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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 marks of zero will be awarded.

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1. Introduction

1.1 Introduction About Project

This is the third coursework in the Information System project module. This project received a 40% overall module grade. The project was given to us in the 11th week, and the deadline for the assignment is the 15th week, which falls on June 1, 2022. This project is to create an e-commerce shopping website with some specific webpages such as research, blog, and home, and to demonstrate how technologies and their consequences in daily life, rivalries in using relevant tools and techniques to develop a website, use of scripting languages on websites, use of navigation bars, and simple navigation of the website structure are all part of the project. The project was split into two segments. First segment is the creation of the web page, and the second is the documentation. Documentation explains what the project is about, why it was given, and how it will be carried out, whereas web page development includes the production of a web page.

HTML5 (Hyper Text Markup Language), CSS (Cascading Style Sheets), and JavaScript are used to create web pages. Home, Products, Blog, Research, and Contact are the five sections of the website. When a visitor's browser enters our website, the first page that loads is the home file. The pages created are simple in style and design, with navigation bars in the header and footer sections that allow users to jump from one page to the next with a single click. This project provides us with a fantastic opportunity to apply our theoretical knowledge to a competitive and demanding work. The home page has a brief image slider with 3 pictures and some website information, while the products section lists the things that are on sale. The blog page is devoted to what technology is and how it affects our daily life. The style and content of our personal website are compared to similar websites on the research page. Finally, there is a contact page with a contact form that when submitted with an empty field creates a pop-up message. The testing section digs into the features and functions of websites, as well as how to use the

JavaScript function. The wireframes for the web pages that were constructed are also included in the report.

1.2 Goals And Objectives

Goals are assertions about what a group of people or an organization wants to accomplish. Objectives are the steps that must be completed in order to achieve specified goals. The following are the project's goals and objectives: -

1.2.1 Goals

The main purpose of the project is to create an e-commerce website with five webpages that will be reviewed by our project's potential teachers. I try to make my websites look as unique as possible, as if they were designed by someone who understands a lot more about web design than I do.

1.2.2 Objectives

- > You have a basic understanding of how to create an effective website.
- > To learn HTML, CSS, and JavaScript so that you can build websites.
- Learn how to apply graphic design ideas to web design and how to put your theoretical knowledge into practice.
- ➤ To be able to create a professional-looking website using CSS layout and flexbox.
- Create generic programming logic in web pages with JavaScript.

1.3 How HTML, CSS and JS was used while developing website

HTML (Hyper Text Markup Language) is the most widely used markup language for creating web pages. Tags are used in HTML to specify objects in a document. Browsers display the material within the HTML tags rather than the tags themselves. It establishes the core structure of the web page. HTML5 is used to generate the web page in this project. The HTML content serves as the page's foundation. It's used to specify the type of content on a web page, such as a paragraph. It's used to depict headings, paragraphs, pictures, videos, and other material on a web page, as well as to split, or section, well-structured content. It

can also be used to link two pages. Every website begins with an HTML document created in a text editor that explains the page components using tags.

Cascading style sheets (CSS) are a type of style sheet that allows you to change the appearance of your website It's a language for describing how an HTML document should look. Colours, layout, and font styles are all part of the language for expressing how pages are presented. It allows developers to conform to the DRY (Don't Repeat Yourself) principle since the style set for one HTML page may be reused numerous times, and if several elements have the same characteristics, they can be merged. The presentation may be adapted to several sorts of devices with large or small screens, as well as printers, using CSS. Websites are easy to manage, style sheets may be shared between pages, and pages can be customized for varied scenarios. It aids in the styling of links as well as web page font and background.

JavaScript is a programming language that lets us interact with websites, input dynamic material, and react to events. It allows variables to be stored, text to be manipulated, and code to be executed in response to certain events. It's utilized to provide websites greater capabilities. Among other things, developers may use it to create constantly updated material, interactive maps, 2D/3D images, and scrolling video jukeboxes. It enables programmers to execute programs that would be difficult to develop otherwise. To refresh the user interface, the document object technique simply dynamically changes HTML and CSS information.

2. Discussion and Analysis

2.1 Selected Text Editor

On the internet, we may find lots of free text editors. These text editors are widely available and may either be downloaded for free or paid. Sublime Text, Visual Studio Code, Notepad, Notepad+, Notepad++, and many other text editors are available on the internet. Each of these editors has its unique set of features and

functions, allowing developers to select the one that best suits their needs and aspirations. Among them, I choose Sublime Text as my text editor for developing the project's web page.

