Level 3 Interactive Website

1

Client Issue (Initial Brief)

Tom Whitefield owns a Wood Moulding company, and would like a way to arrange sales with clients online.   The time constraint is only that of the internal, but he wants the website to be easy-to-use and appeal to clients with limited computer knowledge. He also wants and easy way to keep it up to date and extra features such as pop-up images.

Client

 Wood Mouldings Trader –Manager is Tom Whitefield.

Background

The company Southern Cross Forestry Products has extra, second grade Wood Mouldings left over because they only ship the best to their customers. They would like a way to sell these and generate a profit. They have decided that the best way to do this is through a website (like TradeMe) which I am to design.

Client's Attitudes

Tom Whitefield wants the company to have an identity similar to the Warehouse idea of, "everyone gets a bargain". It's supposed to give a feeling of being a good deal, a bargain, and he cited the Warehouse and TradeMe as examples.

Stakeholders

1. Tom Whitefield (Manager)
2. ~~Andrew Dingley (left the company)~~
3. ~~Sales Rep 1 (never responded)~~
4. ~~Sales Rep 2 (never responded)~~
5. Martin Savory (IT manager)

Users (Wider Community Stakeholders)

1. Tradesmen
2. DIY
3. Builders
4. Contractors

2
_____

Initial GANNT Chart

Stages	Weeks (Term Two)											
	1	2	3	4	5	6	7	8	9	10	11	Resources
Plan and Research	███	███	███	███								
Identify Issue												Client
Find key factors												Word
Contact client												Internet
Consult client												
Make questionnaire												
Plan GANNT chart												
Write up key factors												
Write brief												
Research similar designs to show to client												
Research existing sites												
Decide on solution				███	███	███						
Develop at least 3 concepts												Photoshop?
Consult client to decide on best concept												Client
Revise brief												Word
Update plan/gannt												
Design solution							███	███	███	███		
Design a solution												
Research new ideas												
Talk with client												
Update plan and brief												
Decide on final look and layout of the website												
Get necessary information from client to implement solution												

Headings only blocked out – all tasks mentioned below heading to be completed in specified time, in any order.

3

Key Factors

- Time: The client is willing to work with the time frame of my assessment, so the only constraint is the timeline of the internal.
- Access to client: The client is available through email or appointment, so this is not a large issue.
- Access to expertise and materials to develop skills and understanding: Teachers and books in class/internet at home – not a big issue.
- Resources: I will need to get visual materials from the client to use in the website – this could be difficult, as it's difficult to arrange meeting times with the client.
- Aesthetics: This is very important. If the website doesn't have good and appropriate aesthetics, the target users won't even look at it.
- Efficiency: The website needs to be efficient so that users do not become frustrated by it. Very important. It also needs to be efficient so that the client can update easily without much difficulty.
- Ease-of-use: The website needs to be really easy to use. It's aimed at a market not necessarily comfortable with computers.
- Software/equipment: I now have software useable at home and school, so this shouldn't be an issue.
- Client needs to be able to update website easily in the future as information changes: This needs to easy, convenient, and ideally able to be done with minimal web-coding knowledge.
- Compatibility: Users of the website may not be very computer literate, so are more likely to have outdated web-browsers and software, so the website needs to be fully compatible with older browsers and not make heavy use of java-script, PDFs, or other elements which require separate programmes, *unless* I have a simple alternative obviously available.
- Current logo can't be used on website. Must either make new one or not use one. There are costs associated with Trade Marking a logo. (Decision: not to use a logo at all.)

Key Factors Prioritized

1. Compatibility
2. Ease-of-use
3. Aesthetics
4. Client needs to be able to update website easily in the future as information changes
5. Efficiency
6. Resources
7. Access to client
8. Time
9. Access to expertise and materials to develop skills and understanding
10. Software/equipment

11. Current logo can't be used on website

Prioritization Explained

1. Compatibility: If users can't understand the website, or if it is faulty on their (outdated) browser, they will not want/be able to use/view it
2. Ease of use: If the website is difficult to use customers will give up and leave it. Since customers may not be computer literate, they will give up especially easily
3. Aesthetics: Website needs to *look* simple and easy to use, to calm customers. The look gives the website a feel, and it needs to seem professional and helpful

Combined effect: All related to the way customers perceive the website. For the site to be effective, they must have a positive impression of it. Thus it needs to be usable and professional looking.

4

Needs/Opportunities

Needs

1) Create a website for Client Wood Mouldings Trader to sell 2nd grade products.
2) The site needs to display image in relation to the constantly-updating wood moulding profiles.
3) There needs to be an easy way to update prices and add new profiles.
4) The website needs to be user-friendly for users who are probably not computer literate.
5) The website needs a feel much like the Warehouse[c]. It needs to seem like a bargain.

Opportunities

1) The website could incorporate elements e.g. shopping cart which would make it easier for the client's clients to make purchases.
2) The client believes that the website could expand in future and become a major aspect of their business.
3) The site can utilize advanced coding in php to make it completely user-interactive.

Problems and Solutions

1) ~~Make pop-up images~~
   a) ~~Javascripting~~
   b) ~~Use Flash (not as viable)~~
   c) Pop up images scrapped later in the project
2) Create a way to easily update prices AND add new profiles *with pop-up images*.
   a) Prices: update from excel sheets
   b) Profiles: create template
   c) Profiles: make TradeMe-like uploader (a form with different steps)

     d) Both: Table that includes images and prices and does full update? (probably harder than necessary + inconvenient)

     e) Use Access as a Database to manage this.

     f) What I did: Using php and mySQL, create a php script which inserts values from a csv file (default output by Excel) into the mySQL database. This allows infinite addition/changes of profiles.

3) Create a design which works well for those unfamiliar with the internet, which is aesthetically appealing

     a) I want the navigation bar to be consistently placed tabs, which change colour depending on which one is the page currently selected.

4) ~~Create a search bar~~

     a) ~~This was scrapped later in the project~~

5) Create a way for customers to order wood mouldings from the company

     a) create a shopping cart using various database technologies. This would require log-ins.

     b) Create an order form that clients can use to order wood mouldings from the company, and create associated automated email form. This would use php.

5

Updated Brief

Version 2

Create a website for the business "Wood Mouldings Trader". It needs the ability to display "profiles" of wood products, and also the ability to add more of these profiles at a later date (to be added by non-computer techs at the business). The client has requested that images pop up when the name of the profile (to be in a product list) is hovered over. This website will deal with purchases of wood by cash, cheque, or direct deposit, but will *not* need to be secured, as it will only direct the purchaser to contact the company to arrange payment and pick-up.   The site is to sell *second-grade* wood moulding products. The client would like the website to be visually appealing, easy to use, and appropriate for use by DIY persons, builders, and contractors. These people are not always fond of computers, so the website should be simple.

Specifications

- The website should be easily compatible with older browsers.
- The site will have six pages: Home, Prices and Products, Stock List, Payment, Delivery, Contact Us.
- The website should be simple.
- It needs the ability to have more profiles added at a later date (i.e. it won't be static).
- The client has requested that images pop up when the name of the profile (to be in a product list) is hovered over.

Updated GANNT chart

Stages	Weeks (Term Two)											Resources
	1	2	3	4	5	6	7	8	9	10	11	Resources
Plan and Research	▓	▓	▓	▓								
Identify Issue		█										Client
Find key factors		█										Word
Contact client		█										Internet
Consult client		█										
Make questionnaire		█										
Plan GANNT chart		█										
Write up key factors					░	░						
Write brief					░	░						
Research similar designs to show to client		█										
Research existing sites		█										
Decide on solution				▓	▓	▓	▓					
Develop at least 3 concepts												Photoshop?
Consult client to decide on best concept												Client
Revise brief												Word
Update plan/gannt												
Design solution							▓	▓	▓	▓	▓	
Design a solution												
Research new ideas												
Talk with client												
Update plan and brief												
Decide on final look and layout of the website												
Get necessary information from client to implement solution												
Key												
Finished		█										
Still to be done		░										

6

Research

1. Screen resolution:

Date	Higher	1024x768	800x600	640x480	Unknown
January 2008	38%	48%	8%	0%	6%
January 2007	26%	54%	14%	0%	6%
January 2006	17%	57%	20%	0%	6%
January 2005	12%	53%	30%	0%	5%
January 2004	10%	47%	37%	1%	5%
January 2003	6%	40%	47%	2%	5%
January 2002	6%	34%	52%	3%	5%
January 2001	5%	29%	55%	6%	5%
January 2000	4%	25%	56%	11%	4%

2. Commonly used browsers:

2008	IE7	IE6	IE5	Fx	Moz	S	O
April	24.9%	28.9%	1.0%	39.1%	1.0%	2.2%	1.4%
March	23.3%	29.5%	1.1%	37.0%	1.1%	2.1%	1.4%
February	22.7%	30.7%	1.3%	36.5%	1.2%	2.0%	1.4%
January	21.2%	32.0%	1.5%	36.4%	1.3%	1.9%	1.4%

3. Common web speeds/load times: 10 seconds is *absolute limit*, it should take much less. "In New Zealand the major telephone company Telecom New Zealand owns the majority of the infrastructure and is the only provider of DSL, which they wholesale to their subsidiary Xtra (the largest ISP in New Zealand), as well as many of Telecom's "competitors", with varying speeds and download limits. Download speeds are usually 7.6 Mbit/s, but the ADSL2+ rollout has meant some locations have received speeds up to the maximum theoretical limit of 24 Mbit/s. Most services limit speeds (bandwidth cap) to 64 kbit/s after going over an allocated allowance, while others charge per MiB/GiB over a set limit." [Wikipedia]

> **Comment:** The student has undertaken specific research into the nature of browsers used to view web pages and the required resolution in order to justify the choice of actions and the techniques used

4. Colour displays: The current trend is that most computers use 24 or 32 bits hardware to display 16,777,216 different colours.
   Older computers and laptops often use 16 bits display hardware. This gives a maximum of 65,536 different colours.
   Handheld computers (and very old computers) often use 8 bits colour hardware. This gives a maximum of 256 colours.
5. Javascript:

Date	JavaScript On	JavaScript Off
January 2008	95%	5%
January 2007	94%	6%
January 2006	90%	10%
January 2005	89%	11%
January 2004	92%	8%
January 2003	89%	11%
January 2002	88%	12%
January 2001	81%	19%
January 2000	80%	20%

Research Results

> **Comment:** Research results that inform future action and decision making

1. Screen resolution: It is safe to assume that the smallest is 800x600, and that is an extreme minority (8%) with most having 1024x768 or higher.
2. Commonly used browsers: mostly I.E. 6 and 7 and Firefox, with a small number (5.6%) using other browsers.
3. Common web speeds/load times: NZ web is really slow, so I shouldn't use graphics in the site unless necessary – the load time is irritating. 10 seconds is the max total time for a page to load.
4. Colour displays: Colour is not an issue.
5. Javascript: 95% of users have javascript turned on, so if I need to use this it isn't a big issue.

Things to keep in mind

> **Comment:** The student identifies aspects from reflection on practice and the findings from research that will inform the development of the outcome

1. Inserting search bars: Search should not be overly literal.

2. Text sizing: Text should not be locked at a certain pt, but should be allowed to resize if the viewer wishes, so coding should be in "small", "smaller" etc rather than 12pt.
3. What's good for navigation bars? Navigation bars should be left aligned and *not* in all-caps, for easy scanability.
4. Consistency: an inconsistent website will annoy and confuse viewers, so the website should be consistent from page to page, and also with standard web conventions. Change colour of visited links, even if it isn't perfect aesthetically.
5. Photos and size: there should be high-quality photos available *after* a viewer clicks a thumbnail. There's no point in linking a thumbnail to an image which is small itself, it will only cause irritation.
6. Support for reordering? Consider this, it can increase sales.
7. Avoid large blocks of text
8. Make page visible by Google/other search engines
9. Don't have things that look like advertisements – viewers will ignore them.
10. Don't force open new windows – it confuses viewers (e.g. back button ceases working etc).
11. Users questions should be easy to find answers to
12. Website should look *credible* or users won't trust it.

Brief Updated

I need to create a website for the business "Wood Mouldings Trader". The site is to sell *second-grade* wood moulding products. The client would like the website to be visually appealing, easy to use, and appropriate for use by DIY persons, builders, and contractors. The colours to use are green, white, and blue (others possible). These people are not always fond of computers, so the website should be simple. Tabs should be large, with large and resizable text to make it easier for people whose vision is not as good. The website should be easily compatible with older browsers, and the navigation bar should be consistently placed to avoid confusion. It needs the ability to display "profiles" of wood products, and also the ability to add more of these profiles at a later date (to be added by non-computer techs at the business). The client has requested that images pop up when the name of the profile (to be in a product list) is hovered over. This website will deal with purchases of wood by cash, cheque, or direct deposit, but will *not* need to be secured, as it will only direct the purchaser to contact the company to arrange payment and pick-up. The client does not want the website to have any associations with the parent company. When showed a series of example websites, the sleek, modern one was the one he liked best. Because Trade Marking is expensive, I will not be designing a logo for their company. The client uses excel sheets to keep product lists up to date, so it should be possible to easily update the site from these (about once a week). My site design will need approval from several people within the business. There are no size constraints on the website because of cost, but the download time still needs to be very short, so that viewers don't lose interest.

