

DEPARTMENT OF LANGUAGES, INFORMATION AND COMMUNICATIONS

MANCHESTER METROPOLITAN UNIVERSITY

Practical Project – Final Report

Build a Website for Eurotech Cash & Carry Limited

Bharpinder Singh Sekhon

12079961

Link to Product: http://www.12079961.webdevmmu.uk/final_project/

A project submitted in partial fulfilment of the Degree of Bachelor of Science Web Development.

Date: 20th February 2016

Supervisor: Jonathan Willson

Word Count: 3675

Acknowledgements

The writer would like to thank its clients for bearing with the project and providing all the information required to ensure a high standard website is created. He would also like to thank the project supervisors for providing tips and ensuring that all the documents are created and submitted as a proof of evidence. All the users that have tested the website would be thanked as without their corporation this project wouldn't have been completed.

People the writer would like to thank is Alec Patel for doing a user testing session with the writer to provide him with feedback on how he could improve his site.

Jonathan Willson for been a great supervisor and making sure the writer was on track all the time during the project by ensuring he was backing up all the evidence collected during meetings with him and the clients.

Gurmeet Singh of Eurotech for having faith in the writer to develop his website to ensure more customers were able to order that would help the business succeed.

Zoeb for doing one of the expert review tasks that helped the writer to check if the site created was efficient and easy for them to use.

Jonathan Bryce for doing second expert review that provided the writer with improvements and recommendations of how the website could be more user friendly.

My peers for assisting the writer if he got stuck on anything such as technical side of the website or proof reading the content to ensure it made sense to the users.

Contents

Acknowledgments.....	2
Abstract.....	4
Introduction	5
Product Development	6-7
Product Evaluation	8-9
Project Evaluation	10-11
References.....	12

Abstract

This report is created to provide users with an insight of what the project is about and how it has been completed. The project is a website created for a cash & carry business located in Manchester. This report will cover a brief background information about the project and the reason this project was started. In addition to this, the report will include the product development i.e. how it was build and what risk factors were considered to ensure this project was completed smoothly. The situation during the project was, that the business had been operating over 2 years and required a website to ensure more customers came to the business that would have resulted in more revenue.

There were a few limitations during the project, in terms of the website created as both the developer and client had thought of creating a fully functional website that had a checkout and ordering facilities however even though the buttons have been created, due to lack of time the developer was unable to make these buttons functional.

The report also includes evaluation of the project to see whether there were any improvements made during the project that were ticked off by the client at the end of the project.

Introduction

The project is a practical project to build a brand new website for Eurotech Cash & Carry Ltd based in Manchester. The purpose of the site is to increase the business turnover and the number of customers. In order to create a fully functional and responsive website, there would be different aspects that need to be looked at such as having meetings with the client to get their requirements, researching, building process, testing and more. Since the business has been operating for over a year, it needed a website in order to increase the turnover, therefore the research would include the different structure methods that the client may prefer, competitor's website to get new ideas and the building process. The project will involve both the designer and the client with a meeting every week or month to check the progress of the site. The whole aim is to develop a professional standard responsive website for Eurotech Cash & Carry, Manchester, to raise awareness of the company and increase customers. The objectives to create a most reliable and fully functional site are as follow:

- To research the client's needs and compare competitor websites.
- To investigate good practice in responsive design and a mobile first approach (if in fact you have adopted mobile first).
- To design and build a responsive / professional standard website that conforms to web standards and usability guidelines.
- To test the website to ensure it meets the client's requirements, e.g. responsive on different devices, browsers, etc.
- To review the website and evaluate the extent to which it meets good practice for usability.

Mobile first may be familiar to users however by mobile first approach it means that a developer first works on creating a designing for small screen which gradually he goes up to large screen. It is a tenet of progressive enhancement as said by Ben Gremillion who provide a hands on guide to mobile first responsive design. He stated that ideally the mobile design should be done first as its easier to build for the large screen after however it's hard to build a for small screen after building a large screen website.