Sublime Text was chosen since I was already familiar with it from using it during my workshop session, and I found it to be simple and pleasant to use for my page creation. It is a free source, so I do not have to pay for it, which appeals to me. It is a great environment for web page creation since it has autocompletion and syntax highlighting, which makes things easier. Plugins allow for complete customization. Furthermore, it displays a map projection of the complete code in the right corner and allows navigation to the desired location. Simultaneous editing, which allows developers to edit in many areas at the same time, is another helpful feature. It has robust search capabilities, so when developers try to access a file, it displays the file list with the best match. It also includes parameter information and a content assistance to make development easier. As a result of the above, I have chosen Sublime Text as my text editor for web page development, and I'm pretty pleased with it.

2.2 Tool Used While Developing Wireframe

A website wireframe, commonly referred to as a page schematic or blueprint, is a visual representation of a website's skeleton architecture. Wireframing is a process of developing an internet service's structure. A wireframe is a graphic depiction of how content and functionality will be organized on a page, taking user requests and journeys into account. Wireframes are used early in the development process to identify the core foundation of a page before visual design and content are added. Wireframe design tools like as Figma, Adobe XD, Adobe Photoshop, Balsamiq, and others are available on the internet. Balsamiq was used to create the wireframes for these projects.

Peldi Guilizzoni, a former Adobe senior software developer, created Balsamiq Studios in March 2008. It is a free tool for creating wireframes for web pages. This includes a variety of pre-made shapes, text, link bars, buttons, social site logos, and other necessary elements that can be scaled to any size for wireframes,

making them more appealing and offering a better development guide. These tools are easy and quick to use since they can be easily placed using drag and drop. It is simple to use and supports the English language. Low-resolution sketch Wireframes, UI components and icons, click-through prototypes, and complete keyboard compatibility are the major features that encourage me to choose it. The wireframes that have been created may be easily exported as a.png or.pdf picture. Balsamiq's functions may be used without an internet connection, so there is no need to rely on it. As a result, Balsamiq is chosen above other tools for creating wireframes.

2.3 Home Page

The five webpages are included in this website. The Home page is the initial page of a static project that loads automatically as people navigate through it. The title of the page, which is put inside the title tag, is used to display the page's title name. Between meta tags in the head, meta information about the web page, such as author details and keywords, is supplied. There is a logo in the header section. A link just opposite the navigation bar leads the user from one page to the next. The navigation bar features a hover effect, which means that when you place your mouse over it, the link's background colour changes and the link text changes as well. The body consist of a image's slider. Below the image slider there a background image and over the background there is Explore Now button, which when clicked executes the JavaScript code and redirect to the product to explore the items. To improve user happiness, the spacing between the items has been handled to make it more appealing, and the font colour and size have been altered. And the below the explore button and upper from the footer we show time to show the time i used the JavaScript. At the end, in the footer section I leave my social media link where the visitors follow our page and copyright information.

