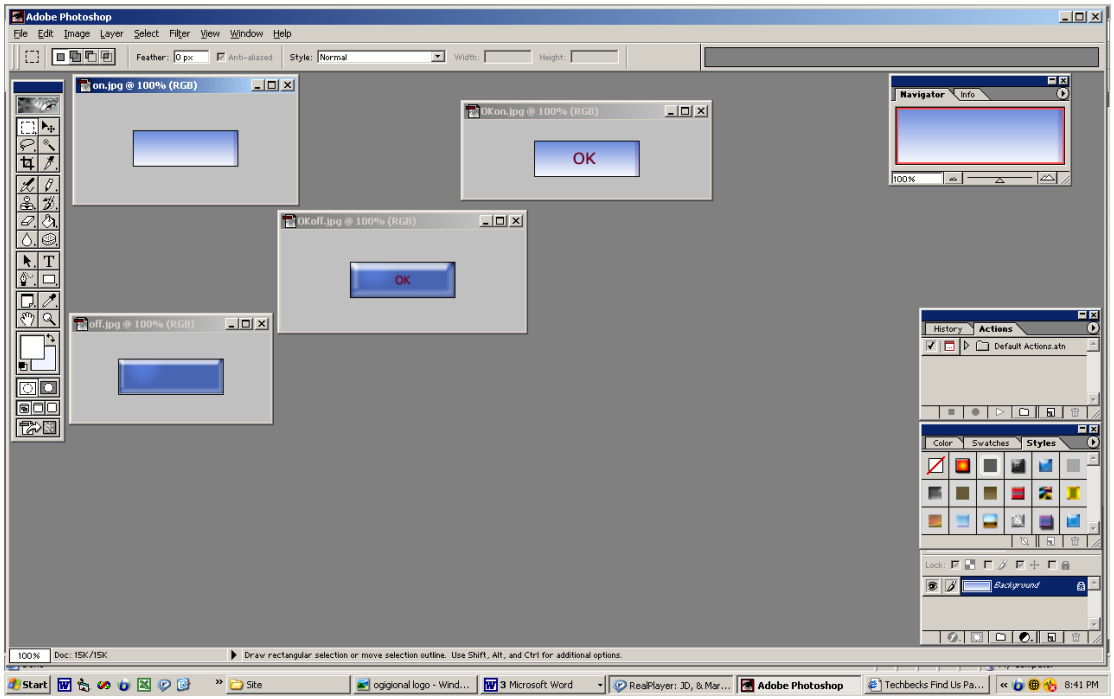


**Figure 17(creating button images in Photoshop)**

## 4.2 Text Editor

I used notepad to write the html code, the cascading style sheet code and the JavaScript code.

