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Student Name: Nischal Acharya

Group: L1C1

London Met ID: 21039900

College ID: NP01CP4A210020

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I confirm that I understand my coursework needs to be submitted online via Google Classroom under the relevant module page before the deadline in order for my assignment to be accepted and marked. I am fully aware that late submissions will be treated as non-submission and a mark of zero will be awarded.

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1. Introduction

The following coursework include the development in the form of a website of a particularly E- Commerce Website. The various tools used for developing a simple website were HTML5, CSS3 and JavaScript, which have their own value or value for building a receptive website. Each web page is constructed one after the other using a structure and sequence of specific instructions. HTML and CSS are not programming languages, but they define the website structure and provide the layout and style information. While JavaScript offers a dynamic and interactive web pages as an actual client-based programming language. Listed below are the few basic overview for each of them.

Single unit of information, often called a hyper document is a webpage which is created by using language called Hypertext Markup Language (HTML). It is a standard set of codes, called tags, used to format all web pages. CSS helps to style this content, on the other hand, so it seems to the user that it has been designed for viewing. These languages are kept independent to ensure that websites are properly built before reformatting. JavaScript is a logic language which can be used to modify the content of a website and to comply in different ways with the actions of the user. Common JavaScript applications include confirmation boxes, call-ups, and the addition of new identities to existing data. Using all the features provided by each of them, a simple progressive and responsive website was developed based on the allowance the students we had to go through (Saud, 2021).

Thus, use was made of all the components such as HTML, CSS and JavaScript, a simple web page with interactive answers and the guide was followed, each webpage was linked to a different one and each webpage was presented to the tutor with its own value and value. Similarly, the lecture slides were not enough to justify the content, even if the model was straightforward, references from different websites and tutorial videos from different sources appear to be very vital as the work and website are completed. Therefore, it is all created by the compilation from all the possible sites and references.

1.1. Goals and Objectives

The students were also planned to create a simple website with the aim of achieving all the necessary plans taught in this class, together with further research from different sections of the Internet. Every course work or ethics has its own objective, so as ours with the basic theme to design and develop, in five different pages, a simply individual E-Commerce Website in the shape of a website providing the reader with knowledge each has to refer all about. Details for the demonstration during and for the completion of the coursework are listed below as follows:

- 1. Understanding the fundamental Internet technologies and the consequences of the Internet technologies in their daily lives.
- 2. Competence with appropriate tools and technologies such as HTML, CSS and JavaScript in designing a website.
- **3.** Ability to use web pages with scripting languages adding different features to be offered by the webpage.
- **4.** Understand the website structure and simple principles of navigation.
- **5.** Website design awareness: e.g., usability and accessibility with all the attributes to be defined accordingly.
- **6.** Search the different web components that have the student's attributes and elements in the following website and contrast them for the investigation section.
- 7. Consistent use of browser navigation bars allowing the user to navigate fully through all sections of the webpage.
- **8.** Proper structure and formatting, together with good reasoning for each line of codes to define them properly.
- **9.** Using HTML5 to define the web page, CSS3 for its layout and design justification and JavaScript to dynamically change the website content to structure.
- **10.** Presence and implementation of all HTML tags in the document.
- **11.** Use of comments finally to focus on major events

1.2. Use of HTML, CSS, and JavaScript

As the usage of each instrument and technology for the coursework was defined above, let us only interpret each of the following to add something more describing to raise the reader's or tutor's level of understanding. The uses for each tool in each area are shown below, along with a comparison to the question.

1.2.1. Code Structure

The construction of different parts of the content was made possible via a variety of HTML5 technologies. Individual or common classes were utilized to specify the layout and look of different tags for each value. Table tags were used to create a table in the Cart area, specifically to define the number of products brought. Similarly, numerous div tags were established to split each division, each with its own set of classes, and the elements were defined under those tags, such as the navigation bar. Meta tags were used to give the web page a responsive framework, while image tags were used to add images, form tags were used to construct a simple form, and other inputs and text areas were included (Ubah, 2020).

1.2.2. Description of Presentation

CSS3 and its attributes were used to describe the webpage, which may contain colour. layout, and typeface, among other things. External CSS was used to make the website more attractive. As a result of its use, it is possible to modify the presentation to different devices, such as large or tiny screens in mobile phones, as well as printer forms. Through the classes linked in each HTML file, CSS keeps the sites or share style sheets up to product and product-details pages. Internal CSS was similarly used to describe individual web page features, whereas inline was used to define individual properties for each of the attributes used up. Finally, the common sectors and sections define the layout and styling of the document (W3Schools, 2021).

1.2.3. Interaction and Dynamic

JavaScript allows users to connect with websites by adding interactive elements. JavaScript enhances the user experience of a web page by converting a static page into an interactive one. To recap, JavaScript is a scripting language that adds functionality to web pages. The coursework's web page was created using two scripts: one internal and integrated into the same HTML file using script tags, and the other external and linked to the HTML file. Finally, all these tools were compiled into a simple webpage (Ubah, 2020).