It is important that the developer use a mobile first approach as this helps them to widen their search on how to ensure that the site is responsive on all mobile devices and browsers. In order to ensure that the site is mobile friendly the developer created wireframes on Balsmiq and Axure to check how it would look and whether there could be an alterations to make the site look more professional once its build properly. The wireframes were shown to the client to get their feedback and ensure they were satisfied with the results and were happy for the developer to go ahead with the project.

Product Development

Approaches

In order to ensure the project was a success there were different approaches to the product such as creating wireframes, personas, competitors analysis, user journeys and other approaches.

First approach towards the project was to have a meeting with the client to ensure they were aware of the project as well as to ensure they knew how this project would be carried out. Once everything was decided, meeting 1 was ticked off to ensure this could be provided as an evidence during the submission of the project and that the clients were agreeing on carrying this project further.

Second step was to do a competitor analysis that would help the developer and the client to decide on the layout and the colours that they would need on their website. Competitor analysis also helped the developer to look at what competition is out in the market. It gave the developer ideas of how to design the site to ensure that it was appreciated by the users and that the site was to a high standard. After completing the competitor analysis, the developer looked at 5 key points which included efficiency, accessibility, consistency, corporate identity and relevance. The 5 factors helped the developer to look back at the 3 sites and find the positives of the sites that could be included in the client's site.

In terms of efficiency the developer thought that the idea of having navigation at the top was really good as it helped the users to navigate to different pages more easily. On efficiency, developer really liked the idea that the user didn't had to do more than 4 clicks to get the information required. All images were optimized to meet the web accessibility requirements which resulted in the sites loading quickly. On the accessibility side, competitor analysis also helped the developer to ensure that the site met WAI guidelines, that it avoided plug in when accessing the site and that it was functional on all devices and operating systems.

On consistency side it was important that after doing competitor analysis, the developer needs to ensure that colour are the same on all pages to avoid any distraction of the user. It is also important that navigation bar is visible clearly on all pages so that users can locate different information easily. Overall different approaches were used to ensure that the site created was to a high quality and that it met the client requirements.

Once the competitor analysis was done, it was time to think a wide on how a user would progress through the site so firstly the developer created wireframes on what the site would look like. Once this was done, the developer created two personas and user journeys to provide the client a brief of how he believes that their users will progress through the site. Apart from these there were a lot of different approaches used such as User Testing to get feedback from the users, expert review to see whether a user was able to access the website successfully and required practices for web development site that helped the developer to analyse any technical errors such as validation, naming of files and folders, etc. were correctly done.

Resources

There were a number of resources used during the project both internal and external to ensure that the developer was aware of the tools and techniques that are used to create a high quality website.

Facilities

The facilities used by the developer were laptop, different software's to ensure that the website looked good with images optimised at correct resolution. It was vital to ensure that the right facilities were provided to ensure the product was created to a high standard.

Problems and Solutions

There were a few problems during the whole of the project which were then resolved. Some of these problems included evidencing work as the developer had meeting with the client however he didn't have any evidence to prove it which could have resulted in a big problem during the project such as the client may have withdrawn during the end of the project. So in order to ensure that this was dealt, the developer made meeting agendas and got them signed off by the client to ensure they were aware of the project and that they couldn't withdraw.

Another problem that was encountered time consuming as during the project is it important to keep up to date with all the tasks that have been written on the project plan. Since there were many tasks to complete it was important that all the tasks are completed on time and to a high standard. In addition due to time consuming the developer had to reduce some of the tasks to ensure that the project was completed on time.

During the user testing it was important that a consent form was signed to ensure that any data collected from the user is kept with the client and not shared with third party. Also it was important to get the right customer to test the site so that the developer could get feedback and improve on it.

