Wed Asset and Application Development

Martha Katsiki
up789041@myport.ac.uk
Username: UP789041
Password: bb2Pdm7W

1. Introduction

WAADE Enterprises have taken on a Client who requires a branded video sharing website. The client's name is Patterned Sweater Proposal and its business concept is clothing tutorials. The goal is to create a database driven, responsive website where the users can ask for help about clothing tutorials, and others to respond with video tutorials. Website visitors will be able to watch the videos but if they want to submit a request or respond to an existing request, they will have to create an account. Users can also comment to a tutorial, but the content will have to be approved by the website administrator before it is released to the public.

1.1. The Brief

The first step was to outline the procedure by presenting an initial proposal. After searching for existing examples and using inspirational pieces, the Design Concept was created. The Design Concept includes main ideas for the concept, the visual style and the functionality. During a meeting with the Client, the Pitch was discussed and agreed, so the idea for the website was approved and the process will continue based on the Client Proposal. In order to specify what it will be delivered and what the Client wants, meetings were held between the Client and the Contractor (WAADE Enterprises). As a result, a Contract will be developed and more information can be given by the Client for the design of the website. Moreover, there is a need for detailed specifications, considered the content, the structure and the functionality of the website. Therefore, the Contractor will gather requirements during discussions with the Client. Consequently, requirements that were not mentioned in the Client's brief, might arise and will be included in the documentation.

This report will present the Design development of the website and the process of technical, aesthetic and usability implementation.

2. Initial Proposal - Pitch

The first priority is to create an initial proposal, the Design Concept, which is the response to the Client's brief. In order to arise with an idea that is focusing on Client's business concept, gathering information is essential. Searching for the latest news, developments on the field can help with the design development, while mapping the new trends and learning about recent innovations can help on the style and functionality. Moreover, checking the competition by looking at existing example is very important; knowing what competitors are offering in their services can lead to examine what a website visitor prefers, what is attractive to the public, concerning the concept or the design, and also find out in which area they lack or what service has poor quality (learn from their mistakes), in order to present a better solution in this particular problem which can lead to attracting more visitors in the website (Kumar, c2013, p. 11).

2.1. Inspirations

All the information gathered from the research combined with inspirational pieces lead to the creation of the Design Concept. Website examples were included in the pitch in order to show the existing style. Since the business concept is clothing tutorials, the research was focusing on blogs and website in this field. As it is shown in the pictures below, the style and structure are of poor quality. Websites that include video tutorials were not found, only step-by-step picture tutorials.
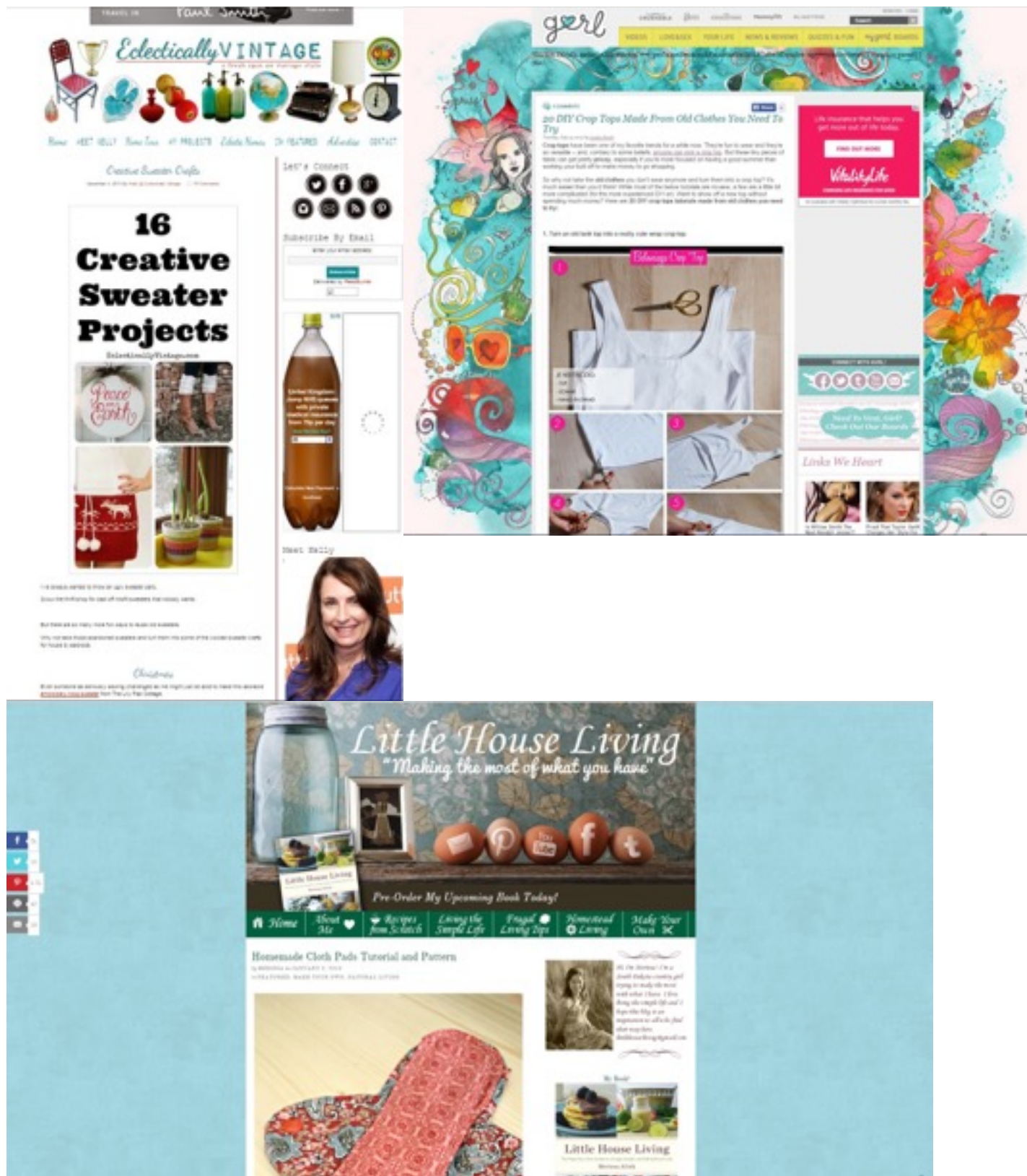
However, this is considered a benefit because it rose up the idea of categorising the content, making the website more accessible, since it will be easier to search and find a tutorial and also more presentable. In addition, it introduces the use of the database where all the tutorials will be uploaded and stored. The user will have to search in the database in order to find a tutorial.