The website should have search bar to make it easy for users to find the product they want. This search bar should not be overly literal. The pages should be consistent throughout the site, and also with other websites. It should be easily scannable and avoid large blocks of text. It needs to take into account commonly used browsers, screen resolutions, and download speeds. I need to take steps to make the website visible to Google and other search engines. The website should look credible or users won't trust it. I should also consider other ways to increase sales, such as support for reordering or an information request form for clients.

> **Comment:** References made to client interactions which shape the development of the outcome

The client also has a second website in mind for me to redesign; coding is not a large issue, but the site needs to be brought up to web visual and compatibility standards.

Specifications

- The website should be easily compatible with older browsers.
- The site will have six pages: Home, Prices and Products, Stock List, Payment, Delivery, Contact Us.
- The website should be simple.
- It needs the ability to have more profiles added (by non-computer techs at the business) at a later date (i.e. it won't be static).
- The client uses excel sheets to keep product lists up to date, so it should be possible to easily update the site from these (about once a week).
- Tabs should be large, with large and resizable text to make it easier for people whose vision is not as good.
- The client has requested that images pop up when the name of the profile (to be in a product list) is hovered over.
- The website should have search bar to make it easy for users to find the product they want. This search bar should not be overly literal.
- It needs to take into account commonly used browsers, screen resolutions, and download speeds.

Image Research

Research of various company websites

(N.B. The Client liked the look of this website.)

What's good about it: I like the clean lines, the divided-look navigation bar across the top, and the fact that the main part is smaller and centred (this makes it possible to view on several different browser sizes without un-necessary scrolling or disruption of design).

What I would use from it: Centred layout, for sure. I think that this is the best way to make a site compatible with various browser sizes while retaining a crisp, planned look.

Having the navigation bar across the top is also functional, although it could be along the side just as easily, depending on design requirements.

It's a good idea to have some kind of logo. Do you have one already that I should incorporate? Is there an existing site I can take a look at?
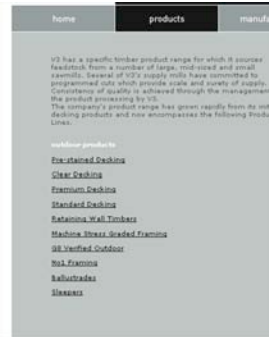
This site has very nice crisp lines. Since it gives a tidy feel, I would probably also use very clean lines on the finished website

What should also be there: Search button. Every website selling anything needs a search button.

It has a structure where you click a broad heading and gradually narrow down. This would be good to include in the finished website as well as the search bar, for those who are simply browsing.
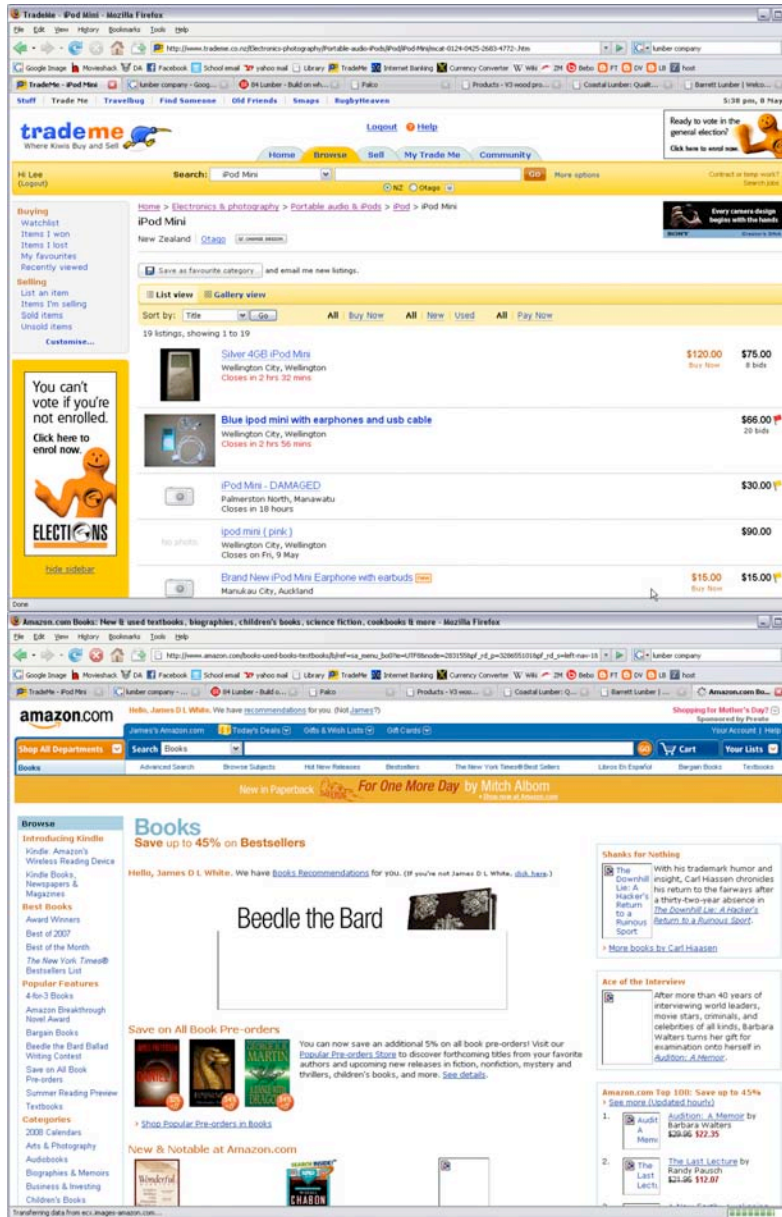
In the cases of TradeMe and Amazon, they are mainly trying to find room to fit huge numbers of menus and products. Their layouts are not especially attractive, and I wouldn't take much from the layouts. The menus, however, are good because they're very easy to understand and navigate. TradeMe also allows users to upload new profiles. A form similar to this one might be good for adding new wood profiles to the website.

This choice of category matches to the heading that is later displayed

① Category > ❷ Details > ③ Photos > ④ Extras > ⑤ Confirm

Details
Required fields are shown with a star*

Listing Details

Category	Computers > Apple > Laptops
Listing title *	[_____]
Subtitle ?	⦿ No subtitle ○ Add a subtitle (55c) [_____]
Description * e.g. condition, special features	[large text box]
Brand new item	☐ Brand new, unused item with original manuals and packaging
Start price * ?	$ [_____]
Reserve price * ?	⦿ Same as the start price ○ Specify a reserve ? $ [_____]
Buy Now ?	$ [_____]
Allow bids from	⦿ Anyone ○ Authenticated members only ✱
Multiple identical items ?	☐ Create a new listing each time one sells. I have a total of 2 items ⌄
Listing duration *	⦿ Fixed length 7 days ⌄ ○ Or, choose an end time (25c) Thu 8 May ⌄ 11:45 pm ⌄ Trade Me's busiest time is 7-10pm, every day except Sat

Payment & Shipping

Pick-ups *	Buyer can pick-up ⌄
Shipping * ?	⦿ I don't know the shipping costs yet ○ Free shipping within New Zealand ○ Specify shipping costs: Cost Details e.g. Overnight courier within Auckland $ [__] [_____] $ [__] [_____] ⊞ Add another shipping option

Photos can be added at the next stage.

TradeMe has a heading which shows you where you have browsed to/from. This makes the site more comprehensible if, say, you want to easily go back to the broader search heading. Good thing to include in final design?
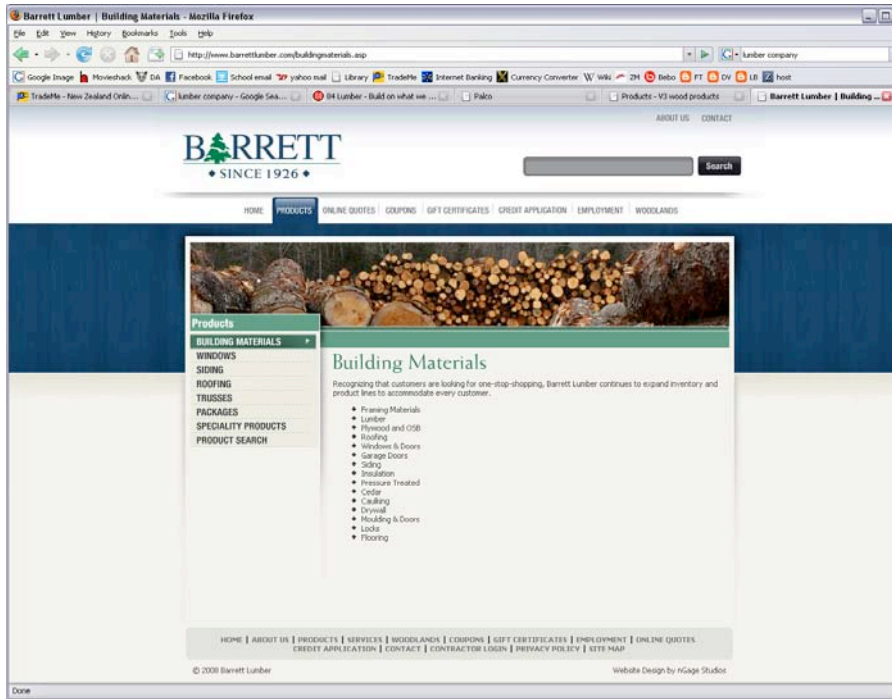
This one is quite nice and clean.
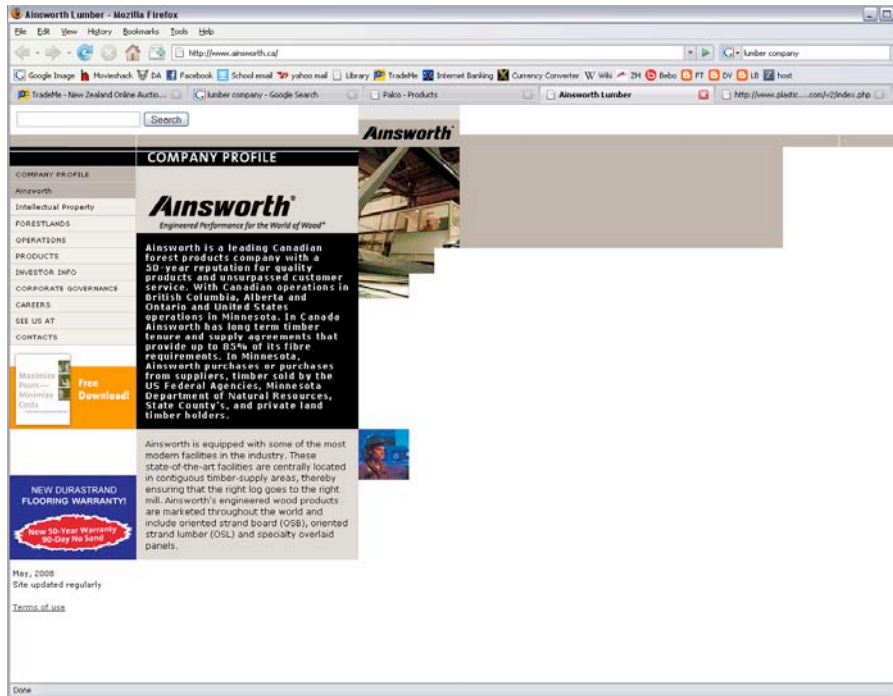
Alternatively, you could choose to align the page so that it was always on the left, and sized to look good on a smaller browser. However, this looks odd on the full screen browser (which is why I prefer the centred layout).

This is another designer's conceptual design for a webpage (in German). I like the way that they've made the page look like an A4 folder sitting on a desk. I'm not sure how hard this is to program, but would this style of design appeal to the client? Would it be appropriate for a website selling wood mouldings?

