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Student Name: Rabina Shrestha

Group: C13

London Met ID: 20049416

College ID: NP01CP4S210039

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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

Introduction to the Project

This is the last coursework given to us this semester, it carries 40% of the total weightage. It was expected of us to make 5 webpages which includes CV and blogs explaining how technology has affected people's lives on the basis of research work. The website is consistent and feasible making it easy to navigate and user friendly. The website is built using HTML, CSS and JavaScript using proper HTML tags such as title, meta, image, table, div, form and proper implementation of nesting tags. The code is structured and formatted using proper attributes and comments. The operation of different CSS has been justified and JavaScript has been used to format the contents of the website specifically.

Goals and Objectives

- > To understand the basic Internet technologies and the impacts that the Internet has made in people's daily lives.
- ➤ To be competent in designing a website using appropriate tools and technologies.
- > To learn manipulation of scripting languages to web pages.
- To understand the structure of web site and simple navigation principles.
- To grasp the usability and accessibility while designing a website.

Usage of HTML, CSS and JS.

HTML, CSS and JavaScript is the backbone of the web despite the fact that HTML and CSS are not programming languages but is a markup and styling language respectively. On the other hand, JavaScript is a programming language.

HTML is an acronym for Hyper Text Markup Language and its significance can be understood by breaking it down into Hyper Text i.e., it grants access to other texts through links, and Markup which provides the basic structure and the features of a raw text.

Cascading Style Sheet also known as CSS, deals with the appearance of a website in terms of their outlook. Colours, font and positioning of the content is done through CSS.

It majorly depends on the HTML content as it needs to be linked in order to add some style and structure to the website.

The behavioural aspect of a webpage is handled by JavaScript. It makes the HTML and CSS animated which creates interactive functionalities and makes the website come to life. The functional unit of webpages would still be available without JavaScript but in a very limited way. (Niekerk, 2017)

2.Discussion and Analysis

Text Editor

The text editor that was used to complete the coursework is Visual Studio Code. As a programming student, this editor is massively helpful in terms of its prediction. It is a bonus that a lot of programming language is supported by it. Visual Studio Code is an open-source, ever since the first step of installing new extensions, VS Code is simple and intuitive. One of the features of it is to highlight keywords in the code in different colors, this promotes faster learning and easy identification of different codes. It also assists in completion of code lines with an added common mistake correction feature. Shortcut keys, terminals, and extensions enhances user experience making it extendable and flexible. The variety of extensions provided by VS Code has easy accessibility which makes it very popular. It is rightly said so that it is a very capable piece of software. (Microsoft Corporation, 2015)

Wireframe

Balsamiq Wireframes, sometimes called mockups is a user interface designing tool used to create wireframes. It is a graphical tool specifically made to map out sketches for the website. Generation of digital sketches of the user's idea or concept for an application is done by assembling the in-built design provided by the software. The software is programmed to automatically save changes. Just like any other control, symbols can be used and arranged. It makes the entire process easier by letting the programmer visualize a rough sketch of the website. The wireframes can be exported in any form which makes it more accessible and is always created in higher resolutions. (Balsamiq Studios, 2008)

Description of the Webpages

1.Homepage

The homepage is also known as an index page, it is the first webpage that is displayed when a user opens the site.

Homepage is formed by using some fundamental HTML codes and CSS styles as per the author's choice. It is a simple yet stylistic homepage which consists of a navigation bar, a normal banner which displays the welcome message and a footer which includes author's social media platform on the left-hand side and the name of the author on the right-hand side. The navigation bar allows the user to go from one page to another with just a click. It also shows which page is active by highlighting the homepage with shadow-box and when the page is opened in different device the navigation bar turns into a small hamburger button which makes the page responsive.

Tag	Element Type	Description
<div></div>	Block	It describes a section or division in the HTML document.
<i>></i>	Inline	It describes a part of a text in alternate voice.
<nav></nav>	Block	It describes a set of navigation links in the HTML document.
	Block	It describes an unordered list in the document.
<	Block	It describes a list item, and is used inside of tag and ul tag.
<h1> - <h6></h6></h1>	Block	It describes the HTML headings.
<a>	Inline	It describes a hyperlink present in the document and is used to link from one page to another.

Table 1: Tags used in Home Page.

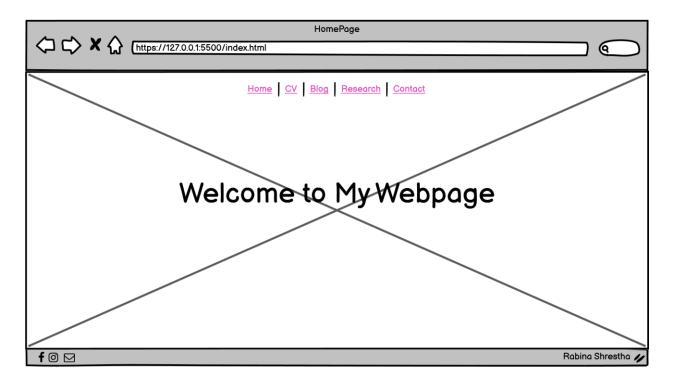


Figure 1: Wireframe of Home Page.