Nevertheless, the concept is for users to ask for a tutorial and others to reply by uploading a video tutorials; that is where the website will be focused on.

2.2.Website's Logo

Since there was not a logo ready for use, it had to be created. Another research took place in order to find materials, e.g. photos, (free of copyrights) so they can be used in the process of creating a logo. The business concept should be taken under consideration. The website content will be consisted of "making your own" clothing tutorials, so the idea behind the logo design (5 Tips for Logo Design, 2015) was to include all the tools that someone needs in order to make his own clothing. There is wide variety of video tutorials on youtube channels or Pinterest that show which tools are used, such as scissors, buttons, threads, fabric, needles and tape measure.

The logo must contain the Client's name, in order to promote the company, in this case it is the "Patterned Sweater Proposal". After completing the research and gathering the materials, Adobe Photoshop CC was used so the chosen pieces will be processed and turned into the final design. The background of the logo is transparent, so it can easily be added to any layout while the front picture, which includes all the sewing tools mentioned before, has bright colours so it will not be considered boring or indifferent. Each of these tools were taken from different sources, so their colours and style is slightly different and gives an interesting presentation. The final result can be seen below.

3. Project Initiation - Contract

After the Client's agreement in the Initial Proposal, it can then be refined into a contract. The contract generally defines the work plan (Myers), the budget, the process and the deliverables. During the meetings, the Contract can change from its initial state since new requirements and issues may be mentioned and therefore considered to be included. Through negotiations the details of the contract will be finalised. It is best to know what it is important and what is not, so compromises in this part could be possible. The work plan is important in order to organise each activity carefully, considering how much time will be needed until it is completed and move on to the next one; otherwise the development procedure could be delayed. Although the contract could include a section mentioning the delays for both parties and what should happen in this case, e.g. penalties.

Another part of the contract is the specification of the final deliverables. The Contract must include what will be delivered to the Client, because both of the parties will have to agree. In case the Client wishes to include services which are not part of the contract, there will be additional charges. They both give something of value, so the Contract creates a legal obligation between them. After signing the Contract, none of the sides will not be able to make changes, unless they both agree to alter the Contract but it is not an easy process. Consequently, both parties are obligated to follow the terms and conditions included in the Contract.

Another aspect to consider is the copyrights. It is essential to determine the ownership of the graphics designs created for the website as well as the website's ownership, along with granting license for the use and display of the final deliverables and credits, even after the implementation of the website. In addition, if the Client agrees, then support services will be provided after the completion of the project and should be included in the Contract, as well as the required payment.

4. Client Requirements

During the meetings with the Client, the Client will reveal what he really wants concerning the content, functionality and structure of the website. It could be slightly different from the brief as new requirements may be emerged, even though they were not mentioned in the business concept. By gathering requirements, many aspects of the final deliverables will be specified (Degeyter, 2010). A requirement defines goods to be delivered or services to be implemented. Its goal is to satisfy Client's expectation or the Contract. (Kappel, Pröll, Reich, 2006, p.25). This can affect the aesthetic design, the functional design and the structure. In addition, this information can help to create a time schedule and find out what resources are required in order to complete the website. Therefore, it is important to examine the requirements in order to understand the reason behind them, so they can be distinguished as business or user requirements. Moreover, they should be prioritised in order to clarify their importance as some may be replaced by others or combined with others (Degeyter, 2010).

There are many techniques that can be used in order to collect requirements from the Client (Gavin, 2010). There are also many web forms (available for collecting requirements) or online services that can help to build an online form. These forms usually do not contain many questions as their goal is not to be complicated, but simple, straightforward and to be completed in a short time. Although, they can be considered helpful since they can be used as examples for gathering the right questions, the best way to collect requirements is to meet the Client directly (Hussam, 2011). A personal contact can show respect towards the Client because of the time dedicated to him and it helps to understand his needs and what he really wants. During discussions or just by listening to

what the Client has to say, clear answers will be received whether it concerns the functionalities, services or the web design. Gathering requirements means gathering information that leads to create the work plan or manage the time schedule (Degeyter, 2010); some of them could be used in the Contract because of their importance in the development procedure.