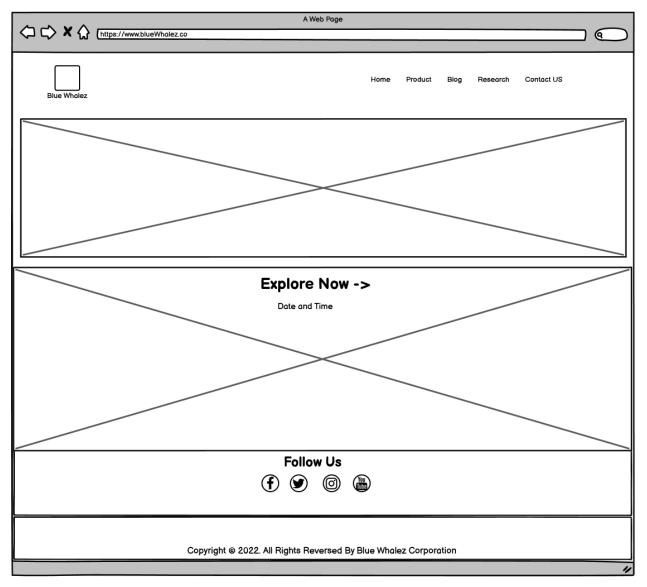


Figure 1: Wireframe of Home Page

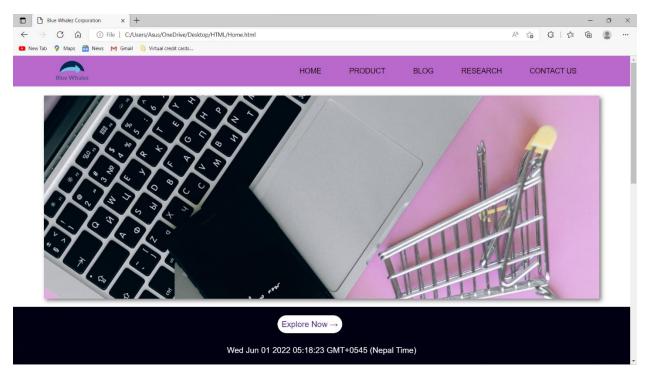


Figure 2: Developed Home Page

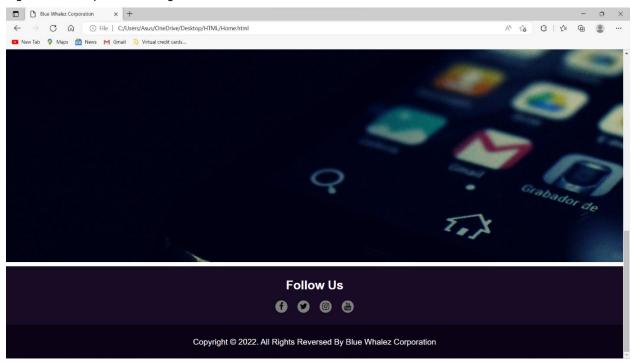


Figure 3:Developed Home Page(1)

2.4 Product Page

Product page is the second static web page. Header and footer information will be same as in home shown in home page. I can make a three particular section in list form. First Smart Phone section where different types of smart phone with their price and rating and two buttons one is to buy the item instant and another for add to cart another is Laptop section where various companies of laptop are on sale and same option as in mobile section like price and rating and also two button and same is in Dress section.

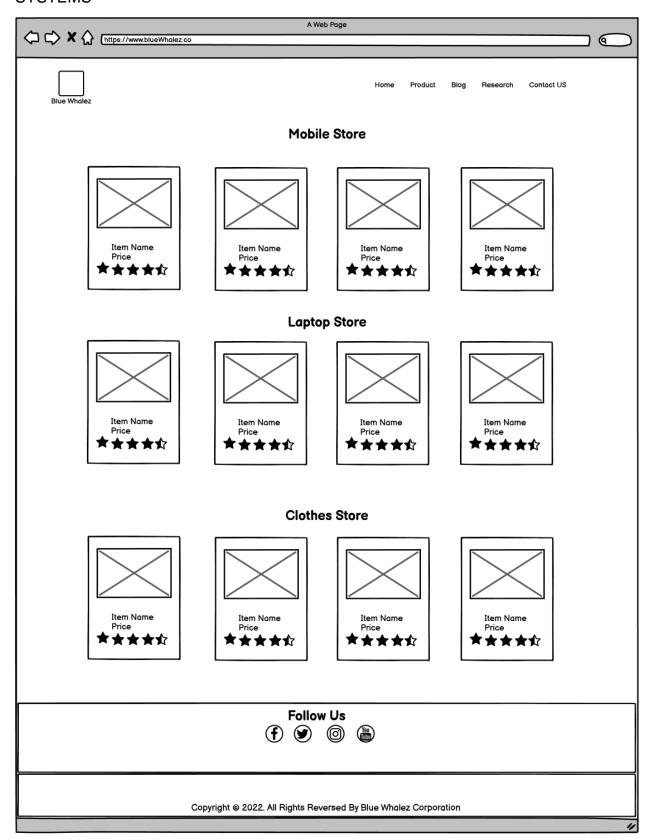


Figure 4: Wireframe of Product Page

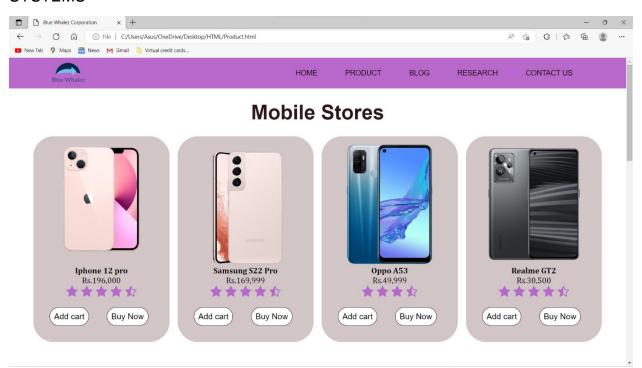


Figure 5: Developed Product Page

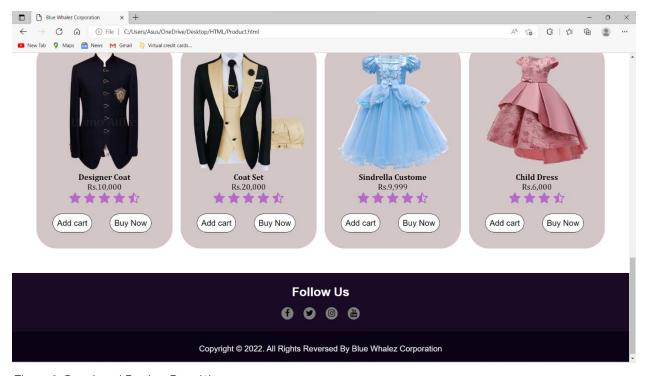


Figure 6: Developed Product Page(1)

2.5 Blog Page

Blog page is the third static web page of the websites. It has logo and navigation bar on the header and It has a footer section containing copyright, and hyperlink to social account. In the main section it contains images and paragraphs describing about the technology and its negative and positive impacts on daily life. Images and paragraph are placed one after another to make it look better.