Figure 2: Screenshot of Home Page.

2.CV

CV (Curriculum Vitae) supplies a full summary of skills and experience of the author. CVs are lengthier in comparison to resume as it includes more information about the person. (Doyle, 2021)

It is on the second page of the website and consists information about the author. The shadow-box of the CV is highlighted when the page is active. Below the navigation bar, the CV has a translucent border. The CV has a white background which gives it a formal look. It consists of the personal details of the author which includes the qualifications, personal information, programming languages, aptitude, languages spoken by the author and her experiences. The details of the page include a bold heading with the name, followed by a picture, and contact information of the author. The email and phone number are hyperlink which directs the user to the respective platforms.

Tag	Element Type	Description
<div></div>	Block	It describes a section or division in the HTML
		document.
<i></i>	Inline	It describes a part of a text in alternate voice.
<nav></nav>	Block	It describes a set of navigation links in the HTML
		document.
	Block	It describes an unordered list in the document.
<	Block	It describes a list item, and is used inside ol tag
		and ul tag.
<h1> - <h6></h6></h1>	Block	It describes the HTML headings.
	Inline	It is used to insert a single line break
	Inline	It is used to place an image inside an HTML page.
	Inline	It is a used as an inline container to mark up a part
		of a text or document.
<a>	Inline	It describes a hyperlink present in the document
		and is used to link from one page to another.

Block	It defines a table inside an HTML document.
Block	It describes that the text is a paragraph.

Table 2: Tags used in CV.

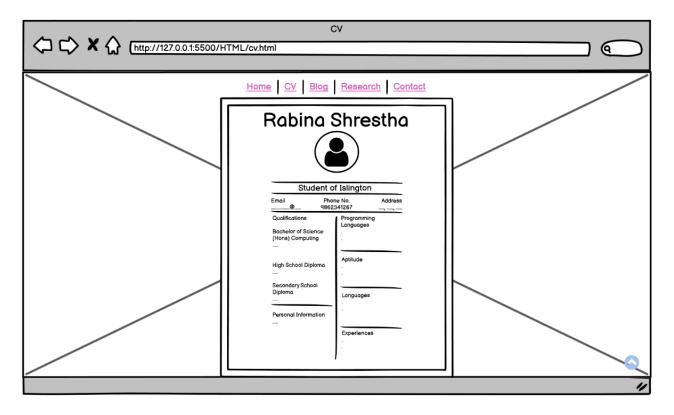


Figure 3: Wireframe of CV.

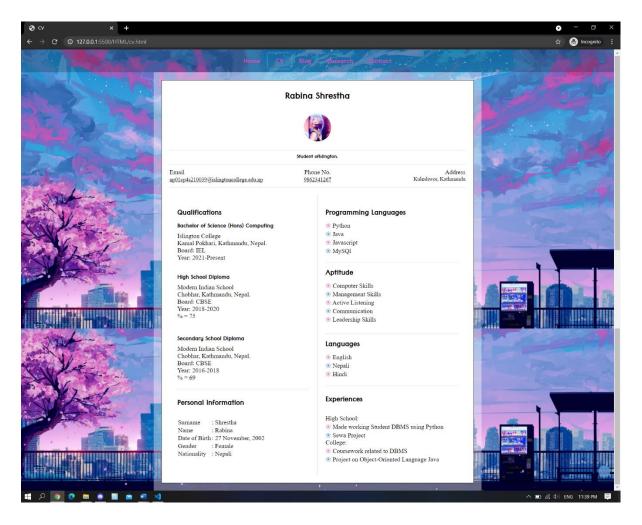


Figure 4: Screenshot of CV.

3.Blog

When the contents are displayed in such a way that newer ones appear first, then these types of websites are generally considered blogs. It is usually made by an individual or a group of people on a particular topic. (Editorial Staff, 2021)

The third page of the website is a blog. It has a different background compared to the other websites, as the background has been specified in accordance to the vibe of the topic. The same format of the A4 paper has been used excluding the translucent border. On the left-hand side, a working time is given to the page and below that is the heading in two different color with a colored background. The blog is on the topic, "Influence of Modern Technology" and the first paragraph gives a preview representing the author's view regarding the subject. The blog contains three sections each dealing with different situations. The three sections: "Education Sector", "Medical Field", and "Entertainment Industry" consists of images and covers the advantages and disadvantages. The blog ends with a conclusion.

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<div></div>	Block	It describes a section or division in the HTML
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<nav></nav>	Block	It describes a set of navigation links in the HTML document.
	Block	It describes an unordered list in the document.
<	Block	It describes a list item, and is used inside of tag and ul tag.
<h1> - <h6></h6></h1>	Block	It describes the HTML headings.
	Inline	It is used to insert a single line break
	Inline	It is used to place an image inside an HTML page.
	Inline	It is a used as an inline container to mark up a part of a text or document.

