



slingshot college
(इस्लिङ्टन कलेज)

Module Code & Module Title

CC4057NI Introduction to Information Systems

Assessment Weightage & Type

40% Individual Coursework

Year and Semester

2021 Spring

Student Name: Sarthak Bikram Rana

Group: N1

London Met ID: 20049228

College ID: NP01NT4S210129

Assignment Due Date: 28th May 2021

Assignment Submission Date: 28th May 2021

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.

Table of Contents

1. Introduction	1
1.1 Technology used	2
2. Discussion and Analysis	3
2.1 Home page.....	3
2.2 CV page	5
2.3 Blog page	7
2.4 Research page.....	9
2.5 Contact page.....	11
3. Testing	14
3.1 Test 1	14
3.2 Test 2	15
3.3 Test 3	18
3.4 Test 4	19
3.5 Test 5	21
4. Conclusion	23
Bibliography	24

List of Figures

Figure 1: Screenshot of Home page wireframe.....	4
Figure 2: Screenshot of Home page.....	5
Figure 3: Screenshot of CV page wireframe	6
Figure 4: Screenshot of CV page.....	7
Figure 5: Screenshot of Blog page wireframe	8
Figure 6: Screenshot of Blog page	9
Figure 7: Screenshot of Research page wireframe.....	10
Figure 8: Screenshot of Research page.....	11
Figure 9: Screenshot of Contact page wireframe.....	12
Figure 10: Screenshot of Contact page.....	13
Figure 11: Screenshot of not hovering over navigation bar	14
Figure 12: Screenshot of after hovering on home in navigation bar.....	15
Figure 13: Screenshot of checking whether the internal link in Contact Me button is working or not.....	16
Figure 14: Screenshot of internal link is working.....	16
Figure 15: Screenshot of checking whether the external link is working or not in referenced webpage image	17
Figure 16: Screenshot of external link working since the webpage opens in a new tab	17
Figure 17: Screenshot of date and time a day before	18
Figure 18: Screenshot of date and time now.....	19
Figure 19: Screenshot of the first image on the image slider.....	20
Figure 20: Screenshot of the image after four second on the image slider.....	20
Figure 21: Screenshot while assigning empty value in the form.....	21
Figure 22: Screenshot while assigning all the required values in the form	22

List of Tables

Table 1: Testing the hover effect on the navigation bar.....	14
Table 2: Testing the internal and external links.....	15
Table 3: Testing the date and time on the home page.....	18
Table 4: Testing the image slider on the blog page	19
Table 5: Testing the form validation on the contact page	21

1. Introduction

This is our third course in which we were assigned to create a portfolio website. A portfolio website includes our personal identification, which includes our name, email address, cv, and other information. This demonstrates our abilities and identification for professional use.

Since, this website is a scroll down website which includes all the five different section such as home, cv, blog, research and contact in a single page. Among these pages, home section was the welcome page for the website. The home page did not have a lot of bulky content. On the left side of the page there was the header section which includes a picture, name as well as current work status. Right below the content there is a simple navigation bar with hover effect. While talking about the page content it only had the name, a short description about what the website is actually about and a button exactly below the short description which directly takes to the contact section. By the help of JavaScript there is a working date and time section too. The main reason to include only few content in the home page was to make it simple and not that content heavy.

Talking about the second page it includes cv section. CV page had few contents which such as introduction, experience and few information. As mention about the header section in the second paragraph, same format was applied over here too. While talking about the contents that this page included were introduction, experience, address on the left side, whereas on the right a box was made which included few personal information to make the page more attractive. The cv page displayed the whole cv along with the facility to download cv.

The third page consists the blog section. The header section was same as it was mentioned in the second paragraph. Here, a blog was written on the topic technologies in today era which included contents like the positive and negative impact of technology. This page was quite long. Here at the top of the page an image slider was added which keeps on changing images every four second. Below the image slider the main blog started. To make the content simple and readable only two different color was used for the heading and the paragraph part. This section was all about blog contained view in the respective topic.

Fourth page was the research page. This page includes five different reference from different website to develop this website. Again, the header section was similar as mentioned before at the left of the page. The major content that this page had was ten screenshots which includes five from the reference website on the left and five from which was implemented in my website on the right. The links were also given to the reference screenshots. Just below every screenshot there were a short description about the things that were taken from the reference and which was implemented. Before starting this project, before starting of the project research was already done which made it easier to complete this project.

The last and the fifth page was the contact section. In this page the concept was also same header on the left side of the page and content in the middle. Here few contact information was added and a form was developed which helped the visitors to share their views and concerns with me personally. Overall, this contact section contained my contact information.

Due to the flexibility of a portfolio website, we can express ourselves through design, layout, and the content we write, which goes same for my website as well. This is the main reason for creating this website as part of this coursework.

1.1 Technology used

To develop this website three different technologies were used which are HTML-5, CSS-3 and JavaScript. HTML is a mark-up language which is used for building web pages. Through the help of HTML, I was able to enter all the content inside the website. Whereas, CSS is a language for styling web pages. In my website all the main style and the design of the whole web page was only possible through CSS. CSS made my website look more presentable and well structured. Similarly, JavaScript is also a programming language which is used for programming web pages. Here, in my website I used JavaScript for displaying date and time in the home page, I also made an image slider in blog page. These two JavaScript is used to dynamically change the content of the website. At-last but not the least JavaScript was also done in contact page for form validation. These three programming languages were used while developing my website according to the guidelines of the coursework.

2. Discussion and Analysis

The website was developed through the help of applications like Sublime text for text editor and Balsamiq Wireframes for creating wireframes of the web pages. Sublime Text Editor is a full featured Text editor for editing local files or a code base. It includes various features for editing code base which helps developers to keep track of changes. It includes wide features such as Syntax highlight, auto indentation, file type recognition, sidebar, macros, plug-in and packages which makes it easy for working with the code base. (tutorialspoint, 2020)

Talking about another application which was used while developing wireframes of the website was Balsamiq Wireframes. Balsamiq is a shortened form for Balsamiq Wireframes which is a user interface design tool that generates digital sketches of ideas or concepts for an application or website in order to create wireframes (Balsamiq, 2020). The main purpose of choosing Balsamiq is because of its easy to use and user interactive format of the application.

2.1 Home page

The home page included a profile picture and a navigation bar within the header content on the left side of the page. The navigation bar had five links to four different pages including the home page itself. The navigation bar had a hover effect applied to it.

The contents of the header section were displayed using CSS's display: flex property. The profile image was then placed at the top of the section with a header tag and at the top of the page. The name and post were placed in the center of the header section below the profile image. The navigation bar was also formed inside an un-ordered list within the header section. Within the un-ordered list, a list item was created that treated each item individually, and an anchor tag was also used. The main reason for using anchor tags is that when a visitor clicks the name of a page in the navigation bar, it directs them to that page. The navigation bar has a hover effect as well. The navigation bar was originally grey, but the hover effect turned it green.

While discussing the main content on the home page, an introduction section was located in the center of the page. It included a greeting to the visitor, a name, and a brief description of what the website was all about. To draw the visitor's attention while displaying the name in the introduction section, root color CSS was used to separate the color of the name from the color of the remaining text. A contact me button was placed just below the introduction content using the anchor tag, which directs the visitor to the contact page. The same hover effect that was used in the navigation bar was used here. A date and time JavaScript was used to give the home page a dynamic look. The date and time were displayed just below the contact me button, which was not styled in any way.