(Perhaps it is a bit too sleek for this particular project, and not especially relevant.)
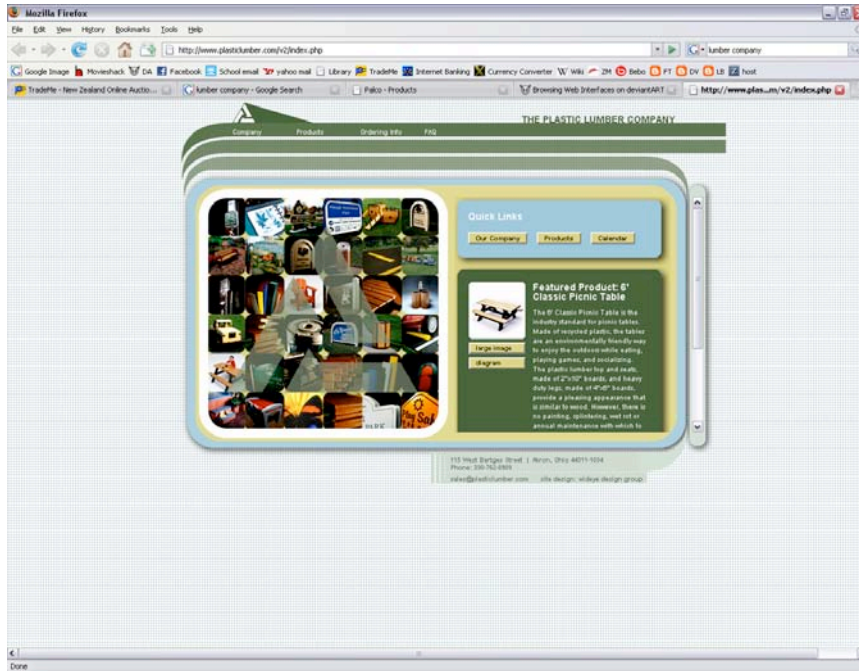
Too busy.
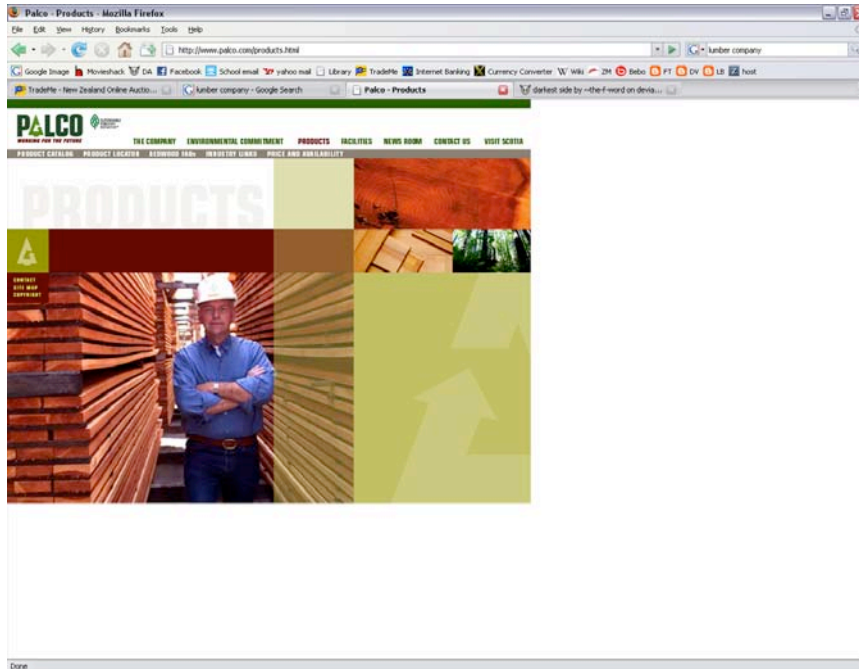
Looks strange when set to the upper left. Better to centre. Interesting effect here with the over-lapping layers. Consider.

Submittable form requesting more information.

Not so good – busy background is distracting. Don't do. Also, tabs at top are hard to find.

Firefox's nice tabs. Rounded look tabs can be effective.

Development

Examine

- Typeface combinations for heading text (there is no logo, so this is important for the site's identity).
- Tabs – what looks good, what works well, what's easy to understand
- Alignments/grid forms (as in website example client liked).

(See next page)

Tabs/Some Typefaces

1.6.08   Fonts for titles of webpage.
          - it's aimed at brides, DIY, contractors etc,
            so it should be functional, not decorative.
          - how do we themeseul? Signature of script?

          Wood Mouldings Trader

          Wood Mouldings Trader   serifs?

          \Wood /Mouldings Trader

          Wood Mouldings Trader   italics?

          Tabs / Nav bar
                    (current)
          blocks: [home] [prods] [contact]   ← too basic

          buttons: (home) (prods) (contact)   no, too "young"

          tabs: [home [prods] [contact]   ← could work, definitely easy.

          Rounded tabs: (home [prods] [contact]   ← could work, slightly harder.

          Still need to: write up search bar notes -
                         get log notes etc for school

11.6.08

Typefaces

Wood Mouldings Trader

Wood Mouldings Trader

Wood **M**ouldings **T**rader

Wood Mouldings Trader

Wood Mouldings Trader

Wood Mouldings Trader

Wood Mouldings Trader

Wood Mouldings Trader

Wood Mouldings Trader

Typefaces

Wood Mouldings Trader

Wood Mouldings Trader
not a nice enough w

Wood Mouldings Trader
too thin

Wood Mouldings Trader
not a nice enough w

Wood Mouldings Trader
too average

Wood Mouldings Trader

Wood Mouldings Trader
difficult to read at speed

Rough Planning for layout

stock images available to work with?

Products / Pages
Search [   ]

Products

Type
Types
Type
Type
Type

22rd June

Wood Holdings Trade

Products / Prices

Branch Info

space heading better

blank

change glow ?

add stripes etc to break it up

← 800 px →

$\frac{800}{6}$:
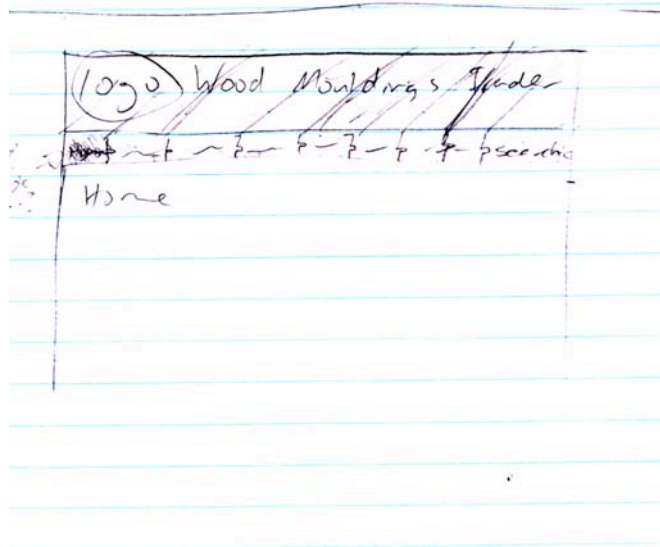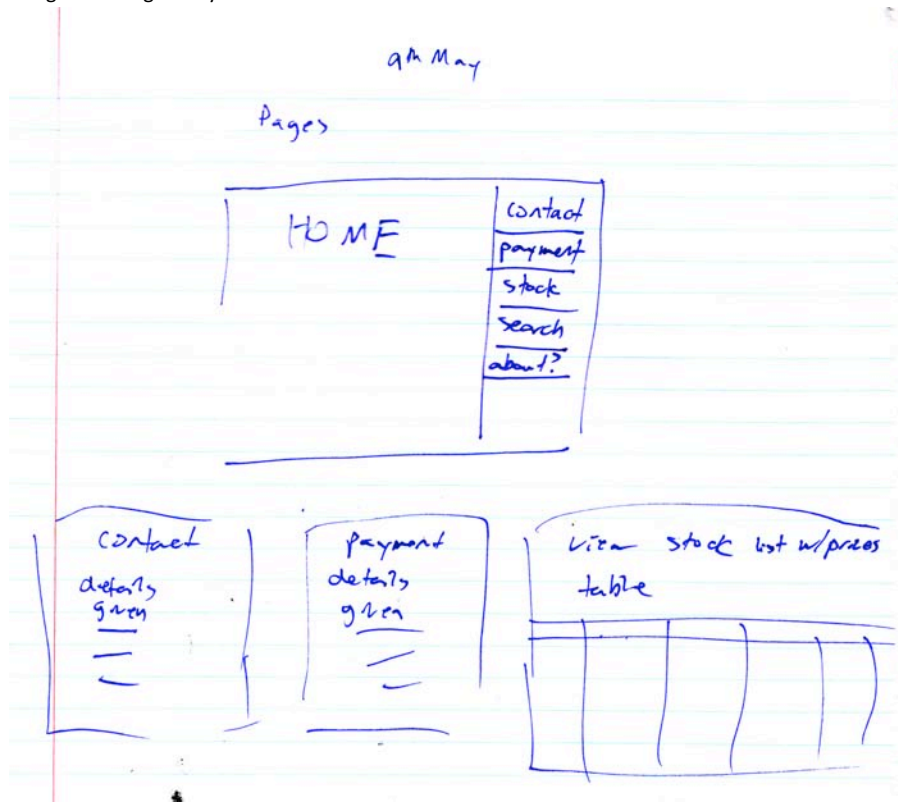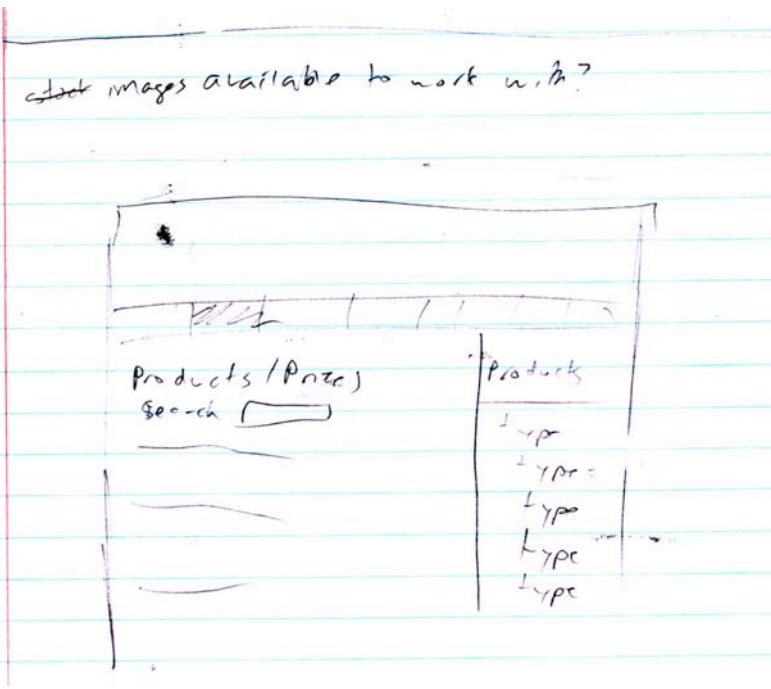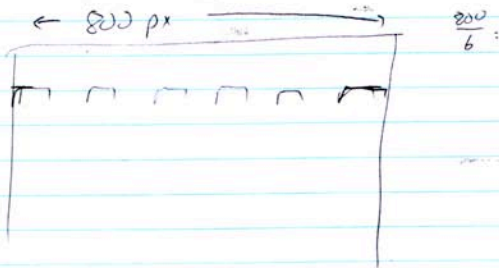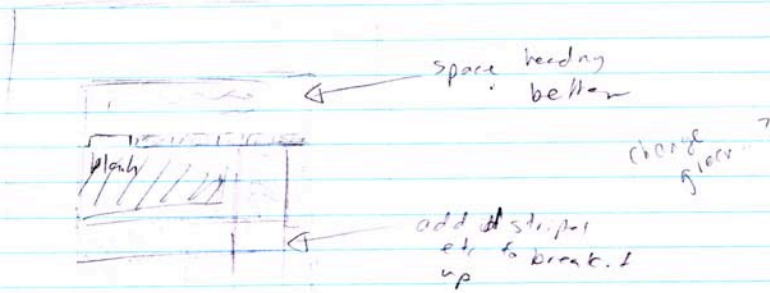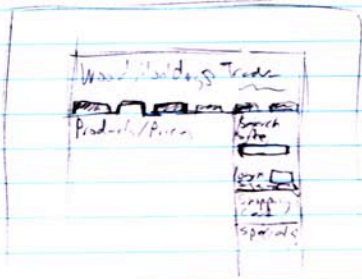
1. Initial idea. Images not in place yet, and fonts haven't fully been decided.