<a>	Inline	It describes a hyperlink present in the document
		and is used to link from one page to another.
	Block	It describes that the text is a paragraph.

Table 3: Tags used in Blog.

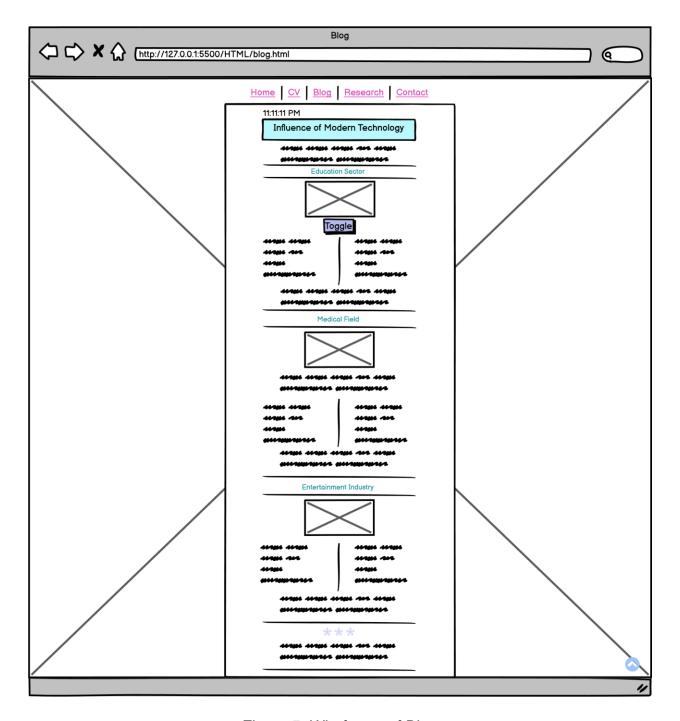
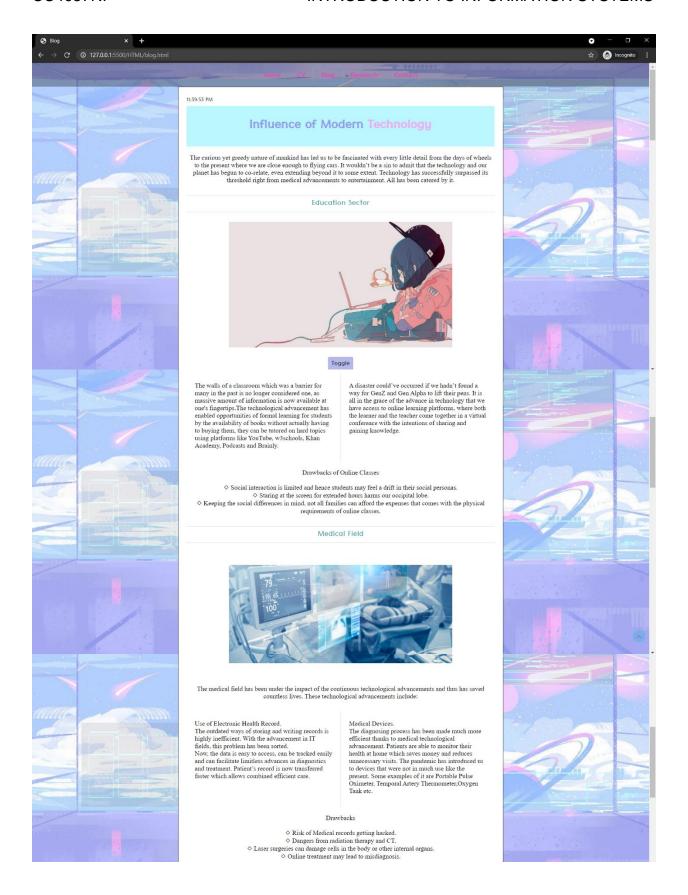


Figure 5: Wireframe of Blog.



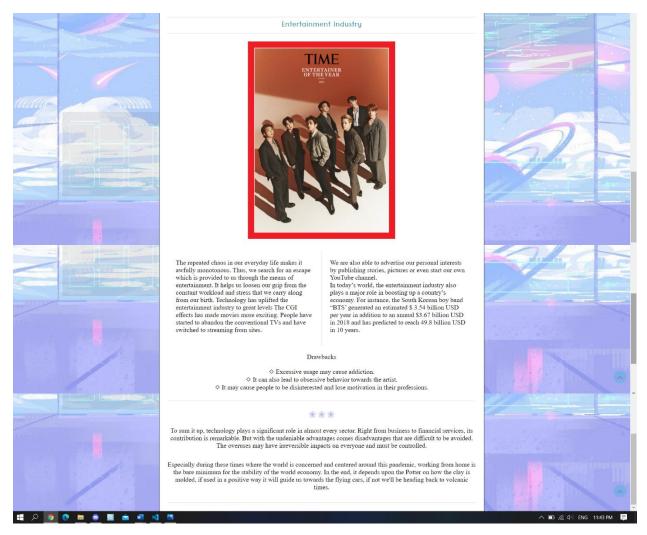


Figure 6: Screenshot of Blog.