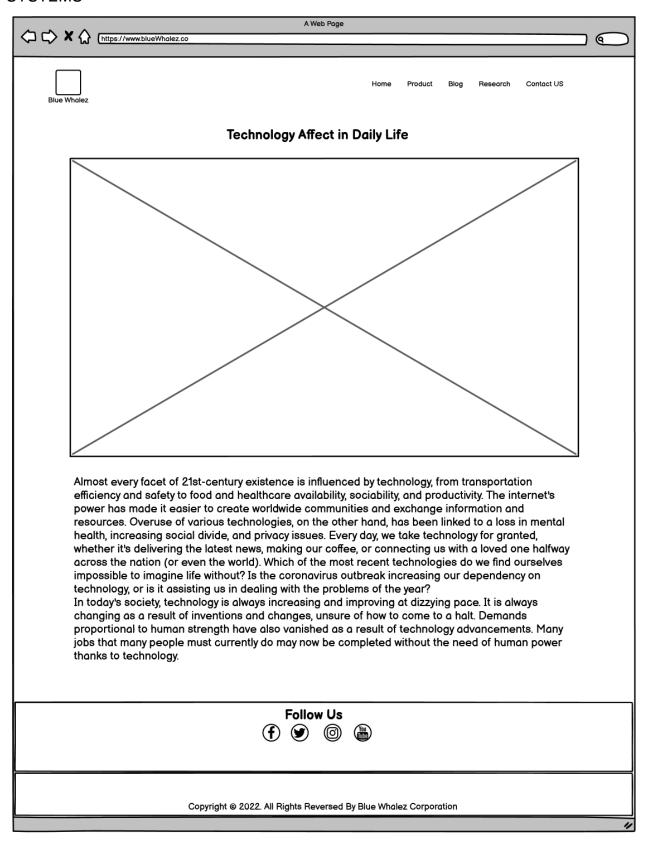


Figure 7: Wireframe of Blog webpage

INTRODUCTION TO INFORMATION



Figure 8: Developed Blog webpage

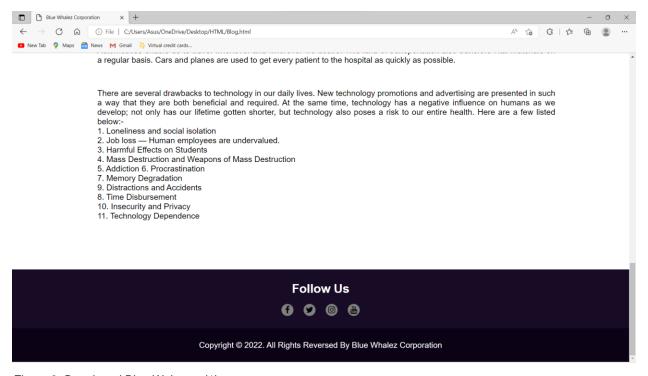


Figure 9: Developed Blog Webpage(1)

2.6 Research Page

This is the website's Research page. On the header, there is a logo and a navigation bar. On the footer, there is a navigation bar, a copyright logo, and a link to a social account. It comprises photos and text from various areas of the website in the main section, and it is compared to other websites. For example, the navigation bar, header, footer, and other elements of one website are compared to those of another while a photo of both is taken and described.