Hussam (2011) has argued that there are five questions that can help diminish the options for the web design. They are called W5 because they all start with the letter W: Who, Why, Where, When, Where. The question Who refers to the audience and its attributes, such as age, gender or education. It can influence the design as it is an important factor. The Client wishes the website to aim for young people both male and female. The question Why refers to the features that will be included in the website. The Client wants a website for clothing tutorials, therefore videos and photos must be shown. But the reason for creating the website in the first place is the profits. This leads to the next question: How: How will this goal be achieved? By adding advertisements related to the business concept. Advertising products that can be used for making clothes will be important part of the layout since it will be the source of income. Therefore, it is essential to be shown on the website and attract the users' attention. The question Where refers to the region; if the site services will be offered in the local area, in the region or internationally. It is a crucial information because the design must satisfy the audience and the different cultures or trends must be taken under consideration as well as the language in which the content will be written. For example, if the website is meant for the audience of France, the website content will be in French, otherwise if it is meant for international use, then the content must be in English or both in French and English. The Client wants the site services to be offered internationally. For this reason, internationalisation should consider details, for example the differences among cultures and the meaning of symbols or colours in each one of them, the content should not be written carefully so misinterpretation will be avoided and also needs to take into account the legal requirements which may vary (Robbins, 2006, p.72). The question When refers to the date when the site will be ready to be launched. It is essential to know the deadline, so a work plan, a time schedule to be created, so the workload will be divided and plan how long each part will take to complete.

It was found that (Hussam, 2011) that asking for the Client's opinion about the likes and dislikes of a website, and what preferences he has towards his competitors' websites can help understanding the preferred style and layouts. In this case, the Client showed no preferences to other websites but he did mention some attributes that considered important for the design. The website must be easy to use, look cool and be profitable. Making users get tired or bored because of the website's complicated structure or indifferent presentation should be avoided; otherwise, there will not be any profits at all. Another way of advertising is with use of social media. As a result, social sharing features will be built in.

Another important information is the content publishing approval process. If a user wants to reply to a request by uploading a video or posting a comment, the content will not be publicly available until it has been approved by the administrator. The content should not be irrelevant to the website's concept. Abusive comments or post that advertise unrelated services/companies will be rejected. On the contrary, if they fulfil the requirements, then the comment/video will be approved and published on the website. This process can be achieved only if a user has created an account; website visitors can only search and watch video tutorials. They cannot post comments or upload videos but they will be able to read other people's comments. By registering, users have the opportunity to chat among them, concerning a post or a tutorial. This is not possible without logging in to an account because these services will be in password protected areas. In addition, when users upload tutorials, they can optionally include, besides the video, instructions in different types of forms, e.g. pdf files, photos, audio, text.

As previously mentioned, the website takes information from a database. Therefore, an internal site search feature can be provided. The search for video tutorials will lead to acquire information from the database. For this reason, the use of metadata is necessary. The website will be hosted in WAADE's servers with the Client's approval and it has to be mobile friendly, meaning that the design should be responsive in order to be displayed on

devices whose sizes differ. Moreover, another attribute to take into account is that the web page should offer printer friendly options and key optimisation which is an important factor for web marketing (Degeyter, 2010).

By understanding the business and the aiming audience (Degeyter, 2010), a website can be built which adheres to Client's core principles and meet his expectations.

5. Responsive website

The website is produced not only for PCs and laptops but also for mobile devices. Therefore, design for multiple devices which have different sizes may cause problems in the website's pages. This needs to be resolved as it is essential for the website to be shown in mobile devices, so the content must be clear, readable, while the design should have the same structure but adjusted to different screen sizes. It should not be altered in a way that would like a completely different website which will decrease its quality and make it look like a slipshod approach. The solution to this problem is to design a responsive website; it is a very important factor that is the reason the design should focus on that for a start since everything else will be built by using it as a core. Simon (2013, p.3) claims that responsible web design is the website's ability to change layout depending on the device the website is viewed on. Thinking in advance can be a great advantage, since there are some features that need to be designed differently in various devices or resolutions. It is not a matter to overlook because if it is planned for the beginning, time and resources will not be wasted. Using HTML and CSS, in order to make a website responsive, will only happen once; there will not be a need to code each time for a different device (size). In addition, media queries (the attribute used in CSS) can be used in the latest updated browsers and new devices, so compatibility is not a problem to consider.

Moreover, a complete responsive website should include a few features which need to be able to be modified according to the device (Simon, 2013, p.16). These important features are the logo, the primary horizontal navigation, the content area, the sidebar with side-specific navigation and the footer with some social media links.

5.1. Techniques for Responsive Design

Most of the work is done with CSS; it creates a responsive design. Part of the CSS features is the media types which can be used for managing different screens, width or orientation. There are many techniques that may apply for a responsive design using media queries, for example, the wrapping element "#wrap" which changes the other elements' size every time the website gets smaller. There is also the Fluid approach which helps with readability on smaller devices. Simon (2013, p.32) claims that this is the best choice despite few disadvantages.

