



slington college
(इस्लिङ्टन कलेज)

Module Code & Module Title
CC4057NI Introduction to Information Systems

Assessment Weightage & Type
40% Individual Coursework

Year and Semester
2021-22 Autumn

Student Name: Utsarga K.C.

London Met ID: 21049619

College ID: np01cp4a210280

Assignment Due Date: 8th April,2022

Assignment Submission Date: 8th April,2022

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.

Table of Contents

1. Introduction	5
Introduction of the project	5
Goals and Objectives.....	5
How HTML, CSS and JavaScript were used	6
2. Discussion and Analysis	7
Selected text editor: Sublime Text	7
Tool used to develop wireframe: Balsamiq Wireframes.....	8
Home Page.....	8
Products Page	11
Blog Page	12
Research page	13
Contact Us Page.....	15
3. Testing.....	16
Test 1 - To Navigate in Image slider using the radio buttons (JavaScript)	16
Test 2 - To Check for Error message in form for invalid or empty fields (JavaScript) ..	17
Test 3 - To Check for Success message in form for valid field entries (JavaScript) ..	19
Test 4 - To Check if Cursor pointer hover effect works or not in nav bar (CSS)	21
Test 5 - To test Internal and external links (HTML)	22
4. Conclusion.....	25

Table of Figures

Figure 1:Wireframe of the home page.....	9
Figure 2: Welcome and top picks section, home page	10
Figure 3:Featured Genre section, home page.....	10
Figure 4:About Us and Footer section, home page	11
Figure 5:Wireframe of Product page	11
Figure 6:product page 1	12
Figure 7: product page 2	12
Figure 8: Wireframe of blog page.....	13
Figure 9:Blog page.....	13
Figure 10:wireframe of research page.....	14
Figure 11:Research page 1	14
Figure 12:Research page 2.....	14
Figure 13:Wireframe of Contact Us page	15
Figure 14:Contact Us page	15
Figure 15:Before clicking second radio button	17
Figure 16:After clicking second radio button	17
Figure 17:Before submission with empty and invalid fields	18
Figure 18:Before submission with empty and invalid fields	19
Figure 19:Before submission with valid field entries.....	20
Figure 20:After submission with valid field entries.....	20
Figure 21:Hover effect in nav menu	21
Figure 22:Before clicking link to product page.....	22
Figure 23:After clicking link to product page.....	23
Figure 24:Before clicking link to reference website	23
Figure 25:After clicking link to reference website	24

Table of Tables

Table 1:Table of test 1.....	16
Table 2:Table of test 2.....	18
Table 3:Table of test 3.....	19
Table 4:Table of test 4.....	21
Table 5:Table of test 5.....	22

1. Introduction

Introduction of the project

The project is about creating an e-commerce website for a store that sells various books. I have made a website for a bookstore named Book Planet. Book Planet is an online bookstore, physically situated in Kathmandu, Nepal, with an aim to create a huge community of readers in the country. The website has 5 pages that are, home page, products page, blog page, research page and contact us page. The home page contains the featured genres and few top books and an about us section. The products are all displayed in the products page where they are arranged in categories of their respective genres. The blog page is for demonstrating how technology has affected us in our daily lives. The research page contains the ideas and inspiration taken from 5 different websites. The ideas have been compared to their implementation in our website in the research page. The Contact Us page has a form and the form in the Contact Us page is used to receive message of feedback and queries from the users. The first name, last name, email of the user and their message is taken as input in our website and there is a "Send Message button" for sending the message to us. If any field is empty or email address is invalid appropriate error message is displayed and if all data entries are correct then a "Message Sent!" text is displayed.

Goals and Objectives

Book Planet is an online bookstore, physically based in Kathmandu, Nepal, with an aim to create a huge community of readers in Nepal.

So, our objective with this project was to create a simple and minimal yet effective website. The website's font and colour pallet were chosen with this aim in mind. The goal was to have a recognisable and memorable look. The theme of the website is continued all the pages.

The objectives of this project were met using HTML, CSS and JavaScript.

How HTML, CSS and JavaScript were used

The framework of the website was created using HTML. The concept of divs and basic html tags like head, body, meta, title, anchor, etc. and their different attributes were key to complete this project. The navigation bar and footer present in all pages was created using divs and list tags. The products displayed in the products page are also made using divs and all images in the website are added through img tag. Form tag is used to create the form in the contact us page.