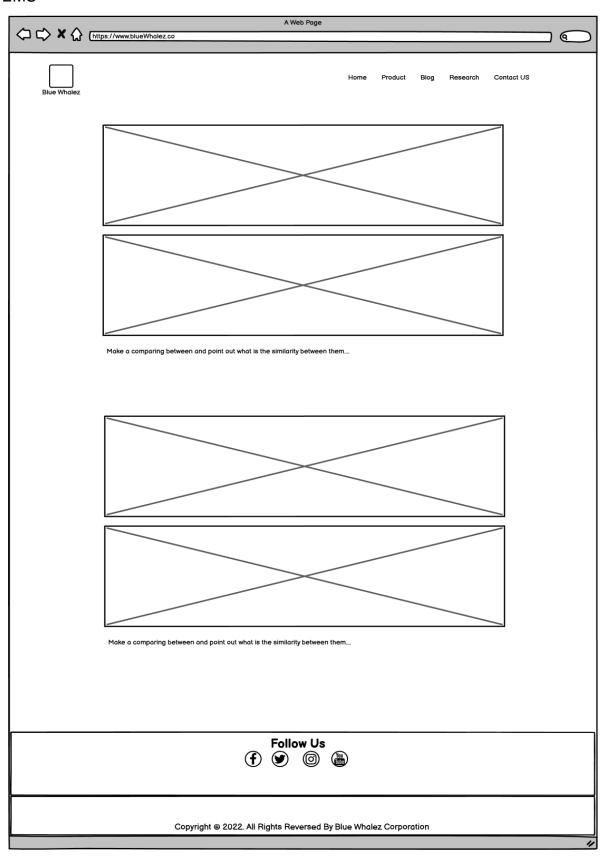


Figure 10: Wireframe of Research

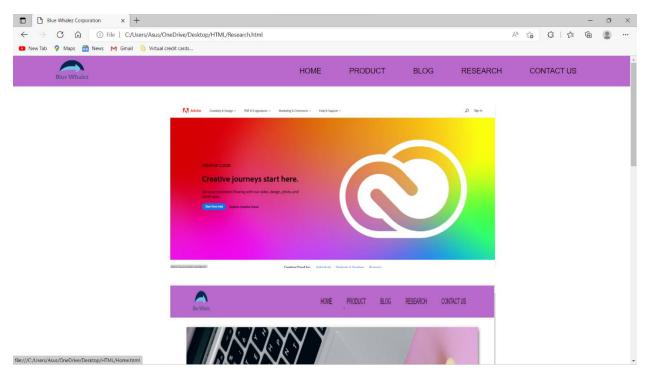


Figure 11: Developed Research page

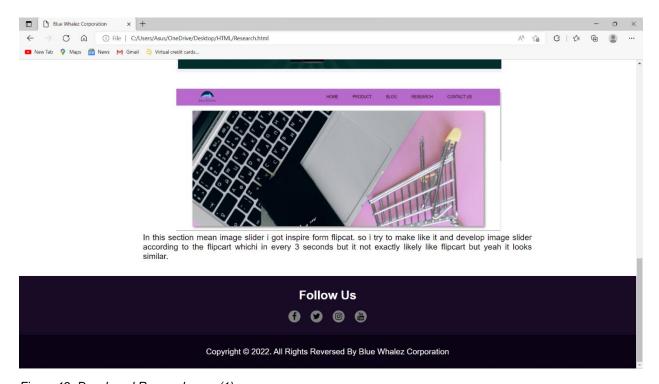


Figure 12: Developed Research page(1)

2.7 Contact Us Page

This is the website's Contact page. On the header, there is a logo. On the footer, there is a copyright logo and a link to a social media account. The navigation bar is located on the left side of the main section. In the centre of the main web page, there is a form that the reader may fill out. If any blank spots are noticed on the form, alert messages are retained to let the reader know if anything is missing. If the communication has been sent, an alert message is also preserved.

