

Online Marketing of the new Technology Centre – MI Building

**CP4014 Internet and Communications Technology
Assessment 1**

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1. Design

1.1 Breakdown Content

The first step in the design process was to familiarise myself with the content for the site provided in the document MI Building Brochure.doc. This content could easily be split into 6 clear pages including a homepage and 5 others, *about*, *careers*, *facilities*, *support* and *contacts*. By summarising the headings and content for each section into one word titles, I have the main headings for the Navigation Bar. Two pages of the site that could not be devised from MI Building Brochure.doc are *gallery*, to display photos of MI building provided by Brendan Riordan and my contact details.

1.1.1 Navigation bar

I kept the headings in the order that the above mentioned document read, except that I felt *facilities* should be the first title after *about* as this was maybe a more important section to most users and subsequently more visited. *Gallery* I added at the end, but before *contacts*, as it was a page that summed up everything that had been stated on the other pages, the same can be said for *contacts*, it offers a summary of the content in the site. Also, it is common practise to have the contacts/contact us page as a final link in the nav bar for most corporate sites. I chose *contacts* over *contact us*, as it is not just one organisation that the page held contact details for.

I chose to create a sub navigation that would form a footer to the website. I chose to put my details as a footer because the page does not provide important content that the user must have in the main navigation, but it was important this was a link on every page, as well as the university official disclaimer, it did not matter however if you had to scroll to get these links.

1.2 Rough Sketch

From the list of sections generated by dissecting the content, I produced a sketch showing how the website will be structured. The sketch (see *appendix 1*) shows the filename for each page and how the site will be linked together and constructed using various html and shtml files. The sketch was drawn in boxes, each box representing a table – this helps to visualise how the tables will be nested. The header and footer are separate html pages (see section 2.1 for more detail). The header will contain the background image and the main navigation bar; the footer will contain the sub navigation as discussed above. The sketch depicts how all content pages will be .shtml files and have server-side include tags in the html code which will include header.html and footer.html to every content page.

1.3 Page Layout

From this sketch I began to design the aesthetics of the website in Photoshop. Firstly I chose the colours for the site, choosing web safe colours used on the University of Wolverhampton site, Dark Blue - #333366 and Mustard Yellow - #FFCC33. I did this because the building is a part of the university therefore I felt there should be subtle continuity with www.wlv.ac.uk. To design the background image I used two photographs provided by Brendan Riordan as a suitable background, using the colour #FFCC33 I added a colour overlay to the image and a grid, to produce an image that complemented the technology theme. The image was designed to frame the content; the diagonals of the image are used to help guide the eye to the content of the page. Similarly I have chosen subtle colours so the image does not detract from the content of the page. This design allows for growth of the site by leaving space to introduce left navigation. At this point I selected the fonts for the site. For the logo I used Myriad Web, as this was to be an image I could use a font that was not web safe, I did not need to worry about how the user's browser would render this font. However, I

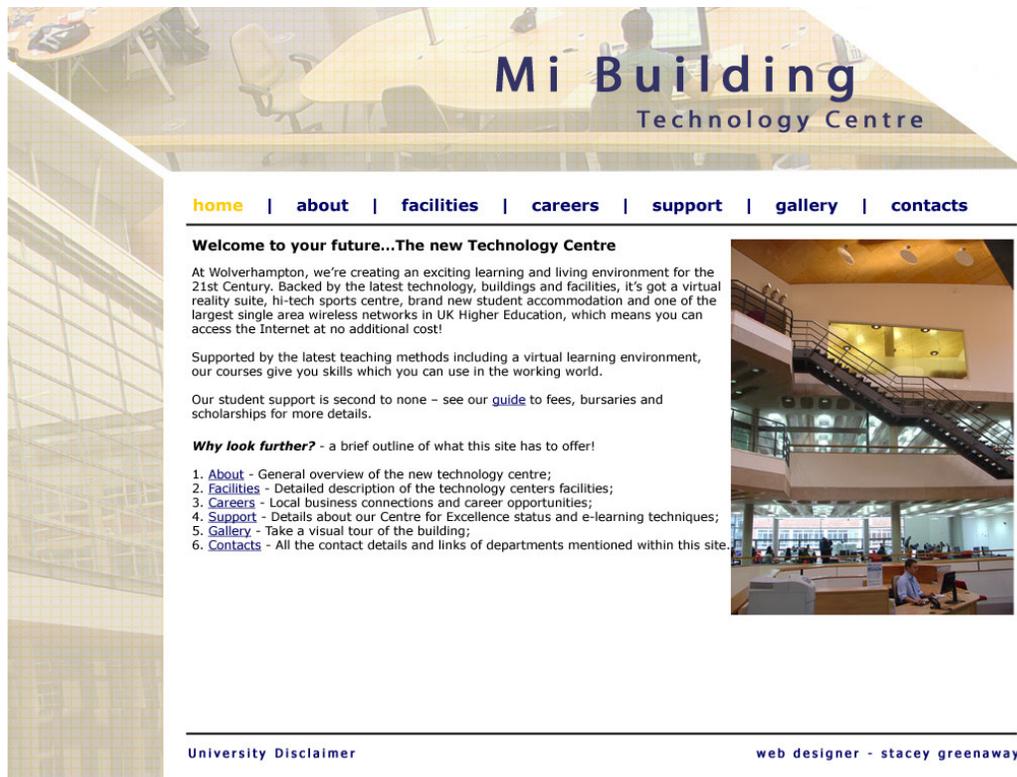
wanted to select a font that was simple to sit over the background image and not detract from the copy, it must also compliment Verdana which I had selected for the navigation and copy. Verdana is a web safe font meaning the majority of user's browsers will be able to render it, it is clear and easy to read.