4.Research

Research is the process that involves systematic investigation by collecting, analyzing and interpreting the data.

The fourth page includes the research section done by the author; it includes screenshots of different sites which is used as a reference with parallel comparison. Different elements from different webpages were brought together to complete the overall website and in order to display the contrast, this research page was made. It includes the translucent border with a white background, along with research heading and pictures related to research. The place where the elements are used, has been given a sub heading and side-by-side comparison on the bottom. It has information about the element used and a hyperlink which leads you to the site.

Tag	Element Type	Description
<div></div>	Block	It describes a section or division in the HTML
		document.
<i>></i>	Inline	It describes a part of a text in alternate voice.
<nav></nav>	Block	It describes a set of navigation links in the HTML
		document.
	Block	It describes an unordered list in the document.
<	Block	It describes a list item, and is used inside of tag
		and ul tag.
<h1> - <h6></h6></h1>	Block	It describes the HTML headings.
	Inline	It is used to insert a single line break
	Inline	It is used to place an image inside an HTML page.
<button></button>	Inline	It describes a clickable button.
	Inline	It is a used as an inline container to mark up a part
		of a text or document.

<a>	Inline	It describes a hyperlink present in the document
		and is used to link from one page to another.
	Block	It describes that the text is a paragraph.

Table 4: Tags used in Research.

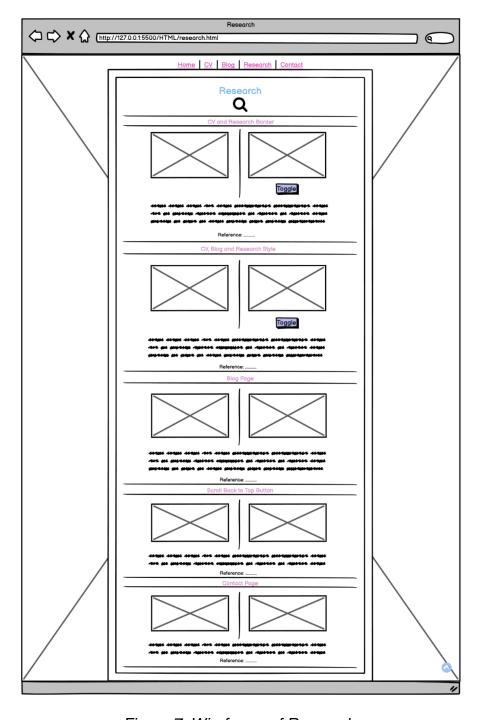
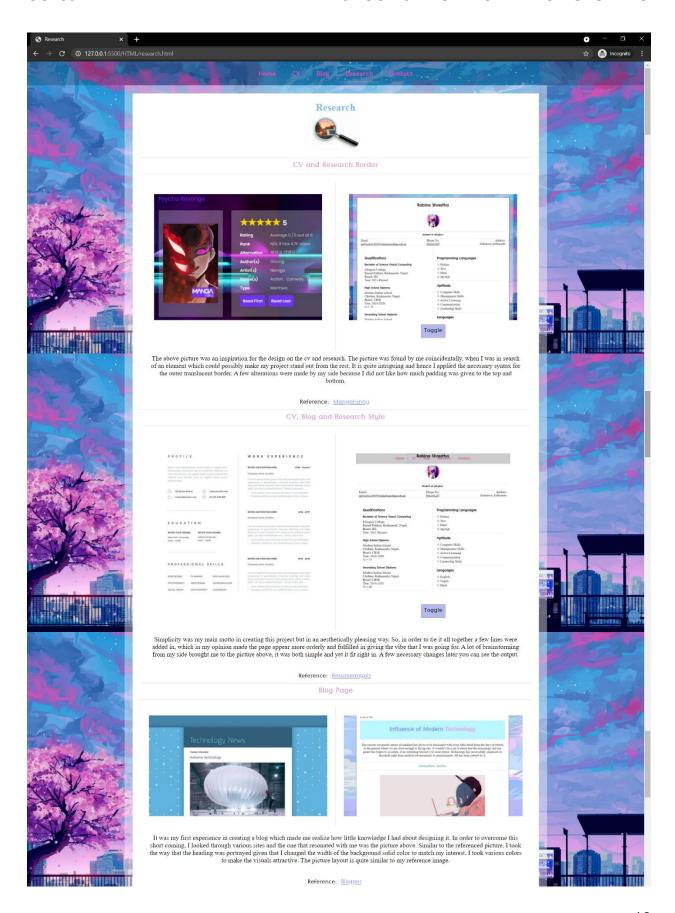


Figure 7: Wireframe of Research.