CSS is used to decorate the website according to the theme and colour pallet of our website. Internal, external and inline CSS were used as per their requirement. It was used to position the divs and images correctly and also used in resizing of those elements. The margins and padding were defined using CSS. The custom font used in the website is also through CSS. Hover effect added in the images in products page and home page was done using hover selector in CSS in order to make the website interactive.

JavaScript was used in this website to create the image slider used in the home page and to validate the form in the Contact Us page. Internal JavaScript has been used in the image slider which has radio buttons for navigation and the images are linked to different genres in the products page. In form validation, external JavaScript is used and the data from the user is taken and its validity is checked after submission using “on submit”. The field are checked using if condition and suitable message is displayed for errors and successful entries.

2. Discussion and Analysis

Selected text editor: Sublime Text

Sublime text is one of the most famous text editors and I chose this editor due to its various features and benefits. Many people describe Sublime as their favourite text editor because of these features. So, some of the features of Sublime Text editor are discussed below;

- Syntax highlight
 - Sublime includes inbuilt support for a few dozen programming languages and will colour code components accordingly. It even has numerous colour themes. Even current mistakes will be warned in real time by the code editor.
- Auto completion
 - It suggests the appropriate tags when we type the initial letters and auto completes the code in smart ways when we press enter.
- Code Folding
 - It makes large pieces of code more compact to view by hiding parts of it.
- Customizability
 - Users can download packages and plugins for Sublime Text from GitHub, Bitbucket and PackageControl.io. The latter is Sublime's own creation where the community behind this text editor publishes plugins.
- Lightweight, Fast and Stable
 - The stability of Sublime is one of the most cited reasons as to why users stick to using it. The speed and light weight become immediately apparent as the application loads almost instantaneously. It is also very good at handling large files.
- Simultaneous editing
 - The ability to use multiple cursors at once is one of the most interesting features of Sublime. This allows users to create the same edit in multiple places.

- Minimap
 - The Minimap is very useful for getting an idea of how big your file is and it displays your current position as you scroll using the scrollbar. You can even navigate to a part of the code through the Minimap. It's a small detail but extremely useful especially for larger files.

Tool used to develop wireframe: Balsamiq Wireframes

Balsamiq Wireframes is used for prototyping and creating wireframes for your projects.

It is a low-fidelity wireframing tool which can be used to create quick visual representations of projects like websites, apps or any software interface for mobiles, web or PCs. It can be useful for communicating ideas, generating basic ideas and visualizing the project in hand in the early stages of development.

I found Balsamiq to be very simple to use and it helped me conceptualize the design of my website with its various tools. The ability to download more controls within the app was very helpful and grouping and selective editing of elements were also useful features. The sticky notes were very handy for referencing to the functionality of different elements of the website.

Home Page

The home page consists of a text area with a big and bold "Welcome to Book Planet!" message. This is displayed so that the user feels welcome and the website has a good first impression. As shown in the wireframe and the images from the webpage below, the logo of the book store and nav bar are above the message. Nav bar was created using concept of divs, <nav> tag and list tag. The top picks section consists of 4 top books their prices and names. The books have a hover effect so that the site feels interactive.

The Featured Genre section consists of 7 different genres in an image slider and each image is linked to the respective genre in products page. There are radio buttons in the image slider for navigation between the images of the genres.

The About Us section has brief description of the website about who we are and what our philosophy is. Below it is the footer section, which has the app download images, our logo and slogan in the middle, the list of our social media on the right side and copyright message at the bottom.