2. Discussion and Analysis

The discussion and analysis sections contain in-depth information about each of the coursework's web pages. The functions and features provided by Virtual Studio Code IDE were first used for the start-up and definition of code as a text editor. Wireframes were created for the sample layout of how a web page should be presented, and Balsamig was used because of its efficient purposes, making the task even easier. The coding part currently comprises the principles of HTML codes, which were followed by the addition of additional tags such navigations, div channels, and footers as needed. The total number of webpages is 5, with the home page functioning as a browser's start-up page, a product page including a simple product and product-details page displays the details of particular product, a creative technology blog, and a reference section comprising odd websites whose ideas were used up while the coursework was being finished. Finally, in the form submission, a form tag for a contact page was established. Now that each of the website's pages has been investigated and examined, and details about each of the website's pages have been referred to, a broad range of understanding has been provided. The editor used to write the code and compile it, as well as the tools and wireframe chosen to describe it, are all described on the following pages. The basic overview of the codes used up with a common feature can be listed up as follows:

```
<!DOCTYPE html>
                                                 <!-- Declaration of HTML information -->
<html>
                                                 <!-- Creation of a HTML Document -->
<head>
                                                 <!-- Creation of head tag -->
<meta>
                                                 <!-- Creation of meta tag -->
                                                 <!-- Creation and addition of title -->
<title> </title>
                                                 <!-- Addition of internal CSS -->
<style></style>
k>
                                                 <!-- Linking up external CSS -->
</head>
                                                 <!-- Ending of head tag -->
<body>
                                                 <!-- Creation of body tag -->
<div .class>
                                                 <!-- Creation of div tag with class-->
<nav></nav>
                                                 <!-- Creation of navigation tag -->
<div></div>
                                                 <!-- Creation of further div tag -->
                                                 <!-- Addition of further codes -->
... ... ... ...
</div .class>
                                                 <!-- End of div tag -->
                                                 <!-- Creation of internal script tag -->
<script>
</script>
                                                 <!-- End of internal script tag -->
</body>
                                                 <!-- End of body tag -->
</html>
                                                 <!-- End of HTML document -->
* {
                                                 <!-- Addition of external CSS -->
       padding: 0;
       margin: 0;
       position: relative;
 }
```

2.1. Text Editor

Virtual Studio IDE, a full-featured development environment, served as the text editor. Because it ensured productivity and quality while adding codes to this document, the text editor was picked. platform. The web developer community has given it a lot of love and support. VS Code Studio was chosen for a number of reasons, including extension support for multiple files highlighted. Due to its open access and support for assignment, it also made it move easily. The code flows with precision and speed. Visual Studio Code, also known as VS Code, was designed with web developers and computer programmers in mind. It includes many useful features that help write and navigate code more efficiently. The extensive functionality provided, as well as the easy navigation, aided in engaging the code and making necessary corrections. It was much easier to manage and load the IDE, as well as compile in a reasonable amount of time, resulting in much smoother progress (Gamma, 2015).

2.2. Program tools and Wireframes

Each web page was created using the most up-to-date technologies and tools. HTML was used as a mark-up language with HTML5 support, which had the most updated and latest versions with new tags and elements, as well as several features that made web creation easier and more complete. Similarly, CSS3 was the most advanced and anticipated form of style sheets, and the text editor appreciated its support for the webpage because it included features for a variety of designs. The js extension of JavaScript had been used up, so scripts were added to it. The extensions of HTML and CSS are.html and.css, respectively, and the output of HTML can only be presented as a webpage, but the style sheets and the scripts remain hidden.

A wireframe is a visual way to design the format of the webpage which represents a skeletal framework of a websites. It is used to design the layout of any web pages. It also used to design the element of the web page. It is generally used for the early development of a web page. In this course work I started to make the wireframes before I started making web page.

At first, I made a simple layout of my websites which had assisted me a lot to make website easily with the proper codes and elements. The wireframe of my website is given below (Balsamiq, 2022).

2.3. Home Page

The first page, the home page, is a simple one, with a navigation bar in the top right corner that allows users to move around the interconnected sites, and an icon in the left corner that serves as the logo for the web page. For each of the components present, a large number of div tags were employed, and classes were assigned to each of them to define their presence and appearance. The meta tags supply the web page's metadata. The items in the navigation panel are listed in an anchor tag that provides the HTML website's path. A h1 tag greets visitors to the website, along with a brief description, in another div tag, and another section contains a picture with a hover effect toward the upside. Similarly, anchor tags are used to link multiple social media accounts via icons with hover effects, and all of these elements are well-positioned using CSS and a range of styles are available. Hover effects were applied to the image so that images are moved slightly horizontally when mouse cursor is placed in it. A cart page has been introduced by adding cart icon so whenever the user buys some products it goes to cart page.