Comment: Using design ideas and client feedback to shape the conceptual design
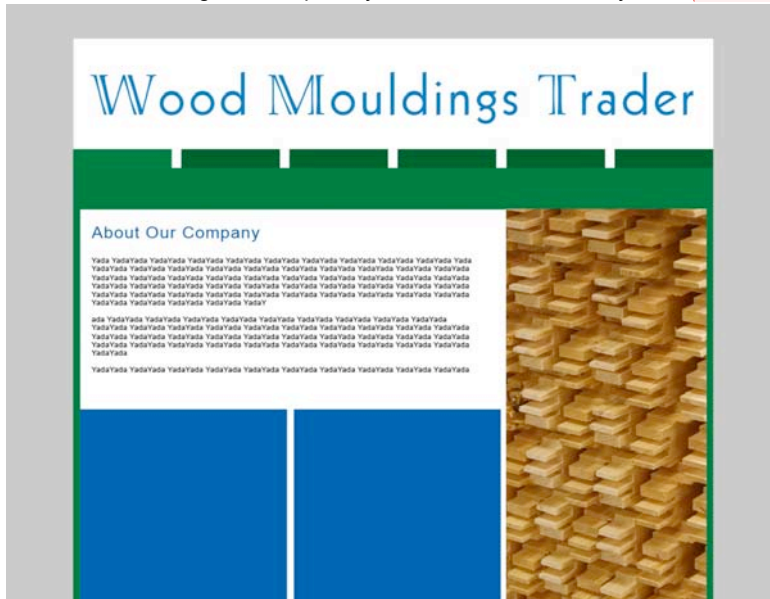
2. Added actual images and a slogan (not a very interesting one). Tried a different font.
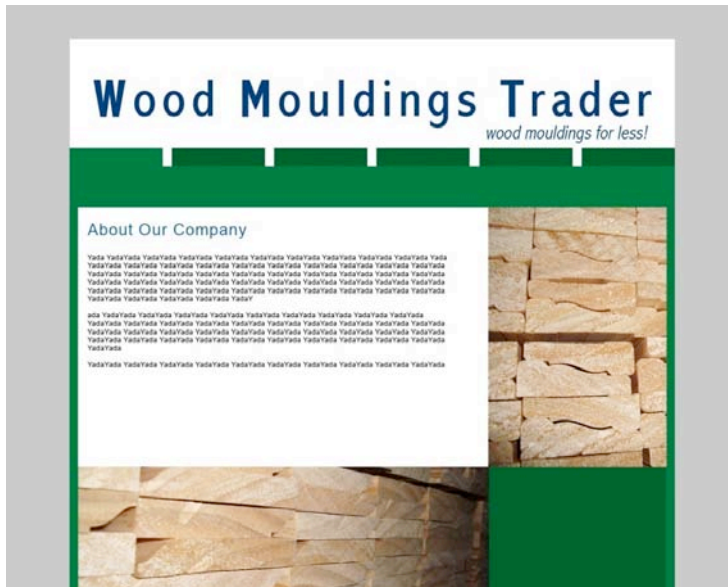
3. Added labels to tabs. Experimented with adding a wooden "strip". Tried a different font, but as it came from a website it may have copyright issues. (Note: the font is no longer on the site I originally got it from, so it is not safe to use due to copyrights.)

4. Tested having a wood background, but it looks cleaner in my opinion with the grey. Tried a different font (from the web, but definitely free for commercial use).

5. The font I like best with the wooden strip look.

(I like the font because: It's thick so easy to read, it has a nicely shaped "w", it's elegant and "fun" at the same time, it has nice letter forms, and it's free. The "g" gives it some character/keeps the look from being too utilitarian. Is it too feminine for a wood moulding site with the "g"?)

6. Font I like without the wooden strip look and with plain background – looks cleaner to me. (Final resolution? Still probably needs *something* in bottom right corner).

-

7. Tried rounded tabs. (Perhaps if I work on the exact shape of the rounding they would be more appealing than the box-look tabs?)
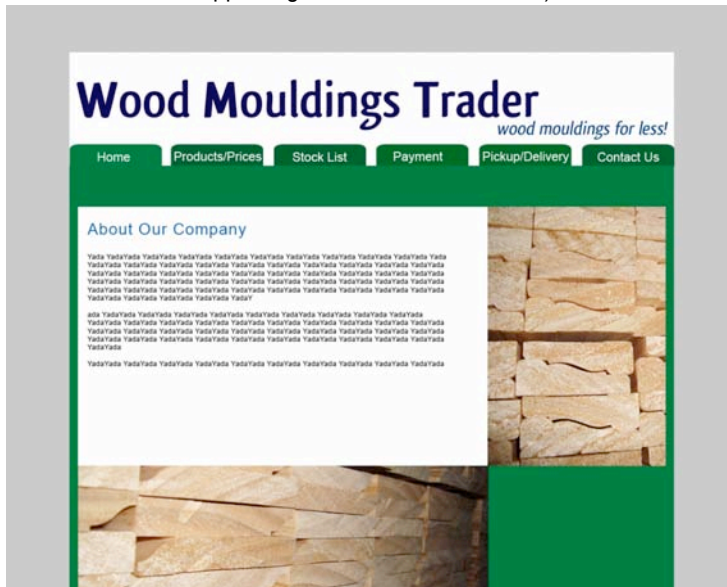
8. Mock up of "products/prices page. Tried adding an extra bar along the right side (should move it to the left?) with various buyer stuff.
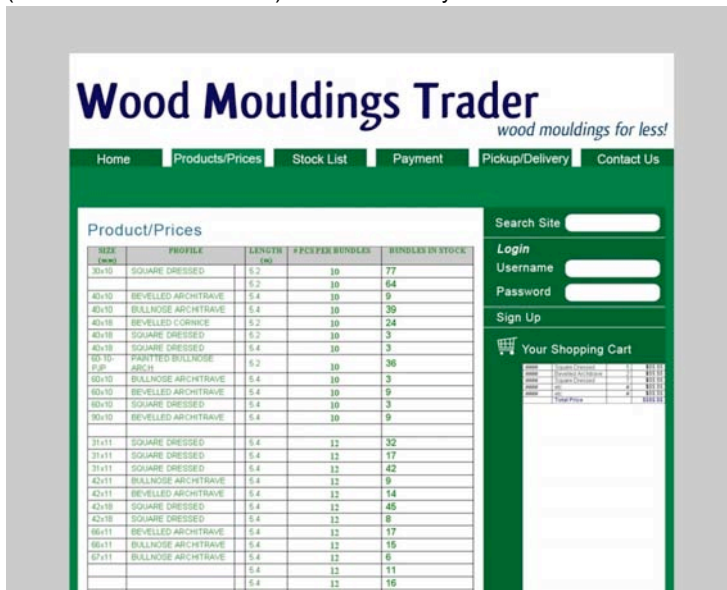
9. Tried placing the shopping cart etc on the left, as is commonly done – to me it just doesn't look as nice somehow.

I wasn't entirely happy with the way that the homepage for option 5 looked (it seemed a bit plain, I liked the simple tabs but I wanted to add something more to the graphic part.) This is my experimentation towards that.
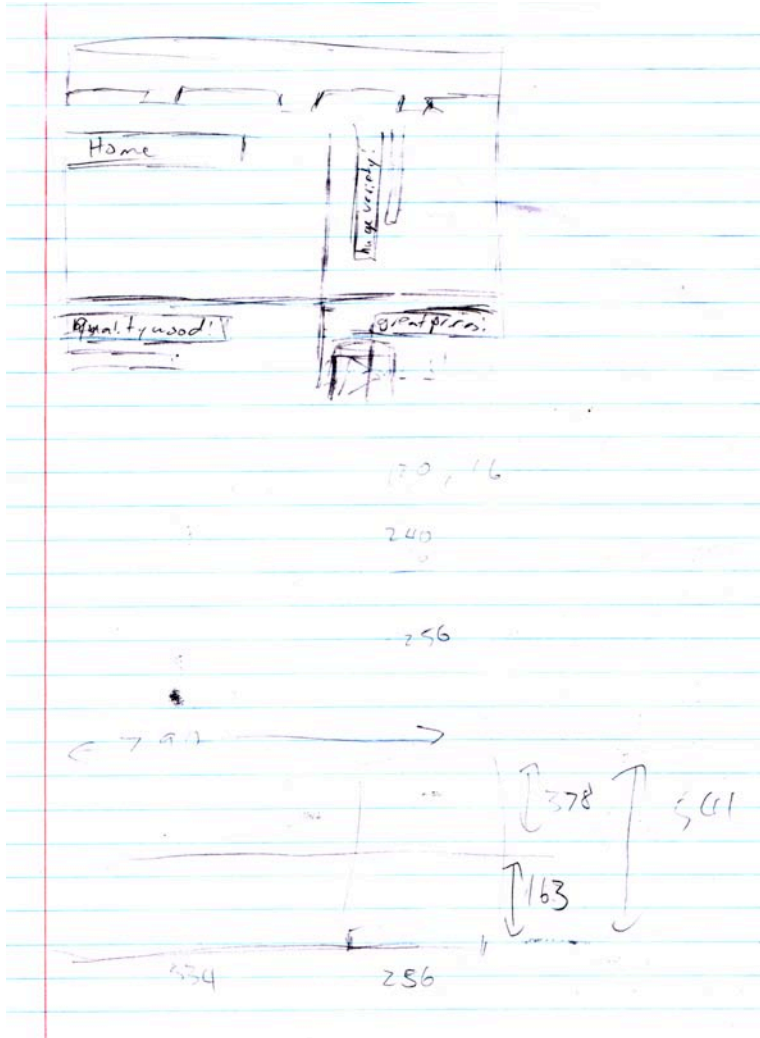
10. Really didn't like this one. It's way too busy.

11. This one was simpler, and a bit better. Still not so great (looks a lot like tartan).
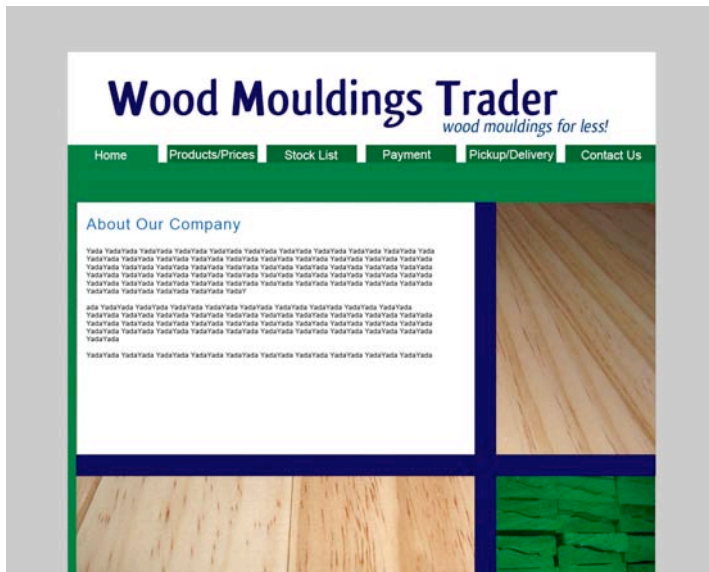
12. I quite liked this one – it's basically the same as for option 5, but with a little bit added. What do you think?

Could also remove the blue stripes along the bottom here, or remove all blue stripes and leave the address – various things like that.

Also, perhaps a header bar:

13a) Off the white?

13b) On the white?

13c) No header bar?

Or header bar but no stripes etc.

7

GANNT Chart updated again

Stages	Weeks (Term Two)											Resources
	1	2	3	4	5	6	7	8	9	10	11	Resources
Plan and Research												
Identify Issue		█										Client
Find key factors		█										Word
Contact client		█										Internet
Consult client		█										
Make questionnaire		█										
Plan GANNT chart		█										
Write up key factors					█	█						
Write brief					█	█						
Research similar designs to show to client		█										
Research existing sites		█										
Decide on solution												
Develop at least 3 concepts				█	█	█	█	█	█			Photoshop?
Consult client to decide on best concept										█	█	Client
Revise brief												Word
Update plan/gannt											█	
Design solution												
Design a solution								█	█	█		
Research new ideas												
Talk with client												
Update plan and brief												
Decide on final look and layout of the website												
Get necessary information from client to implement solution												

Again for Term Three

Stages	Weeks (Term Three)											Resources
	1	2	3	4	5	6	7	8	9	10	11	Resources
Create Solution												
Set up layout of pages			█									Dreamweaver
Consult teachers to problem solve	continuous											Photoshop
Insert text and												Fireworks

format it												
Add pictures												Flash
Add flash												Client
Add navigation bars												
Add automated emails etc												
Create fill out form for adding future profiles												
Update brief												
Update GANNT	continuous											
Place details in Access												
Make website live												
Make Access login etc work												
Test and evaluate												
Check the website works												Client
Check spelling etc												Dreamweaver
Check for client satisfaction												
Modify as needed												
Scheduled												
Completed												

And the next, prettier GANNT chart

KEY		
Planned to complete		
Actually completed		
Do the whole time		

Stages	Weeks (Term Two)											Resources	Problems
	1	2	3	4	5	6	7	8	9	10	11		In Japan – no progress School exams – limited progress
Plan and Research													
Identify Issue												Client	
Find key factors												Client	
Contact client												Client	
Consult client												Client	Had trouble arranging interview with client. Busy and didn't communicate well.