Product Evaluation

At start of the project, the developer created a plan of the deliverables and when these were to be achieved. Setting out deliverables were quite helpful as the developer was able to track down the work and ensure that these were completed according to the deliverables. These deliverables included project planning, proposal for the client, competitor analysis, content writing for the web, building the site, and user testing with improvements to follow.

The first deliverable that was to be completed was project planning and proposal as these would have provided the developer with his client requirements and what they expect from the developer to ensure that this project is a success. Within this deliverable there were a few tasks that were to be looked such as arranging meetings with the client to discuss the progress of the project and what the developer needs to provide the client in the next meeting. Since the developer is nearly finished with the site, he had a final meeting with the client to check if their requirements are met. Upon this meeting, the developer looked back at the aims and objectives and provided a brief to the client on what has been achieved. However the aims and objectives were not to a good standard hence, the developer changed these and got the client to tick off if they thought these were good enough.

The next deliverable in the project was competitor analysis and starting on the other tasks such as wireframes, personas, user journeys, etc. Wireframes helped the developer to meet the aim and objectives of creating the site using the mobile first approach. The developer used the mobile first approach as this would have helped him to create the site more efficiently since it would have provided an insight of how the site would look on a mobile. This also helped the developer to design the site firstly on mobile and then work on the desktop version. Even though the site isn't fully responsive, the developer tried to make it mobile friendly and provided a link to the client so they could see if it was good enough or whether there were any alterations to be made. However the clients thought it was good enough and it could be improved after the project is completed.

Next deliverable in the project was building the website to ensure that the developer could provide the client with updated status of when it would be completed. Along with building the site, the developer had a few meetings with the client to get the content, images and other information that would be on the website. This would have helped the developer to meet another objective which is to meet most of the client requirements to ensure the project is completed to a high standard. However due to certain limitations that included time consuming some of the content or navigation is not accessible. On the products page the developer created a side navigation bar for categories which included sub categories such as Household, DIY, etc. Another idea that was provided to the client and couldn't be completed was add to cart and wishlist buttons. These have been included on the site however due to limitation of time, they were not accessible. The developer had a meeting about this with the client and provided them an overview of the site and of the content that is not accessible due to limitations.

After starting to build the site, the next work package was testing the website to ensure it is working on different platforms without any errors. This also included a user testing session as it would have helped the developer to improve on the site to meet the WAG (Web Accessibility Guidelines) and that is was a more relevant site to use. This

also had the involvement of project sponsor as one of the user testing was done with them to ensure they were satisfied with the results before the site was tested with one of their customers. The results showed that customers were not fully satisfied with some the layout of the pages. One of the issues that most of the customers faced was lack of detail on the homepage as there was just a slider with 3 boxes that lead you to a specific page such as products. The feedback helped the developer to change the layout of the homepage to ensure users were satisfied with it. So after a few improvements on the layout, the developer showed the site to the clients to ensure they were satisfied and whether they required any further changes on the site. The evaluation showed that users were satisfied with the new layout of the website as it attracted them more compared to the first one. To view the different an Appendix 17 is attached to show how the user testing helped the developer to work again on the layout to ensure customers were happy with the results.

An expert review was also conducted to help the developer check if the was tested with the user, whether or not it would be a success story or a failure. So the developer provide 2 individuals with 2 different tasks to check how long it would take them to complete the task. One of the tasks was a success story and one of them was a failure due to some technical issues with the site and the way it was operating. The review showed that the site could have been improved more to ensure it was user friendly and easy to access. Hence keeping in mind the user testing and expert review test, the site would be improved to a much higher standard to meet the client and user needs.

Finally a required practices for website development document was done to ensure that all the Web Accessibility requirements were met. This document helped the developer to ensure that all the assignment brief requirements were met such as Homepage should be named index.html, the validation should have no errors and if errors were spotted these should be fixed. The documents was quite helpful as the developer was able to comment on anything that was missed and improvements that were done to meet the required practices of web site development.