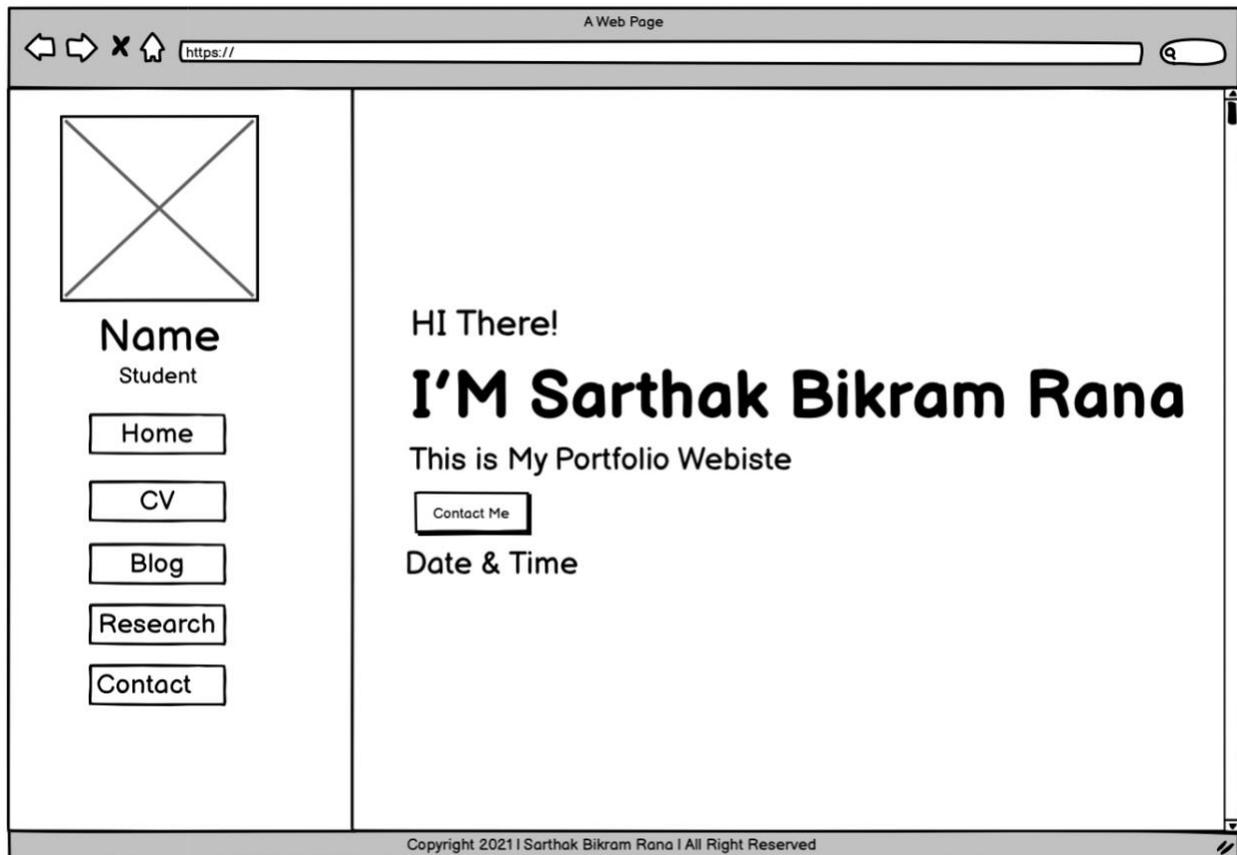


Figure 1: Screenshot of Home page wireframe

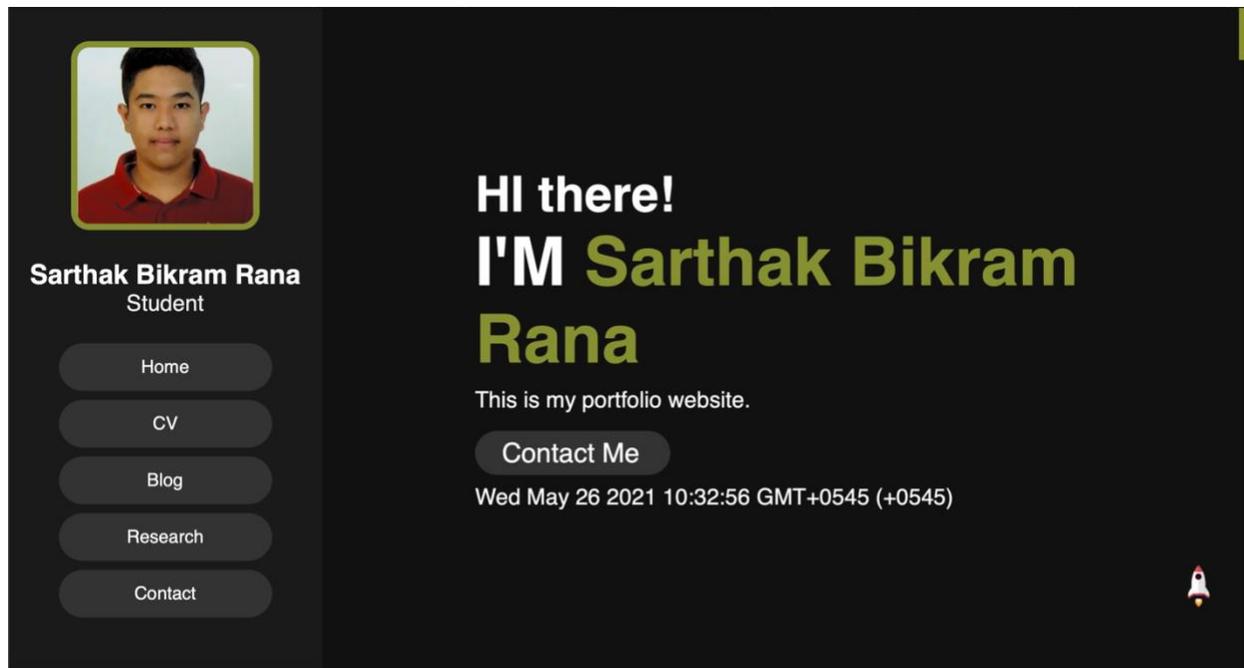


Figure 2: Screenshot of Home page

2.2 CV page

The CV page had the same header section as the home page, which included the profile image, name, post, and navigation bar.

Concerning the main content of the CV page, it contains personal information about me in the middle section of the page. My name, age, qualification, address, and language are all included in the information section. CSS was used to align the contents at the top of the page. To draw the visitor's attention, the root color CSS was used to separate the color of the information. A download cv button was also placed just below the information section via anchor tag, allowing the visitor to download the CV. On the right side of the page, four boxes were created, one for my current status, one for my education level, one for my skills, and one for my hobbies. In this case, a different background color was used in CSS for the box to make it more visible, while the same root color CSS was used for the content.