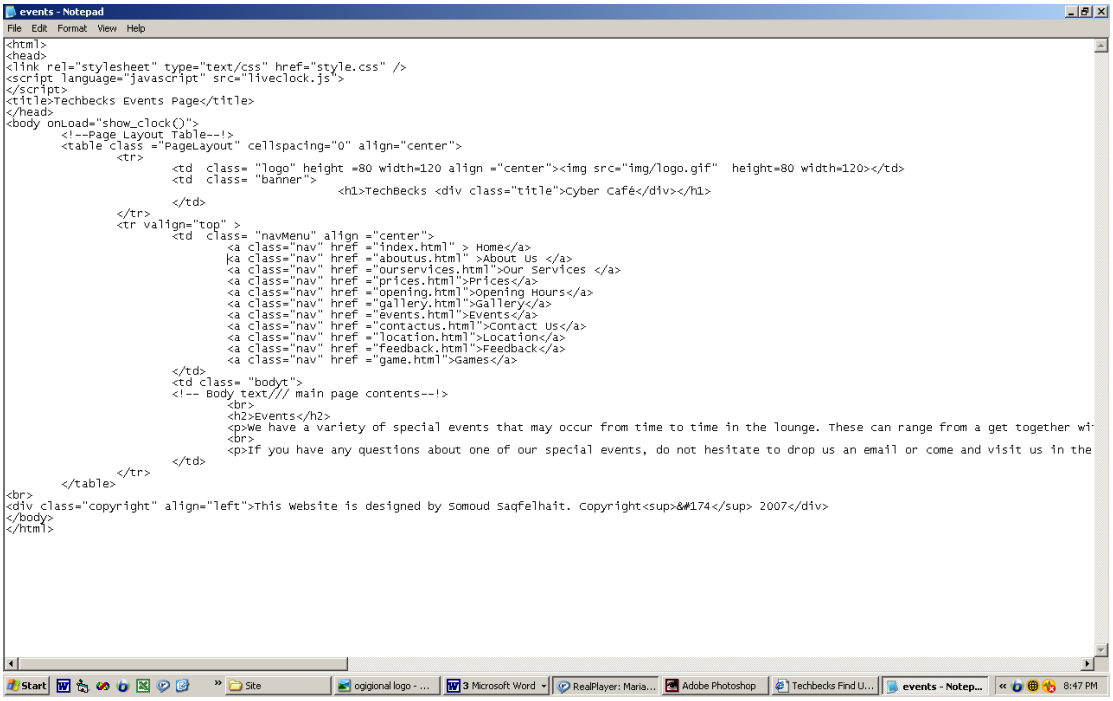


**Figure 18(notepad text editor)**

## 4.3 Word Processing Software

I used Microsoft Word to create the plans and design of the website. This report is also produced in Word.

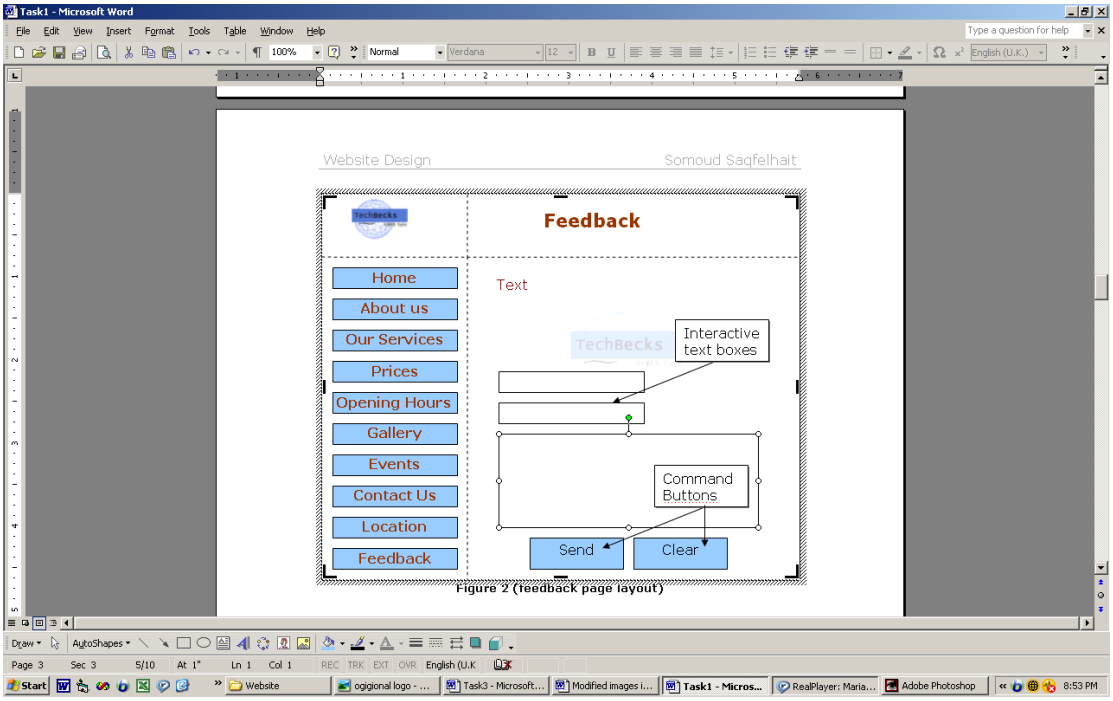


**Figure 19(plans created in Microsoft Word)**

# 5 Security and Copyright

## 5.1 Web Server

The web server that is used to host the website is the college server (epub.leeds-lcot.ac.uk).