Stages	Weeks	Resources	Problems
Make questionnaire		Word	
Plan GANNT chart		Word	
Write up key factors		Word	
Write brief		Word, Client	
Research similar designs to show to client		Internet	
Research existing sites		Internet	
Decide on solution			
Develop at least 3 concepts		Photoshop	
Consult client to decide on best concept		Client	
Revise brief		Word	
Update plan/GANNT		Word	
Design solution			
Design a solution		Photoshop	
Research new ideas		Internet	
Talk with client		Client	
Update plan and brief		Word	
Decide on final look and layout of the website		Client	Delayed, because client is not responding
Get necessary information from client to implement solution		Client	Delayed, because client is busy

Stages	Weeks (Term Three)											Resources	Problems
		2	3	4	5	6	7	8	9	10	11		In Germany – progress
Decide on final look and layout of the website												Photoshop, client	(carry over from term two) Client hasn't confirmed updated variations (week 4)
Get necessary information from client to implement												Client	(carry over from term two)

Task	Gantt	Resources	Notes
solution			
Create Solution			
Set up layout of pages		Dreamweaver Photoshop	
Consult teachers to problem solve		Teachers	
Insert text and format it		Fireworks	
Add pictures		Flash	
Add flash		Client	Am no longer going to use flash
Add navigation bars		Dreamweaver	
Add automated emails etc		Dreamweaver	
Create fill out form for adding future profiles		Dreamweaver	
Update brief		Word	
Update GANNT		Word	
Input Basic Data into mySQL Database			Need way to manage profiles, so had to add... (Client only supplied partial confusing data initially – postponed) Am no longer using Access – php recommended as easier
Integrate Database and webpage		Mr Smith, Access, Dreamweaver	
Link form to Database		Mr Smith, Brendon Access, Dreamweaver	
Create shopping cart		Mr Smith, Brendon Access, Dreamweaver	
Create login system		Mr Smith, Brendon	

Stages	Weeks											Resources	Problems
												Access, Dreamweaver	
Add pop-up images												Mr Smith, Brendon, Access, Dreamweaver	
Add images to site via php and links												Dreamweaver, Firefox, Mr Smith	Pop-ups were unnecessary.
Create multiple order version of order page												Dreamweaver, Firefox, Mr Smith	This needed to be made easier
Create email output for multiple order version of order page												Dreamweaver, Firefox, Mr Smith	
Test and evaluate													
Check the website works												Client	
Check spelling etc												Dreamweaver	
Check for client satisfaction													
Modify as needed													

And the next one

KEY		
Planned to complete		
Actually completed		
Do the whole time		

Stages	Weeks (Term Two)											Resources	Problems
	1	2	3	4	5	6	7	8	9	10	11		In Japan – no progress School exams – limited progress
Plan and Research													
Identify Issue												Client	
Find key factors												Client	

Stages	Weeks											Resources	Problems
Contact client												Client	
Consult client												Client	Had trouble arranging interview with client. Busy and didn't communicate well.
Make questionnaire												Word	
Plan GANNT chart												Word	
Write up key factors												Word	
Write brief												Word, Client	
Research similar designs to show to client												Internet	
Research existing sites												Internet	
Decide on solution													
Develop at least 3 concepts												Photoshop	
Consult client to decide on best concept												Client	
Revise brief												Word	
Update plan/GANNT												Word	
Design solution													
Design a solution												Photoshop	
Research new ideas												Internet	
Talk with client												Client	
Update plan and brief												Word	
Decide on final look and layout of the website												Client	Delayed, because client is not responding
Get necessary information from client to implement solution												Client	Delayed, because client is busy

Stages	Weeks (Term Three)											Resources	Problems
		2	3	4	5	6	7	8	9	10	11		In Germany – no progress
Decide on final look and layout of the website												Photoshop, client	(carry over from term two) Client hasn't

Task	Gantt	Resource	Notes
			confirmed updated variations (week 4)
Get necessary information from client to implement solution		Client	(carry over from term two)
Create Solution			
Set up layout of pages		Dream weaver Photoshop	
Consult teachers to problem solve		Teachers	
Insert text and format it		Fireworks	
Add pictures		Flash	
Add flash		Client	Am no longer going to use flash
Add navigation bars		Dream weaver	
Add automated emails etc		Dream weaver	
Create fill out form for adding future profiles		Dream weaver	
Update brief		Word	
Update GANNT		Word	
Input Basic Data into mySQL Database			Need way to manage profiles, so had to add... (Client only supplied partial confusing data initially – postponed) Am no longer using Access – php recommended as easier
Integrate Database and webpage		Mr Smith, Access, Dream weaver	
Link form to Database		Mr Smith, Brendon Access, Dream weaver	

Stages	Weeks (Term 4)											Resources	Problems
Create shopping cart												Mr Smith, Brendon Access, Dreamweaver	
Create login system												Mr Smith, Brendon Access, Dreamweaver	
Add pop-up images												Mr Smith, Brendon Access, Dreamweaver	
Add images to site via php and links												Dreamweaver, Firefox, Mr Smith	Pop-ups were unnecessary.
Create multiple order version of order page												Dreamweaver, Firefox, Mr Smith	This needed to be made easier
Create email output for multiple order version of order page												Dreamweaver, Firefox, Mr Smith	
Test and evaluate													
Check the website works												Client	
Check spelling etc												Dreamweaver	
Check for client satisfaction													
Modify as needed													

Stages	Weeks (Term 4)											Resources	Problems
		2	3	4	5	6	7	8	9	10	11		
Check for client satisfaction												Client	Client is very busy
Make email												Php	

output for multiple order better											help	
Check all links etc work												
Get site up and running and modified for client's own server											Client	Client hasn't given me server yet

Final GANNT chart

Stages	Weeks (Term Three)											Resources	Problems
		2	3	4	5	6	7	8	9	10	11		In Germany – no progress
Decide on final look and layout of the website												Photoshop, client	
Get necessary information from client to implement solution												Client	Client eventually confirmed, then changed the data to be put on the website.
Create Solution													
Set up layout of pages												Dreamweaver Photoshop	
Consult teachers to problem solve												Teachers	
Insert text and format it												Fireworks	
Add pictures within site layout (not the database ones)												Flash	
Add flash												Client	Am no longer going to use flash
Add navigation bars												Dreamweaver	
Add automated emails etc												Dreamweaver	
Create fill out form for adding future profiles												Dreamweaver	This has been replaced with an upload for a csv from
Update brief												Word	
Update GANNT												Word	
Input Basic Data into mySQL Database													Need way to manage profiles, so had to add... (Client only

												supplied partial confusing data initially – postponed) Am no longer using Access – php recommended as easier
Integrate Database and webpage											Mr Smith, Access , Dream weaver	
Link profile form to Database											Mr Smith, ~~Brendo n~~ Access , Dream weaver	The profile upload form has been replaced with an alternative solution, so this is no longer necessary
Create shopping cart											~~Mr Smith, Brendo n Access Dream weaver~~	(Too complex)
Create login system											Mr Smith, Firefox, Dream weaver	(this is now to be used for the client logging into the manager site portions, not for customers logging into the shopping cart)
Create form for client to upload csv sheets to the mySQL database											Mr Smith, Dream weaver , Firefox	
Create CSV so that CSV upload form places the data in the mySQL database											Mr Smith, Dream weaver , Firefox	
Create form and php to do the same as above for images											Mr Smith, Dream weaver	

												, Firefox	
Add pop-up images												Mr Smith, Brendon, Access, Dreamweaver	
Add images to site via php and links												Dreamweaver , Firefox, Mr Smith	Pop-ups were unnecessary.
Create order page												Dreamweaver , Firefox	
Create multiple order version of order page												Dreamweaver , Firefox, Mr Smith	This needed to be made easier
Create email output for multiple order version of order page												Dreamweaver , Firefox, Mr Smith	
Create a "manager" site to contain the pages for uploading etc to facilitate easier navigation												Dreamweaver , Firefox	The clients needed an easier way to manage the site
Modify login script so that it can be used as a secure way for the client to manage the site through the manager													It would be bad if just anyone could upload new files to that database
Test and evaluate													
Check the website works												Client	
Check spelling etc												Dreamweaver	
Check for client satisfaction													
Modify as needed													

Stages	Weeks (Term 4)										Resources	Problems
	2	3	4	5	6	7	8	9	10	11		
Check for client satisfaction	▓	▓	▓	Site Handed In							Client	Client is very busy
Make email output for multiple order better	▓	▓									Php help	
Check all links etc work	▓	▓	▓									
Get site up and running and modified for client's own server	▓										Client, Telecom Business Hub	
Modify php on order pages so that it gives error message and doesn't send email if not all fields are filled in.		▓									Dream weaver, Firefox	Client requested this recently – it was not in the original plan
Modify order page to give error and not send email if customer orders more bundles than are in stock		▓									Dream weaver, Firefox	Client requested this recently – it was not in the original plan
Add hit counter to website		▓									Dream weaver, Firefox, Telecom Business Hub	Client requested this recently – it was not in the original plan
Test and evaluate	▓	▓	▓									
Check the website works	▓	▓	▓								Client	Carry over from term 3
Check spelling etc	▓	▓	▓								Dream weaver	Carry over from term 3
Check for client satisfaction	▓	▓	▓									Carry over from term 3
Modify as needed	▓	▓	▓									Carry over from term 3

8

Final Design and Why

The client replied at one stage that he liked the design labelled #5, which contained a wooden strip underlining the heading. I slightly modified the design to give it a more professional look at a later date, and wrote to the correspondent asking for his feedback on which variation he preferred. As there was no response for a very long time, I decided to continue with the design I liked best. Eventually the original correspondent left the company, and the company manager took over communications. He initially said he preferred the design labelled #6, and when I queried as to whether or not this meant he wished to scrap the header bars and bars on the front page with "quality wood!" and "great prices!" he changed his mind again and said it was fine as it was. Thus, this design is the final one.

> **Comment:** The student refers to the client feedback and makes decisions based on this. Decisions are also made on the basis of the nature of the technological outcome that is required by the client eg "professional, bargain feel"

The reason I chose this one as my favourite reincarnation of #5 was that the dark blue header bars contained in the body area of the text gave a clean look, slightly classier than using a default browser font for headings. The additional text bars made the homepage more visually interesting, which I believe is a very important feature for a website, as many customers would pass judgement on the website based on the first page they see, generally the homepage. The text is intended to make the page seem like a bargain sales place, as requested by the client.

This matches the brief's original requirement that the site be clean and professional looking, and appeal to DIY customers as looking simple. It includes the necessary 6 tabs in a tidy way, and has the feel of a "bargain" site. It also has no associations with the parent company. The main box is 800px wide, so the site can display on even very old monitors without need to scroll sideways. Also, the font used in the header has been checked to make sure it is free even for commercial use.

The other requirements of the brief are largely coding issues, and will be answered during the creation process.

Create Solution

http://www.woodmouldingstrader.co.nz

Code sheets attached. Please see Log Book for progress.

The code explained (html,css, php)

For the creation of my website, I worked first with html and CSS, the later with php and mySQL databases. I used html to set up the basic data and page instructions, and php for all of the formatting and graphic effects. To explain my working, I will guide you through index.htm, and also parts of the CSS (Cascading Style Sheet).

html

The blue is the html, and the orange is my comments on what each part does:

The <!DOCTYPE part sets the language that the browser should use to decode the site. The <head> contains data that will not be displayed in the body, i.e. the main part, of the website, but is still needed for it to function. For example, <title> sets the title for the site, which will be displayed in the header bar of your browser. The meta tags tell search engines the content of the site. The <link> is to an external style sheet, and easy way to set the visual styles for the site.

<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Transitional//EN" "http://www.w3.org/TR/xhtml1/DTD/xhtml1-transitional.dtd">

<html xmlns="http://www.w3.org/1999/xhtml">

<head>

<meta http-equiv="Content-Type" content="text/html; charset=utf-8" />

<meta name = "keywords" content="Wood, Mouldings, Trader, Timber, housing, purchase, quality, new zealand, moulding" />

<title>Wood Mouldings Trader: Home</title>

<link href="wmtv2.css" rel="stylesheet" type="text/css" />

</head>

<body> The body of the website contains all the important information that viewers see

<div id="container"> A <div> allows programmers to separate data into blocks, and usually contains other divs within it to give the page its structure. <div>s are easy to apply styling to in

CSS sheets, and so are very useful, especially when applying the same name to divs across different pages. They are all able to link back to the same style sheet (I used this extensively in my site). "container" is the large white background box which contains all the other divs.