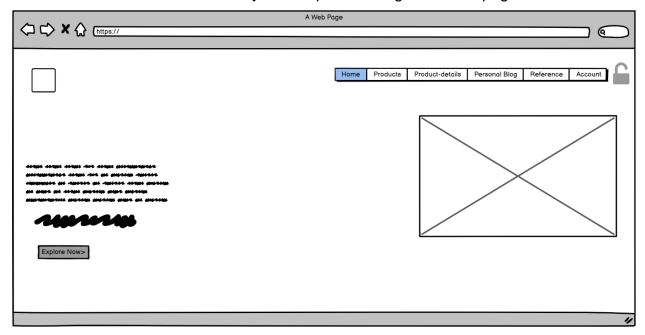


Figure 1: Wireframe for Home Page (i)

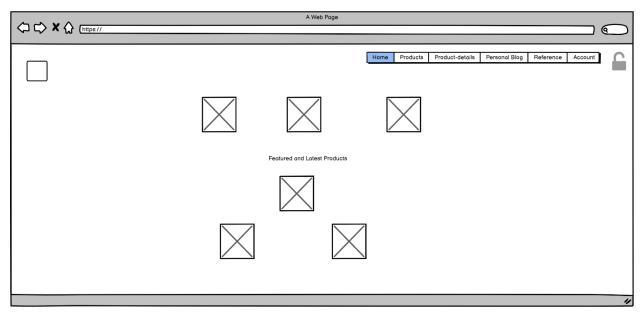


Figure 2: Wireframe for Home Page (ii)

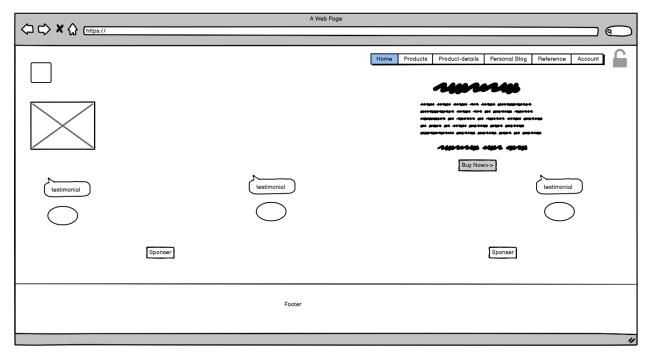


Figure 3: Wireframe for Home Page (iii)

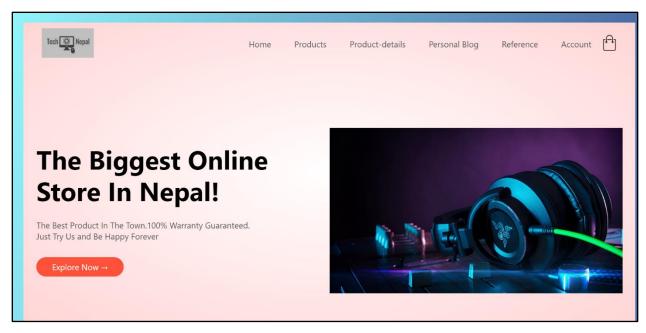


Figure 4: Webpage for Home Page (i)



Figure 5: Webpage for Home Page (ii)



Figure 6: Webpage for Home Page (iii)

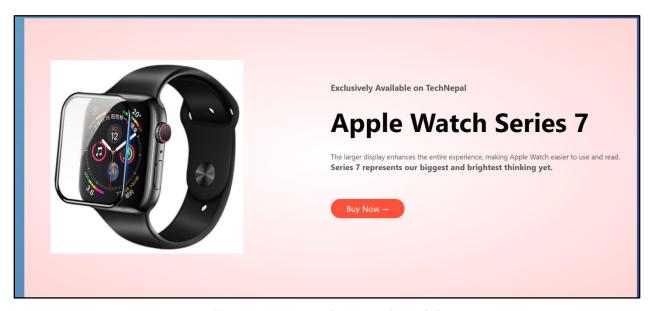


Figure 7: Webpage for Home Page (iv)

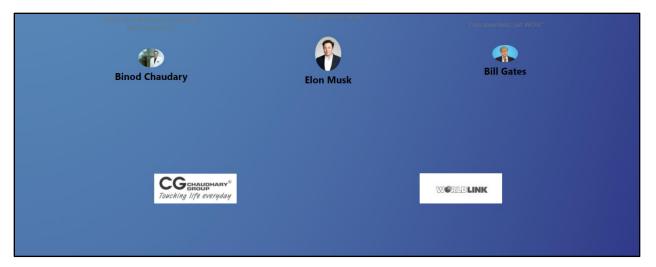


Figure 8: Webpage for Home Page (v)



Figure 9: Webpage for Home Page (vi)

2.4. Products Page

The second page of the website also includes standard features such as the web page logo icon and a navigation panel that allows for constant page navigation. Now the tag is utilized to create a product page section in a div element, and then the image is added by determining its position, destination, and width and height sizes. Additional CSS features are added to the existing file that supports all pages, which is linked to the common style.css. After that, the internal styles were applied, and the content was added to the page. A basic hover effect was added when product images were added. To make user friendly and for making customers job easy default shorting was added where user can default the product by its price, popularity, rating, and sale.

At the last of this product page 1,2,3 and 4 number are added in the box with hover effect so that customer can use the website in more effective way.