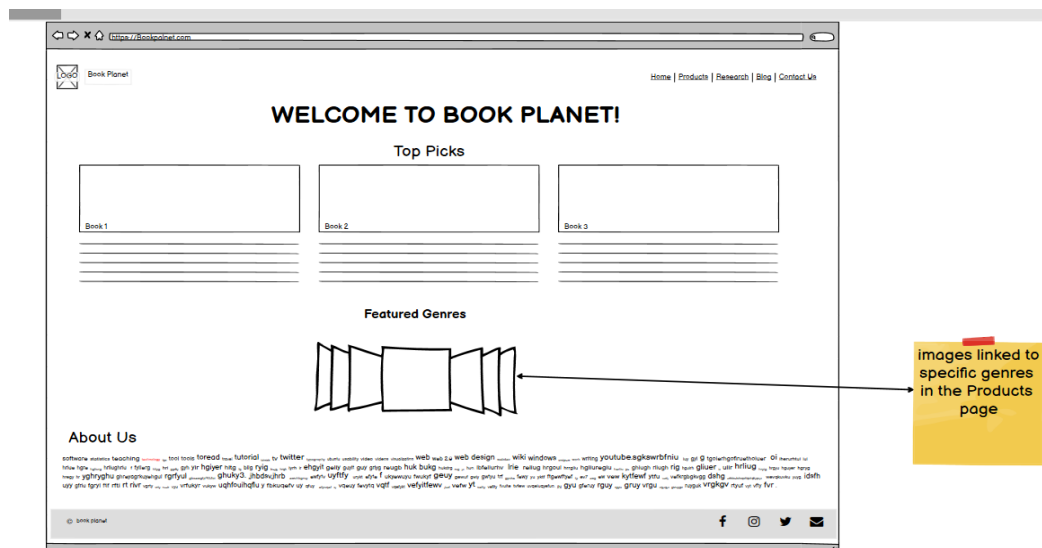


Figure 1: Wireframe of the home page

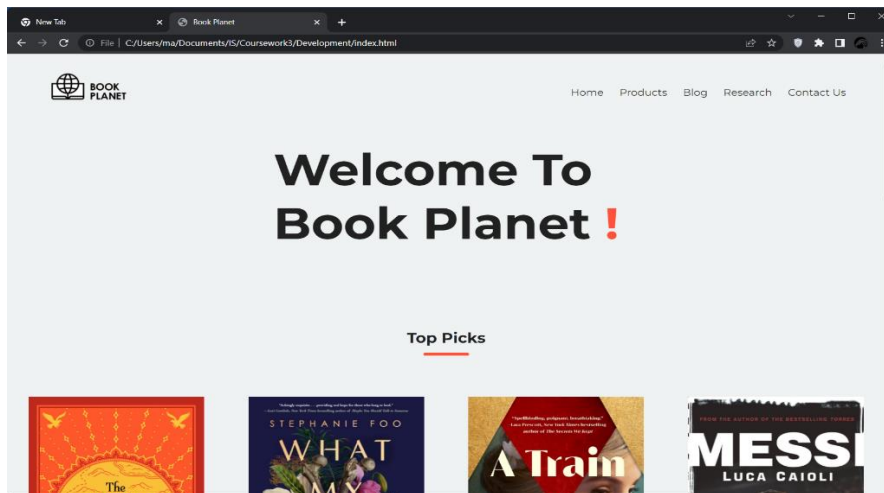


Figure 2: Welcome and top picks section, home page

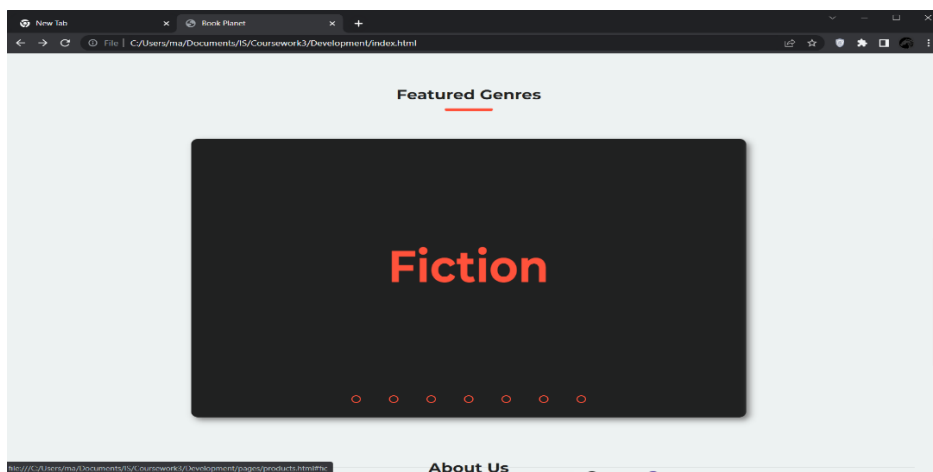


Figure 3: Featured Genre section, home page

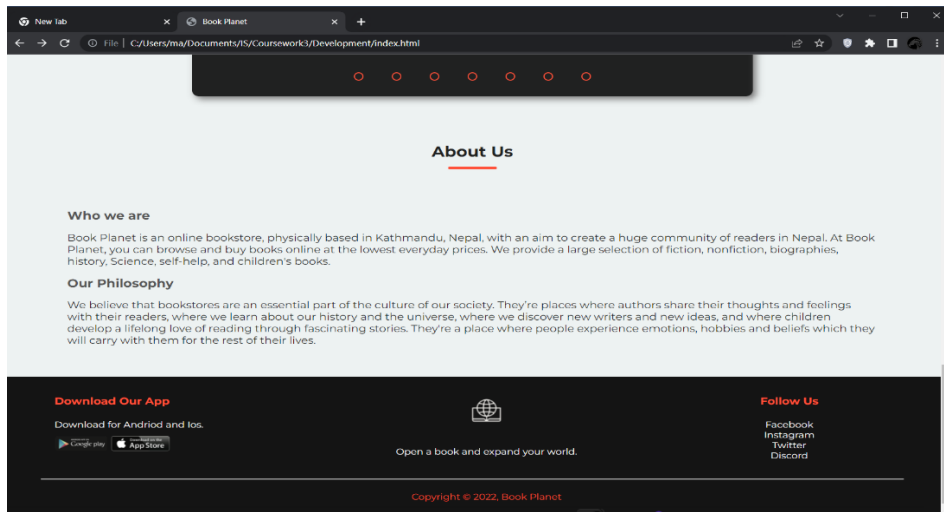


Figure 4: About Us and Footer section, home page

Products Page

The product page has all the products displayed categorized in different genres. The