There is a distinction between Desktop-first approach and Mobile-first approach. So far, the majority of the websites are using the Desktop-first approach since it is believed that users mostly browse the Internet on desktop computer, although it might change in the future as Mobile-first approach is being established. However, there are some issues that need to be considered and these are the JavaScript, CSS and Image load; the more it takes for a website to load the more discourages the users to use it. This can be prevented by detecting if the device is mobile or not, so it can load the libraries without taking too long for the page itself to load. Nevertheless, the code can easily be modified in order to turn a Desktop-first site into Mobile-first site. The most important fact to remember is that anything that has to do with the layout will be inside of media queries. It is suggested that the media query should be created for a Mobile design and in that (media query) should be included a desktop-specific styling (Simon, 2013, p.53).

6. Modelling the Website

The completion of the Contract and the collection of the Requirements help to clarify the services that would be provided on the website. Representing the requirements graphically benefits with a better understanding of the functionality (Kappel et al., 2006, p. 43). Kappel et al. (2006, p.41) claim that Unified Modeling Language (UML) can be used for specification of the functional requirements; it uses diagrams and use cases for modelling. Kappel et al. (2006, p.41) also argue that there are three important levels in the website's design and structure which can be seen below. By understanding and analysing these levels, a general approach will be implemented concerning the development of the Web Application.
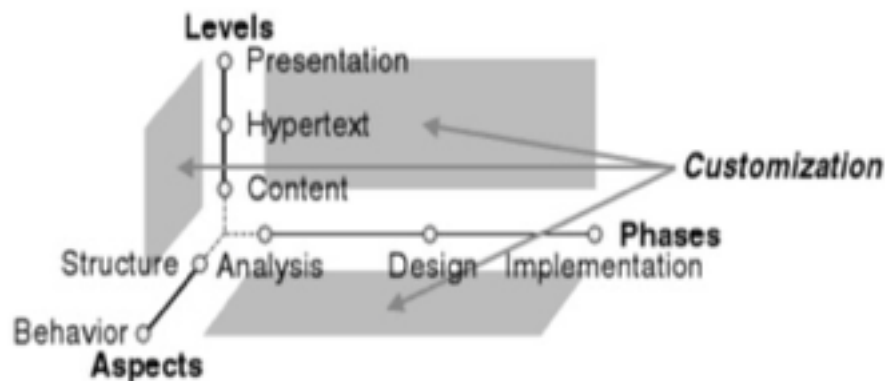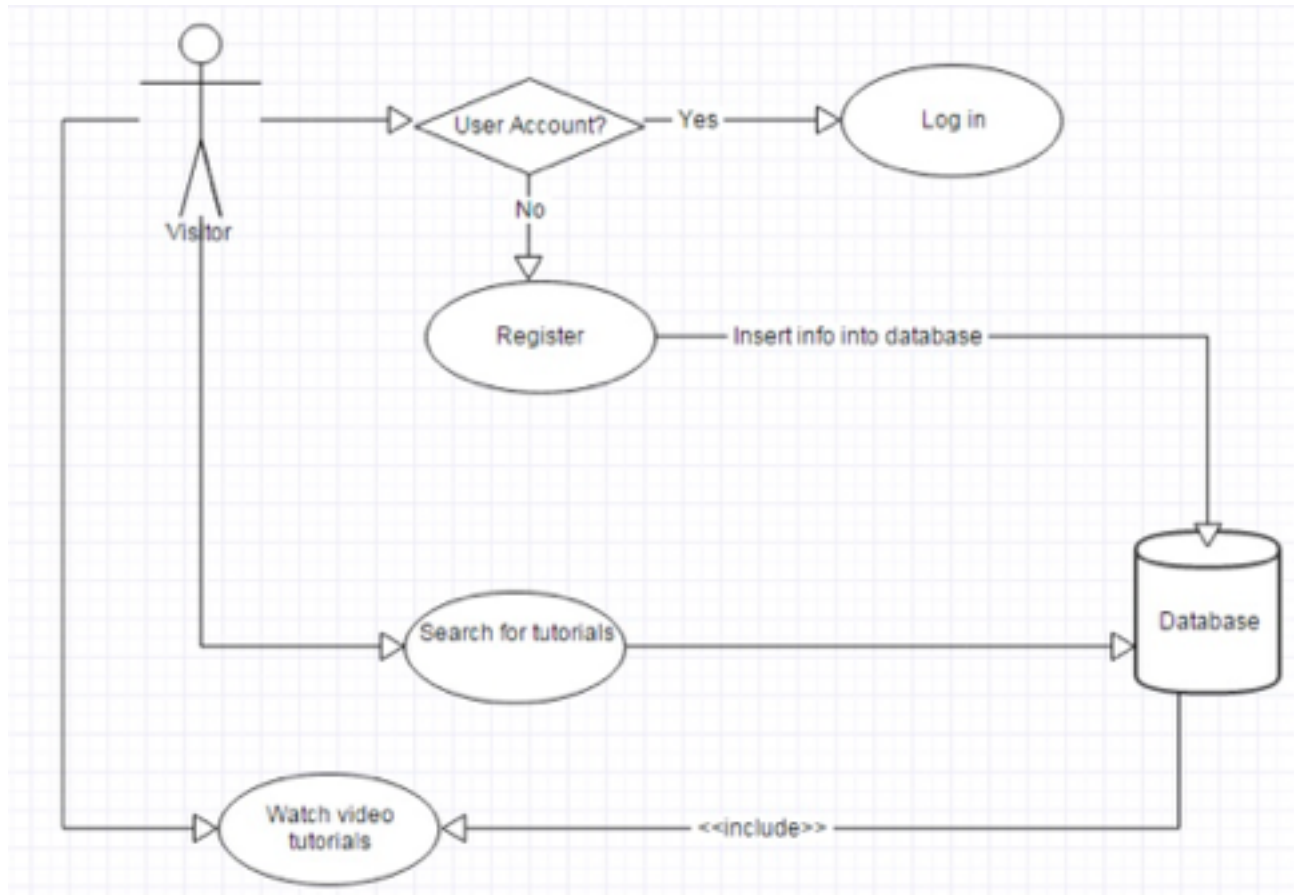