## 5.2 Uploading the Website Files

File transfer protocol is the application layer (OSI model) protocol that handles file transfer over networks including the internet. I uploaded files to the college server "epub". The application that implements ftp that I used is "WS_FTP.exe"

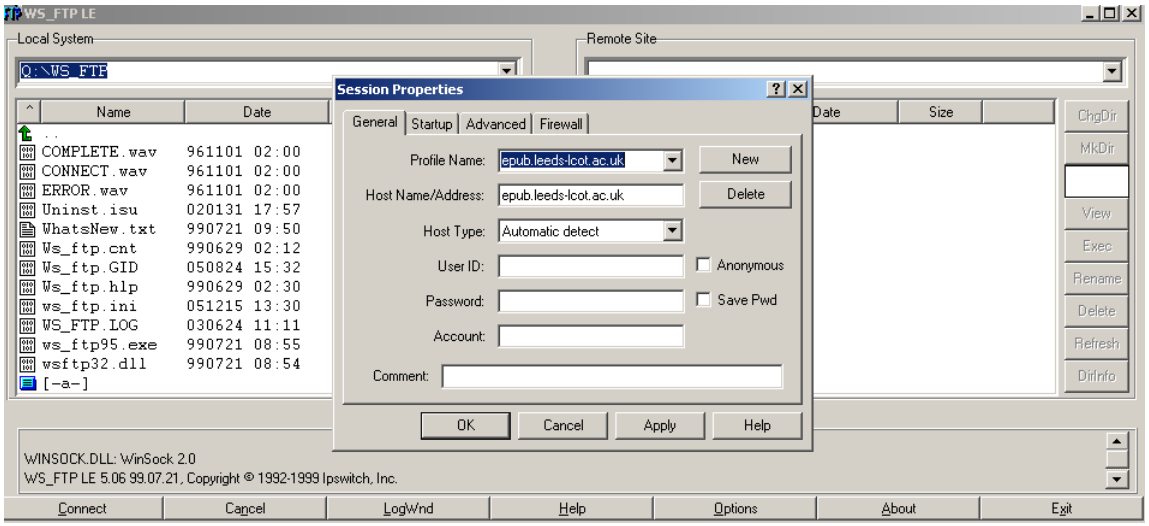


**Figure 20(ftp client software)**

Usually the server will not allow unauthorised access so the correct combination of username and password should be input to connect to the server.

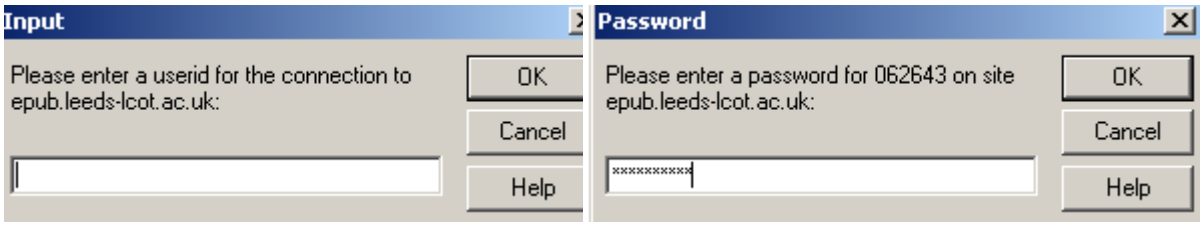


**Figure 21(web server user authorisation)**

Once the PC is connected to the server, files can be uploaded.