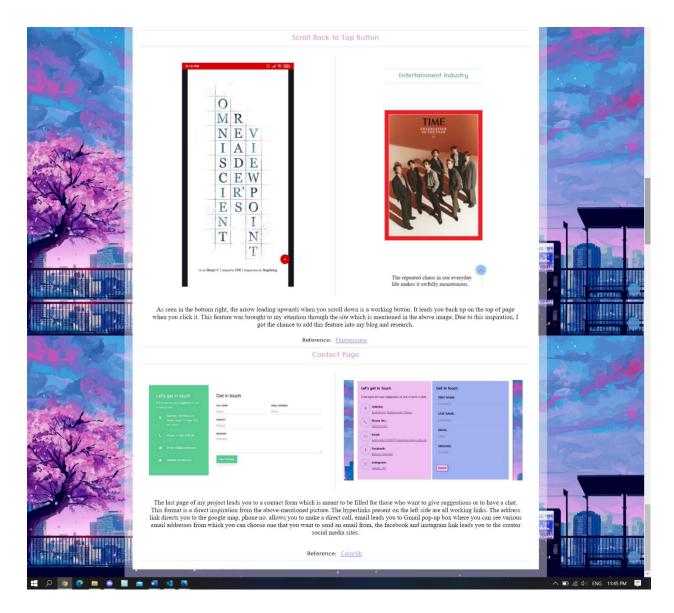


Figure 8: Screenshot of Research.

5.Contact Page.

Contact page lets the user to raise questions or directly consult with the author. It is kept in order to provide information, and also for the author to know who exactly is contacting them. (Smith, 2021)

The fifth and final page of the website is the contact page. It has two sides, the left-hand side with pink background, lets the user contact the author. Each and every hyperlink present there is a working link, which makes it easier for the viewer to interact with just a click. The right-hand side with purple background, is a working form for the author to know the user's information. Incase the viewer fails to fill the form properly; an error message pops up. Only after filling the form properly; a successful message pops up.

Tag	Element Type	Description
<div></div>	Block	It describes a section or division in the HTML document.
<i>></i>	Inline	It describes a part of a text in alternate voice.
<nav></nav>	Block	It describes a set of navigation links in the HTML document.
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<h1> - <h6></h6></h1>	Block	It describes the HTML headings.
	Inline	It is used to insert a single line break
<button></button>	Inline	It describes a clickable button.
	Inline	It is a used as an inline container to mark up a part of a text or document.
<a>	Inline	It describes a hyperlink present in the document and is used to link from one page to another.
	Block	It describes that the text is a paragraph.

<form></form>	Block	It is used to create a form for an individual to input.

Table 5: Tags used in Contact.

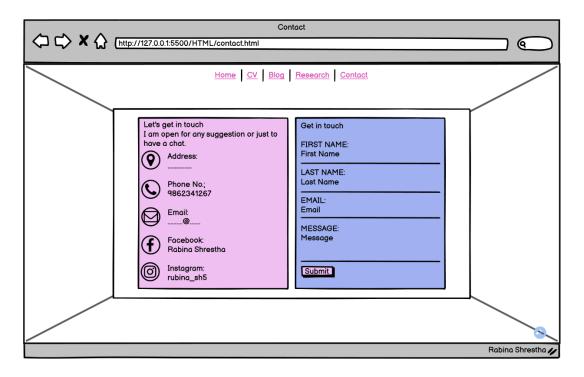


Figure 9: Wireframe of Contact.

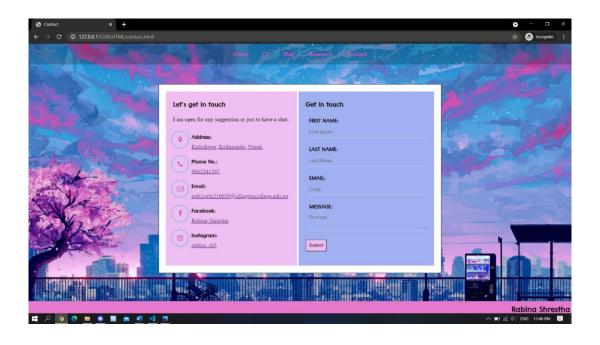


Figure 10: Screenshot of Contact.

3.Testing

Test 1.

Objective	To check whether the page is responsive.
Action	Responsiveness is tested through chrome's responsive view
	panel.
	> Right click your mouse
	> Inspect the webpage
	Click the toggle device tool bar.
Expected Result	The website should be adaptable to other kind of devices.
Actual Result	The website adapts to other kind of devices.
Test	Test was successful.

Table 6: Test 1.



Figure 11: Before conducting the responsive test.

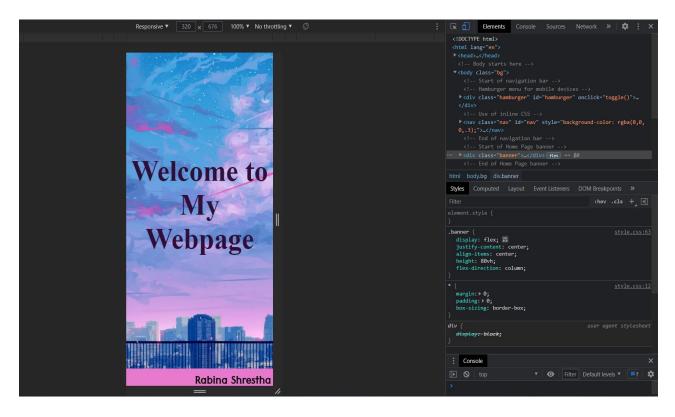


Figure 12: Webpage is Responsive.