The following diagram describes functional requirements by identifying each person's "activities" on the websites. A visitor can only watch a video tutorial or search for one on the database, but if he wishes to comment or submit a request, he must register on the website. As a user, he can comment, upload tutorials or submit a request (for clothing tutorials) if the search on the database does not bring results. On the other hand, the administrator checks the pending posts or/and uploads in order to examine their content. In case it is not related to the website's business content (clothing tutorials) or the posts contain inappropriate content, they will be rejected; otherwise they will be approved and will be available to public display.

Using the online program (Gliffy, Inc.), activity diagrams were created. The following diagrams show the process of each person's activities involved on the website's services.

The first diagram shows the services that a website visitor can use which is to search for tutorials on the database and watch the videos. However, if he wishes to use the rest of the provided service, he will have to create an account on the website.

This diagram describes a user's services on the website. After logging in, he can upload video tutorials, post comments or reply to a request as well as search on the database and watch video tutorials.


The following diagram presents the administrator's responsibilities. He is the one who checks everything users post or upload on the website. If the content is relevant to the

business concept, then it is approved and stored on the database. Users and visitors are also able to have access to this content.

These diagrams have been focused on the level of User Interface; they involve services that can be seen on the layout. The following picture describes the process of searching for a video tutorial with the use of a UML class diagram. This can help to model the hypertext level, which describes the structure of the website, alongside with the User Interface level (Kappel et al., 2006, p.42-44).
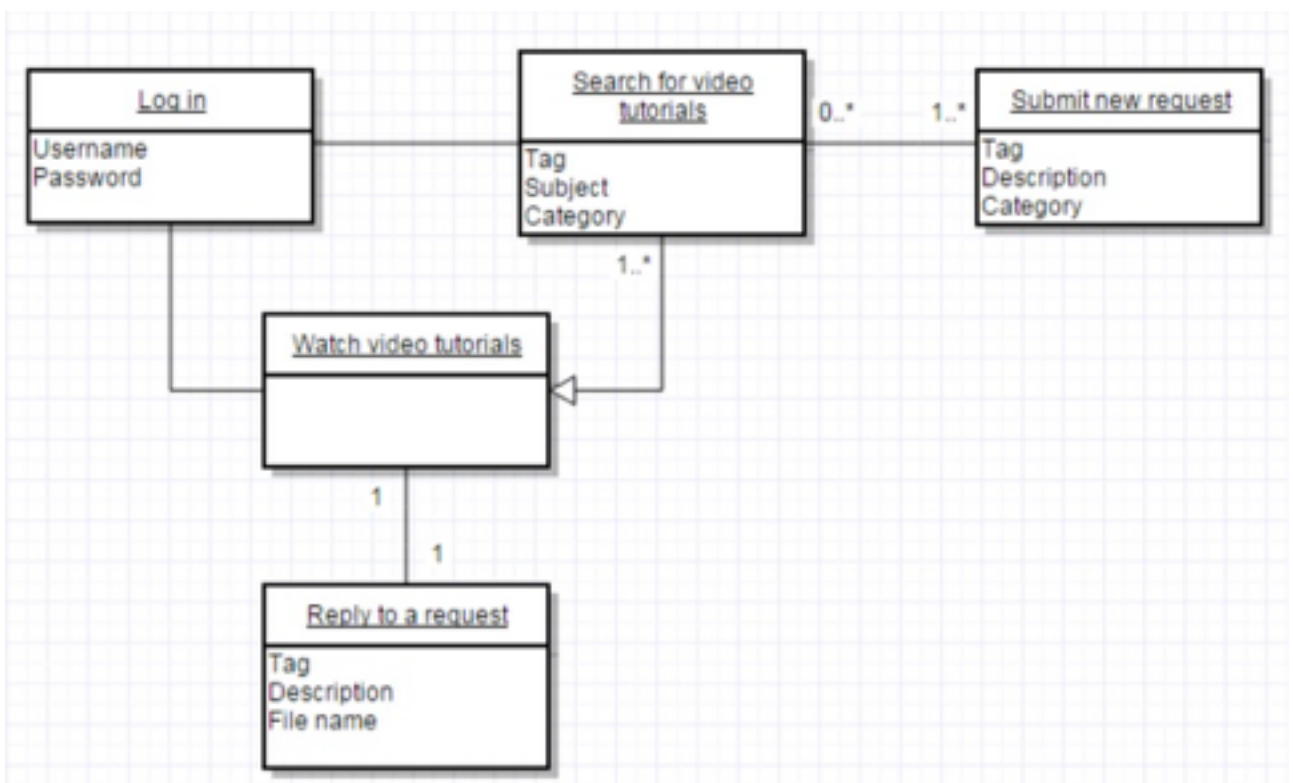
7. Designing the Website

Choosing the right to structure the website's content is very crucial. It can affect the whole website not just for its layout but also for the functionalities. In order to make the right decisions, the website's hierarchy needed to be drawn (Optimal Website Hierarchy Design, 2013).