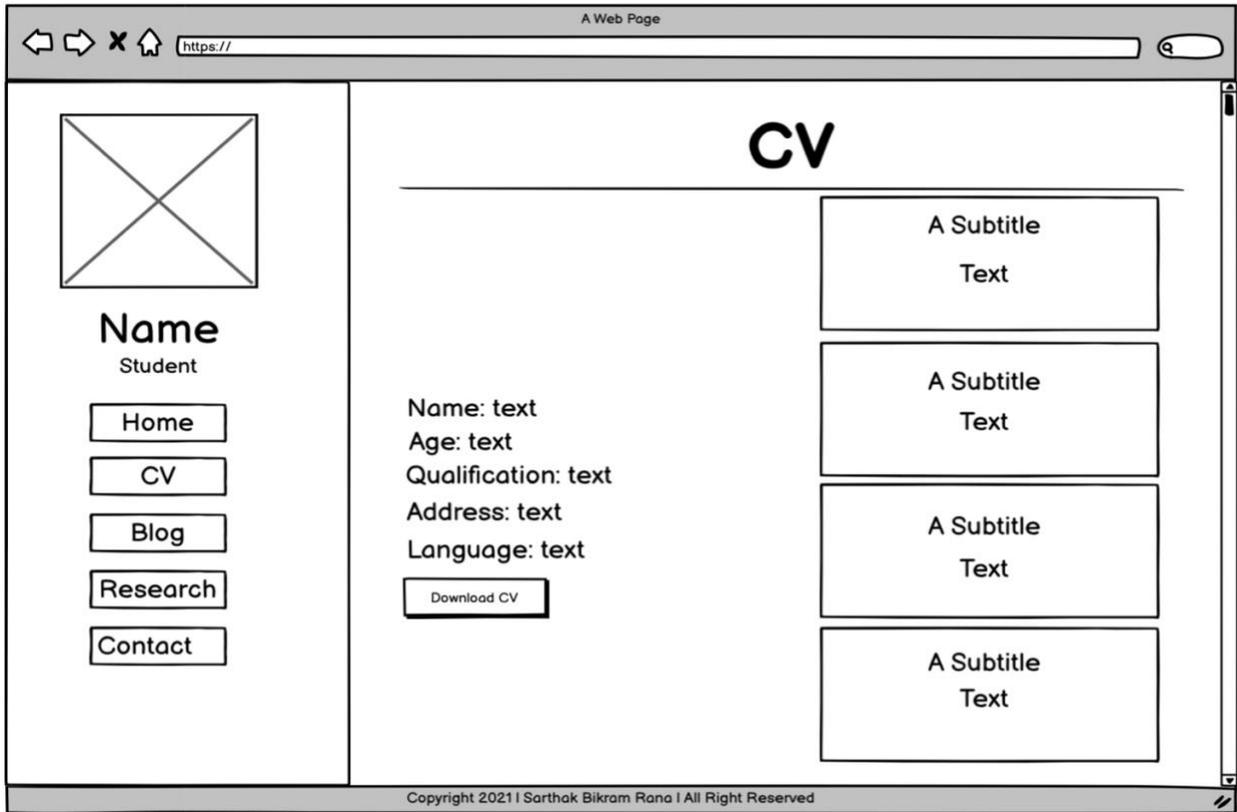


Figure 3: Screenshot of CV page wireframe

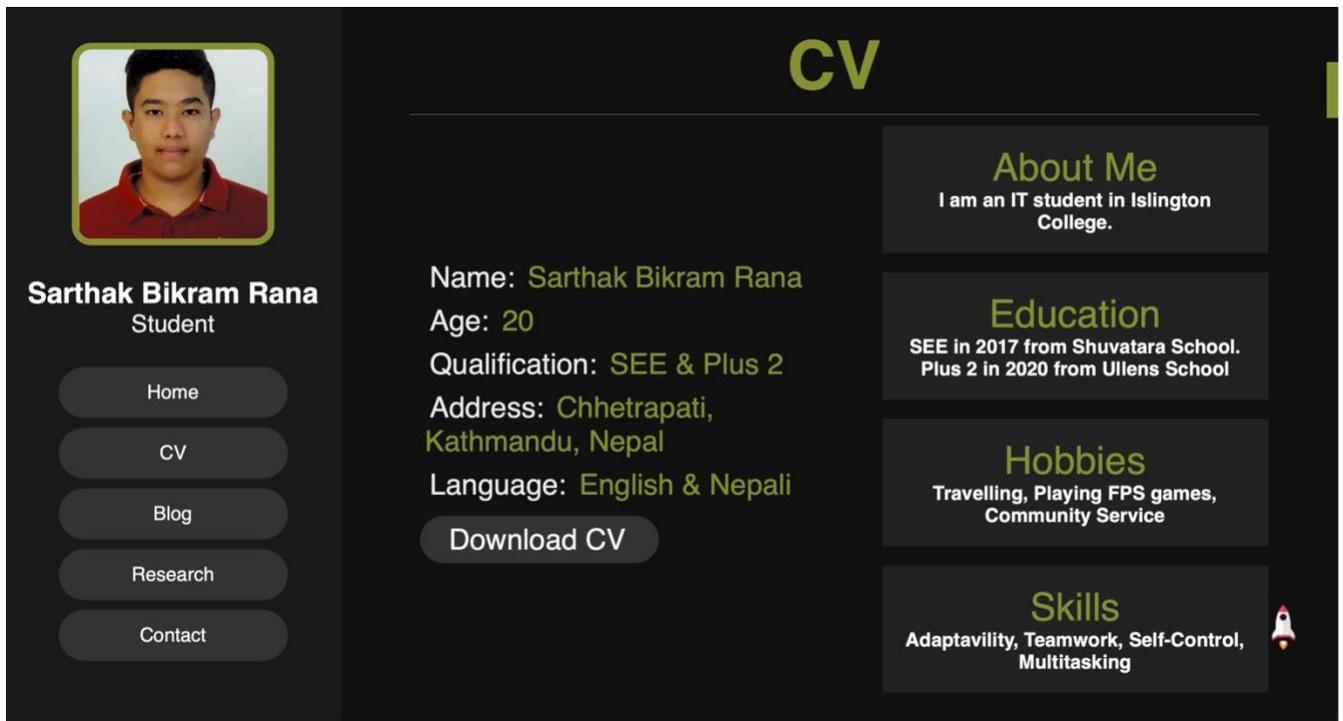


Figure 4: Screenshot of CV page

2.3 Blog page

The blog page had the same header section as the home page, which included the profile image, name, post, and navigation bar.

In aspects of the blog page, it featured an image slider created using JavaScript at the top of the page. A thin green border was added to the image slider to increase contrast. The blog on the topic technologies began just below the Image slider. The blog was about technology and its effects on our lives, both positive and negative. A brief introduction to the topic of technology was given, followed by a list of several new technologies with their explanations and several aspects of the positive and negative impact of technology were mentioned and explained. Furthermore, all combined paragraphs and headings have their own division, and two colors, white and green were used to make the content more presentable and easy to read. At last an overall verdict on the topic was given.

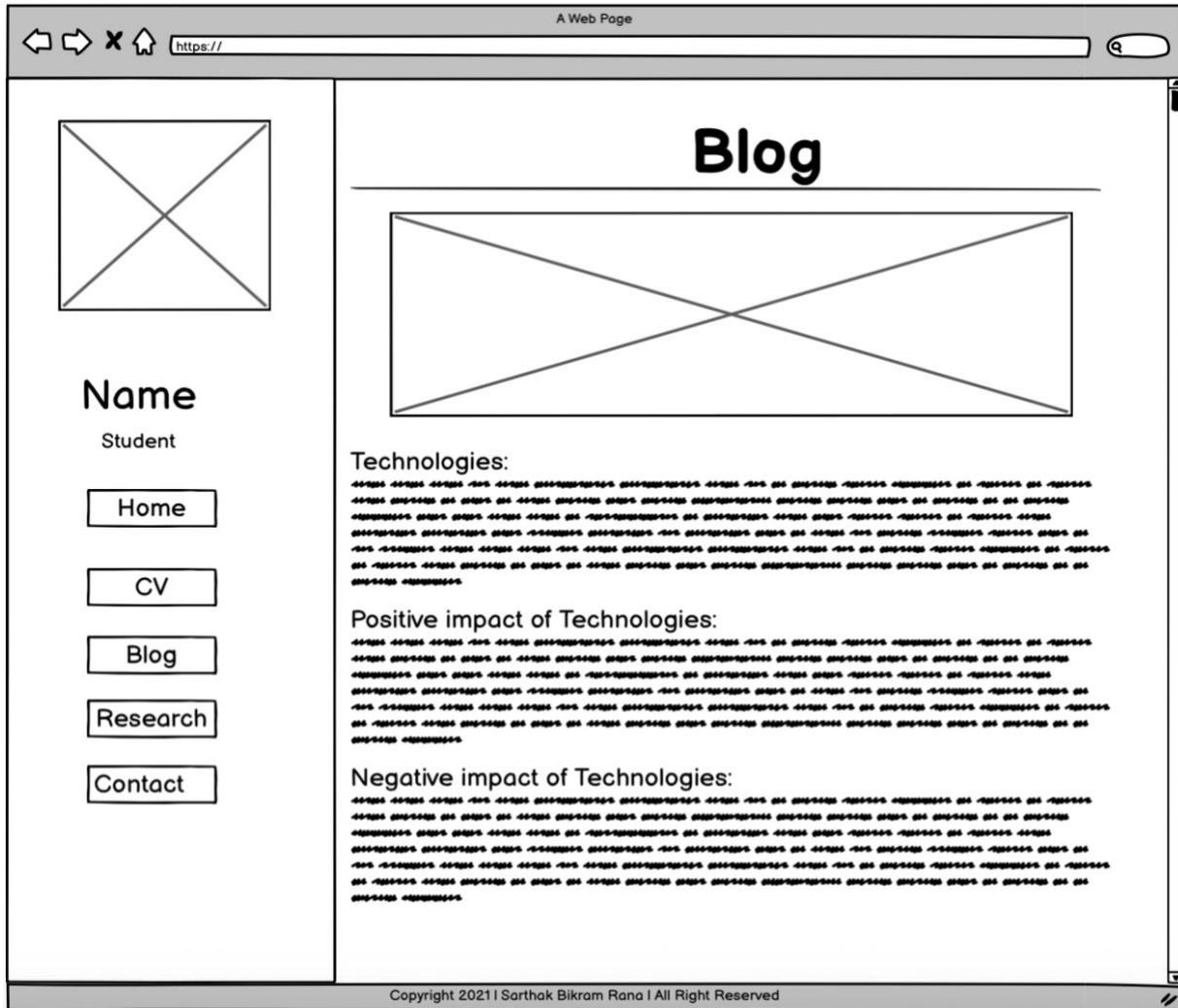


Figure 5: Screenshot of Blog page wireframe



Figure 6: Screenshot of Blog page

2.4 Research page

The research page had the same header section as the home page, which included the profile image, name, post, and navigation bar.

The research page's content is divided into five sections, each of which includes two screenshots on the right and left side of the page, one of which was of the referenced section of the different website and the other of which was implemented in my website. These two screenshots were created with the division tag, and a link to the referenced screenshot was provided with the anchor and _blank tag. The images were given a thin green border to make them look more appealing. A heading was placed directly beneath those two images to provide context for what the images above are about. To distinguish the content, the same root color green was used in the heading. Below the heading is a brief description of what content was actually taken from the various websites and what was implemented. The same concept and format were used in the remaining four divisions. The only distinction was the content of each division.