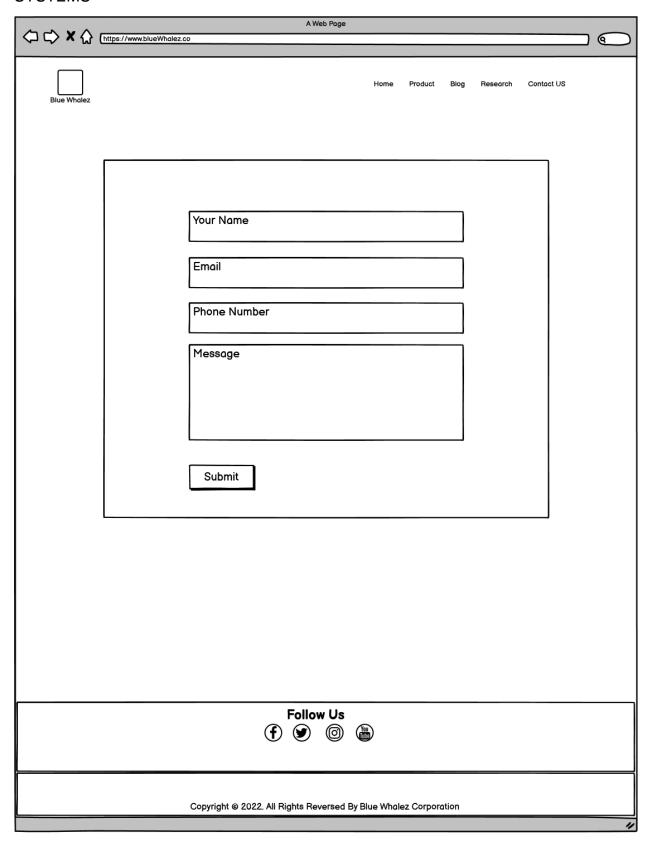


Figure 13: Wireframe of Contact page

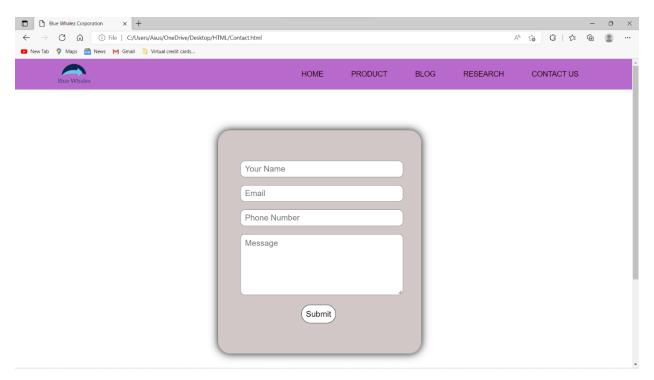


Figure 14: Developed Contact page

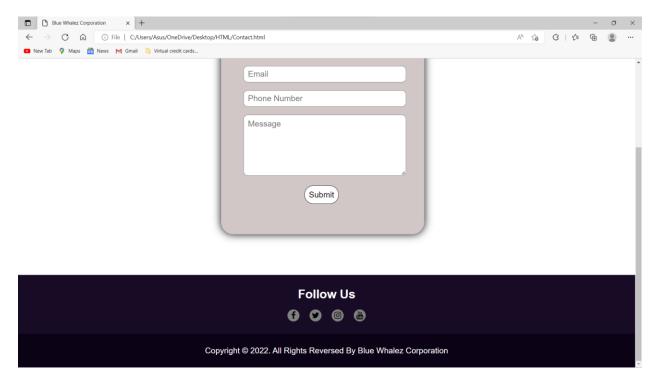


Figure 15: Developed Contact page(2)

3. Testing

Testing is the process that ensures quality by ensuring that a web application's functionality is performing as planned or as specified. Web testing enables you to uncover bugs at any moment, whether it's before a release or on a daily basis. There are some test performed below instructed by the coursework 3 questions.

3.1 Test 1

> Testing the hover effect on Navigation Bar

Objective	Checking the navigation bar hover effect.
Action	The first step was to open a web page. The
	pointer was then shifted to one of the
	navigation bars in the navigation bar.
Expected Result	The colour of the text would change when
	the pointer is placed on one of the
	navigation bars option.
Actual Result	The colour of text is changed when the
	pointer is placed.
Result	Test Successful.

Table 1: Test for Hover affect



Figure 16: Testing for Hover Effect



Figure 17: Hover Effect

3.2 Test 2

> Testing the Image Slider on Home Page

Objective	Check the JavaScript for the image slider.
Action	First, web page was opened. Then, wait for
	some time.
Expected Result	The image of the homepage would change.
Actual Result	The image of the homepage is changed
	every 3 second.
Result	Test successful.

Table 2:Test of Image Slider

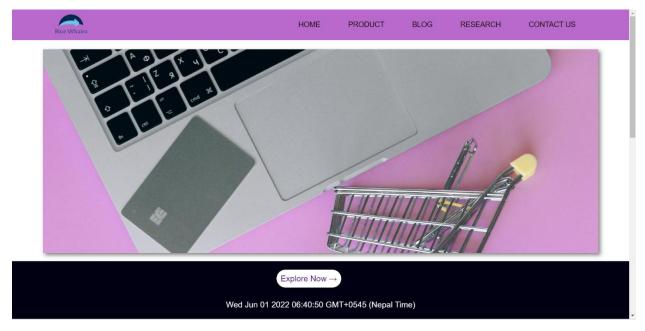


Figure 18: Image Slider

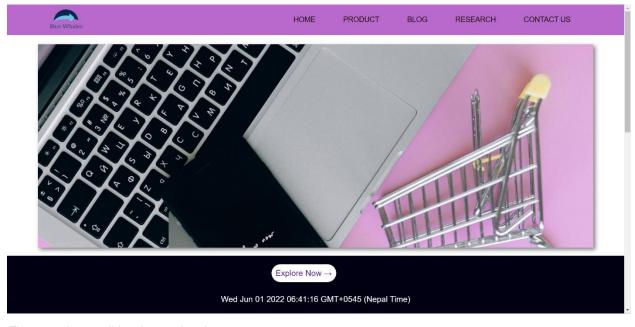


Figure 19: Image slider change the picture

3.3 Test 3

Checking the Time

Objective	Check JavaScript for time and date.
Action	First, web page was opened. Then, the
	website was left for some time.
Expected Result	The time on the homepage would change.
Actual Result	The time on the homepage is changed.
Result	Test successful.

