


## MODULE ASSIGNMENT SPECIFICATION

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<b>Programme</b>	Choose/Enter your programme of study	<b>Media Production &amp; Technology</b>	
<b>Module</b>	Interactive Design	<b>Module level (4, 5, 6)</b>	5
<b>Module code</b>	TE2041	<b>Contribution to overall module assessment (%)</b>	35%
<b>Lecturer</b>	Mark Porter	<b>Internal verifier</b>	Megan Knight
<b>Assignment title</b>	<b>A2: Interactive Prototype, Planning and Development</b>	<b>Assignment no. (x of x)</b>	2 of 2
<b>Hand-out date</b>	13 November 2014	<b>Submission deadline(s)</b>	16 January 2015
<b>Formative feedback date</b>	8 January 2015	<b>Grade and summative feedback date</b>	5 February 2015

<b>Referencing</b>	In the main body of your submission you must give credit to authors on whose research your work is based. Append to your submission a reference list (that indicates the books, articles, etc. that you have read or quoted in order to complete this assignment) using the <a href="#">Harvard</a> system.		
<b>Disclosure</b>	<b>I declare that this assignment is all my own work and that I will acknowledge all materials used from the published or unpublished works of other people. All references have been duly cited.</b>		
<b>Student's signature</b>	<i>Assignments without a Turnitin submission will not be accepted without a signature here.</i>	<b>Date</b>	16/01/2015

An electronic version of the assignment is to be submitted through <a href="#">Elearn / Turnitin</a> (see notes in the Submission section below).	<b>YES</b>	
	<b>NO</b>	

<b>Learning Outcome(s) tested</b> (from module descriptor)	<b>Assessment Criteria</b> To achieve each outcome a student must demonstrate the ability to:
2. Investigate the requirements of a specific client brief in order to plan a practical and effective solution. 3. Employ project management methods to schedule tasks and allocate resources to deliver an interactive multimedia project, identifying areas for future career development in this type of project work. 4. Demonstrate good practice in the development of interactive multimedia products and systems	<ul style="list-style-type: none"> <li>Develop an interactive prototype responsive web site to the client brief</li> <li>Plan and document a project</li> <li>Evaluate the technical performance of the prototype</li> <li>Use industry best practice in creating the prototype</li> <li>Evaluate the skills learned in delivering the assignment to identify career development opportunities.</li> </ul>

This form (ALL PAGES) MUST be inserted at the front of the paper or digital submission.

## TASK DESCRIPTION

The project deliverables will consist of an interactive responsive HTML prototype and report; including a project management plan and any relevant client meeting notes.

The PROTOTYPE will consist of 3 to 4 pages that you have determined are key to the web site. You do not have to create any server side coding (i.e. database etc), just the interface, interactions and navigation in a working site (HTML5/CSS3/JAVASCRIPT). You can use annotated stills to show interactions if you cannot code a particular feature.

### Prototype

- ✓ Valid HTML5
- ✓ Efficient use of
  - CSS (print /mobile /screen/responsive)
  - JavaScript
  - API's
  - Libraries
  - Frameworks
  - Video / audio
- ✓ Meet Accessibility Requirements / legislation
- ✓ Search Engine Optimised
  - Domain Name / Search Terms /Keywords / Page Titles
  - Optimised Content Copy
- ✓ Optimised Code inc. Performance Testing

### Documentation

- ✓ Project management plan (Gantt Chart)
  - Stages
  - Deadlines / Deployment
  - Testing schedule
- ✓ A basic SEO strategy rationale with actual examples of keywords etc
- ✓ Page code download report (net tab + yslow)
- ✓ Code validation report
- ✓ An updated style guide to reflect any changes made
- ✓ A brief evaluation of your prototype
- ✓ A potential future site development strategy
- ✓ Identified career development

### Demonstration

Demonstrate your prototype to the client, staff and peers

## SUBMISSION GUIDANCE FOR STUDENTS

- ✓ Report to Turnitin
- ✓ Prototype on Penguin
- ✓ Penguin URL to Blackboard blog
- ✓ Code (zipped) to Blackboard