Continuing into the layout of the page, I selected the images for the right hand side of the page from photographs provided by Brendan Riordan. These images should not detract from the copy but add some colour to the page and illustrate the text. I tried to use images for each section that complimented the theme of the page, i.e. for support, I chose the helpdesk and for facilities, I chose an image of the computer lab. These images increase the aesthetic of the site by relieving the eye of the text.

After laying out the homepage I did not layout each page in Photoshop as I knew only the copy would change and I would use the formatting of the word document as a guide, as well as *Appendix 1* as a guide for layout.

I optimised all images using the 'Save for Web' command in Photoshop. All images were optimised to medium – low quality jpg's, hence I lost some colour information and some sharpness, but you would have to zoom in to the image to notice. By optimising the images the website will download quicker making for better usability.

Fig1. Homepage Photoshop Design



2. Implementation

2.1 Description

2.1.1 Main Structure

I designed the website to have a separate header and footer. This content is constant throughout the whole site and therefore does not need to be reproduced on every html page. If it is reproduced it makes editing the site more time consuming and increases the chance of errors occurring in the site such as typos, or forgetting to update all the pages so the navigation bar may miss a new link. To ensure continuity over time it is good practise to include the navigation as a separate page so that it only has to be edited once to change the appearance of the entire site.

I used server side includes to create the separate header and footer. Firstly I coded the index page building the layout in nested tables, following *Appendix 1* as a guide. I used percentage values for the width to allow the table to react to different users requirements. Then I cut out the head and body up to the end of the nav bar and put that into header.html. I took the bottom table after the content section and put that into footer.html. The main content section remained as the index.shtml file. I edited this file adding a tag at the very top of the page to include header.html, then at the very bottom of the page I added the tag to include footer.html. The nested table in index.shtml holds the only content that will constantly change from page to page and therefore the only section that really needs to be edited. I therefore made 6 copies of index.shtml so that all the other content pages would have the same structure – by coping them I limited the risk of missing a row and having a web page that bounced around the browser window. With this initial structure in place the site is easier to update over time and add new sections and continuity will be kept throughout.

2.1.2 Stylesheet - CSS

At this stage the text had no formatting. To do this I used an external style sheet, main_style.css, this was linked to the website by putting <link> tag into the <head> of header.html. The .css file was already in place as I had used it to add the background image to every page of the site. I specified verdana as the font, also attributes for links so I could specify mouseover colours. I set the font-size attribute to a percentage value as opposed to a fixed point value to allow for users to have control over the size of the font themselves. This is of great advantage to visually impaired users. Within this stylesheet I specified a class called menu, this would be assigned to the Navigation bar. I created the separate class for the navigation links as I wanted them to render differently to links within the copy. The font size needed to be larger, bolder and I didn't want any text decoration. To make the navigation links use the menu class attributes I added class="menu" to the <a> anchor tag. I used text for the navigation over images as it is quicker to download and is indexed before images by search engines.

2.1.3 HTML Guidelines

My tags all have the attribute border=0 so if the image is a link there is no blue border around the image and an alt attribute so users can see something if they have images turned off, or if their connection is slow and the image is taking a while to download; alt tags also help search engines to index your site. I indent my HTML code and comment sections so it is easy to scan the code and pick out the correct section you need to edit. I have included Meta tags in the

<head> to offer search engines information about my web site and help them to index my site.