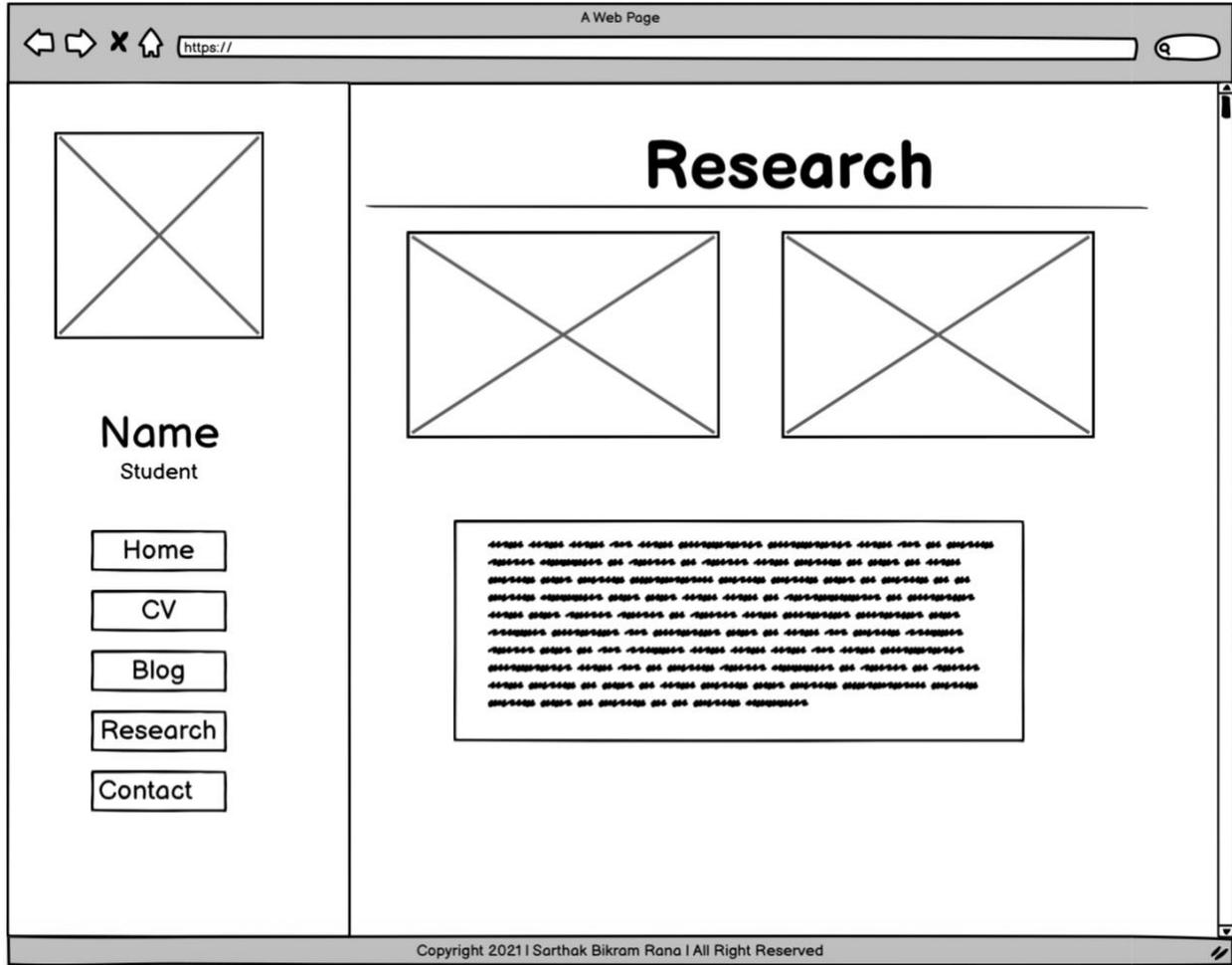


Figure 7: Screenshot of Research page wireframe

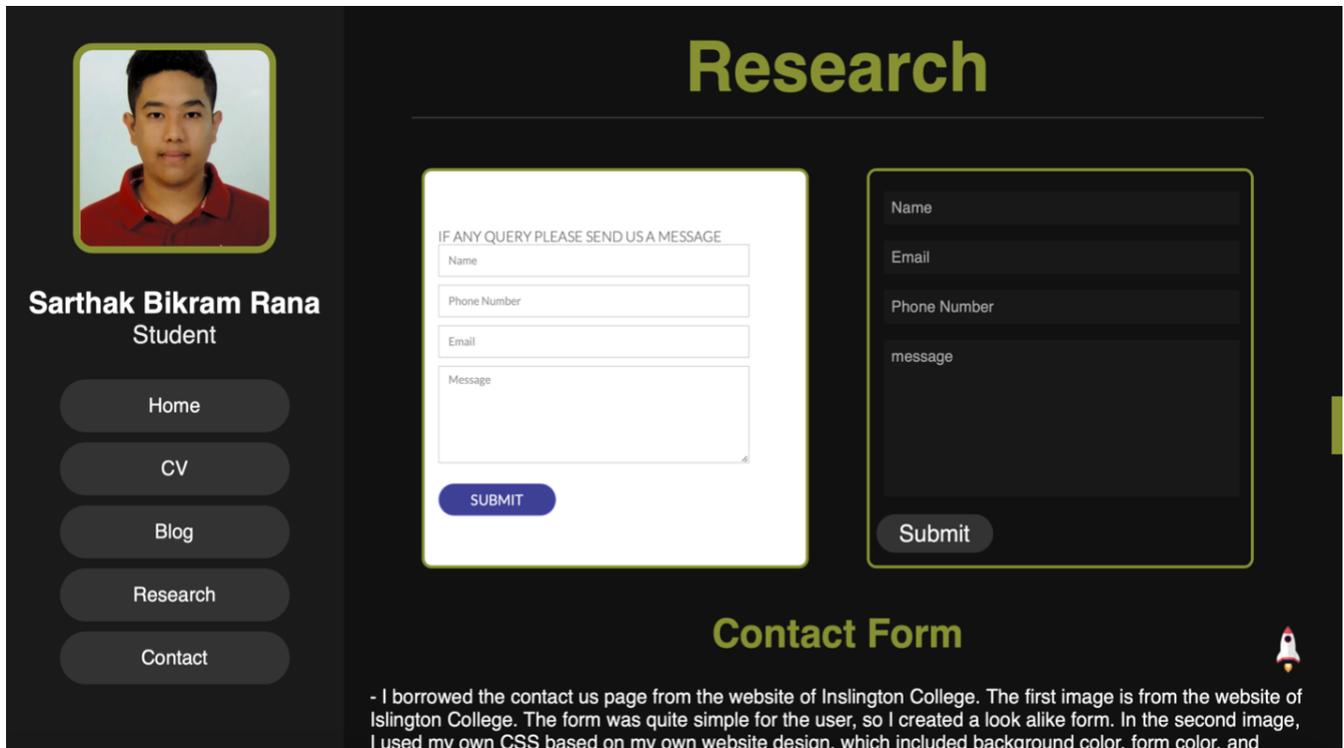


Figure 8: Screenshot of Research page

2.5 Contact page

The contact page had the same header section as the home page, which included the profile image, name, post, and navigation bar.

Concerning the content of the contact page, a contact info section consisting of a personal email, mobile phone number, and address was placed to the left of the page. Each piece of information was kept in its own division. The same root color, green, is used in the heading to distinguish the looks and style. A contact form was created on the right side of the page using the form tag. The form included text fields for name, email, and phone number, as well as a text-area for message. These fields were created using the input tag, and the text-area was created using the text-area tag. The required style was assigned to the form based on the color theme of the entire website. A submit button was added just below the form, which was created with the button tag. The submit button checks the fields entered, validates them, and then displays a message based on the validation results. JavaScript was used to validate the form.