books are displayed with their names and prices. The books have hover effect and the book's image moves 10 pixels upwards when we hover our mouse over it.

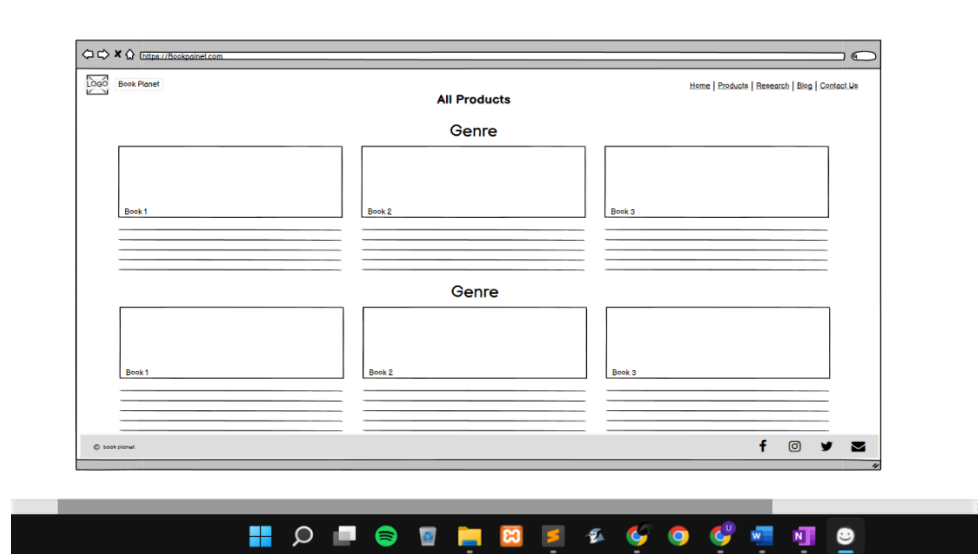


Figure 5: Wireframe of Product page



Figure 6:product page 1

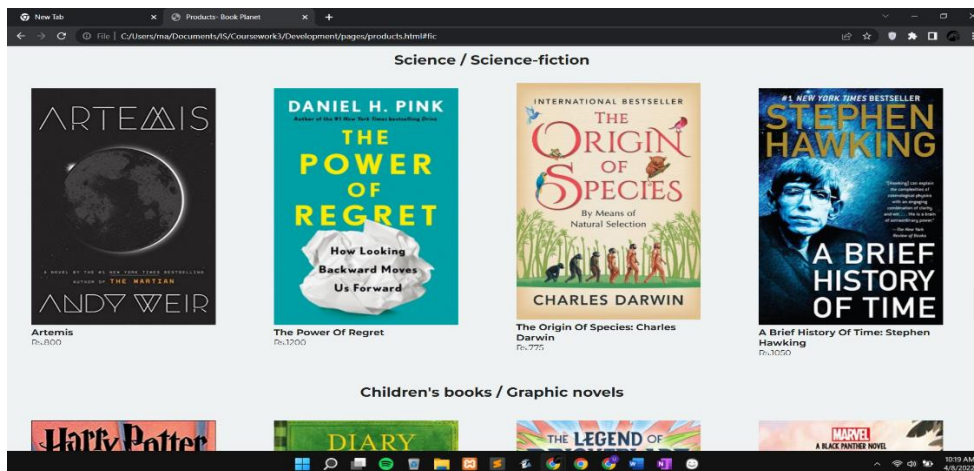


Figure 7: product page 2

Blog Page

The blog page is made to show the influence of technology in my life and the lives of people in general.