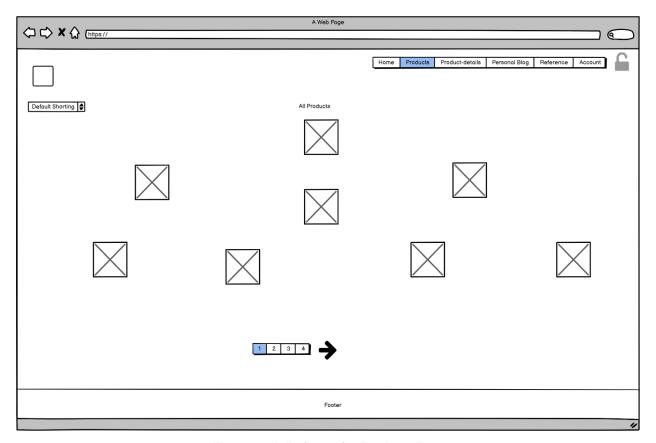


Figure 10: Wireframe for Products Page



Figure 11: Webpage for Products Page (i)



Figure 12: Webpage for Products Page (ii)

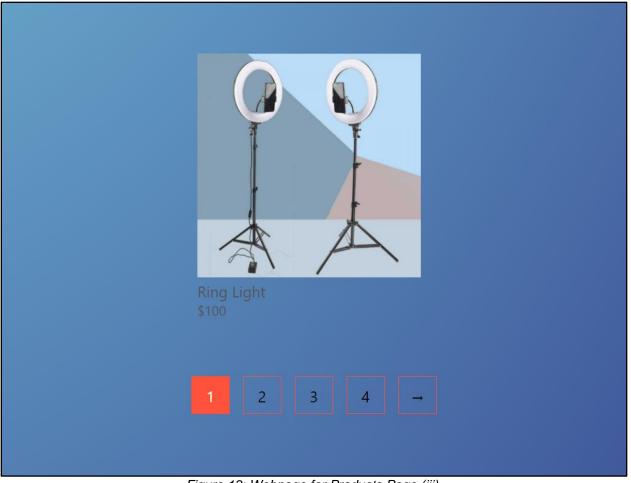


Figure 13: Webpage for Products Page (iii)

2.5. Product Details Page

Here in product-details details of particular product is provided show that it will be easy for consumer to view product details and make the proper choice. Here consumer can also check more details of photographs of order so that they can examine merchandise in details method. If they love certain thing then they may put to basket so it would be easy for them to buy.

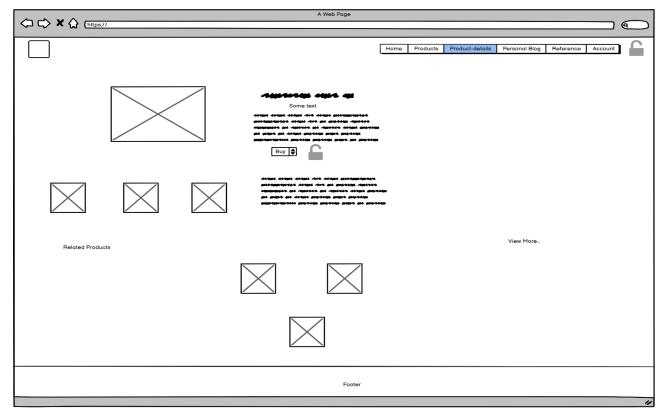


Figure 14: Wireframe for Product Details Page



Figure 15: Webpage for Product Details Page

2.6. Personal Blog Page

This portion of the website can be accessed using the navigation panel, which is the fourth element on the page. The navigation panel is defined by the same class, title, and layout as the preceding ones, as well as the same layout, design, and properties. We were also instructed to write about how technology has altered our daily lives and its consequences. As a result, three individual div tags were constructed, each with its own image and content writing, and they were all presented line by line using a flex display method. Line heights were altered as needed, and then words were added, and buttons were built and given certain colours to add beauty to the web page and make it look fresh and cool. So, under specific tags, a simple unofficial creative writing was offered.

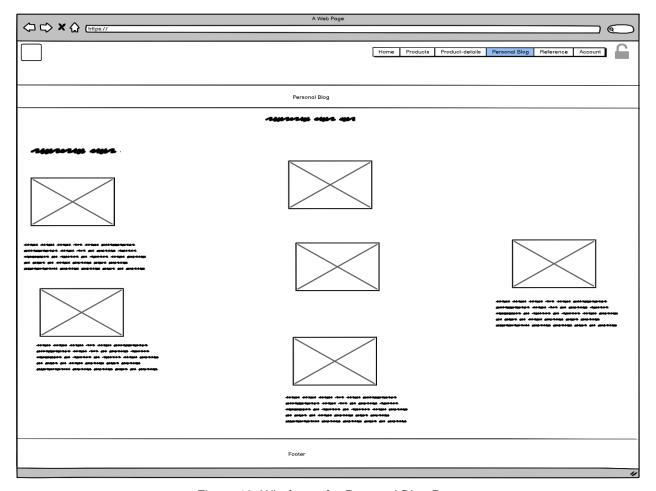


Figure 16: Wireframe for Personal Blog Page

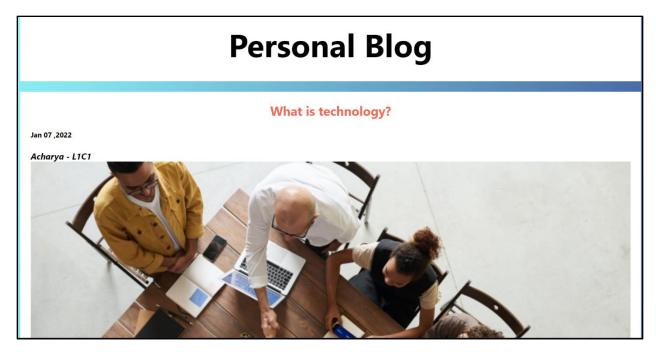


Figure 17: Webpage for Personal Blog Page (i)