Table 3: Test for checking the Time

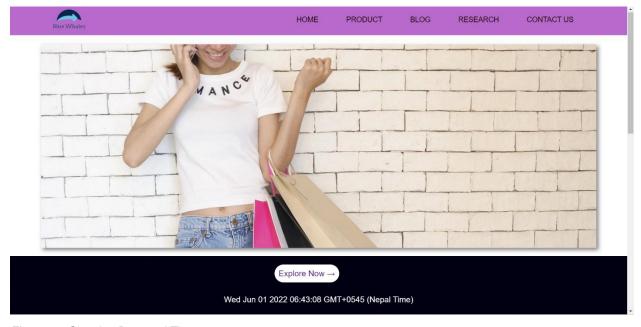


Figure 20: Showing Data and Time

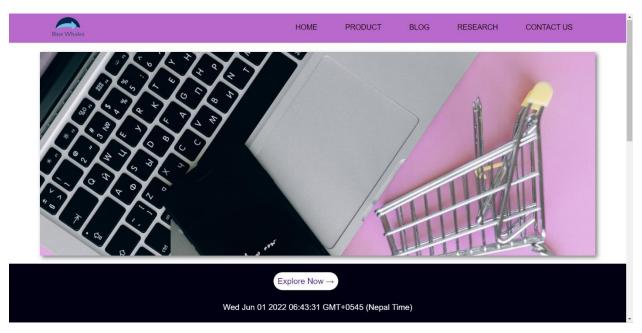


Figure 21: Data and Time change Simultaneously

3.4 Test 4

> Testing Form Validation

Objective	Checking the form validation
Action	First, contact page was opened. Then,
	submit button was clicked without filling the
	form. Again, submit button was clicked
	after filling all the form.
Expected Result	Alert message to fill all the field on the form
	will be popped up in the screen when
	empty form is submitted. And, thank you
	message will pop up after filling all the field
	on the form and submitting it.
Actual Result	Alert message to fill all the field on the form
	is popped up in the screen when empty
	form is submitted. And, thank you message

	is popped up after filling all the field on the
	form and submitting it.
Result	Test successful.

Table 4:Test for Form Validation

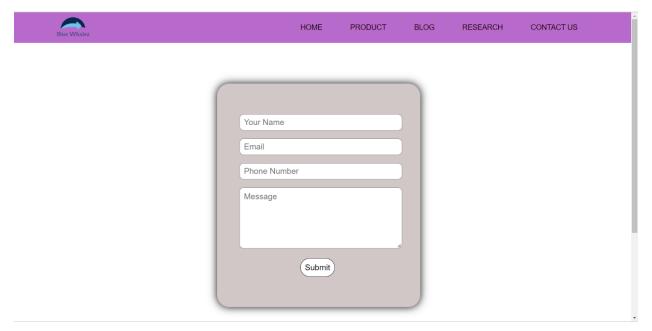


Figure 22: Form Validation

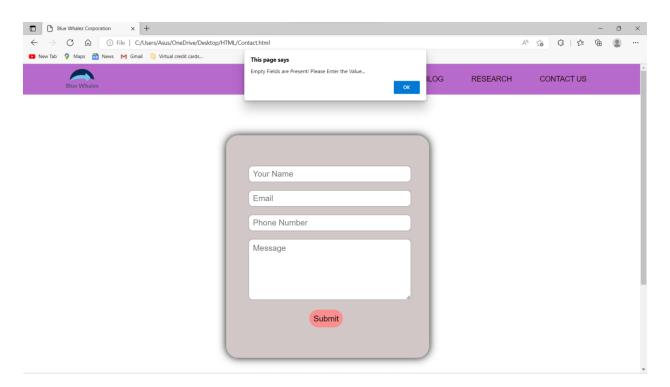


Figure 23: Pop-up notification

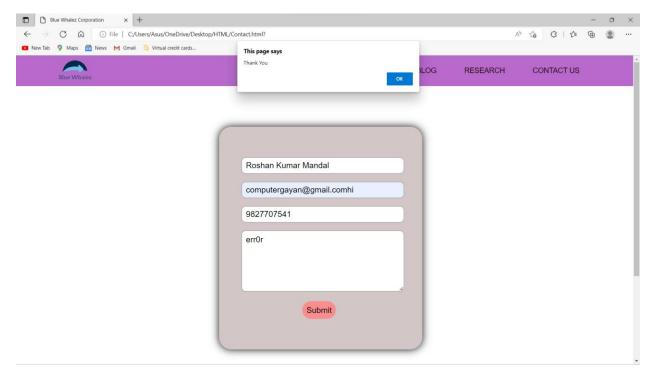


Figure 24: Accept the value and display the Notification

3.5 Test 5

> Checking Internal and External Link

Objective	Checking the internal and external link.
Action	First, web page was opened. Then,
	Product was clicked on navigation bar,
	Again, Facebook was clicked which was
	located at the footer of the page.
Expected Result	The Product page would open on the same
	tab. And, Facebook profile would be
	opened on separate tab.