        `<div id="top"><img src="images/header.jpg" alt="Wood Mouldings Trader" /></div>` I wanted to use a fancy font for my website's header on each page, but because fonts vary from user to user, it is appropriate to use an image file to ensure a consistent look.

   `<div id="nav">` The div "nav" contains the navigation bar. The "id" tags ("lefttab") refer to the css and tell it more about how to display. Class= "active" is another link for the css, which will be discussed next.

The `<a href>` tag creates a link to the specified page for each tab.

     `<ul>`

     `<li id="lefttab" ><a href="index.htm" class="active">Home</a></li>`

     `<li id="lefttab"><a href="products.php">Prices/Products</a></li>`

     `<li id="lefttab"><a href="shopping.php">Buyer's Page</a></li>`

     `<li id="lefttab"><a href="payment.htm">Payment</a></li>`

     `<li id="lefttab"><a href="pickup.htm">Pickup/Delivery</a></li>`

     `<li><a href="contact.htm">Contact Us</a></li>`

      `</ul>`

   `</div>`

The "mainhome" div is unique to this page, and was used specifically to set the background as an image in the CSS so that I could display a visually interesting frontpage with images in very set places with the assurance that it would display consistantly across differently sized screens.

        `<div id="mainhome">`

"textblock" is also unique to index.htm, and in other pages I used "centerbox" to perform the same purpose of containing the main text of the website. In the css, I used this to set the font family and colour etc for the text in paragraphs, and also the size of the container so the text remained in the space I wished it to.

           `<div id="textblock">`

Again, I wanted a decorative font. For consistency across different users' browsers, the heading on each page is also an image.

    `<h1><img src="images/titlehome.gif" alt="Welcome to Our Website" /></h1>`

The text displayed on the homepage<p>

Take advantage of export overruns and seconds

Buy at 50% or less of retail price

A range of architraves available including scotia skirting and many more timber profiles

These quality timber profiles are available direct from the exporter's production factory

</p>

</div>

I wanted a div which would stay locked in the lower right of the website and display the address etc for the company, so I created "lowerright".

<div id="lowerright">

Wood Mouldings Trader

Carncross Street, Mosgiel, Dunedin

New Zealand

Fax   03 489 9849

</div>

</div>

In the footer, I placed contact information etc for the site (this is the small dark green bar across the bottom).

```
<div id="footer">

        <ul>

   <li>&copy;2008 Wood Mouldings Trader</li>

   <li><a href="mailto:mike@nzmoulding.co.nz">Contact Us</a></li>

   <li>Coding by Lee White</li>

   </ul>

</div>



</div>



</body>

</html>
```

CSS

The CSS is too large to go through all of, so I will only go through the parts relevant to index.html.

This sets the encoding to be used for the CSS document

```
@charset "utf-8";

/* CSS Document */
```

body sets the background colour for the main part of the website (this is the gray you see behind the main site) and also the font family to use if no other is specified.

```
body {background-color:#CCCCCC;

                font-family:Geneva, Arial, Helvetica, sans-serif;

                }
```

is used because "#container" refers to the "container" div, and divs are denoted by a # sign in CSS. This sets the margin to auto, making the container div center, and specifies a width, 800px, which I deemed would display as tolerable on the large majority of browsers.

```
#container {
```

```
                    width: 800px;

                    margin: auto;

                    }
```

/*HEADER*/ A comment so I can tell which section I'm working with.

The formatting and background colour (white) for the div which contains the header image

```
#top {background-color:#FFFFFF;

    width:180px;}
```


/*NAVIGATION*/

Sets the background colour to white

```
#nav {background-color:#FFFFFF;}
```


It is customary to do navigation bars as unordered lists – this also sets the height and line height

```
#nav ul{

        height: 30px;

        line-height: 30px;

        margin:0px;

        padding-left:0px;

                }
```


The formatting for the text within each "tab" of the navigation bar

```
#nav li{

        float: left;

        font-family: Arial, Helvetica, sans-serif;

        font-size: medium;

        list-style-type: none;

        line-height: 30px;
```

```
        width: 120px;

        background-color:#003300;

        text-align:center;

}
```

Because lists have specific formatting rules that must be adhered to, much of the formatting for the navigation bar was contained in the "link" formats – this way, I was able to specify widths and confirm heights so that the display would be uniform across the bar. The text within the navigation bar is all links, so this method works. Whether it is a visited or non-visited link, in this case we wish them to be identical, so they share code.

| Comment: Adherence to codes of practice that inform the technological practice of the student |

```
#nav a:link, a:visited {

        font-family: Arial, Helvetica, sans-serif;

        font-size: medium;

        line-height: 30px;

        color:#FFFFFF;

        text-decoration: none;

        display:block;width:120px;

        }
```

The a:hover must in this case be forced to be consistent with the other a:'s, with the exception of colour.

```
#nav a:hover{

        font-family: Arial, Helvetica, sans-serif;

        font-size:medium;

        color:#FFFFFF;

        text-decoration: none;

        height: 30px;

        display:block;width:120px;

        background-color:#016110;

}
```

I wanted white spaces between the tabs, and the best way to do this was to give them borders. However, because I wanted the tabs to be flush with the edges of the "main" div, I had to specify borders on the left for all but the left-most tab. This was difficult, because I couldn't just make "lefttab" and apply it only to the leftmost one specifying border=0, as the other border instructions would overwrite this. The workaround I came up with was specifying left tab on all the tabs except the leftmost one instead.

```
#lefttab {

        border-right-color:#FFFFFF;

        border-right-style:solid;

        border-right-width:16px;

                }
```

This class tag (with a ".") specifies that the page the user is currently on should have a background colour matching the "main" div (lighter green). On each page, I applied this class only to the current page. This created a clear and informative layout.

```
.active {

        background-color:#016110;

}
```

```
/*HOMEPAGE ONLY*/
```

This is the specifications for the image displayed in the background for the homepage. The background colour (visible slightly around the image) is set to green. Heights and widths are also specified to give even spacing around the image, and compensate for the padding.

```
#mainhome {

        background-color:#016110;

        background-image:url(images/frontpgbg3.jpg);

        background-repeat:no-repeat;

        background-position:center;

        color:#000033;

        padding: 5px;

        width:790px;

        height:541px;

        }
```

This specifies width for the block the text is contained in.

```
#textblock {

        width:500px;

        height: 350px;

        font-family:Arial, Helvetica, sans-serif;

        font-size:small;

        padding-left:5px;

        margin-top:30px;

        }
```

This specifies placement and size etc for the div containing the address etc for the company.

```
#lowerright{

        width:256px;

        height:163px;

        padding:5px;

        margin-right:5px;

        margin-bottom:0px;

        margin-top:65px;

        float:right;

        color:#FFFFFF;

        font-size:11px;

        text-align:right;

        }
```

```
/*MAIN*/
```

This sets colours etc for the main div

```
#main {

        background-color:#016110;

        color:#000033;

        padding-top:5px;

        padding-bottom:5px;

        height:auto;

        }
```

This was added to prevent strange spacing appearing and separating the footer slightly from the main.

```
#main:after {

        display: block;

        visibility: hidden;

        content:".";

        width: 100%;

        height: 0.1px;

        clear: both;

}
```

This sets the header images to the same relative place on each separate page for continuity

```
        h1{

        padding-left:-20px;

        }
```

This sets colour, font, family, and padding for everything in the entire site tagged <p>

```
p{

        color:#0d004c;

        font-size:medium;

        font-family:Arial, Helvetica, sans-serif;
```

```
        padding:10px;

        }


/*FOOTER*/
```

The footer also needed alignment and colours specified, and as it was also a list, it needed similar ul and li treatment to the navigation bar (only easier, as these were not required to be consistent widths)

```
#footer {

        color:#FFFFFF;

        font-family:Arial, Helvetica, sans-serif;

        font-size:12px;

        background-color:#003300;

        vertical-align:middle;

        text-align:left;

        }


#footer ul{

        padding:4px;

        margin-top:-0px;

        }
#footer li{

        list-style-type:none;

        display:inline;

        padding-left:10px;

        }
```

Specifying the link text colour and decoration, so that it doesn't default to bright blue which doesn't match my website.

```
#footer a{

        color:#FFFFFF;
```

```
    text-decoration:underline;

    }
```

php

I will explain the most complicated php that I ended up doing, near the end of the project. This was for the multiple order system.

Stage one: Getting the checkboxes to appear in the table with the product details:

Profile (Size(mm), Description)	$/lm	$/piece	Pc length (m)	$/Bundle	$/Bundle GST Inc	Pcs/ Bundle	Bundles in Stock	Image	Order
30x10 Sq Dressed 5.2	0.46	2.39	5.2	23.90	26.89	22	10		☐
30x10 Sq Dressed 5.4	0.46	2.48	5.4	24.80	27.90	16	10		☐

This mostly involved adding to a php already created to output the details as a table.

Segment of products.php:

<?php

include "connect.php"; this connects to another php file, which contains instructions to connect to the database (such as password, username, etc)

This defines what "$result" is; "mysql_query" gets data from the database (which has already been "connected" to. The "SELECT" portion tells the php which fields to take from the database. "FROM" defines which table in the database. "WHERE" specifies that it should only grab fields who's corresponding BundlesInStock value is greater than zero.

$result = mysql_query("SELECT Profile, PerM, PerPieces, PieceLength, PricePerBundle, PricePerBundleGST, BundlesInStock, PiecesPerBundle FROM Stock WHERE BundlesInStock > 0")

or die("SELECT Error: ".mysql_error()); if there is an error (a generic php/mySQL error) the script will stop running, and will print the error to the screen.

$recno = mysql_query("SELECT STOCKID FROM Stock") This defines what the value "$recno" is. This part will be used later for the checkboxes.

or die("SELECT Error: ".mysql_error()); again, this stops the script and outputs errors

$image = mysql_query("SELECT Image FROM Stock") This defines the value of "$image"

or die("SELECT Error: ".mysql_error());

$num_rows = mysql_num_rows($result); This specifies the number of rows in the output table as the number of rows in the variable "$result", which will be the number necessary to display data retrieved from the database.

echo "<table>"; "echo" is used here as a way to create html tags for a table within the flow of the php.

echo " these are the headings for the table

<td>Profile (Size(mm), Description)</td>

<td>$/lm</td>

<td>$/piece</td>

<td>Pc length (m) </td>

<td>$/Bundle</td>

<td>$/Bundle GST Inc</td>

<td>Pcs/ Bundle</td>

<td>Bundles in Stock</td>

<td>Image</td>

<td>Order</td>

";

while(($get_info = mysql_fetch_row($result)) && ($get_rec=mysql_fetch_row($recno))

) the "while" statement means that the code will perform not just once, but until the condition is no longer fulfilled. This allows it to output the entire table, rather than just one row of it. It was necessary to group the fetching of "$result" and "$recno" into the same while statement, so the php didn't get confused.{

        $get_image = mysql_fetch_row($image); we included this within the while statement, as we wanted the image to output in co-ordination with the associated data.

        print "<tr>\n"; opens a row

        foreach ($get_info as $field) defines $field as the information from the table retrieved earlier.

        print "\t<td>$field</td>\n"; outputs the main data (profile, prices etc) from the database into separate rows, and separate cells (since this is within the while loop, it repeats)

foreach ($get_image as $img){ gets the name of the file from database, converts to a format usable later

?>

<td>

<img src = "stockimages/<? print $img; ?>" alt="No Image"> prints the name of the image file (different for each image) into the appropriate cell of the table.

</td>

<?

foreach ($get_rec as $recn) { specifies $recn with relation to data retrieved from the database earlier

?>

<td>

<form name="purchasing" action="addtocart_.php" method="post"> tells the form to action another php file, which will be explained next

<input type="checkbox" name="recordnumber[]" prints a checkbox for each cell of the table. The "[]" allow the recordnumber to be output as an array in the next step.

value="<? print $recn ?>"> Defines the value for each checkbox as a value from the database (the stockID). This allows each checkbox to correspond to a unique stockID.

</td>

<?

print "</tr>\n";}

}}

echo "</table>";

?>

   <div id="submit">   <input type="submit" name="submit" value="Place Order"> </div> Moves the order process on to the second php file.