Figure 18: Webpage for Personal Blog Page (ii)



Figure 19: Webpage for Personal Blog Page (iii)



Figure 20: Webpage for Personal Blog Page (iv)

2.7. References Page

The initial part is the same as the title section, with the navigation panel linked up with hover effects and so on. Moving on to the section, it consists of a reference area where the reader can compare and contrast various web pages with the ones created to help the completion of the coursework. The peculiar websites picked and how they were applied in the following website have been detailed, along with a comparison, allowing the reader to gain a better understanding of the information gleaned from the internet pages. It was completed with the assistance of numerous site explorations. The display inline flex property allowed photos to be inserted on the same line as text, allowing for appropriate exercise of the specification of the characteristics used as a point of reference. For the reference list, five different peculiar websites were taken as a part of the process to cover up the websites, taking those websites as a reference and creating a content with styles in this coursework's webpages. Listed below are the list of all the web pages taken for the reference section:

- 1. https://www.apple.com/ (Apple, 2022)
- 2. https://fantechnepal.com/ (FanTech Nepal, 2022)
- 3. https://www.daraz.com.np/ (Daraz, 2022)
- 4. https://wordpress.com/ (WordPress, 2022)
- 5. https://www.adidas.com/us (Adidas, 2022)

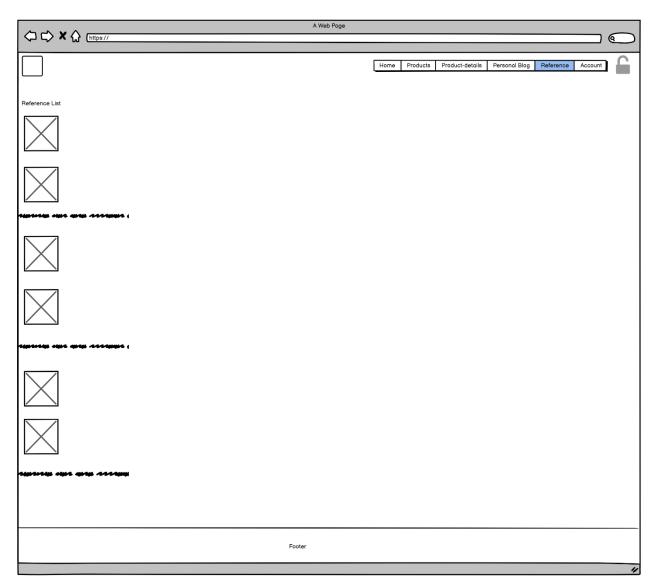


Figure 21: Wireframe for Reference Page

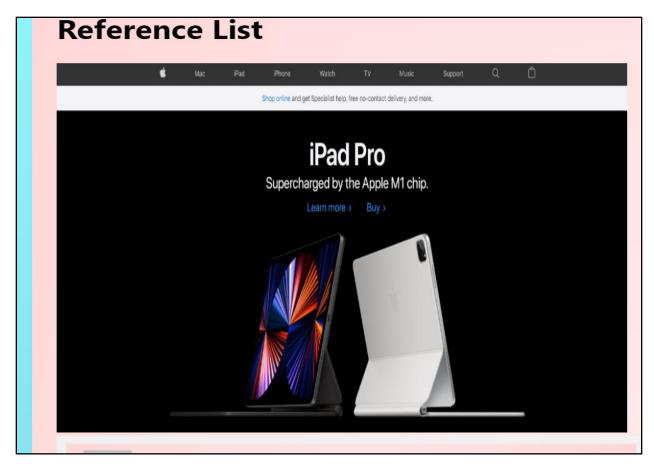


Figure 22: Webpage for Reference Page (i)

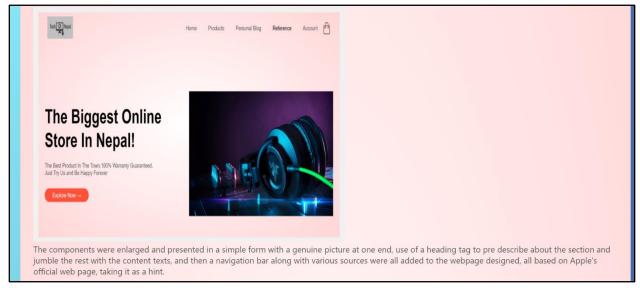


Figure 23: Webpage for Reference Page (ii)