With regard to avoid burying the content under layers of categories, a flat hierarchy was chosen which is short and is not consisted of multiple subcategories (Optimal Website Hierarchy Design, 2013). The home page introduces contact menu, submission for the requests, list with the existing requests as well as the clothing categories, each one of them includes video tutorials related to their subject. Besides the basic services, which will be added on the website, are not many so the can be displayed all together without weighting down the page.

Designing the structure of a website is different to designing the structure of individual pages. Each page has different use or content, therefore elements might be placed differently (Stocks, 2009, p. 50). During the process of gathering requirements, there were some first efforts to draw the structure for each page (see Logbook p.37, p.40-45). Due to the fact that not all information were collected, some services where not included. Although the majority of the elements used in the structure shall remain, few changes were required in order to include new features (Stocks, 2009, p. 51).

Some of the elements will appear on every page because of their importance. Those are the logo, the menu bar, navigation, social media features. The first three can be grouped together in the header area, while the social media features are usually put in the footer area (Stocks, 2009, p. 51-53). The position of these elements is expected to be in a certain because this is what the users expect. For example, navigation is usually at the top side, so if the position changes, it will take more time than usual in order to find it instead of using this time to read the content. Another example is the social media features; the majority of the websites put them at the bottom or at one side (Quick, 2008, p.71). After completing the requirements' collections, new wireframes were drawn, including new elements or services. The structure will get to be more presentable and clearer in order to have the final display (see Logbook p.37, p.52-55).