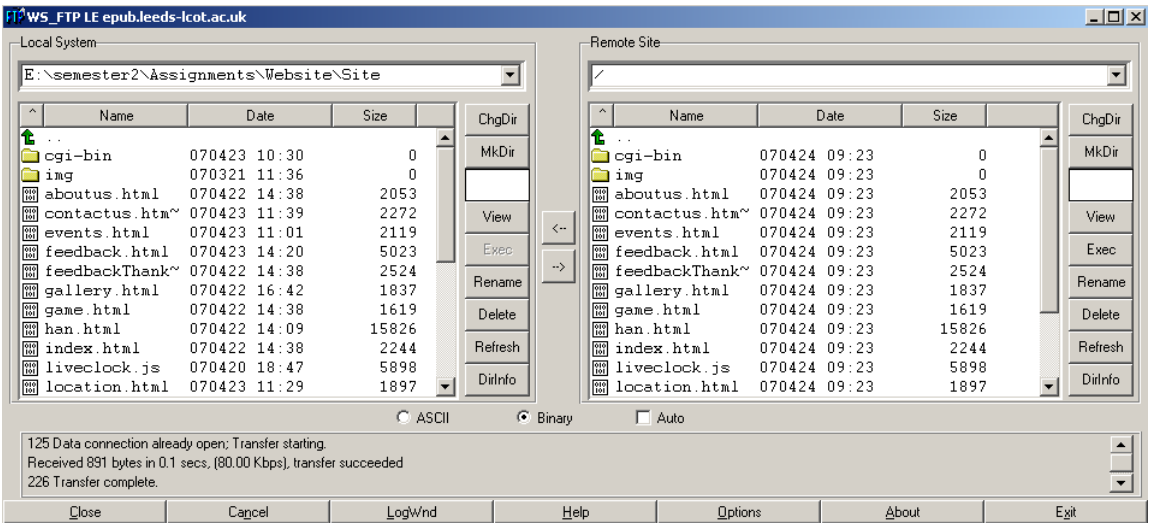


**Figure 22(files transferred using client ftp software)**

Another way of connecting to an ftp server is by entering the server name or IP address into a web browser and specifying the application protocol to be ftp. The server will still ask for authorisation as shown in figures 24 and 25 below.