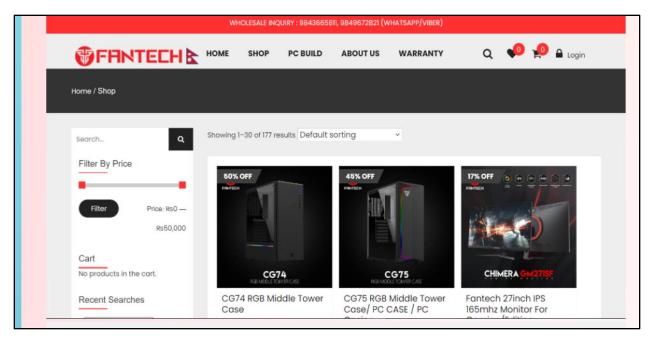


Figure 24: Webpage for Reference Page (iii)

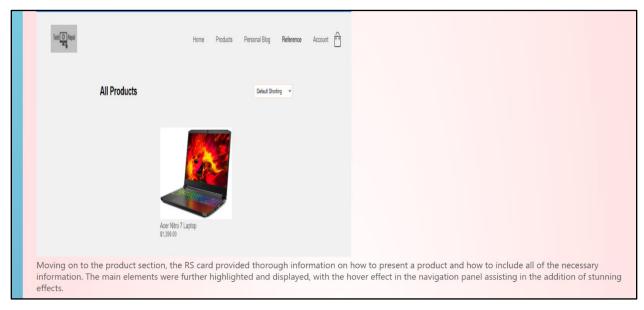


Figure 25: Webpage for Reference Page (iv)



Figure 26: Webpage for Reference Page (v)



Figure 27: Webpage for Reference Page (vi)

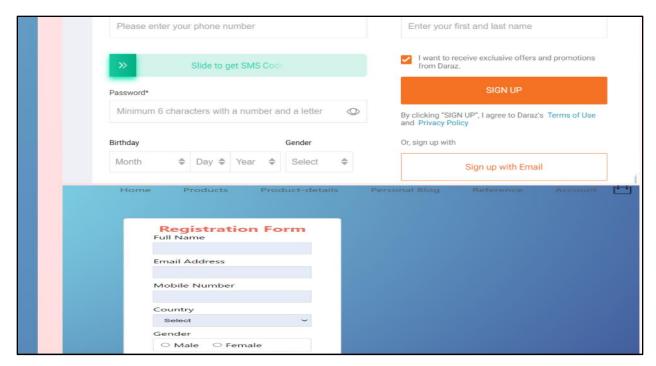


Figure 28: Webpage for Reference Page (vii)

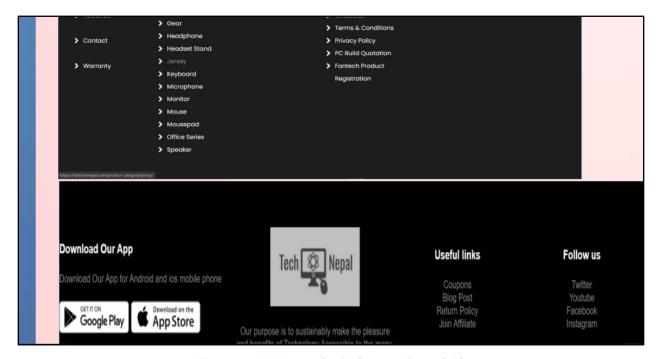


Figure 29: Webpage for Reference Page (viii)

2.8. Account Page

Out of the five various web pages, the last one has a similar navigation panel structure but differs in the content it contains. The form tags were then put to the empty right-hand side. Structure approval is available in the contact section, where any individual can provide their own information. The form was developed using input boxes that were added with needed attributes to command the user to add and enter text so that they weren't left empty, and each of them had their own labels. External CSS now adds distinct color codes and designs to each of the attributes present, and a short portion of icons with the address, email, and phone number printed has been imported for a footer area. The contacts section also includes an external JavaScript file that adds a pop-up function that displays when the text area and input box are left empty, alerting people to add data, and similarly, after data is entered to them, another pop-up box is created via scripting.