*Indicative threshold criteria for the deliverable shown below*

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#### Project management (Client meetings, User Testing / Prototype Development and Deployment schedule)

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- 70+** A Well organised project. Comprehensive and relevant goals, tasks & deadlines identified. Good use of project planning and management tools. Constraints clearly identified and accounted for, milestones appropriate. Clear scheduling of the testing, deployment and measurement points. Comprehensive user testing strategy
- 60+** Evidence of project management and identification of key tasks & milestones. Good use of project planning and management tools. Most relevant constraints identified. An appropriate testing schedule provided with most of the major events present in a logical order. Good user testing strategy with indication of testing content
- 50+** Some evidence of project this planning, testing schedule evident & deployment timetable, with timescales evident. Reasonable notes and some use of project management tools like a Gantt chart.. Some constraints to the project identified. Reasonable notes from client meetings.
- 40+** Little evidence of planning. Little attempt at project organization only basic notes etc provided. No testing or deployment schedule. Some client meeting notes evidenced.
- Fail** No plan or mention of a plan. No Gantt chart or similar project visual planning tool. No testing

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#### Report (S.E.O, User testing, metrics and future development strategy)

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- 70+** Distinctive work, showing independent thought and ability to place a personal value judgment on a range of statements / reports. A sound S.E.O. & future development strategy has been proposed along with an equally sound user testing strategy. Site metrics relate to this strategy and would prove clear and illuminating.
- 60+** Evidence of independent thinking and / or logical argument, with some value judgment, and some logical strategy, evaluation and conclusions. A well-structured S.E.O., user testing and development strategy. A sound indication of future developments & key metrics used to measure the prototype's success clearly identified. Full referencing of assets used in the correct format has been provided.
- 50+** Development of some independent thinking and strategy. Views indicated in broad terms but personal rather than objective. Limited evaluation and conclusions of the project. Basic S.E.O. and user testing strategy present. Some indication of possible future developments of the prototype & potential methods to measure the success of the site with appropriate metrics. Some referencing of code and other assets used.
- 40+** Standard view rather than independent view presented. Little evidence of independent thinking. Few valid or relevant conclusions. Virtually no inclusion further planning, user testing, S.E.O. strategy or metrics. No performance charts. Basic Referencing
- Fail** Missing strategy or highly rudimentary piece. Presentation of the piece is poor. No referencing.

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#### Prototype Code architecture and Performance

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- 70+** Very well organised prototype site. Immaculate file naming and folder structure. Extensive use of API's, Libraries, Plug-ins, Frameworks and fonts create a rich media prototype. Validates for XHTML strict. No redundancy or duplication of code. Customised use of API's etc to demonstrate a high level of functionality to the client. Extensible code architecture with consistent and clear file naming and organisation. Optimised performance and fully optimised for SEO.
- 60+** Well structured code. No validation errors, little or no redundant code or css rules,. Good use of libraries / frameworks/API's. Good site architecture and file management. Use of hosted fonts or @fontface, use of sprites and image replacement techniques. Responsive framework well implemented with customisation of layout. Code mostly optimise for performance and some optimisation for SEO
- 50+** Code validates accessibility errors. Unused or duplicate code present. Some folder structure. Interactive features broken or not explained visually. Some use of frameworks or libraries or API's. Use of @fontface or similar. Some use of image replacement techniques. Flexible responsive design, but out-of-the-box code used to achieve it. Some optimisation of content but not all, to increase prototype performance. Some indication of optimisation for S.E.O.
- 40+** Many validation errors & accessibility errors. Code messy and files disorganised. None functional elements. Code verbose. Limited use of libraries or frameworks. Embedded css styles. Use of standard fonts only. No evidence of a template. Fixed width, or scalable site, not responsive. Slow performing site, nothing optimised for SEO.
- Fail** Insufficient pages. Limited Functionality. Poor coding practice.

## MARKING CRITERIA

This section details the assessment criteria. The extent to which these are demonstrated by you determines your mark. The marks available for each criterion are shown. Feedback will be provided within 15 working days to comment on the achievement of the task(s), including those areas in which you have performed well and areas that would benefit from development/improvement.