Actual Result	The Product page is opened on the same
	tab. And, Facebook profile is opened on
	separate tab.
Result	Test successful.

Table 5: Test for Internal and External Link

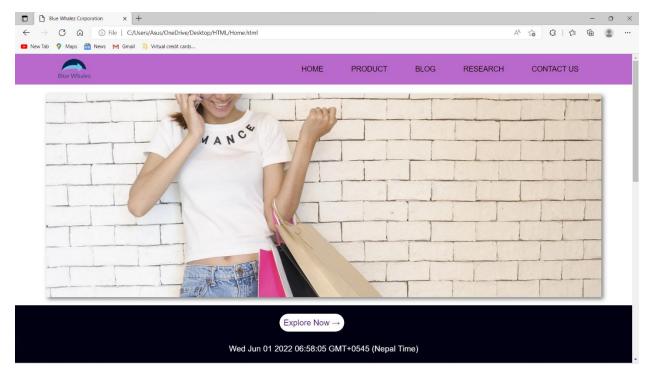


Figure 25: Home page

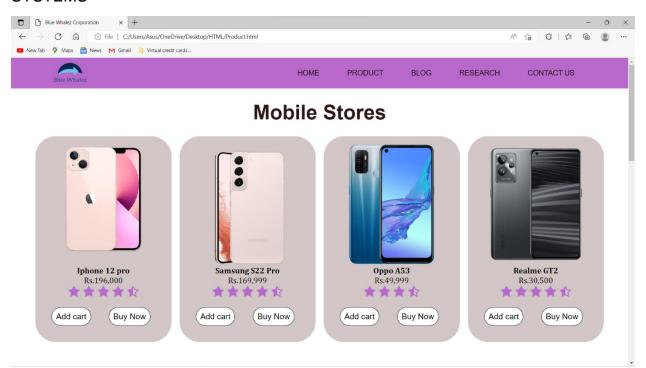


Figure 26: Show Internal Link

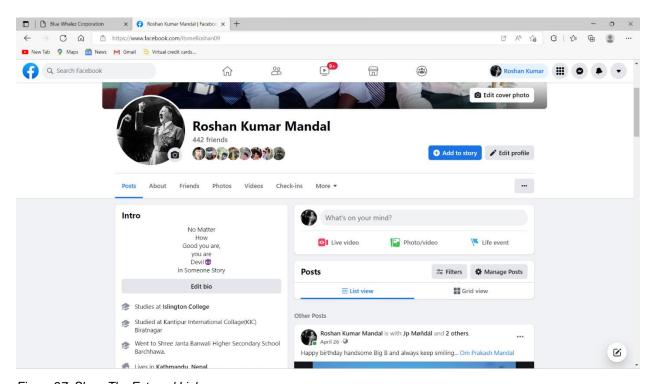


Figure 27: Show The External Link

4. Conclusion

Working on this project has been a great and educational experience for me. Every stage of the project development was enjoyable for me, and it provided me with a valuable experience and understanding of web development. The project, which involves the creation of web pages and documentation, has been a huge help in putting what we have learnt thus far into practice. The total of five web pages has been created, with each page having a navigation bar that allows visitors to move from one page to the next. The website's welcome page was the home page. HTML, CSS, and JavaScript are all used to create these web pages. This website may be used to promote myself to the rest of the globe. It encourages us to be more innovative while also strengthening the problem-solving skill. Writing web pages in compliance with standards reduces development time and simplifies page maintenance. It allows us to express our creativity through the medium of the internet.

It is never simple to complete any assignment when you are a beginner. There will be several challenges that you must face. While working on this project, I encountered several challenges. Flexibility and division were difficult concepts for me to grasp. It was also difficult to utilize JavaScript to dynamically update content. However, I overcame these challenges and completed the assignment effectively. The conversation with professors and friends yielded a lot of useful information. Websites like w3schools, Coding Masters, GeeksforGeeks, and others have been helpful while doing this project.

Finally, the project is finished with the construction of the website and the drafting of a report. Various sorts of tests were run to see if the website's implemented HTML, CSS, and Java script properties worked effectively or not with the evidence. All the pages on the website are briefly discussed. The report's description includes relevant wireframes and screenshots of each page. This is a valuable project since it allows us to gain knowledge and experience in HTML and its many features, as well as how to incorporate various types of CSS and Java Script in a website, resulting in us being able to create better and dynamic website on our own.

Bibliography

(Vodnik, 2018) (Jaffe, 2016) (www.w3schools.com, 2020)