Test 2.

Objective	Time should change according to the creator's device.
Action	Go to the blog page where the time is displayed on the top left corner. (Give it some time to properly function)
Expected Result	Accurate hour, minute and second should be shown.
Actual Result	Accurate hour, minute and second is shown.
Test	Test was successful.

Table 7: Test 2.

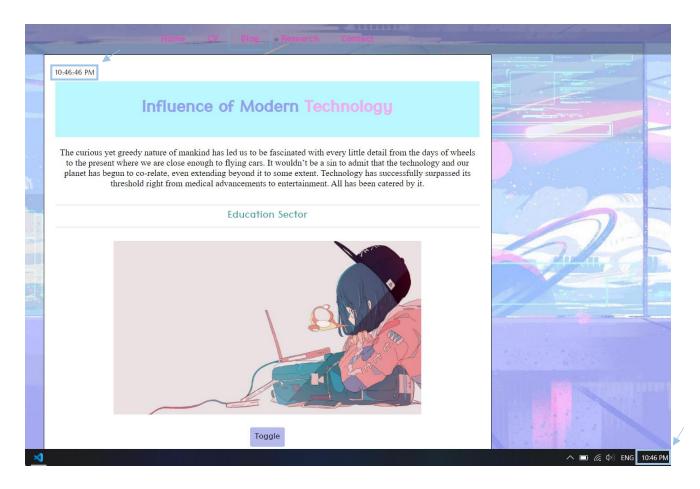


Figure 13: Checking Time Element.

Test 3.

Objective	Reference hyperlink should be highlighted when the cursor is hovered over it and when clicked the site should open in a new tab.
Action	➤ Go to the research page.
	> Find the reference mentioned.
	➤ Hover over it.
	➤ Click the link.
Expected Result	It should show purple highlights surrounding it and link should
	open in a new tab.
Actual Result	It shows purple highlight surrounding it and the link is opened in a
	new tab.
Test	The test was successful.

Table 8: Test 3.

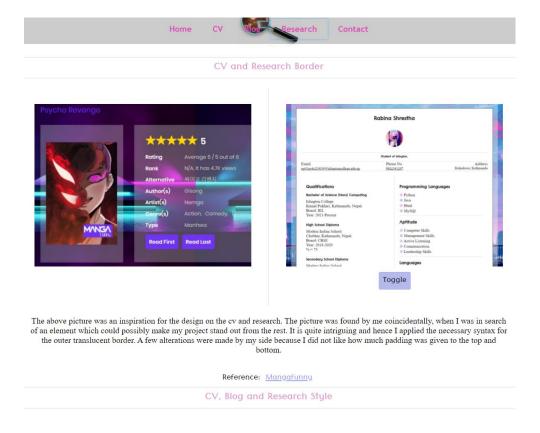


Figure 14: Before conducting the hover test.

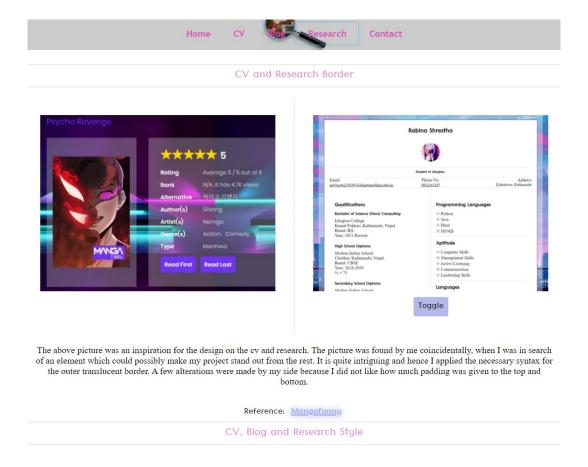


Figure 15: After conducting the hover test.

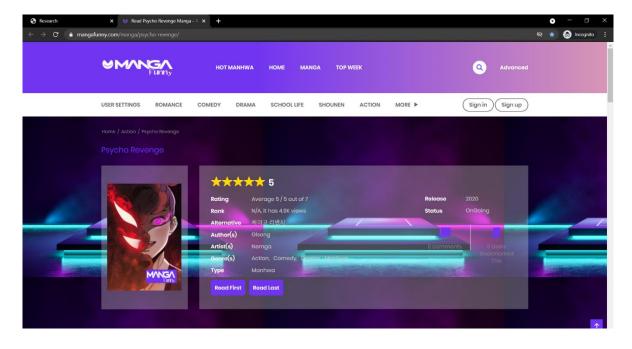


Figure 16: Link opens in new tab test.

Test 4.