Principles of assessment applied	Weight %	Grade %
<b>Knowledge and understanding</b>		
The work demonstrates knowledge and understanding of the chosen methods / principles and development techniques.	<b>15</b>	
<b>Critical analysis</b>		
Not assessed	<b>0</b>	
<b>Application to design and synthesis</b>		
Creating a well structured and functional prototype	<b>60</b>	
<b>Evaluation and conclusions</b>		
Evaluating the prototype's effectiveness and future development	<b>10</b>	
<b>Referencing and supporting evidence</b>		
Use of external technical and media resources	<b>5</b>	
<b>Oral communication</b>		
Prototype demonstration	<b>5</b>	
<b>Written communication</b>		
Quality of presentation including the standard of written English, structure and layout, along with any supporting evidence (appendices) & Presentation	<b>5</b>	
<b>Group work</b>		
Not assessed	<b>0</b>	
<b>TOTALS</b>		
	<b>100</b>	

## TE2041 – Interactive Design

### A2 - Interactive Prototype, Planning and Development

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*Danny Dixon*

*Mrs Kirkham's Lancashire Cheese – Website Redevelopment*

## Summary

This report details the evaluation and further development criteria for consideration on the Mrs Kirkham's Cheese website prototype. The client currently have a website live which has many opportunities to address in the redesign. With more of an idea of their business focus, a new version has been drafted and is available at the following web address: <http://penguin.uclan.ac.uk/~ddixon1/y2/KirkhamsCheese>

The following information within the report is based on the data within this space.

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## Project Management Plan

The following Gantt chart outlines the project timeline for tasks to be completed. The plan is based on an 8-week structure commencing from 28/11/2014 to the final deadline of 16/01/2015.

Task	Weeks							
	1	2	3	4	5	6	7	8
1. Structure								
a. Framework								
i. Research Foundation vs Bootstrap								
ii. Build HTML framework for index								
iii. Build HTML framework for about								
iv. Build HTML framework for visit								
<b>FRAMEWORK COMPLETE</b>			◆					
b. Styling								
i. Colour								
ii. Responsive Attributes								
iii. Asset Collection and Distribution								
<b>STYLING COMPLETE</b>						◆		
2. Testing								
a. Responsive Design								
b. Validation								
<b>TESTING COMPLETE</b>							◆	
3. Deployment								
a. Upload to Penguin Server								
<b>PROJECT COMPLETE</b>								◆



## Stages of Development

Following the build of this prototype, there should be key stages in the further development of this project. Below are the stages.

### *Planning*

A client meeting will be arranged to showcase the prototype. Notes should be made on how they have received the design, what their main objectives are moving forward and ensuring that their business goals are still within our focus.

### *Structure*

After the refocus on design and development following the meetings with the client, the development team should start to ensure the file structure of the website is meeting the correct guidelines; that is, matching the planned hierarchy within the FTP structure. If URLs are to change in the future, this structural planning will avoid any instances of the website “404-ing”.

Information taken from performance reports will affect these decisions on structural integrity. As an example, some content may be condensed into a single file to reduce the number of HTTP requests to the server.

### *Pages*

Content will need to be implemented at this stage. All content should adhere to the client's brand standards and be the most recent version of all materials. Each page should follow the goals set in the proposal. Functionality for each page should be adjusted so that the website is fully optimised for performance on all platforms. Design aesthetics should be in accordance to the most recent style guide. Frameworks should maintain the “responsive-ness” of the website and allow content to be adjusted for all platforms.

### *Testing*

The testing stage should be thorough, with each part of the website loaded on different devices using different broadband connection bandwidths. Any issues during this stage should be quickly turned around before moving onto final deployment. Server-side, version control should be in place in case of any problems during transfer of materials via FTP.

## SEO Strategy

Mrs Kirkham's Cheese is a relatively small-scale business with local links to the city of Preston as well as retail and wholesale connections throughout the UK. The SEO strategy should enhance their online presence and focus on the company's business goals. Mozilla posted a very useful guide to strategic SEO on their blog space<sup>i</sup> (Lippay, 2010). Below are the 8 summarised steps:

1. Target audience and their needs
2. Categorized Keyword Research
3. Finding Gaps and Opportunities
4. Define Competitors
5. Spying on (and learning from) competitors
6. Customised SEO strategy
7. Must-haves
8. Priorities and summaries

There are three main areas that this SEO strategy should follow based on Kirkham's business needs.