With the use of an online tool, Wireframe.cc, another layout was drawn. In the home page appears what the header and footer include as it was described and the main content which consists of the video introduction, a small description of the website, requests that are waiting for a reply, the sign in/register option and the submission for a new request along with the sponsors' advertisements.
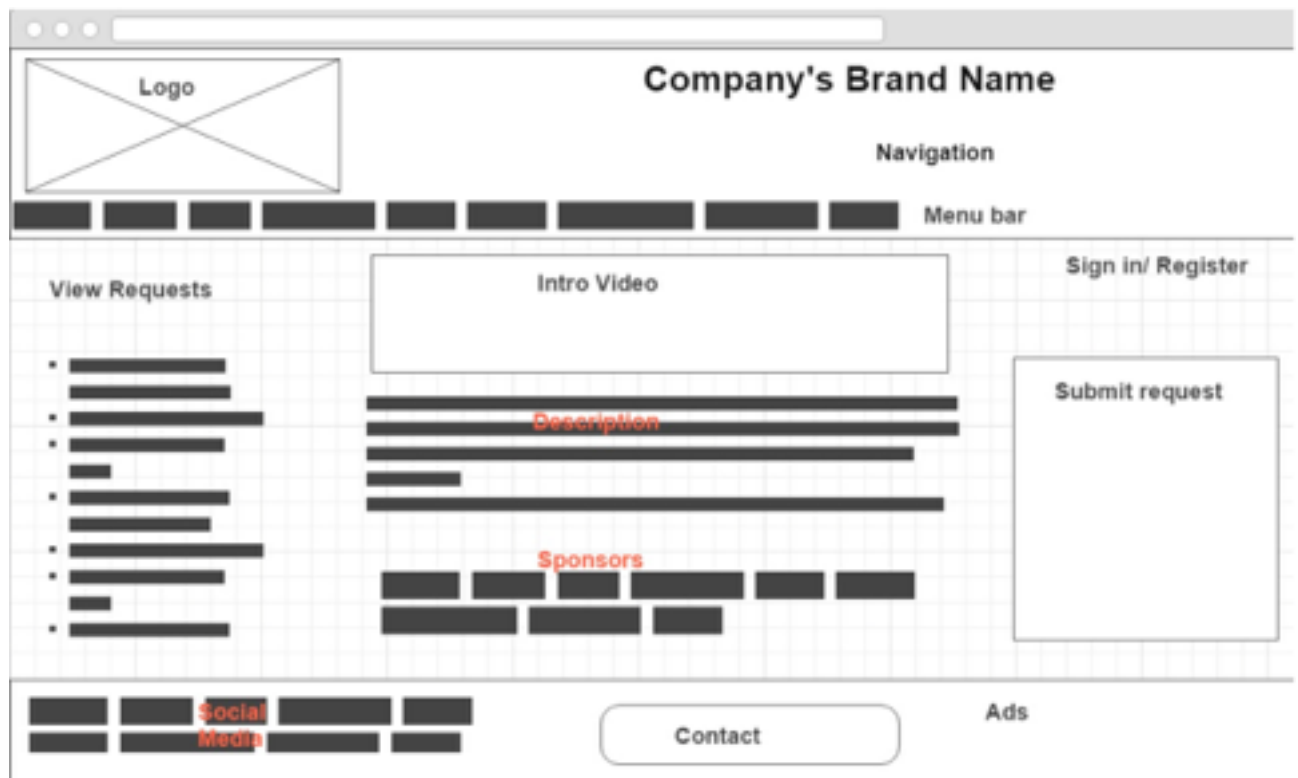
The layout for submitting a new request is slightly different. Although the header and the footer will remain the same, the main content will need to be changed in order to add new elements. There will be a title for the subject (the actual question), a small paragraph for describing in detail what exactly the user is looking for and the submit button. The page will also include advertisements with products that can be used for making clothes which the user might be interested in.
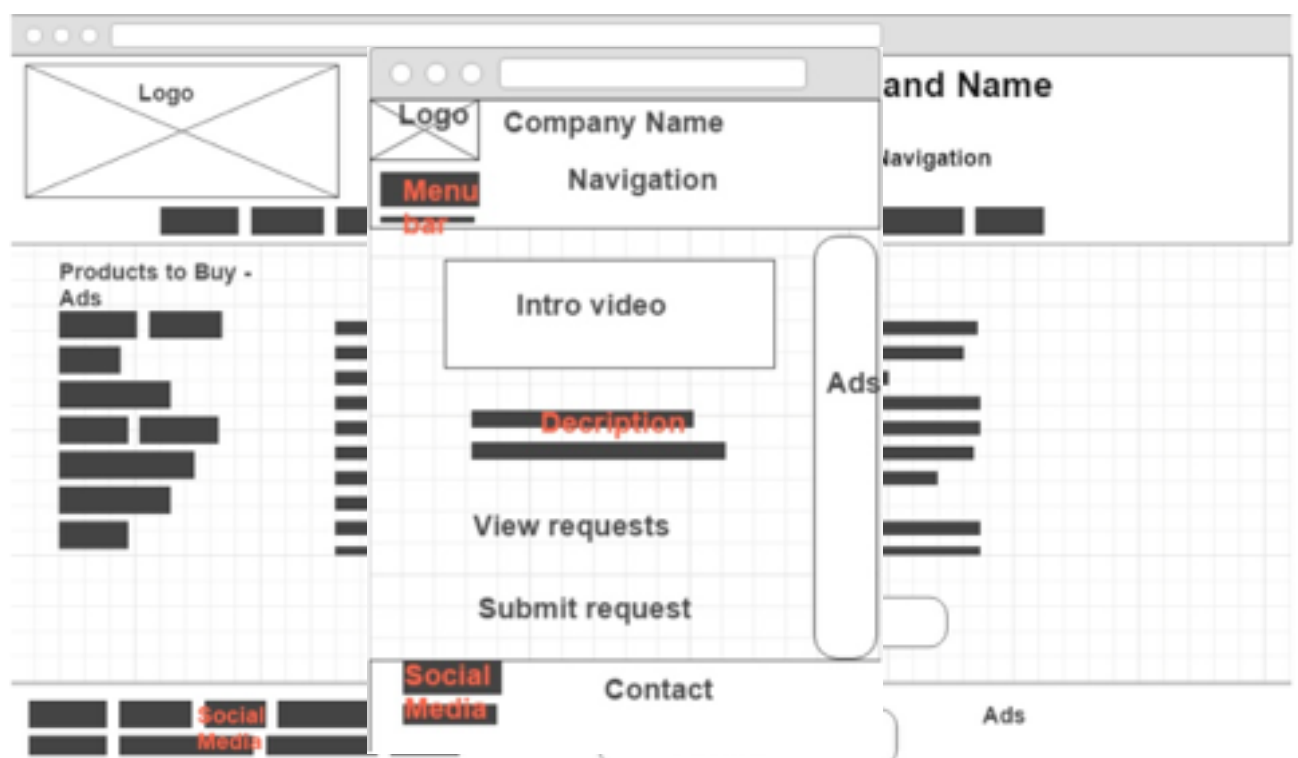
The layout for posting a reply needs also to be changed, concerning the main content. This page will also include a title for the subject along with a small description, but it will also have an element for upload a file or a url as well as posting a comment, related to the request. The page will also include advertisements about products and tools for creating clothes.
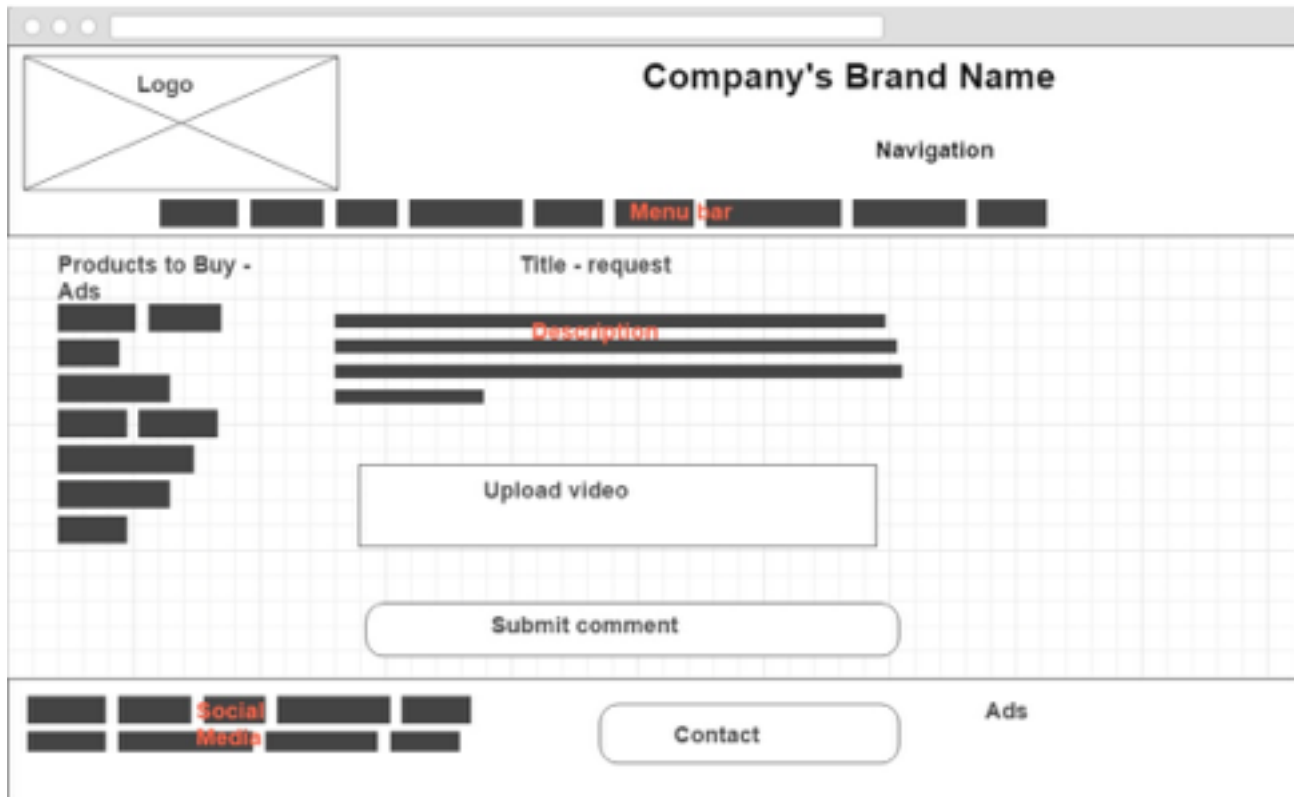
Wireframes have been created for the mobile layout as well. Since the screen size is smaller, some elements will be be displayed in another way; for example, the menu bar usually turns into drop-down menu because it will not fit when the width is being decreased (Stocks, 2009, p. 70). As previously mentioned, the website will be mobile friendly, therefore the design should be expected to adjust for different screen sizes and resolutions. Therefore, there will be some major changes on the layout, although the content will remain the same.