Objective	To check the proper functioning of the form.
Action	Fill in the details.Click the submit button.
Expected Result	If the form is submitted with incomplete information, then "Please Fill the Details Properly" message pops up whereas if it is filled properly it should show "Thank You for the Feedback!"
Actual Result	"Please Fill the Details Properly" message pops up when the information is incomplete whereas if it is filled properly it shows "Thank You for the Feedback!"
Test	The test was successful.

Table 9: Test 4.

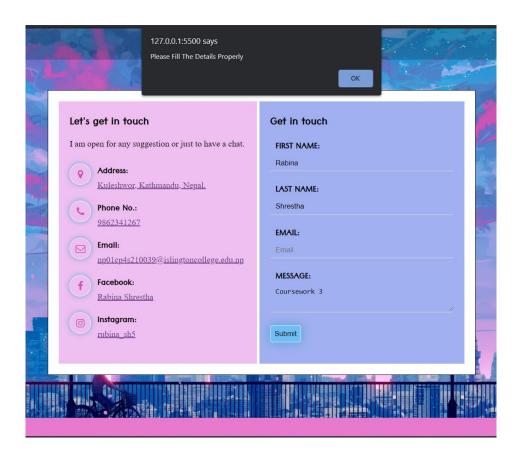


Figure 17: Incomplete Form Test.

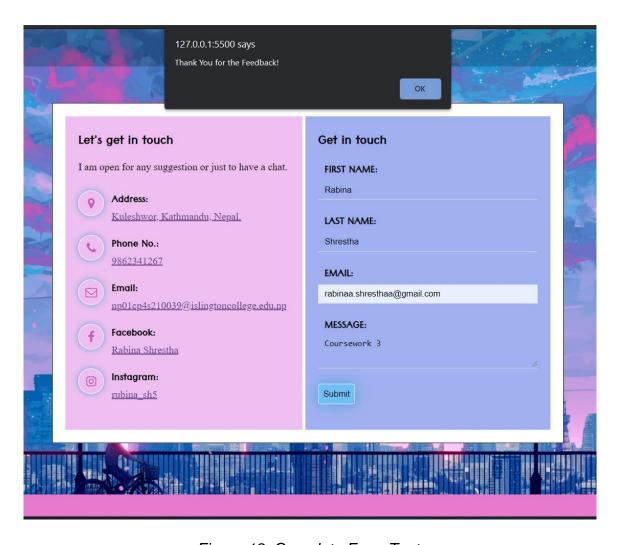


Figure 18: Complete Form Test.

Test 5.

Objective	To check whether the links provided in the contact page's left-
	hand side is working properly or not.
Action	Click on any provided hyperlink.
Expected Result	➤ When we click on address, then google map should open up.
	When the contact is clicked, then the user should be able to
	make a call without having to copy the number.
	➤ When the email is clicked, it leads you to Gmail pop-up box if
	you have various email addresses, from which you can choose
	one that you want to send an email from.
	➤ The Facebook and Instagram link leads you to the creator's
	social media sites.
Actual Result	When we click on address, then google map opens up.
	➤ When the contact is clicked, then the user is able to make a call
	without having to copy the number.
	➤ When the email is clicked, it leads the user to a Gmail pop-up
	box if they have various email addresses, from which the user
	chooses one they want to send an email from.
	➤ The Facebook and Instagram link leads the user to the
	creator's social media sites.
Test	The test was successful.

Table 10: Test 5.

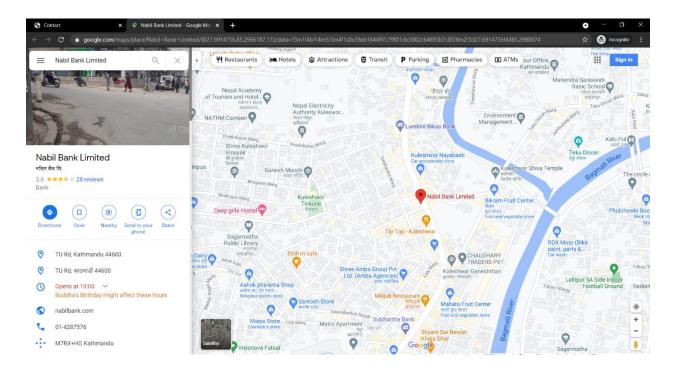


Figure 19: Address.

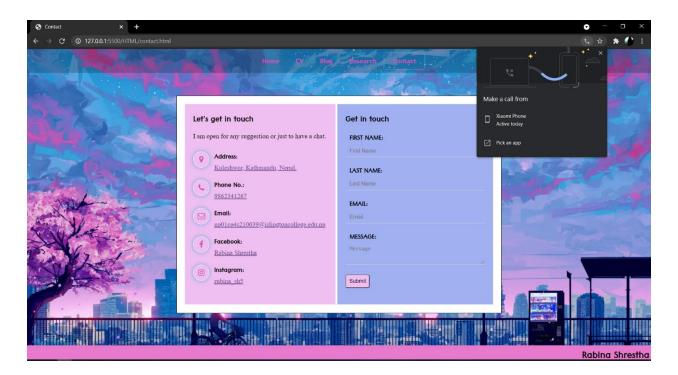


Figure 20: Phone Call.