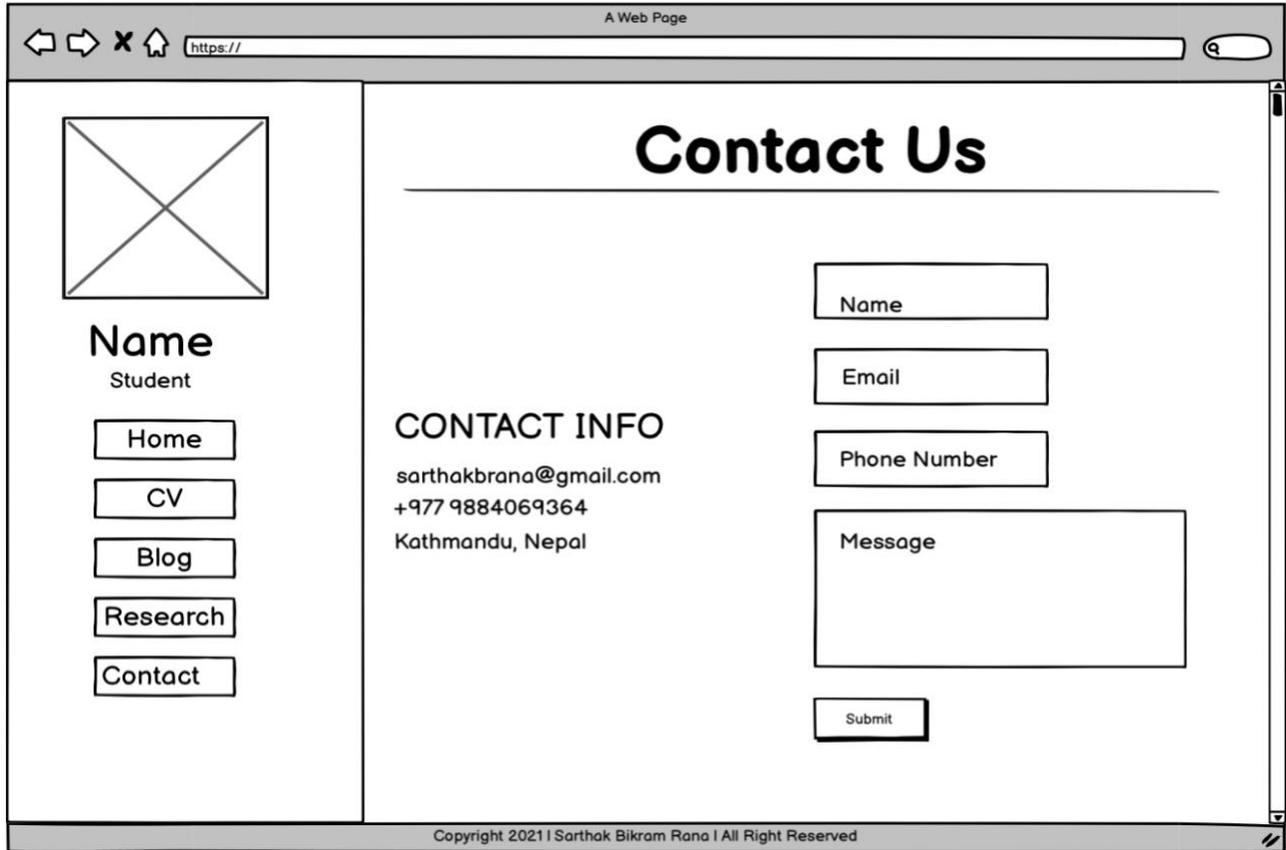


Figure 9: Screenshot of Contact page wireframe

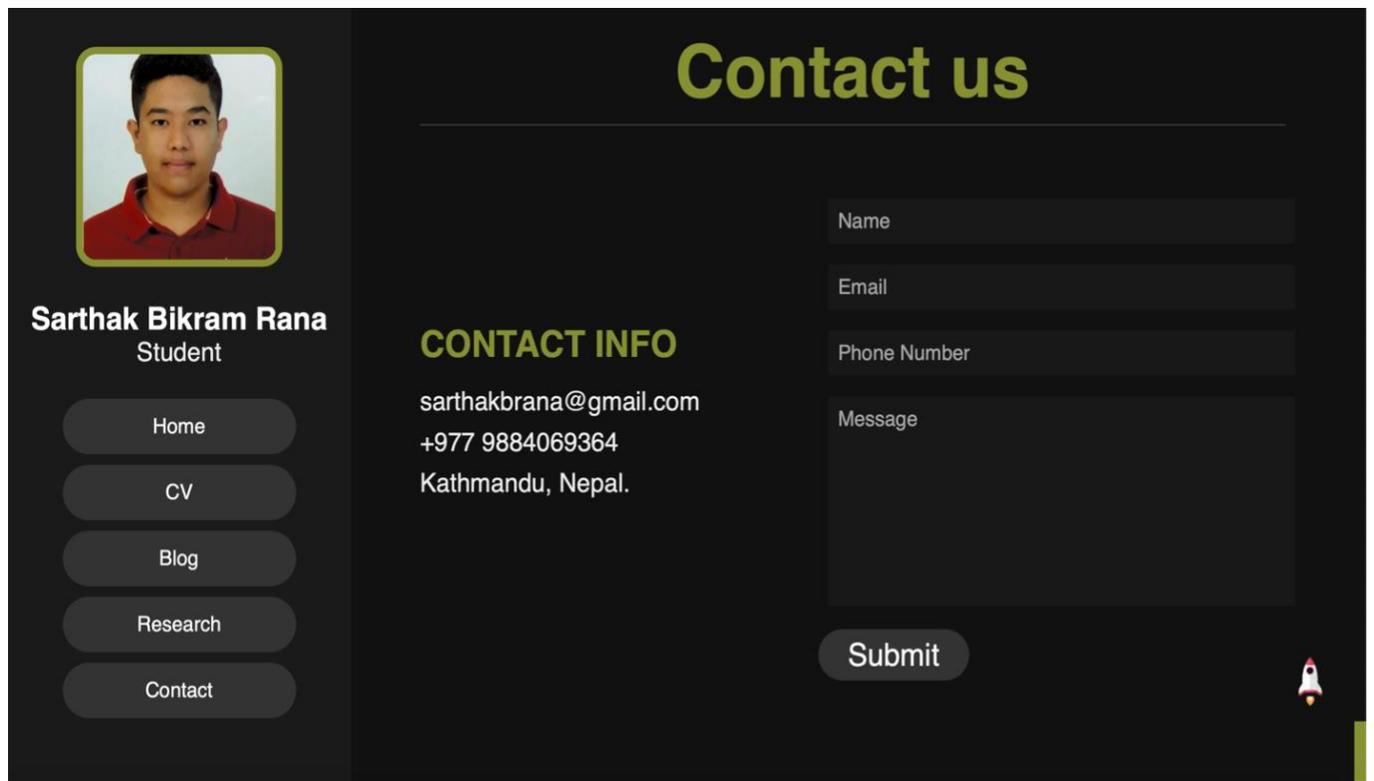


Figure 10: Screenshot of Contact page

3. Testing

3.1 Test 1

Table 1: Testing the hover effect on the navigation bar

Objective	Checking the navigation bar hover effect.
Action	<ul style="list-style-type: none"> - The website was opened. - The cursor was hover over the content of navigation bar.
Expected Result	The change of the color from grey to green will be seen.
Actual Result	The cursor was hovered on the navigation bar and the color change was seen.
Test	Test successful.

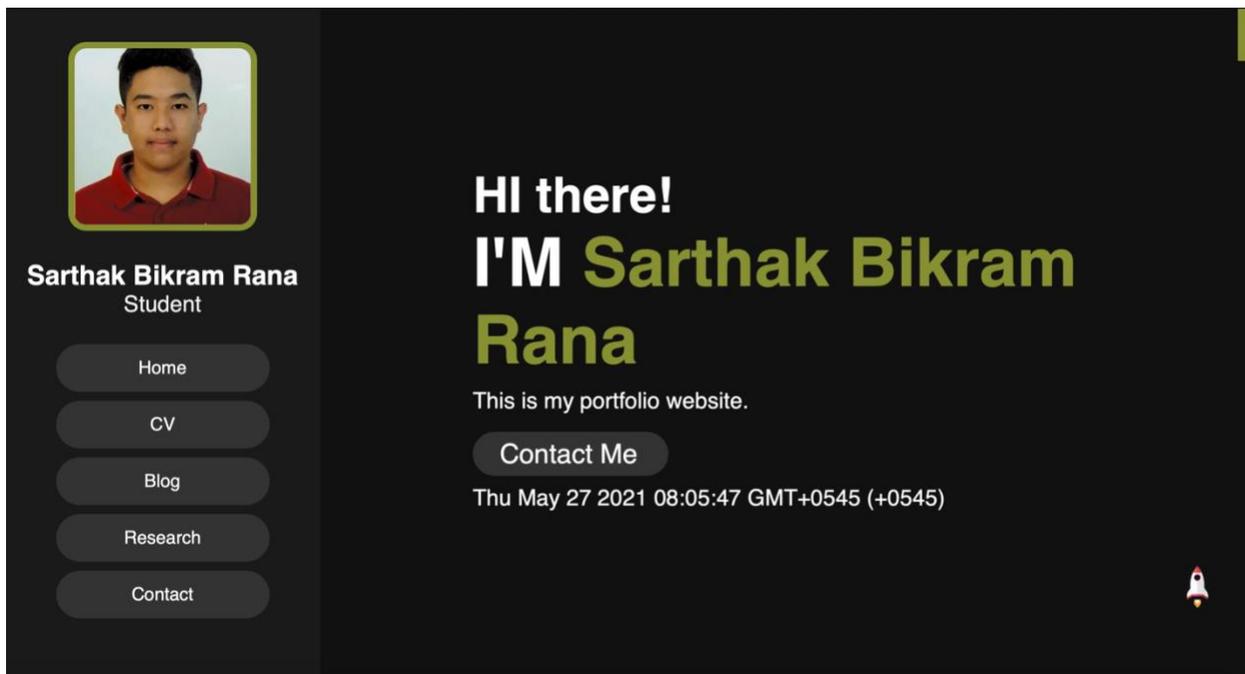


Figure 11: Screenshot of not hovering over navigation bar

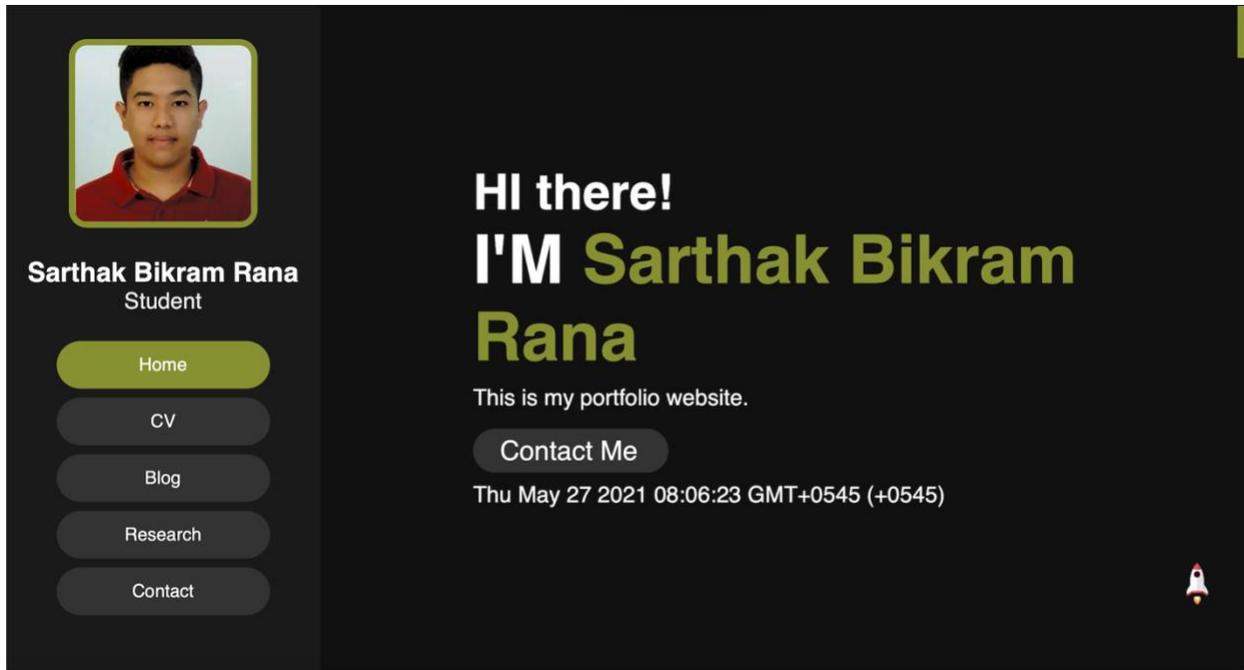


Figure 12: Screenshot of after hovering on home in navigation bar

3.2 Test 2

Table 2: Testing the internal and external links

Objective	Checking the internal and external links.
Action	<ul style="list-style-type: none"> - The website was opened. - For internal link, click on the contact me button of the home page to check whether it is redirecting to the following page or not. - Go to the research page to check the external link is working or not. - Click on the image of the referenced page which will open the page in a new tab.
Expected Result	Internal link will redirect to the mentioned page whereas, external link will open in a new tab.
Actual Result	<ul style="list-style-type: none"> - While testing the internal link, the contact me button was working which redirected to the contact page. - While testing the external link, while clicking on the image of the referenced page the actual website was opening on a new tab.
Test	Test successful.