8. Conclusion

This report presented the process of the Design development and showed the importance of the Contract, the Requirements as well as the procedure that need to be followed in order to build an overall design and outline the final deliverables.

Since the development procedure for the website's design implementation has been resolved, the next step will be to develop the functionalities, structure and assets for the website along with the search engine optimisation techniques. In addition, a video will be created in order to present the business concept and it will be included in the home page.

The result will be a fully functioning database driven, responsive website where users can rely on finding the tutorials they need so they can make their own clothing or upload their own video tutorials and help other users find what they need and the sponsor can advertise their products which users may be interested in buying.

9. References

1) Kumar, V., (c2013). 101 design methods: a structured approach for driving innovation in your organization. Hoboken N.J. : Wiley.

2) Simon, Cory (2013). Instant Responsive Web Design. Birmingham, UK: Packt Publishing Ltd.

3) 5 Tips for Logo Design (2015). Retrieved from http://www.howdesign.com/featured/top-tips-for-logo-design-gardner/

4) Kappel, G., Pröll, B., Reich, S., (2006). Web Engineering : The Discipline of Systematic Development of Web Applications. Heidelberg, Germany: Wiley.

5) Myers, J. C. Design Contracts for Freelance Web Designers. Retrieved from http://webdesignlaw.com

6) Gavin, E. (2010). How to collect design requirements for a Client. Retrieved from http://www.gavinelliott.co.uk/2010/06/how-to-collect-design-requirements-from-a-client/

7) Degeyter, S. (2010). 100+ Questions You Must Ask When Developing A Website. Retrieved from http://marketingland.com/100-questions-you-must-ask-when-developing-web-site-86342

8) Hussam, A. (2011). How to get the Right Creative Requirements From Your Client. Retrieved from http://webdesign.tutsplus.com/articles/how-to-get-the-right-creative-requirements-from-your-client--webdesign-1792

9) Optimal Website Hierarchy Design (2013). Retrieved from http://www.enform.com.au/optimal-website-hierarchy-design/

10) Stocks, E.J., (2009). Sexy Web Design (1st ed.). Australia: SitePoint

11) Robbins J.N., (2006), Web Design in a Nutshell (3rd ed.). USA: O'Reilly.

12) Quick, R., (2008). Web Design in easy steps (4th ed.). UK: Computer Step