Overall all the evaluations provided the developer an insight of how to ensure that a project is a success as the decisions made during the project were helpful and the meetings with the client to ensure they were satisfied with the product developed were useful as they provided any improvements that they thought could have been made such as they didn't quite like the aims and objectives so the developer changed these to ensure they were satisfied.

Project Evaluation

Self-Management

The overall outcome of this project in terms of self-management was to ensure that everything is well organised with the tasks been completed on time. If the developer was to do the project again, he would ensure that he plans ahead by creating a project plan which he did during this project however wasn't able to keep up with the time to ensure the project could be created to a high standard. So self-management is quite important when creating projects as these help you keep in track with the project and ensure the result is a high quality result.

Involvement

There was a good amount of involvement of others during the project such as the involvement of supervisor, client and users. These were the 3 main people who had an important role to play during the project as the supervisor helped the developer to improve on any errors that they could see, clients who ensured that all the information required by the developer was provided on time and users who helped the developer to complete the user testing session by providing feedback on the site. If there was no involvement of the above three it wouldn't have been possible to complete the project as the developer wouldn't have had any feedback on the site that would have helped him to improve on it and ensure it is user friendly.

Possible Improvements

During the project there were a lot of improvements to be made as the developer was learning new tools and techniques during the project which has helped him to gain new skills. Some of the improvements suggested by users were the layout of the site as, first the developer provided the client with a one page layout with all the information on the same page however, they rejected this idea due to their competitor's websites offering different pages for different sections. So in order to make improvement and ensure that the client needs were met, the developer changed the layout with different category pages such as products, FAQ, about, etc.

Another improvement that the developer got during the user testing session was the way the pages are layout as one of the users didn't quite like the idea of having just sliders and boxes on the first page with a simple blue and white colour scheme. Hence to ensure that the users were satisfied the developer revamped the whole site to ensure that it attracted vast majority of customers to view the site and start to place orders that would help increase the business revenue.

Other than the above the users and the client were satisfied with the site and provided recommendations of how it could be more enhanced if the site was to be done again.

Recommendations

During the user testing session, the developer was provided with both positive and negative feedback. So in order to improve on the negatives, the developer had some post user testing questions that would give user's recommendations of how to improve the site if this was revamped.

Some of the recommendations provided by the users were to change the layout of the homepage so that it is more attractive towards the consumers. This was a recommendation as the homepage just had a slider with flexboxes which didn't go quite well with the client and the user. So in order to ensure the clients and customers were happy, the developer worked on the recommendation and changed the layout of the site completely.

One of the recommendations during the testing done was to make the checkout and add to cart buttons work as these would help the users to place order quickly. However during the user testing session the developer provided the user with why these were not working and how he would ensure these worked after the project is completed. Listing to this answer the user were satisfied that the next time they view the site it would be fully functional and that they would be able to place orders quickly without having the need to visit the business location.

Another recommendation was to have an app once the website is completed so that customers who are not able to view the site can order from the app whenever they are free at their shops. The developer quite liked this idea and since the business already had an app for its sales reps, he provided the client with an idea of having a mobile app for their customers so that they could place an order whenever they have time without having the need to login to the site.

References

Axure.com, (2015). Interactive Wireframe Software & Mockup Tool [online]

Available at: <http://www.axure.com/> [Accessed 12 December 2015]

Code My Views, (2016) Mobile First Design: Why It's Great and Why It Sucks (online) Available At:

<https://codemyviews.com/blog/mobilefirst> (Accessed 25 January 2016)

CSS-Tricks: Responsive Menu Concepts. (2012) [online]

Available at: <http://css-tricks.com/responsive-menu-concepts/> [Accessed 25 January 2016].

Ben Gremillion (2010) A Hands-On Guide to Mobile-First Responsive Design (online) Available At:

<https://studio.uxpin.com/blog/a-hands-on-guide-to-mobile-first-design/> (Accessed 28 January 2016)