### Business focuses

The three main focuses as outlined within the client meetings are: trade/wholesale connections and invitations to new distributors, retail links for customers to be able to buy the product and visiting options with ideas around training events being hosted at the venue for chefs/food experts to try out the product alongside their own cooking recipes.

### Location/Locality

With the company being based in Preston, Lancashire; it makes logical sense to include location based SEO keywords and local identifiers so that both local and non-local visitors can get an immediate idea of where the company operates. This would also be a good opportunity for local business links so that relevance and suggestion will be more apparent in a Google search engine.

### Product category

Kirkham's are in the cheese industry, but as outlined previously, their product is specialist meaning the SEO should highlight their quality. Basic keywords linked to the product such as: "Cheese", "Dairy" and "Specialty" should be used.

### Basic Semantics

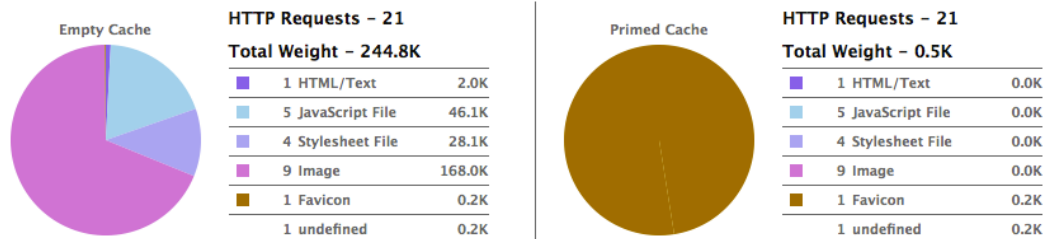
When developing the prototype further, it is important to check the semantics within each webpage. Google now focuses on this content within the HTML to help users navigate a website.

## Page Code Download Report

By running the prototype through metrics analysers like YSlow, it has been simple enough to find opportunities for further development. Below are the results.

**Grade B** Overall performance score 83 Ruleset applied: YSlow(V2) URL: <http://penguin.uclan.ac.uk/~ddixon1/y2/KirkhamsCheese/index.html>

### WEIGHT GRAPHS



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Figure 1: YSlow Analysis

As can be seen above, the website scored a Grade B overall from YSlow. Most of the criteria scored either an A or B for quality. The score is brought down due to server-side analysis. YSlow will always recommend using a CDN<sup>1</sup> to optimise the way that the website data is distributed worldwide. For this project, it is unlikely that this will be required as most of the business focus is in the UK. However, if the scale of the business demand were to increase, this strategy would have to be reanalysed.

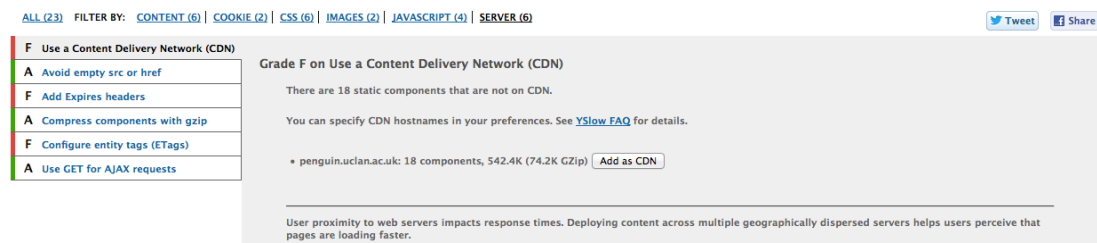


Figure 2: Server-Side Results

The caching of data is strong on this website. The original download weight shows 244.8K but the cached version shows 0.5K, which is a drastic change. This is a very good result as it allows users to access the website quickly even with slower broadband connections.

<sup>1</sup> Content Delivery Network

## Code Validation Report

The following links are evidence of cleared validation of HTML within the prototype.

