

Web Design and Development
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Coursework 2

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An outline of the extra work needed to make the current interactive prototype into a working professional web site

The current interactive prototype consists of significant web design features but there are much more elements that must be incorporated in order to deploy a professional, fully functional and secure website to the client. These elements should exist either on the client side or the server side.

It is pretty clear on the client side that there are links on the current webpage that do not direct the user anywhere. More specifically, on the navigation bar there are two links (Mixers and Snacks) that have no content at all. As the name implies, the first page will contain photos and information of a variety of snacks that the users can order, and the second link relevant details. The link that allows the user to see the drop-down menu with the drinks category also contains more links that do not have any information apart from the one that directs the user to the wine list. The page displaying the wines should be developed more. At this stage, this page was used mainly for demonstration purposes. In the future, this page should contain all the wines that the company sells.

The user has the chance to log into their account. When that happens, the user is able to access two more webpages. These webpages are Trolley and My Account. Once more, for demonstration purposes, the Trolley webpage shows a table that looks like an order with all the details. In reality, this will be a dynamic webpage which would show the user all the details of their order at that time, the total would be calculated according to the prices and quantities of the products that are about to be purchased. Also, an option will be given to the user to delete an item from the purchase. Moreover, My Account page shows basic information of each user and gives them the opportunity to view any previous orders they had placed, update their details and delete their accounts.

Currently, the order link does not show anything, but it will give the user the ability to see any previous orders. The update button redirects the user to another webpage where a form is presented to them with various inputs available according to the details that they want to update. It would be ideal, if that form would not update all details at once but give the user the ability to update a single piece of information at a time. The delete button automatically deletes the user's account. An alert window should be shown in the future, requiring confirmation from the user to delete their account. This could be done with JavaScript scripting language (Rababah and Masoud, 2010).

At the bottom of the homepage, there are several links that are not working at the moment. These links are social media icons that will be used as links to connect users to the client's social media accounts and the other links should provide relevant information.

As far as the server-side of the development is concerned, there are quite a few factors that we need to take into consideration. For security reasons, we need to be able to alter the characters of the passwords in the database. In that way, we prevent the leak of passwords in case of hacking. Moreover, more "entities" need to be created in the database for storing the information of the products that the client sells. In that way, we will be able to update our website automatically in case a product is out of stock or notify the users of how many items are left. Also, we will have to extend our current users table and add some more fields. The user's address and telephone number should be one of those fields. In addition, we might need to create another table with users' payment information like card number, expiry date, account number and sort code. In this case, we need to create extra layers of security and be sure that the information is well protected following every regulation and protocol (Kendall and Kendall, n.d.).

Finally, we need to make sure that our website is responsive. Nowadays, more and more people use their mobile phones as the primary tool to place an online order (Roggeveen and Sethuraman, 2020).

With this in mind, we need to make sure that the most appropriate usability principles for responsive web design such as consistency, familiarity, flexibility, efficient feedback and aesthetically pleasing are in place ((Santiworarak and Choochaiwattana, 2018).

A reflection on my work for this module, outlining what I have learned about web design

I have always been fascinated by the world of internet. It gives us the ability to communicate no matter how far we are from each other. We have access to limitless information. We purchase goods and services within seconds just by clicking buttons and filling in forms on a website. By attending the Web Design and Development module, I felt like I can become part of something important that provides comfort and ease to the everyday life of many people.

My knowledge was limited as to how a website is built, where it resides and how it operates according to the instructions I provide. Now, I know that there are two parameters I need to consider when it comes to website development. The first one is about “client-side”. It is about what the user can see on a webpage. We basically refer to HTML and CSS. The first gives structure to our page, while the latter is related to the aesthetic part. We can also use some frameworks like Bootstrap which prevents us from wasting time on doing and writing code regarding the style of our website.

Additionally, we can use JavaScript (JS), a scripting language that gives our website the possibility of interaction with the user. JS offers the ability to the website to do something when the user clicks a button or fills in a form. Also, it can be used as a means to prevent us from sending wrong information to the server. It is a nice tool of verifying information on the client side before we send it to the server.

The other parameter I have to consider is related to the server side. I would like to mention how excited I am that I learnt PHP which is a server language. PHP helped me clarify how and where users' information is stored and used. It is a great language which gives the programmer the ability to connect the website to a database. That is where all the information is stored and can be manipulated by different queries. Connecting the server to the database through different Mysql (in my case) queries was fascinating. It was when I realised how the whole process works. It was the moment that I realised that there are so many things that I do not know but at the same time, because of the module, I was able to have a thorough understanding of how all the pieces come glued together and interact with one other by giving us an outcome that all internet users are familiar with.

Moreover, it was interesting to discover how programming is developing and becoming much easier due to the hard work of previous software engineers. Libraries and frameworks are widely used in order to make our life easier and save time on projects. Finally, all the above were presented and supported with the relevant theory. The most significant for me was the explanation of the “Five Planes”. Surface, Skeleton, Structure, Scope and Strategy are the five Ss (as I called them) that underpin web design and development.

Self-report your achievements in code-writing

Coursework Achievement Grid	Exists: Yes/NO	Provide Requested Information
Provide full URL (web address) of your home page on the server	yes	http://localhost:8080/cw_part2_40127467/Homepage.php
There must be at least 3 web pages (list 3 filenames)	yes	<ul style="list-style-type: none"> • Homepage • Sign Up • Wines • My Account • Trolley • Log In
Registration new account possible (On which page)?	yes	Sign Up page
Logging-in into site possible (On which page)?	yes	Log In page
Is logging-in only successful for the correct password?	yes	
Is there indication/feedback that inform the logged-in status (Provide brief detail)?	yes	<p>The message appears on top of the nav bar that includes the user's name (ie Cheers Vasileios).</p> <p>Also, more links appears on the nav bar such as 1. Trolley, 2. My Account and 3. Log out</p>
Are there any secure pages that can only be reachable once a user logged-in (List these pages)?	yes	<p>As mentioned above the following pages can be accesses only by people who have logged in:</p> <ul style="list-style-type: none"> • Trolley • My Account • Log Out
Can your application create a table row on the database? (How can I check?)	yes	When you sign up you as a new member then a new row is created on the database. As a user you can now log in after signing up. The name will appear on top and then if you click on my account your details will be there. Also, if someone has access to the database like an administrator, will be able to see that another record is added.

Can your application read from the database? (How can I check?)	yes	Same as above: The name will appear on top and then if you click on my account your details will be there. Also, if someone has access to the database like an administrator, will be able to see that another record is added.
Can your application update a database entry? (How can I check?)	yes	As a user you can go to My Account, then click on update button. You will get directed to a form and you can change an update your details.
Can your application delete a database table row? (How can I check?)	yes	As a user you can go to My Account and then click delete account. The account will be deleted which means that the relevant entry is deleted from the database so It will be impossible for the user to log in again.

Link to Video Demonstration

<https://www.youtube.com/watch?v=FxNRE7Kr2NE>

References

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