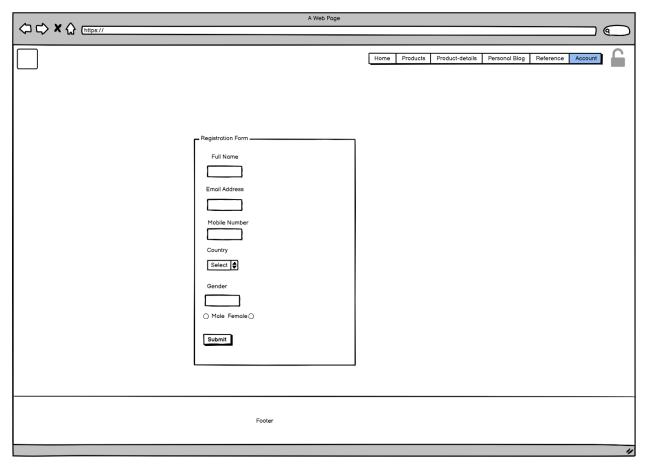


Figure 30: Wireframe for Account Page

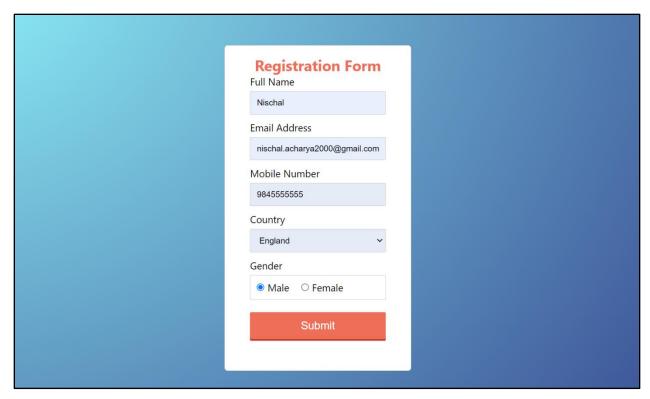


Figure 31: Webpage for Account Page

2.9. Cart Pages

The cart page is where all of the product calculations are completed. If a customer purchases a certain product, the purchased product can be added to the cart page by clicking on the add to cart button. It accounts all the calculation of product is done. If customer buy certain product, then the bought product can be placed to cart page by add to cart.

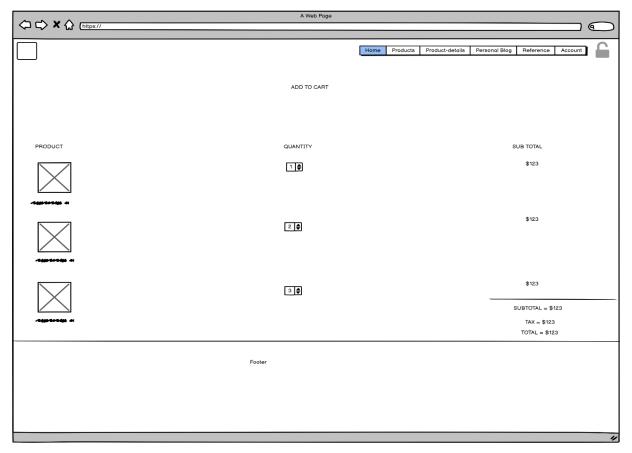


Figure 32: Wireframe for Cart Page



Figure 33: Webpage for Cart Page

3. Testing and Inspections

3.1. Test 1

Test Number	1
Objective	To change up to a new web page while navigating through the icons present at the bar.
Action	The web page was initialized first to the home page and was clicked up on the Products icon from the navigation panel.
Expected Result	The web page should load to a new page of the Products list.
Actual Result	The web page loaded to a new page of the Products list.
Test	The test was successful.

Table 1: Testing Number: 1

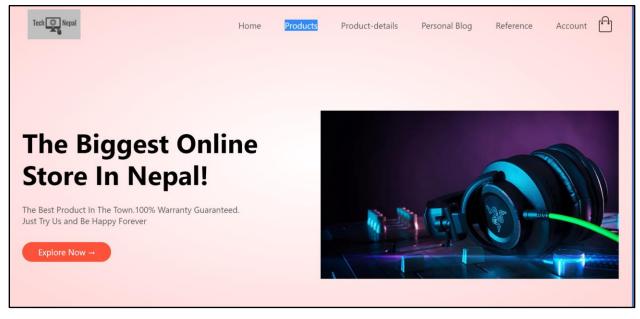


Figure 34: Initializing to the Home Page before navigation



Figure 35: Finalizing to the Products Page after navigation

3.2. Test 2

Test Number	2
Objective	To go to the cart page of the webpage on clicking the icon
Action	The page was initialized to the home page and the icon (Buy Now) down the exclusively available item was pressed then it opened cart page.
Expected Result	The web page should load to a new page of the cart list.
Actual Result	The web page loaded to a new page of the cart list.
Test	The test was successful.

Table 2: Testing Number: 2

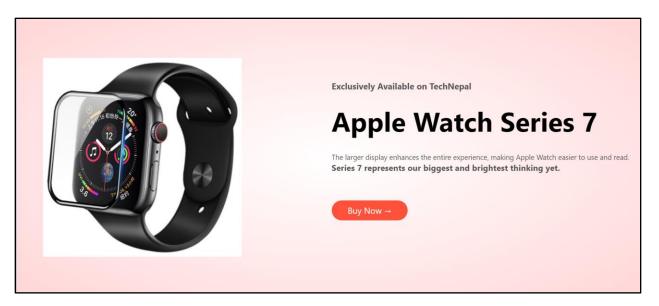


Figure 36: Initialized to the Buy Now Icon



Figure 37: Finalized to the Cart Page

3.3. Test 3

Test Number	3
Objective	To open a new page once a hyper linked anchor tagged element was clicked.
Action	The Explore Now icon from the home page with hover effects was clicked up to load a new page.
Expected Result	Products on another tab should be opened.
Actual Result	Products on another tab was opened.
Test	The test was successful.