### Index (Home Page)

<https://html5.validator.nu/?doc=http%3A%2F%2Fpenguin.uclan.ac.uk%2F~ddixon1%2Fy2%2FKirkhamsCheese>

### About Page

<https://html5.validator.nu/?doc=http%3A%2F%2Fpenguin.uclan.ac.uk%2F~ddixon1%2Fy2%2FKirkhamsCheese%2Fabout.html>

### Visit Page

<https://html5.validator.nu/?doc=http%3A%2F%2Fpenguin.uclan.ac.uk%2F~ddixon1%2Fy2%2FKirkhamsCheese%2Fvisit.html>

## Style Guide (v2.0)

### Colours and Styling

Content Elements	Colour (RGB Value)
Background Colour	#333
Heading 1	#008CBA
Heading 2	#CC9933
Heading 3, Paragraph	#FFF
Inline Link	#CCCCFF
Inline Link (on hover)	#0078A0

Content Elements	Font Family	Font Size
Heading 1	Helvetica Neue, Helvetica, Roboto, Arial, sans-serif;	2.75rem (Unit from Foundation Framework)
Heading 2		2.3125rem (Unit from Foundation Framework)
Heading 3		1.6875rem (Unit from Foundation Framework)
Paragraph		1rem (Unit from Foundation Framework)

## Evaluation of Prototype

The prototype redevelopment of Mrs Kirkham's Cheese addresses a number of opportunities outlined from the proposal stage. A more consistent design has been implemented allowing users to comfortably navigate across pages and access interactive content. All elements have been organised on each page according to grid theory, which has allowed not only for a much neater outlay, but also (with the addition of frameworks) a responsive system, which adapts depending on the users platform of choice. The content is aimed at the business goals as discussed within the original proposal. The prototype contains demo content to illustrate the functionality of interactive elements like image carousels and iframed videos.

There are still a number of opportunities to address moving forward. Some functionality was restricted due to poor time management, resulting in the implementation of code to be missing in some key areas. This can be seen within the navigation of the website on mobile screens. More style choices would have created a much more engaging view for the user upon first glance. Again, poor time management resulted in the final design lacking some important enhancements of colour to draw the attention to certain areas of each page.

It would be nice to see more interactive JQuery elements within the page to modernise the overall look and feel for the user experience. Although the page scales and is responsive, some elements overlap when on mobile.

With another attempt at this project, I would reallocate time to ensure the development stages are a main focus. With the client's approval, I would like to help them achieve their business goals by allowing their online presence to be as impressive as their product.

## Future Site-Development Strategy

It is important to consider the current online status of the Mrs Kirkham's brand. Currently their live website does not follow the design and development principles outlined throughout the study of this module. This is a key opportunity to draw customers to the important content within the website by engaging them from the moment the page first loads. The client has a limited social media presence. With further research, there is a huge opportunity for them to be able to find out what is being said about their brand by both customers and trades. Increasing online exposure through social networks and allowing their current fan-base to follow their events on-site and within production could bring a new form of communication and build rapport between the client and their target audience. This information could impact future business decisions which will then be reflected on future developments of their website.

## Identified Career Development

Throughout this module, it has really opened my eyes to the availability of work within the industry. Each week's task has allowed us as a group to explore what is required within each stage of a "big-build" and through actually working with real clients, we have experienced first-hand the necessary skillset needed to do these jobs in the real world.

From previous and current work experience, I have identified my ability to talk with people, which has focused my attention towards a client liaison-based career. With this I could take my knowledge of project management and my ability to code into each meeting with a client and allow the conversation to be much more realistic and conversational. The last thing a client wants is to have false promises and the last thing the development team needs is to try to work towards goals that aren't either possible or necessary.

Another focus of mine is to develop my coding experience further by engaging with similar projects. Currently with poor time-management skills and other commitments, I've not been able to produce work of maybe the professional standard I should. I do however enjoy building a website from the design perspective and implementing interactive functionality. With more work on this, I could see a progression into front-end web development or user experience design.

## References

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<sup>i</sup> Lippay, L. (2010) 'The 8-Step SEO Strategy', *The Moz Blog*, 6 April. Available at: <http://moz.com/blog/the-8step-seo-strategy-step-1-define-your-target-audience-and-their-needs> (Accessed: 6 January 2015).