        </form>

Step Two: Getting the checkboxes to output as an Array to a table which customers can view

Profile	Bundles in Stock	Piece Length (m)	Pieces/Bundle	$/Bundle	$/Bundle GST Incl	Select	Number to order
35mm Scotia 5.4	10	5.4	10	56.70	63.79	Bundles ⌄	
30x18							

And **including forms within the table that customers can fill out.**

<?php

// dBase file

include "connect.php"; connects to the database

$recarray= ($_POST['recordnumber']); defines an array based on which checkboxes the customer has clicked. 'recordnumber' is retrieved from the checkbox form.

echo "<table border=1>"; headings for the table

echo "

<tr>

<td>Profile</td>

<td>Bundles in Stock</td>

<td>Piece Length (m)</td>

<td>Pieces/Bundle</td>

<td>$/Bundle</td>

<td>$/Bundle GST Incl</td>

<td>Select</td>

<td>Number to order</td>

</tr>

";

print "<tr>\n";

foreach ($recarray as $stockid){ this is so that the array will output all variables contained in it, not just the last one.

$result = mysql_query("SELECT Profile, BundlesInStock, PieceLength, PiecesPerBundle, PricePerBundle, PricePerBundleGST FROM Stock WHERE STOCKID = '$stockid'") this uses the "$stockid" variable defined in the previous step to retrieve from the database only information on the products with corresponding checkboxes selected in the previous step.

or die("SELECT Error: ".mysql_error());

?>

<form method="post" action="orderplacedsix.php"> This will output the form to a php discussed in the next step.

<input type="hidden" name="stocknumber[]" value ="<? echo ($stockid) ?>" /> This is necessary so that the stockID is usable at the next stage – otherwise it would output from the array and cease to exist except as table output, which is unusable in php.

<?

while($get_info = mysql_fetch_row($result)){

foreach ($get_info as $displayrow){

print "\t<td>$displayrow</td>\n";} This displays the data retrieved previously for products with the stockID selected in step one.

?>

<td>

<select name="unit[]" size="1"> This is a dropbox contained within the php table. This form input is contained within the foreach so that it outputs the correct number of times (if there are three rows, three times, two rows, two times etc). The "[]"s are once again necessary (as for the "number" form later) so that an array can be output at the next stage.

<option value="Bundles">Bundles</option>

<option value="Bundles_GST_excl">Bundles GST exc</option>

</select>

</td>

<td>

```
            <input type="text" name="number[]" n="5" />
```
This also needs to output the correct number of times, so is contained within the php flow.

```
            </td>

            <?

            print "</tr>\n";

        }

    }
echo "</table>";


        ?>
```

Step Three: Create the output to email


```
<?

$email = $_POST['email'];
```
this retrieves the customers email from the form where they have input it in the previous step

```
$stock_array=($_POST['stocknumber']);
```
gets the stockID as an array from the previous step (where it was preserved as a hidden form)

```
$number_array = ($_POST['number']);
```
gets the number ordered from the previous step as an array

```
$unit_array = ($_POST['unit']);
```
gets the "unit" (GST exclusive/inclusive) from the previous step as an array

```
$name = $_POST['name'];
```
gets the customers name from the form on the previous page

```
$address = $_POST['shippingad'];
```
gets shipping address from form on previous page

```
$phone = $_POST['phone'];
```
gets phone number from form on previous page


```
include "connect.php";
```
connects to database


```
$stock=var_export($stock_array, true);
```
creates an output of the stockID array which can be used in the email as a single variable. The "true" part forces the array to output not as soon as "var_export" is called, but when "$stock_array" is called.

```
$units=var_export($unit_array, true);
```
same as above

```
$number=var_export($number_array, true);
```
same as above

$to = "[companyname]@somemail.com"; specifies sending the email to the company

$subject = "Order Placed by $name"; outputs the subject line, with the name of the customer as a variable

$body = " Outputs all the variables previously specified. The difficult bit was to get them to display in simple enough format to be read within the flow of the email (using var_export).

Order placed by $email, phone contact $phone.\n\n

Order of products with stock number of: \n\n

$stock

For, respectively, the following units:\n\n

$units

And, respectively, the following number:\n\n

$number\n\n\n

To be shipped to:\n\n

$name\n\n

$shippingad"

;

if (mail($to, $subject, $body)) { if the email sends successfully…

  echo("<p>Order successfully placed!</p>");

  echo("   You ordered:");

  echo "<table border=1>";

print "<tr>\n"; Prints the table of what the customer ordered so they can copy it for their records. Uses variables defined at the top of the page. Same ideas as with previous tables.

foreach ($stock_array as $stockid){

$result = mysql_query("SELECT Profile FROM Stock WHERE STOCKID = '$stockid'")

        or die("SELECT Error: ".mysql_error());

```
                while($get_info = mysql_fetch_row($result)){

         foreach ($get_info as $displayrow){    foreach statements had to be printed on
separate rows to avoid unnecessary amount of repeating.


print "\t<td><font face=arial size=3/>$displayrow</font></td>\n";}}}

                print "</tr>\n";

        print "<tr>\n";

foreach ($number_array as $numberid){ print "\t<td><font face=arial
size=3/>$numberid</font></td>\n"; }


        print "</tr>\n";

        print "<tr>\n";

foreach ($unit_array as $unitid){ print "\t<td><font face=arial size=3/>$unitid</font></td>\n"; }


                print "</tr>\n";


echo "</table>";
```

Order placed by , phone contact 03 482 2010.

Order of products with stock number of:

```
echo("<p>You may wish to record this for your
records</p>");

}
```

```
array (
  0 => '13',
  1 => '14',
  2 => '15',
  3 => '16',
)
```
For, respectively, the following units:

```
else {
```

```
array (
  0 => 'Bundles',
  1 => 'Bundles_GST_excl',
  2 => 'Bundles_GST_excl',
  3 => 'Bundles',
)
```

```
  echo("<p>Order did not place, please try again.  We
apologize for any inconvinience.</p>"); Outputs if the email
was unable to send.
```
And, respectively, the following number:

```
};
```

```
array (
  0 => '2',
  1 => '4',
  2 => '5',
  3 => '9',
)
```

```
?>
```

The email outputs as:

To be shipped to:

Lee White

Which I was later able to change to:

C ⋯ 7 8683731.

C

)

F

)

Order for Bundles_GST_inclusive

To be shipped to:

MY HOUSE

9

Final Brief

I need to create a website for the business "Wood Mouldings Trader". The site is to sell *second-grade* wood moulding products. The client would like the website to be visually appealing, easy to use, and appropriate for use by DIY persons, builders, and contractors. The colours to use are green, white, and blue (others possible). These people are not always fond of computers, so the website should be simple. The website should be easily compatible with older browsers, and the navigation bar should be consistently placed to avoid confusion. There should be a minimum of scrolling involved. The pages should be consistent throughout the site, and also with other websites. It should be easily scannable and avoid large blocks of text, and needs to take into account commonly used browsers, screen resolutions, and download speeds. I need to take steps to make the website visible to Google and other search engines.

The site needs the ability to display "profiles" of wood products, and also the ability to add more of these profiles at a later date (to be added by non-computer techs at the business). The client uses excel sheets to keep product lists up to date, so it should be possible to easily update the site from these (about once a week). An upload form will need to be created so that the client can update profiles with minimum hassle. Php will need to be written to convert a csv file output by Excel into data in the mySQL database. The database itself will need to be set up on the client's server prior to handing-over of the site, and instructions will need to be written both on uploading data and on managing the mySQL database (simplified). The client has requested that images be included in the table of data. An upload form will need to be created for these, and php to retrieve image name from its place in the database then display the image in the table will also need to be written. The site will also feature a hit-counter add-on from Telecom (the service provider) and this will need to be integrated with the rest of the site. An order form will need to be created which will automatically email both the customer and the client when an order is placed. The site will need multiple order capability. The forms used to output the emails to the client/customer need to tell the customer if they have ordered more bundles than in stock, or if they have forgotten to fill in their email and/or address/phone/etc. In this case, the order needs to not go through.

This website will deal with purchases of wood by cash, cheque, or direct deposit, but will *not* need to be secured, as it will only direct the purchaser to contact the company to arrange payment and delivery. The client does not want the website to have any associations with the parent company. When showed a series of example websites, the sleek, modern one was the one he liked best. The website should look credible or users won't trust it. Because Trade Marking is expensive, I will not be designing a logo for their company. My site design will need approval from several people within the business. There are no size constraints on the website because of cost, but the download time still needs to be very short, so that viewers don't lose interest.

Specifications

- The website should be easily compatible with older browsers.
- The site will have six pages: Home, Prices and Products, Place an Order, Payment, Delivery, Contact Us.
- The website should be simple.
- It needs the ability to have more profiles added (by non-computer techs at the business) at a later date (i.e. it won't be static).
- The client uses excel sheets to keep product lists up to date, so it should be possible to easily update the site from these (about once a week).
- It needs to take into account commonly used browsers, screen resolutions, and download speeds.
- An upload form will need to be created so that the client can update profiles with minimum hassle.
- Php will need to be written to convert a csv file output by Excel into data in the mySQL database.
- The database itself will need to be set up on the client's server prior to handing-over of the site, and instructions will need to be written both on uploading data and on managing the mySQL database (simplified).
- The client has requested that images be included in the table of data. An upload form will need to be created for these, and php to retrieve image name from its place in the database then display the image in the table will also need to be written.
- The site will also feature a hit-counter add-on from Telecom (the service provider) and this will need to be integrated with the rest of the site.
- An order form will need to be created which will automatically email both the customer and the client when an order is placed.
- The site will need multiple order capability.
- The forms used to output the emails to the client/customer need to tell the customer if they have ordered more bundles than in stock, or if they have forgotten to fill in their email and/or address/phone/etc. In this case, the order needs to not go through.
- There needs to be a secured "Manager site" for the client to manage the site from without concerns about hackers. I will need a login and also a slightly altered appearance for this site.

10

Complete Solution

Please view the site at www.woodmouldingstrader.co.nz, the official site. Printouts of the code are attached.

How the Solution meets the specifications of the Brief

> **Comment:** This section describes how the technological outcome meets the requirements of the brief and client needs

The final solution has been checked to make sure that the site is compatible with older browsers. The site has six pages, Home, Prices and Products, Place an Order, Payment, Delivery, Contact Us, all of which function correctly. The site is simple to navigate, and has the ability to have more profiles added (by non-computer techs at the business) at a later date (i.e. it is not static). The php scripts written allow the client to easily and regularly update the site from Excel files. Images have all been optimized to reduce download times. An upload form has created so that the client can update profiles with minimum hassle, and php has been written to convert a csv file output by Excel into data in the mySQL database. The database itself was set up on the client's server prior to handing-over of the site, and instructions were written both on uploading data and on managing the mySQL database (simplified). The client requested that images be included in the table of data, so an upload form was created for these, and php to retrieve image name from its place in the database then display the image in the table has also been written. The site features a hit-counter add-on from Telecom (the service provider) and this is integrated with the rest of the site. An order form has been created which automatically emails both the customer and the client when an order is placed. The site also has multiple order capability, and the forms used to output the emails to the client/customer tell the customer if they have ordered more bundles than in stock, or if they have forgotten to fill in their email and/or address/phone/etc. In this case, the order doe not go through. There is also a secured "Manager site" for the client to manage the site from without concerns about hackers. I created a login and also a slightly altered the css for this site.

Implementation of Final Solution

The solution is live on the web, and the client has seen it in action repeatedly (one presumes) and provided feedback to improve it (as seen in the e-mail correspondence presented in the Log Book). The key stakeholders, and indeed anyone else who wishes, can also view and test this solution, (key stakeholder Martin Savory has also provided feedback in e-mails, as shown in Log Book). The site is www.woodmouldingstrader.co.nz.

11

Evaluation of Final Solution

Comment: Evidence of client feedback and evaluation

Client (Manager, Tom Whitefield)

Lee........

 The original brief/scoping of the website project was too broad and ambitious. Modifications to the brief occurred as we, the client, learnt what was and wasn't feasible.

In a sense we, the client, modified our goals and aspirations to the project as you, the designer, raised the issues and impacts.

While it would have been good to have every aspect of the work pre-planned, it provided an opportunity to evolve our thinking as we went and involve a broad range of people in our organisation.

To your credit, you remained calm and focussed during the projects evolvement and we have ended up with a great result. We see the 'Wood Mouldings Trader' as a good base to work from; one in which we will look to expand its use and purpose.

 I believe we have no further demands of your time on this project. Some of the technical issues still outstanding are minor and our IT manager will attend to these.

Well done on achieving a great result for our group of companies and all the best for upcoming examinations.

Yours sincerely,

Tom Whitefield

Managing Director

SOUTHERN CROSS FOREST PRODUCTS LTD

Key Stakeholder (Martin Savory, IT manager)

Hi Lee,

First let me say that your politeness in all our correspondence has been exemplary. It has been a pleasure to work with you.