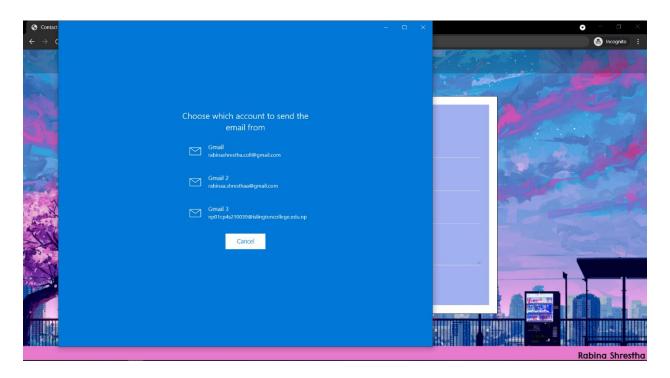


Figure 21: Email part 1.

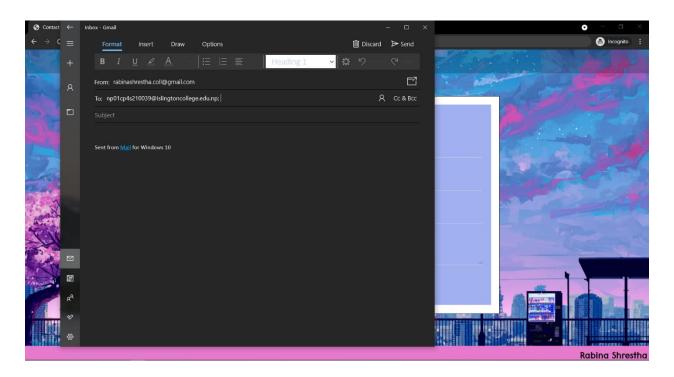


Figure 22: Email part 2.

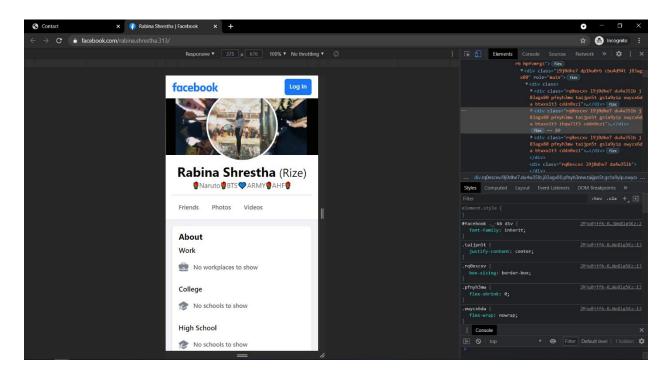


Figure 23: Facebook.

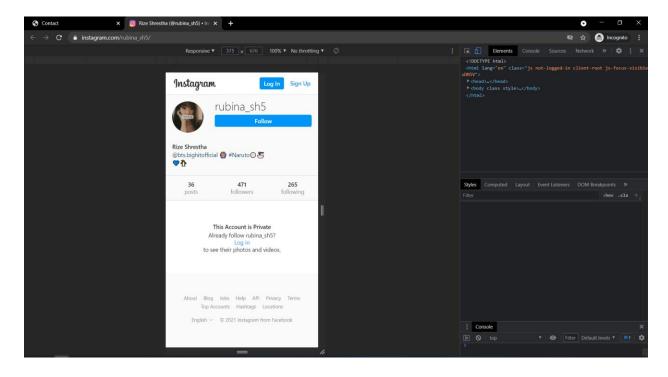


Figure 24: Instagram.

4.Conclusion

In the end, this coursework proved to be informative as well as resourceful. We were assigned to make five webpages with implementation of various knowledge of HTML, CSS, and JavaScript. Not only that, we also learned how to navigate between the pages, provide working links, creating CV's and writing blogs.

In the beginning it felt like a hard task as it was difficult to directly implement my ideas and expectations regarding the website due to the lack of concept. Going through the lecture slides and reviewing the recordings provided to us helped me add elements to my webpage. I wanted my website to be aesthetic and despite the failures, I am genuinely satisfied with the results. With the help of w3schools I could deal with the problems that were troubling me. Even though I had a clear vision of the end point, it was a challenge at every step.

This project has helped me to learn proper use of wireframes. Now it is easier for me to visualize my website and make a rough sketch out of it. It made me realize that making wireframes helps a lot, as we can look at the wireframes for references or to make changes as per the convenience. Using Visual Studio Code and Balsamiq Wireframes were helpful as they provided extensions and in-built designs respectively.

In conclusion, I'm really satisfied with the coursework added that it has helped me relish my skills. Overall, this project has helped me to grow as a programmer and has turned me into a keen observer. Now, I happen to give thoughts to websites regarding its feature while thinking of altering and implementing it to my own website as per my taste. I can finally claim my interest and eagerness and I am really looking forward to learn more about web designing.

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