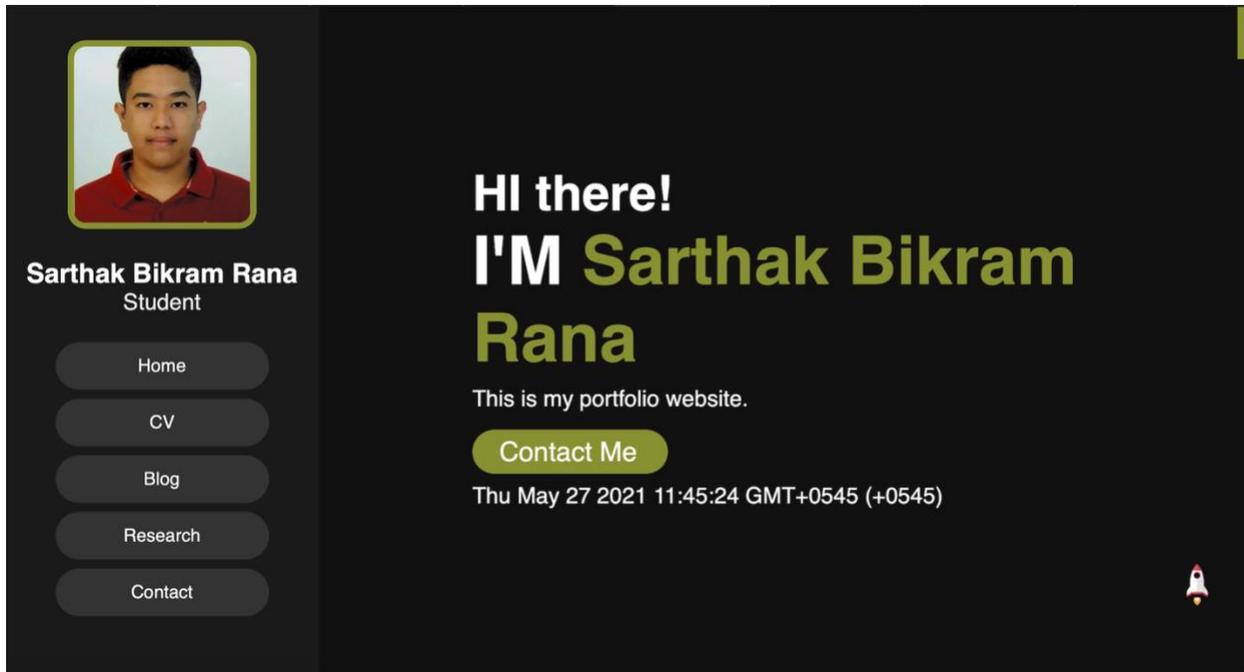


Figure 13: Screenshot of checking whether the internal link in Contact Me button is working or not

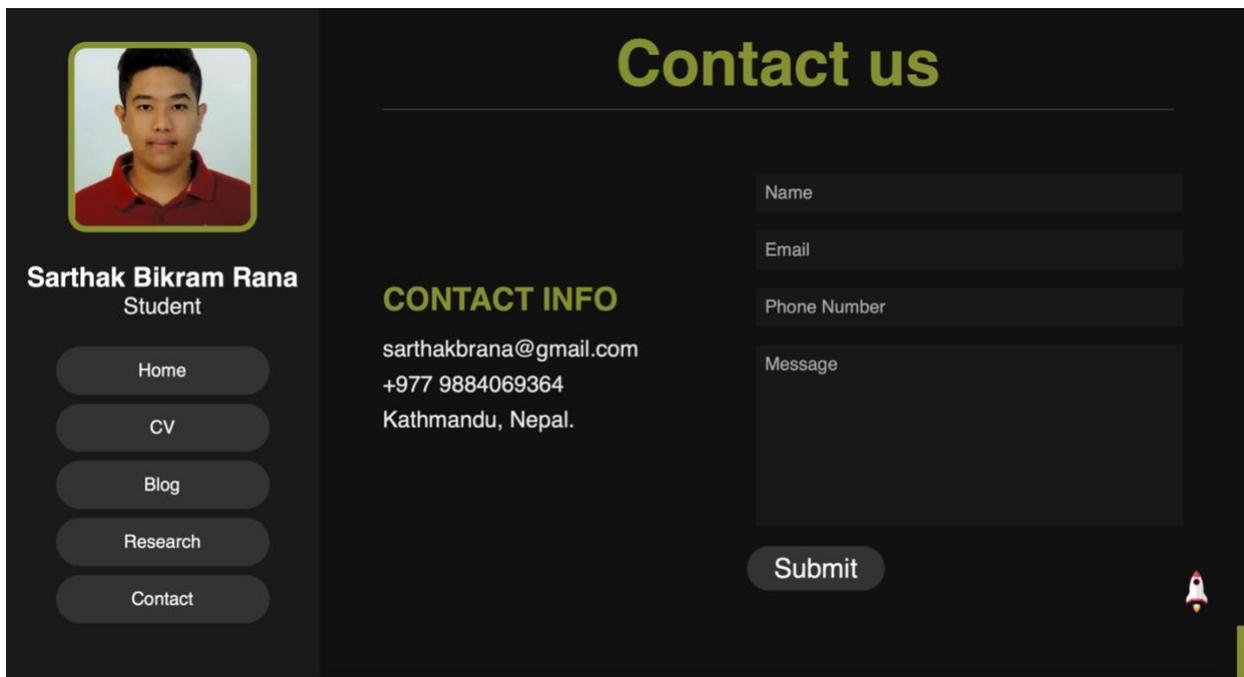


Figure 14: Screenshot of internal link is working

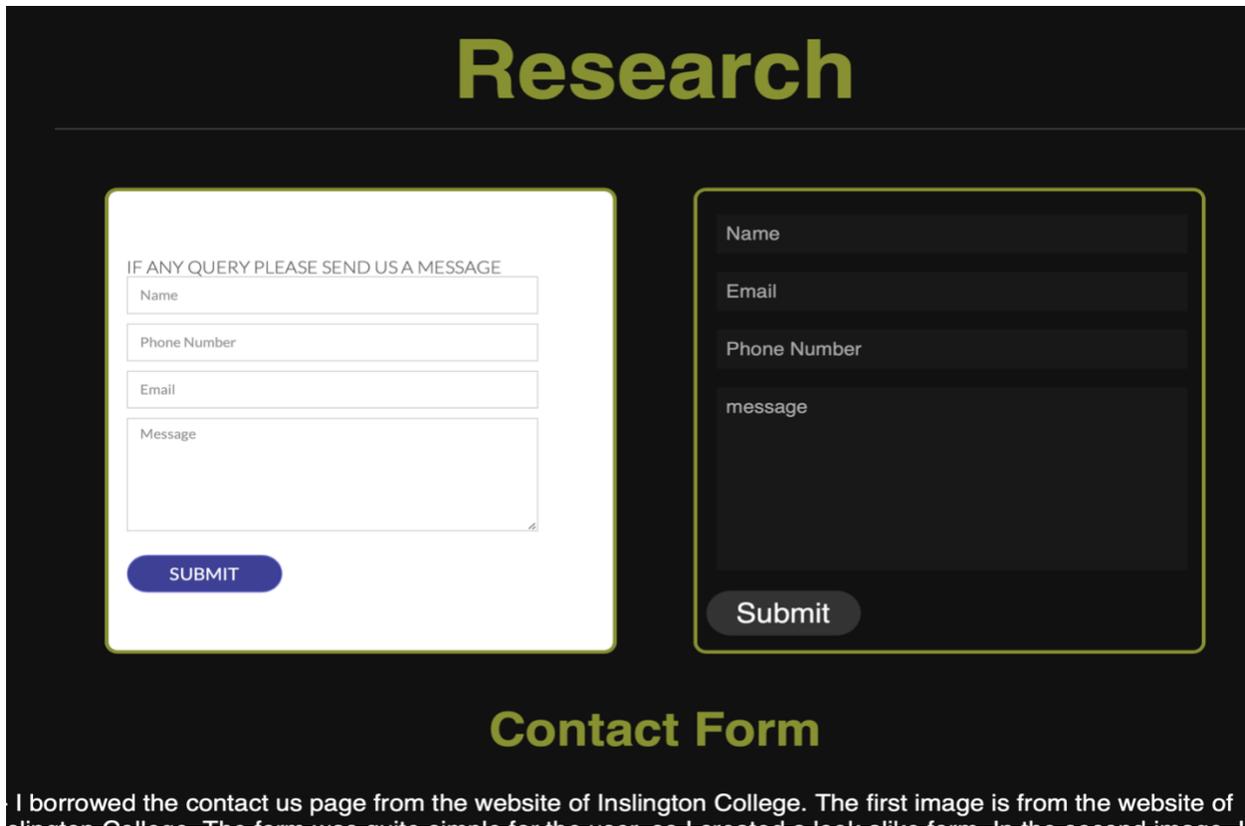


Figure 15: Screenshot of checking whether the external link is working or not in referenced webpage image