Second, your response to fixes required and changes to the web site design and programs has been both speedy and, by and large, a first time fix/change.

All in all, from my perspective, I believe you have done a thoroughly good job in meeting the client requirements for this web site.

The web site is visually appealing, easy to use and a simple design. It provides the necessary checks to allow correct ordering of products with user friendly error messages.

From a web site administration perspective, the web site offers all the required change mechanisms to allow easy update by the client. Comprehensive documentation has been provided to allow full administration of the web site.

Although we have some minor technical issues to work through the web site is working to design, has been delivered within the required timescale and on budget.

CLIENT CUSTOMER SATISFACTION LEVEL IS HIGH IN MY OPINION.

Well done and good luck for the future

Yours sincerely,
Martin

Martin Savory
Group Systems Manager, Southern Cross Forest Products

Student

Comparison with brief 3

Brief	Reality
Easy updating	Relatively easy. They have forms to upload, but the data does require minor manipulation before hand
Ability to add new profiles	No problem at all. Mixed in with "updating"
Images to pop up	This was a gimmick which didn't seem necessary. The hover effect was scrapped, but the images are still present
Appealing design, easy navigation; visually appealing, easy to use, and appropriate for use by DIY persons, builders, and contractors.	All respondents thought it was easy to navigate, and there have been many comments on the appeal of the design (positive ones)
Search bar	This was scrapped as being too difficult.
The colours to use are green, white, and blue (others possible).	Company colours were used.
These people are not always fond of computers, so the website should be simple.	Website is relatively simple
Tabs should be large, with large and resizable text to make it easier for people whose vision is not as good.	Text is not resizable, due to coding constraints. It is, however, set to use an easy-reading font.
The website should be easily compatible with older browsers	I have viewed it on Safari, IE7, IE6, Firefox 2 and Firefox 3, and it displays well in all of these.
Website will deal with purchases of wood by cash, cheque, or direct deposit, but will *not* need to be secured, as it will only direct the purchaser to contact the company to arrange payment and pick-up.	The site has hopefully comprehensive instructions on ordering, paying, and shipping included in it
he client does not want the website to have any associations with the parent company	
Load time needs to be very short	Load time is short
The pages should be consistent throughout the site,	Pages are consistent
It should be easily scannable and avoid large blocks of text.	This has been adhered to
It needs to take into account commonly used browsers, screen resolutions, and download speeds.	This has been considered in the creation. The width is set at 800px, which displays well on most screen sizes, and is the smallest possible physical screen anyone could have
I need to take steps to make the website visible to google and other search engines	
Website should look credible or users won't trust it	Hopefully it looks credible

I should also consider other ways to increase sales, such as support for reordering or an information request form for clients.	This has been disregarded in the final site.
Second website in mind to be redesigned, brought up to web visual and compatibility standards.	There was no time for this after all, and judging from client response in current project it would have taken a very long time
Navigation bar should be consistently placed to avoid confusion	This is consistent

Comparison with brief 4

Brief	Reality
The client uses excel sheets to keep product lists up to date, so it should be possible to easily update the site from these (about once a week).	This is possible
An upload form will need to be created so that the client can update profiles with minimum hassle.	This has been created
Php will need to be written to convert a csv file output by Excel into data in the mySQL database.	This has been done
The database itself will need to be set up on the client's server prior to handing-over of the site, and instructions will need to be written both on uploading data and on managing the mySQL database (simplified).	This has all been done
The client has requested that images be included in the table of data.	Images are included
An upload form will need to be created for these, and php to retrieve image name from its place in the database then display the image in the table will also need to be written.	This has been done
The site will also feature a hit-counter add-on from Telecom (the service provider) and this will need to be integrated with the rest of the site.	This has been integrated and aligned
An order form will need to be created which will automatically email both the customer and the client when an order is placed.	This has been done
The site will need multiple order capability.	It has this
The forms used to output the emails to the client/customer needs to tell the customer if they have ordered more bundles than in stock, or if they have forgotten to fill in their email and/or address/phone/etc. In this case, the order needs to not go through.	

There should be a minimum of scrolling involved.	
Appealing design, easy navigation; visually appealing, easy to use, and appropriate for use by DIY persons, builders, and contractors.	All respondents thought it was easy to navigate, and there have been many comments on the appeal of the design (positive ones)
The colours to use are green, white, and blue (others possible).	Company colours were used.
These people are not always fond of computers, so the website should be simple.	Website is relatively simple
The website should be easily compatible with older browsers	I have viewed it on Safari, IE7, IE6, Firefox 2 and Firefox 3, and it displays well in all of these.
Website will deal with purchases of wood by cash, cheque, or direct deposit, but will *not* need to be secured, as it will only direct the purchaser to contact the company to arrange payment and pick-up.	The site has hopefully comprehensive instructions on ordering, paying, and shipping included in it
The client does not want the website to have any associations with the parent company	There are no associations with the parent company
Load time needs to be very short	Load time is short
The pages should be consistent throughout the site,	Pages are consistent
It should be easily scannable and avoid large blocks of text.	This has been adhered to
It needs to take into account commonly used browsers, screen resolutions, and download speeds.	This has been considered in the creation. The width is set at 800px, which displays well on most screen sizes, and is the smallest possible physical screen anyone could have
I need to take steps to make the website visible to google and other search engines	
Website should look credible or users won't trust it	Hopefully it looks credible
I should also consider other ways to increase sales, such as support for reordering or an information request form for clients.	This has been disregarded in the final site.
Second website in mind to be redesigned, brought up to web visual and compatibility standards.	There was no time for this after all, and judging from client response in current project it would have taken a very long time
Navigation bar should be consistently placed to avoid confusion	This is consistent

In conclusion, I feel that the site fulfils all the main requirements of the brief very effectively. It is a very "intelligent" site, which is completely user interactive, and can be updated continuously and still function. It is also easy to navigate even for those not especially familiar with computers.

Viability

I think that the site is particularly viable because it uses php which allows it to be updated constantly with little hassle to the client. This makes it ideal for the business, and the easy-upload forms I created for the client complement this. The "life-cycle" of this site is potentially unlimited, because of this ability to constantly update. The design is also somewhat timeless, not a "fad" design which will go out of fashion in a few years. The code is also quite clean, so it should be compatible across most platforms. The use of css to format the site is a new convention, reducing page size, and as the site utilizes this, it is up-to-the-minute. It is unlikely to have any environmental impacts, and it is unlikely to harm any part of society. The font used on the header was downloaded from dafont.com, and I made sure I chose one which was free for commercial use. The future demand is impossible to predict, as it will largely depend on the effectiveness of the company's advertising directing potential users to the website. The ease of maintenance varies. Simply running the site as is requires no maintenance except for uploading a new CSV file every week to update prices/profiles etc. If the client wishes to change some of the basic html, this should also be quite easy. Changing the CSS would be slightly more complex, and require more coding knowledge, and altering any of the php would require very advanced coding skills, so it is unlikely that the company will be able to alter the php. The only resources required for its maintenance would be web programmers and coders, of differing skill depending on which part of the site the client wishes to modify. To separate maintenance from modification more clearly- it is the modification that would be a difficulty. The maintenance has been created to be very easy, by use of upload forms and the like.

Wider Community
Questionnaire forms (Given out before final completion, so that they could be used to improve the site):

Research in the wider community

I created and distributed a questionnaire form to two different community stakeholders, the results of which are included here. The feedback I received from this form pinpointed some issues that needed attention, and was very helpful.

Respondent 1 (Jeremy Noble of Ovoss Builders)
Questionnaire:
For the image-only copy:
Do you like the look and "feel" of the design? The current design is 13b.

The overall design of the website is appealing. It doesn't seem overly complicated and looks clean.

Do you like any other design better? Why?
Yes, number 7, because I like the rounded edges in the tabs.

Does the current site (13b) have a feel of "bargain"? Do any other
numbers give a better bargain feel?
It looks very white the way it is. It looks professional and simple which could imply bargain but it's hard to say what a bargain website would look like.

Does it look professional and crisp? Do any others look more so?
No variety of materials at first glance, the only picture there is of skirtings. It needs variation of selling materials.

Is all text readable (this applies to heading fonts only, the body copy is
filler text)?
Everything is readable. Maybe more contrast behind each site (a lot of very white white in there at the moment).

For the draft site:
Is it compatible with your web-browser? (i.e. does it display similarly to
the image-only copy?)

Yes it does. Looks the same.

Is it easy to use (the parts that are working)?
Yes, it is easy.

Is it easy to navigate?
Yes.

> **Comment:** In the following section the student presents evidence of wider stakeholder consultation and feedback influencing the development of the outcome
> This evidence also describes the social environment in which the outcomes is to be placed

Is the load time tolerable on your computer?
Yes.

Other:
All other things being equal, would you choose this company's site
(design-wise) to buy from?
Yes, no reason not to.

Is the information clear?
Yes, it is.

Any other comments:

- In the product section you could put pictures/diagrams of where/how to use each product to make it more accessible to the general public. They would be unfamiliar with the terminology.

- The page doesn't fit into the browser window, I have to scroll to see the information at the bottom of the page.

- Gray gaps on the side of the page???

- Contact us tab: no names to contact, makes it very impersonal, also a brief location map wouldn't go amiss.

- I think the price information and stock etc. information should be under each other (maybe in different colours) to avoid scrolling up and down

Respondent 2 (an employee at a store called "step up joinery" which sells products such as wood mouldings)

Questionnaire

For the image-only copy, please refer to the printed sheets, which are labelled for your convenience.

Image only copy:

1. Do you like the look and "feel" of the design? The current design is 8b. Do you like any other design better? Why?
   Yes, easy to use

2. Does the current site (8b) have a feel of "bargain"? Do any other numbers give a better bargain feel?
   I don't like to sell goods for the lowest price. Quality – service value.

3. Does it look professional and crisp? Do any others look more so?
   Wording could be better
   Great prices – who do you want to sell to? What are your current clients going to think? Quality wood? I thought – product range. Say "large product range". Quality Guarantees.

4. Is all text readable? (This applies to heading fonts only, the body copy is filler text)
   Yep good.

For the draft site (http://www.testing.endgathering.com):

1. Is it compatible with your web-browser? (i.e. does it display similarly to the image-only copy?) Please state which web-browser you use. Do you normally browse full screen?
   Don't know web browser. Yes full screen.

2. Is it easy to use?
   Yes

3. Is it easy to navigate?
   Yes

4. Is the load time tolerable on your computer?
   Yes

5. Is the order process comprehensive? (Please feel free to test this, the order will not be filled or required to be paid for).
   Not enough info with product – How long are they? How many in each bundle? Delivery cost should be inclu.
   I like the photo (of the item you are purchasing) to get larger if you click on it.

Other:

1. All other things being equal, would you choose this company's site (design-wise) to buy from?

? Don't know maybe?

2. Is the information clear?
No how long are the length of timber?

Any other comments:
www.(illegible).com
very good site.
View price $ - (country you come from).

Look at the photos how they change. Cost here!
Another site to look at www.sopers.co.nz

In response to this

1. It became clear that the products page would have to be changed from its original format of two tables (one containing prices and one containing product details, so they fit easily across the page) to a single table. The second respondent didn't even see the product details table, which contained details such as piece length.

2. Everyone has varying opinions. Neither of the respondents was entirely happy design-wise, though the overall look appealed to them. They pinpointed different things, so the design was not something that it would be beneficial to change.

3. Respondents were not hugely familiar with computers (e.g. not knowing what web browser they used). This matched my initial idea that the website would have to be very simple. Fortunately, the respondents both seemed to be able to navigate it. This was good to know.

4. Images should be able to resize, but the client wasn't concerned so I didn't spend extra time on this.

In Conclusion

The client, Mr Whitefield, seemed satisfied with the overall result of the website, as did Mr Savory. I was also happy with the result, as it meets the brief effectively and concisely, with some advanced features of php incorporated and functioning. The respondents to my survey also seemed to think the website was acceptable, although they did pinpoint some issues to be targeted as possible future development. Considering the time frame and the amount of learning required to implement the solution, the site was accomplished well on schedule and with all the essential features.

Bibliography

Specifications related research

http://w3schools.net – web browser statistics, screen size statistics

http://www.useit.com/ - Jakob Nielson on Usability and Web Design. Useful when deciding on "points to keep in mind"

Production related research

http://php.net

www.w3schools.net

Thanks Mr Smith and Mrs McMahon

Image research (site appearences). All research occurred in April/May 2008

www.keylumber.co.nz

www.trademe.co.nz

www.barrettlumber.com

www.ainsworth.ca

www.code2.deviantart.com → FOERDERPRAXIS mock up design

www.plasticlumber.com

www.palco.com

www.vantage.co.nz

www.ran.org