Table 3: Testing Number: 3

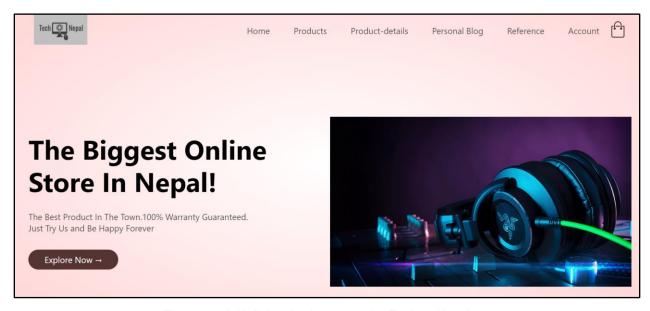


Figure 38: Initializing the hover on the Explore Now icon



Figure 39: Finalizing after clicking the button opening up a new page

3.4. Test 4

Test Number	4
Objective	To pop up the error message when the form field is left empty.
Action	On the Account page, one of the text fields was left empty to open a prompt box.
Expected Result	An error message pointing the empty field should be displayed.
Actual Result	An error message pointing the empty field was displayed.
Test	The test was successful.

Table 4: Testing Number: 4

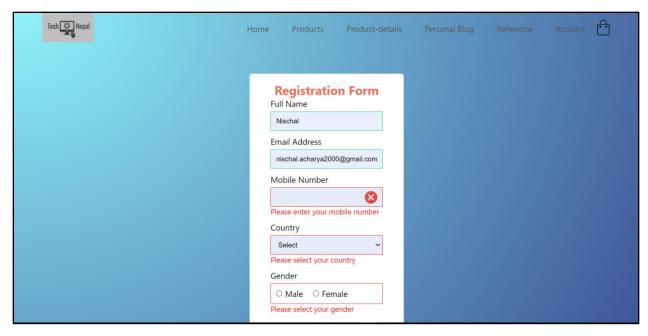


Figure 40: Error Message for an empty text field

3.5. Test 5

Test Number	5
Objective	Getting the hover effect.
Action	Cursor is placed in the 1 button of Products page.
Expected Result	The colour of the button should change into orange.
Actual Result	The colour of the button is changed into orange.
Test	The test was successful.

Table 5: Testing Number: 5

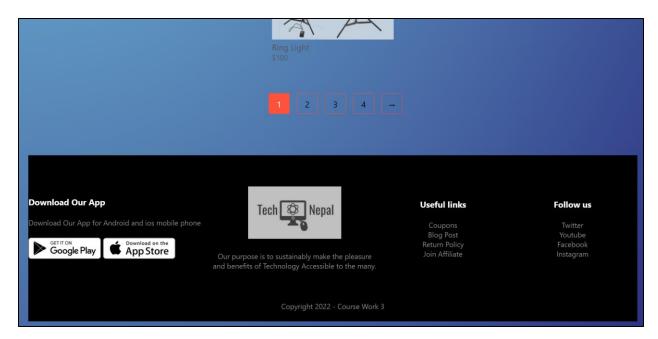


Figure 41: Initializing the hover effects

4. Conclusion

The coursework involved the creation of a simple web page, which was completed in a reasonable amount of time and in an appropriate manner. It was the semester's final coursework as well as the module's final one. The module completed its agenda, which was the completion of terms on web technologies and their development. However, the students were only taught the surface knowledge, which was insufficient to combine spiciness and sweetness to make a fascinating one. According to the investigation, the coursework covered both site planning and production. After completing the coursework, I received information on how to create a website using HTML, CSS, and JS content design. This coursework was indeed one of the most interesting coursework of this module. In fact, the coursework was based on real-time scenario, as almost all the business has their own E- Commerce Website. I had a few issues while doing this coursework, but they were all resolved with the help of the module instructor, as well as our specific instructors.

The writing substance was brief, but the adapting and responsiveness took a long time to manage. Separate pages shared similar CSS but differed in other ways, but they all met the students' needs in the end. To improve the coursework's dependability, screen captures of the scripts and wireframes were taken. It was a lot of joy to do the curriculum. Following the creation of this site, I continued my research on websites to determine how beneficial and relevant my site may be.

Writing the HTML codes was simple and didn't take long, but what annoyed me was where to put the stylings, as suggested in the reference section. I got the idea of the layout, but the execution wasn't as simple. Writing codes but being apathetic about CSS due to misuse resulted in a lot of chaos. Because only the basic JavaScript codes were added, it was simple to proceed and observe the dynamic changes. This coursework assisted me in developing my abilities to create a website using HTML, CSS, and Java Script, as well as my inventiveness abilities, which will be useful in all aspects of my life. Because it provided me with information on what I was looking for, which will be extremely useful for my future transporter.

The coursework necessitated a large number of learning references, particularly tutorials and various websites such as W3Schools and tutorial points, which were critical in making the necessary changes to the website. As a result, this coursework forced me to recognize what I am good at and how I can overcome my shortcomings. I learned a lot from this, such as how to create a basic website, and now I'm going to learn how to create a dynamic website. This means a lot of things for my future. I'll be able to keep the front-end engineer from this, which is extremely useful.

Last yet not the least, I should concede that I have acquired abilities of making and executing data sets and in the coming days I'm certain that I can finish comparable activities like these.

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