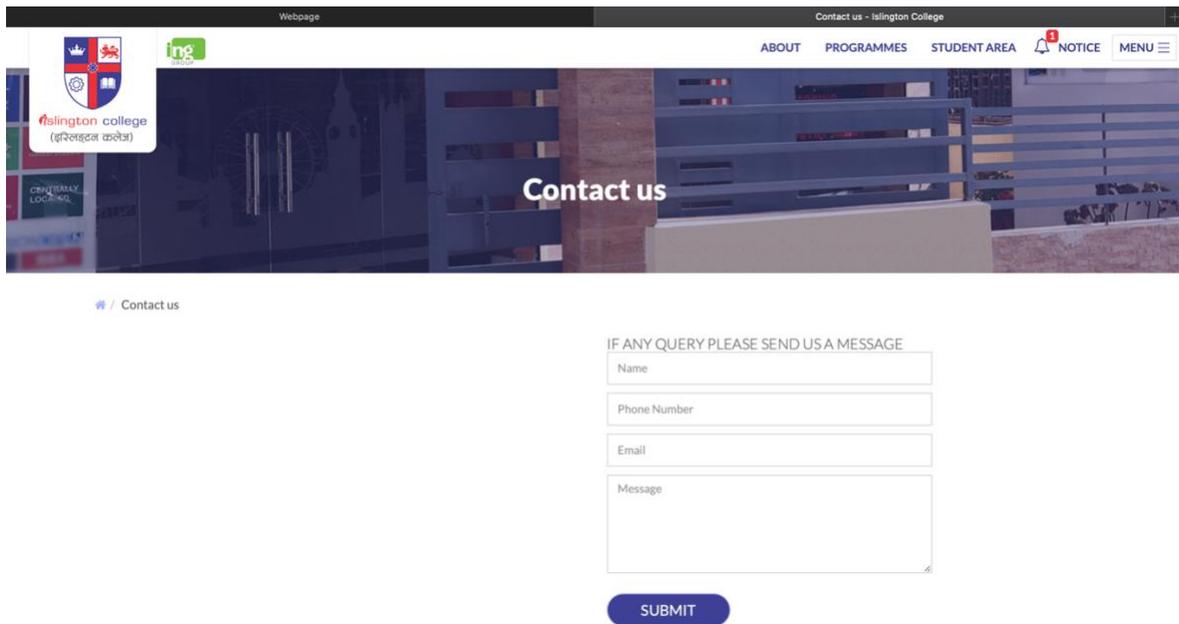


Figure 16: Screenshot of external link working since the webpage opens in a new tab

3.3 Test 3

Table 3: Testing the date and time on the home page

Objective	Checking the date and time in home page.
Action	<ul style="list-style-type: none">- The website was opened.- Whether the date and time is working or not was checked.
Expected Result	The date and time will change as same as in the real world.
Actual Result	The date and time was observed and it was working.
Test	Test successful.

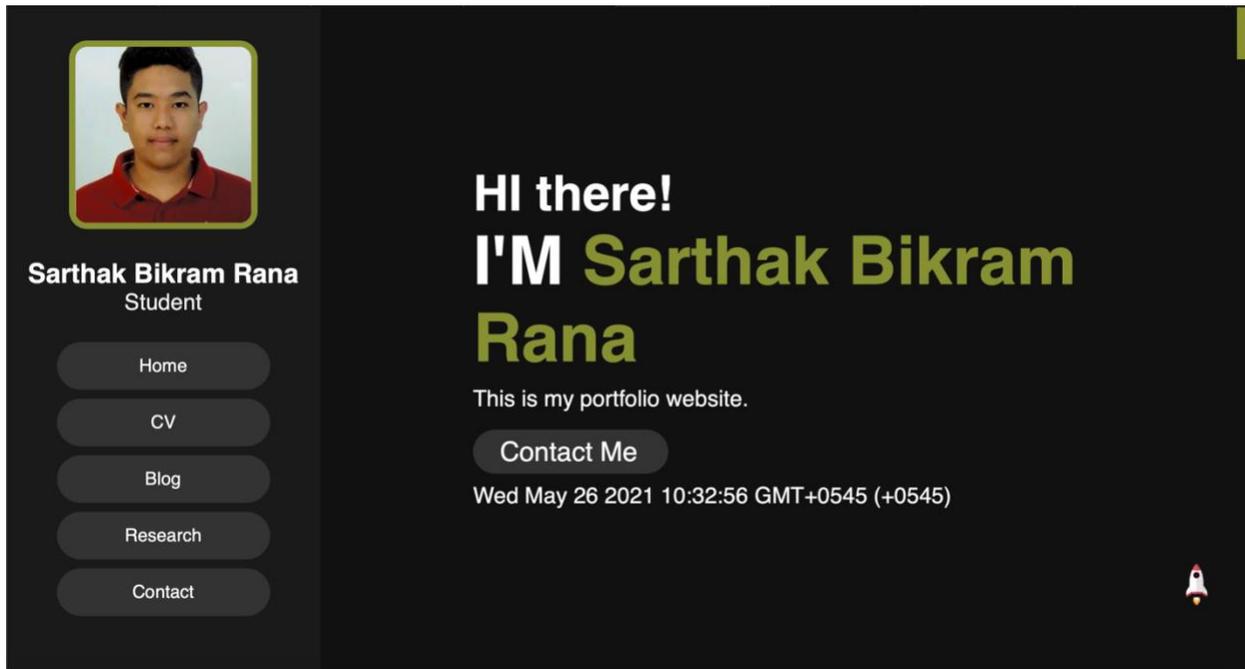


Figure 17: Screenshot of date and time a day before

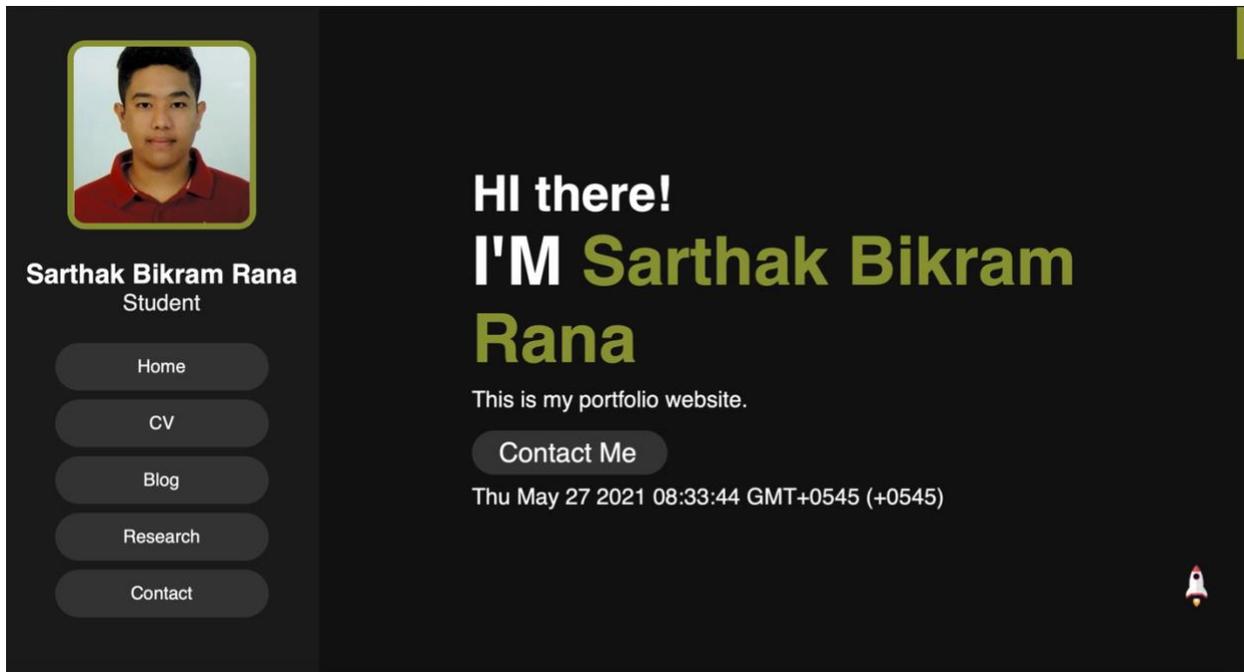


Figure 18: Screenshot of date and time now

3.4 Test 4

Table 4: Testing the image slider on the blog page

Objective	Checking if the image slider is working or not.
Action	<ul style="list-style-type: none"> - The website was opened. - Through navigation bar blog page was opened. - Whether the image slider was working or not was checked.
Expected Result	The image slider will change the image every four second.
Actual Result	The image slider was changing the image every four second.
Test	Test successful.