I use lowercase tags, this is partly out of habit, I always have done and type on automatic a lot of the time, but more importantly because I have, in the past, worked with xml/xhtml, where it is vital that tags are lowercase as this language, unlike html, is case sensitive. Below is a quote from W3C website:

"If you want to prepare yourself for the next generations of HTML, you should start using lowercase tags. The World Wide Web Consortium (W3C) recommends lowercase tags in their HTML 4 recommendation, and XHTML (the next generation HTML) demands lowercase tags."⁽¹⁾

2.1.4 Javascript Image Gallery

I searched using Google for appropriate image gallery and found some from http://www.hotscripts.com/JavaScript/Scripts_and_Programs/Image_Effects/Image_Display/

I chose the Photo Album Viewer from www.i-code.co.uk/ this is free to use as long as I credited them which I have done.

This image gallery shows off the modern design of the building and the clean user friendly working environments. The drop down menu allows users to select an area of the building they are interested in and take a closer look at it. With more time and resources I would make this a more comprehensive list linked to each section of the site i.e. a section for the IT Futures area and some of the specialist labs.

One problem with this image gallery is that it worked but generated errors in IE using the server includes – there were no errors in the other browsers, but as most users use IE, I had to amend my original design and build gallery.shtml without the server include for the header. This fixed the problem. I will be interested to see if the image gallery works in a php file using includes or if I encounter the same problems.

Fig 2. Javascript Image Gallery



Gallery courtesy of www.i-code.co.uk

¹ Quote from - http://www.w3schools.com/html/html_elements.asp

2.1.3 Form

I chose to put the simple form in my contact details as an enquiry form, I will discuss later in section 3 Extending the Website, how I feel the use of forms could extend the site and how the form itself could be improved using php. The form tag used for this form was taken from the HTML workbook issued as part of this module. I used 2 input boxes and a textarea to capture user information and added a submit button to send the information the form had captured to the users mail client. I added a reset button to clear the form, in case the user made any mistakes or wanted to submit another enquiry.

2.2 Suitability

This website is suitable as a marketing tool for the Technology Centre as it has a clean businesslike design. The site is fast loading so users will not get fed up waiting for images and leave. There are no flashy aspects to the site which serve only to distract from the marketing content. The navigation provides the user with an easy way to find the content they want and get from one place to another. There are plenty of sub-links inside the content to push the user further into the site. I have used target=_blank in the anchor tags for external links, so that the user is not navigated away from the site. It is accessible to a wide range of users as it is cross browser tested for Mozilla Firefox, IE and Opera; I have used percentage values for fonts and table widths to allow the site to adapt to any screen resolution and text settings.

3. Extending the Website

3.1 Improvements

Instead of using server includes I would have built the site using html and php. This would have created greater possibilities for functionality. Aside from file includes for the header and footer, using php will improve the quality of the forms. By using php I would be able to connect the website to a database therefore allowing for data collected in a form to be stored either in a database or a text file. Data collected in the forms can also be submitted via email but the presentation within the email can be formatted so that it would look like an email sent through outlook, but with no extra work for the user, unlike the example of a form taken from the html workbook. Below are a couple of examples of how the site could be extended using php.

3.2 Secure Area

A secure area could be produced which would be entered via a login page asking for a username and password. This area could provide one of two things, an online booking facility and a support section.

3.2.1 Online Booking

Online booking could be introduced with a link from the nav bar. The section could provide a valuable resource for booking sessions in the edit suites and specialist computer labs and equipment. The section would only be accessed once the user had logged in. The page would show a calendar which would show availability, it would be linked to a database which would hold the availability of the rooms/equipment. From here the user could select an available time slot which would take them to a form which would capture their personal details. On submission the database would be updated and the user would be returned to the calendar showing their timeslot booked. They would receive email confirmation of their booking.

3.2.2 Online Support

A facility could be provided for online support. After logging in the user would be presented with a form which would record their details including their workstation and the problem. Before finally submitting the form a search would be done on the subject of the support request and a list of faq's could be generated that were similar to the subject and may solve the problem. If it does not then the user will be asked to confirm submission. Submission of the form would generate a ticket and send an email to the helpdesk. The ticket would have an id and a status and would not be closed until the helpdesk changed the status to closed. Both the user and the technician would see a webpage with their support request which could be updated. Simple or common support requests could be dealt with through written instruction or be placed in a queue for the technician to get to see the user.

Appendix 1 Rough Sketch

Appendix 2 Image Declaration

I have received permission verbal or via email to use all logos/images on this site

Signed

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Appendix 3 Listing of Html Code