

Coursework 2 Report

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Intended Additional Features

There were a number of additional features that I wanted, the first was a slide-show of images on the homepage. To display some high quality images of what the business sells. It will also have some relevant information about the business. The slide-show will give the user the option to move the images or they will move automatically if they don't. I will also add some links in the slide-show to maybe go to relevant pages in the website. I will try and make very professional with high quality transitions in the slide-show. This will involve a mixture of CSS, HTML and JavaScript/J query. This will also require me to add bootstrap, to help me implement this slide-show.

Another feature I am going to add is the HTML5 element of the video tag. I will add a video of some bricks to my building supplies, instead of a normal image. I will want it to be auto played and on a loop when they go on the website.

The final element I want to add is a feature of using the Google map, I had in my coursework 1 website, adding geolocation. I would then get it to plan the nearest route using the location of the user of the website to the business location. This will involve a mixture of both HTML and JavaScript.

Differences between the design and the implementation

For the slide-show everything I had in my initial design was the same, except that I didn't use bootstrap. The reason for this was that this would have completely messed up my CSS and HTML elements in my website. This is due to the fact that I would be using bootstrap's own JavaScript and CSS format. This made it not viable to completely reconstruct my website, just for adding a simple JavaScript element into it. I believe I have made it look professional by adding high quality images which are transitioned by high quality fades.

I have also successfully implemented the video tag. I have implemented it, so it will run a video automatically and with everything that I wanted in my design. There was very few problems to implement this, as it was very easy to implement a new HTML5 tag into my website.

The final element was the geolocation on Google maps. This was almost successful, however often many devices don't show their location making it very hard to implement this design onto my map. I would get errors and problems if there location wasn't on. In the end the amount of code and problems weren't worth how much I would get back from the project.

Possible Additional Features

Other possible features I could add are things like show and hide buttons. This would hide/show parts of text, meaning the page will look a lot better as I could limit the amount of information on the page. Another possible feature that I could add is

having some alerts, coming up the screen when they do something. For example, it will say when the business will open and how much time till it opens, every time you open the contact us page.

JavaScript Files.

There are 5 JavaScript files, the first is called jquery-1.6.js. This is simply the 1.6 version of J Query, that I decided to use for my other JavaScript functions. The second one is called Vegur_300.font.js, this is open source font that I use in my slide-show. The third is cufon-yui.js, this is a library of open source functions that I used to help construct the slide-show. It is very similar to bootstrap except I only need to change some JavaScript to create it. The fourth one is called tms-0.3.js, this is similar, to the previous file except they are used in tandem in my website. The final file is index.js, which is a few functions and constructors that I created myself in JavaScript. These are used to launch the JavaScript when the website is loaded. Much of these functions rely on the previous files being available, as functions in other files are used are in there. Initially this was going to be in the index.html, I moved it into a separate JavaScript file later.

A Description of the Client and the Server in the World Wide Web

A client isn't a person but it is the browser that it requesting the web page from the server. A server is quite simply a computer or web server, that sends the client a web page and it's relevant resources (images, video, audio). For much large websites, it may receive millions of requests for the web pages, every second. This therefore means that there could many different web servers, that will distribute web pages to many different clients. These web servers will often use mirror servers, which will all distribute the same thing but just try and lessen the load for an individual server. This way of web page distribution is called the client server model. The other method is called peer to peer, this isn't widely used for web page distribution. Almost all of the websites in the world which are used, use the client server model.

These web pages use HTML links which are used to link multiple web pages together. These can not only link web pages in an individual website but also to external website. This means millions of websites, can have multiple links that link together to millions of websites. This creates a web like structure between much of these websites all over the world, hence why we call it the World Wide Web.

A description of the HTTP protocol and how it operates when a web page is requested from a server

HTTP stands for Hypertext Transfer Protocol. HTTP is a sequence of instructions that is used for communicating between web browsers and servers. This involves the browser sending a request to the server for a web pages, images and any other relevant resources. The server will then respond often sending them a response back, hopefully with the requested resource. When a HTTP request is sent, it is sent with some parameters (data) and a request type. One of these request types is the type GET. This will be used to ask to get a resource from the server. Another type is POST. This is very similar except that the parameters that are sent with the request aren't stored in the browsers meaning that it is a little bit more secure. The

PUT request is almost identical to the POST request except if there is a file already there, it may replace it with something else. This can have it's different purposes to the PUT request. Other request types are things such as OPTIONS, HEAD and DELETE. You can also get HTTP error codes, one of these common ones is the 404 (Not Found). This means that it can locate with the server however it can't find the file. Another common one is 500 (Internal Server Error) which means for some reason the user can't process the request. The order of events in a HTTP request is;

1. BeginRequest
2. AuthenticateRequest
3. AuthorizeRequest
4. ResolveRequestCache
5. AcquireRequestState
6. PreRequestHandlerExecute
7. PostRequestHandlerExecute
8. ReleaseRequestState
9. UpdateRequestCache
10. EndRequest

Comparison of the purposes of HTML and CSS

The purpose of CSS is primarily for styling the web page. CSS main purpose is used to improve the presentation of a web page primarily affecting what the colours, layout and the fonts look like. Also CSS is used to change the look of a website depending on what device, the user is using. It may look different on different computers, different monitors and on a mobile device. Also it's purpose is good for easy maintenance of web pages as it will only be using one style sheet.

The purpose Of HTML is primary used for defining the actual content of a website. It's also used as a language for describing the structure of a web page. It also define the structure of how documents are related and linked together on the world wide web. HTML is also used to define how websites are search for via search engines and how they rank up in search engine results.

This shows that CSS and HTML are used for very different reasons when creating websites.

Evaluation and Testing

Overall I would say that all my new design features on my website went very well. I carefully tested as I went along with the creation of the additional features. I made sure that I created a little bit of code and made sure that it was correctly working. I also made use of JavaScript error checkers online. This allowed me to weed out any syntax errors. When I was editing my CSS file for the slide-show I made sure that when I added/removed something, I checked for what the changes were. Afterwards I did quite a few tests to see what I wanted at the start is what I got at the end. This was very successful as for the features that I ended up implementing what I wanted was very similar.

References

My Own Knowledge

<http://stackoverflow.com/questions/107390/whats-the-difference-between-a-post-and-a-put-http-request>

<http://learn.onemonth.com/understanding-http-basics>

<https://www.w3schools.com/>

<https://jquery.com/s>

<https://www.drivehq.com/folder/p9420255/1897762608.aspx>