Figure 19: Screenshot of the first image on the image slider

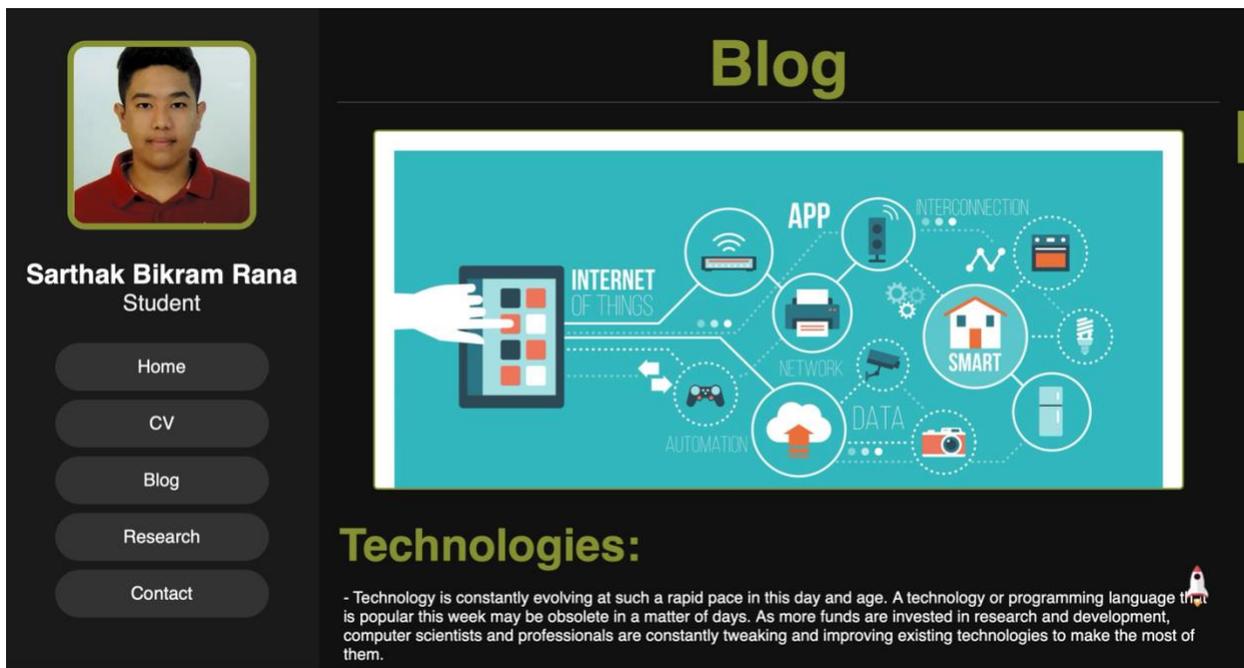


Figure 20: Screenshot of the image after four second on the image slider

3.5 Test 5

Table 5: Testing the form validation on the contact page

Objective	Checking if the form validation is working or not.
Action	<ul style="list-style-type: none"> - The website was opened. - Through navigation bar contact page was opened. - Fill an incomplete form and a completely filled form.
Expected Result	The website will always reject the incomplete filled form and asks to re-try.
Actual Result	The website asked the visitors to retry when the form was filled incomplete and accept when the form was filled complete.
Test	Test successful.

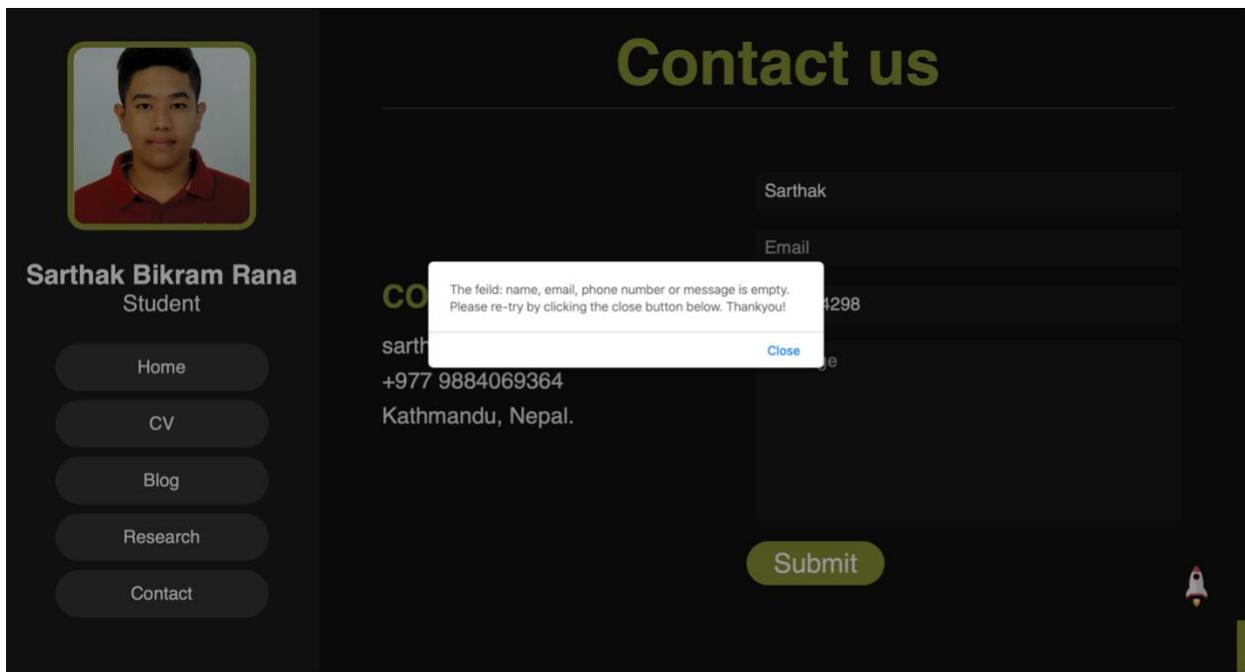


Figure 21: Screenshot while assigning empty value in the form

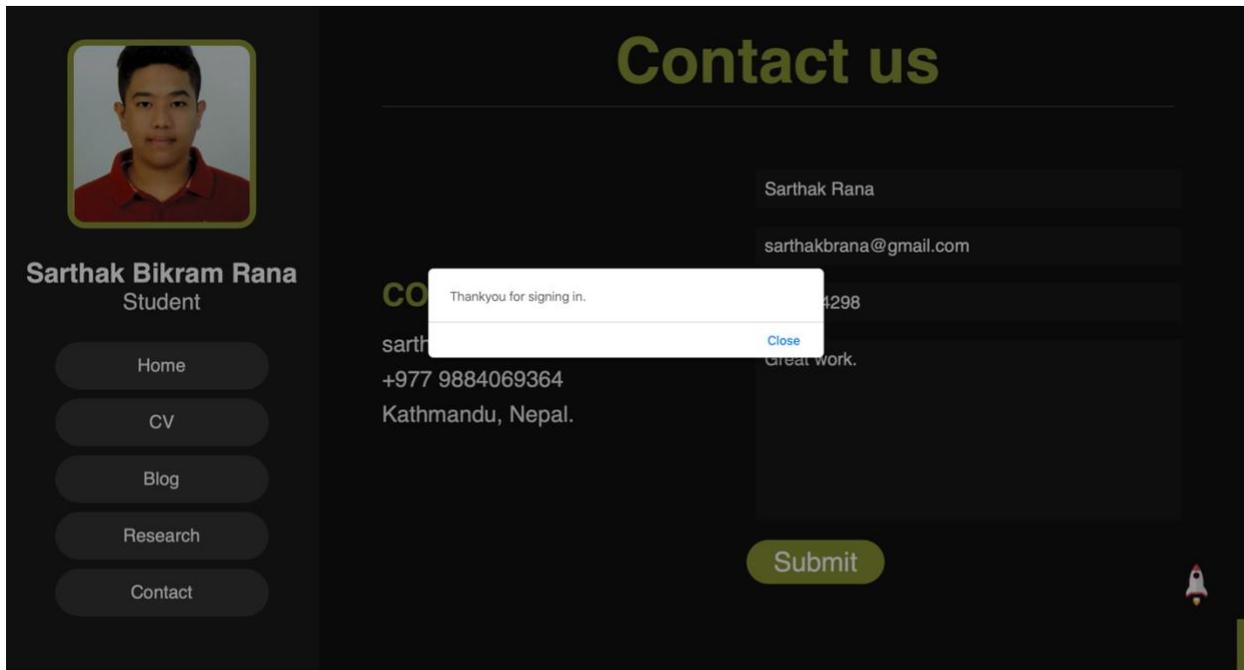


Figure 22: Screenshot while assigning all the required values in the form

4. Conclusion

Finally, the portfolio website was completed successfully. This portfolio website was a scroll down website with five different pages of content on a single page. This website contains my overall portfolio, a blog about technology, and my contact information. This was the first time developing a web page. The general concept of HTML was already present, but proper use of CSS and JavaScript was accomplished through this project. This course introduced the fundamental concepts of HTML, CSS, and JavaScript.

While completing this coursework, we used resources provided by our teacher as well as websites such as W3Schools and freeCodeChamp to create this website. After spending a significant amount of time on the internet, the layout and color scheme of the entire website were determined. The wireframes for each page were created using the balsamiq wireframe developer. Many difficulties were encountered while developing the page, particularly when implementing CSS and JavaScript. Various new CSS properties were discovered and implemented in the project while conducting research for this website. Properties such as `:root color`, `position: fixed` were used to serve as the website's root color, which can be used in text, border color, and even the scroll-bar. A small rocket icon image has been added to the bottom right corner of the page, which redirects to the home section from any page on the website. This image is used as a scroll-top image.

This course covers a wide range of topics, including HTML, CSS, and JavaScript, all of which were taught to us by our teacher and learned while conducting research. This aided in the creation of a proper and presentable portfolio website, which would be used in the future as our contribution to the project and would showcase our skills and knowledge.

Bibliography

tutorialspoint, 2020. *Sublime Text- Introduction*. [Online]
Available at: https://www.tutorialspoint.com/sublime_text/index.htm
[Accessed 23 May 2021].

Balsamiq, 2020. *Introduction to Balsamiq Wireframes for Desktop*. [Online]
Available at: <https://balsamiq.com/wireframes/desktop/docs/intro/>
[Accessed 24 May 2021].