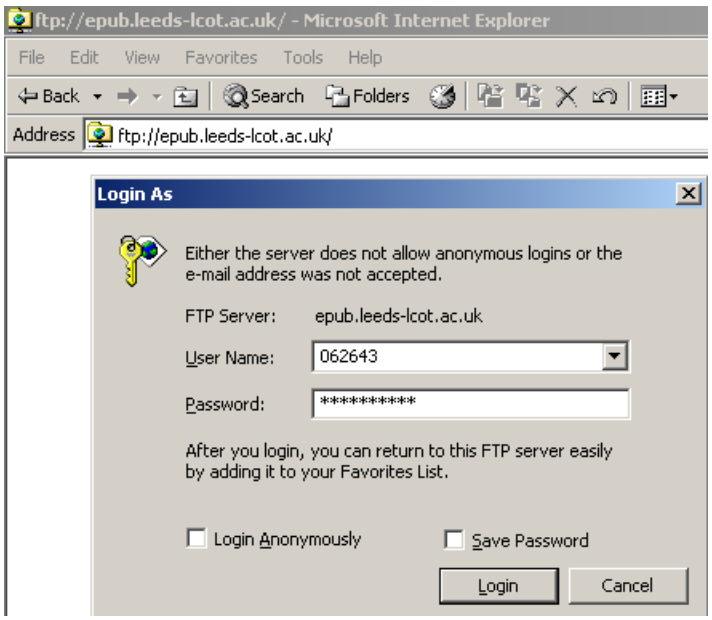


**Figure 23(login to the web server via Internet Explorer browser)**

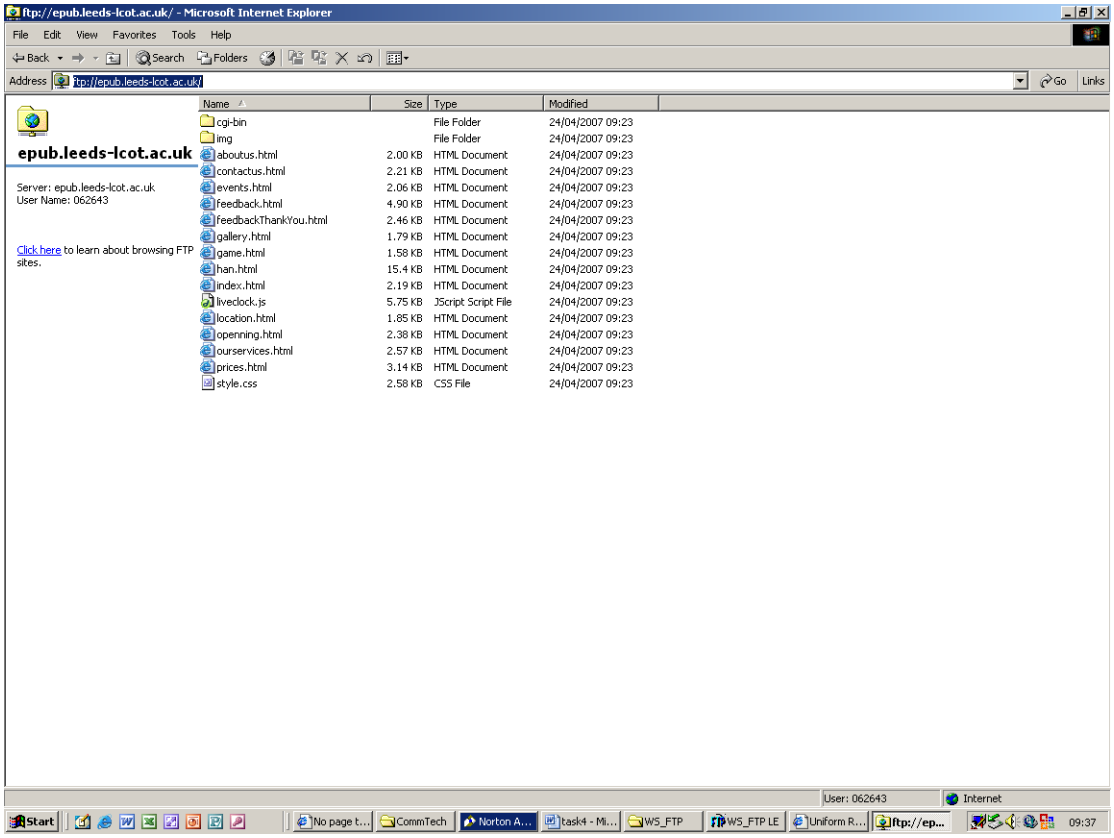


**Figure 24(uploading the files "copy and paste")**

The files to be uploaded or downloaded can be copied and pasted from or to the server.

## 5.3 Security

### 5.3.1 User authorisation

The web site pages and contents are protected by the log-in procedures through the authorisation, identification and authentication of the user, it can be achieved by

- Password control: Passwords should be carefully chosen, kept secure (memorised not written down), and changed regularly.
- Data encryption: is used to prevent hackers from picking up the communication signal and hence the data and play it back on their machines.

### 5.3.2 Firewall

The web hosting company (Web server) should use a firewall (hardware or software) to prevent unauthorised access to the server and hence prevent hackers from deleting or altering website pages. Besides, the web designer and the site manager should use firewalls to prevent hackers from getting the web hosting account details.

### 5.3.3 Antivirus

The web hosting company (Web server) should use Antivirus Software to prevent computer viruses from being installed on the system and hence the risk of system crash. However, most web hosting companies use Unix Web Server Operating Systems which are more secure than Windows based Operating Systems.

## 5.4 Copyright

One way of protecting and securing websites, brand image or company image is copyright. Copyright (including software copyright) in the UK is protected by the "Copyright, Designs and Patents Act, 1988". A copyright is established automatically when the product is published. For a company to secure its rights in case of court claims regarding a specific product a company or individual can simply mail the designs or the software to themselves by registered mail. a website copyright is usually reserved by stating the copyright owner as shown in figure 16.

Website designers should get the explicit permission of the original author before using any image, code or script. This applies even if they apply changes to the object in use.
I have included copyright statement in every page of the website.

# 6 Bibliography

1. BTEC National, IT Practitioners, Software Development, Jenny Lawson et al.
2. BTEC Nationals for IT Practitioners, G. Knott and N. Waits.
3. JavaScript Made Simple , Peter McBride
4. http://www.thesitewizard.com/wizards/feedbackform.shtml
5. http://www.dynamicdrive.com/dynamicindex12/hanoi.htm
6. http://www.dynamicdrive.com/dynamicindex6/clock2.htm

# 7 Appendices