The blog has information on the influence of technology in my life, people's lives and the environment. As shown in the image below, the images are kept in a div and box shadow is used to make them look better.



Figure 8: Wireframe of blog page

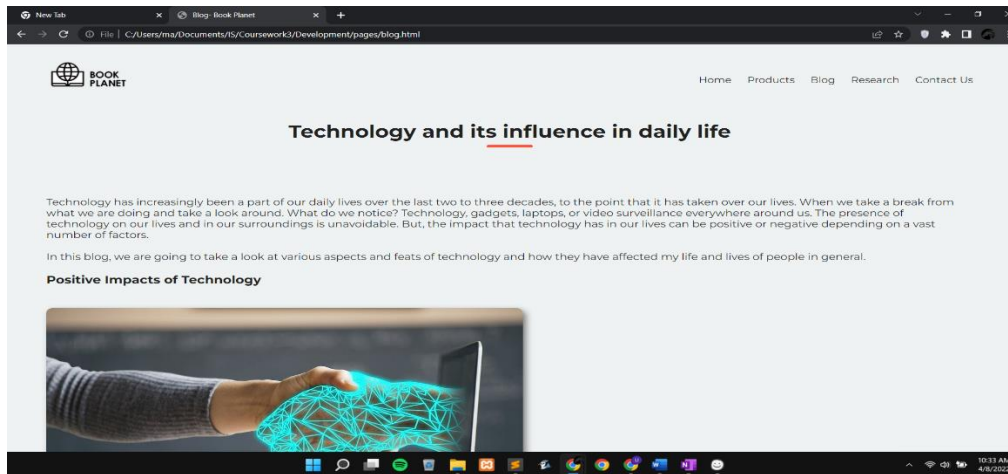


Figure 9: Blog page

Research page

This research page showcases the ideas and inspiration taken from different websites and how they were incorporated into this website. In order to develop this site, references were drawn from a variety of good websites. So, this page is dedicated to displaying and contrasting the components used on our website against the website that is investigated for research purposes.

Images have been used from our website and reference website to contrast in the research page. The images are linked to the respective websites as show in the wireframe also.

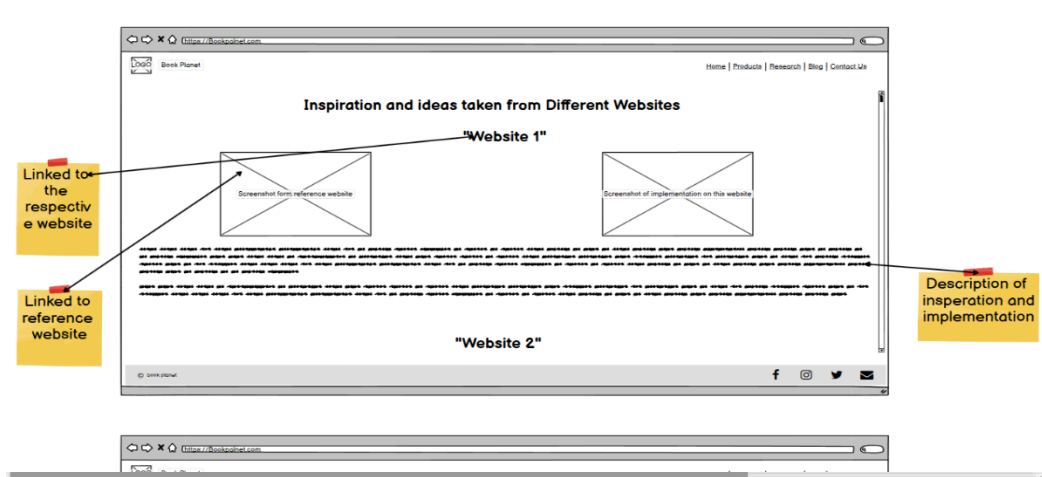


Figure 10: wireframe of research page

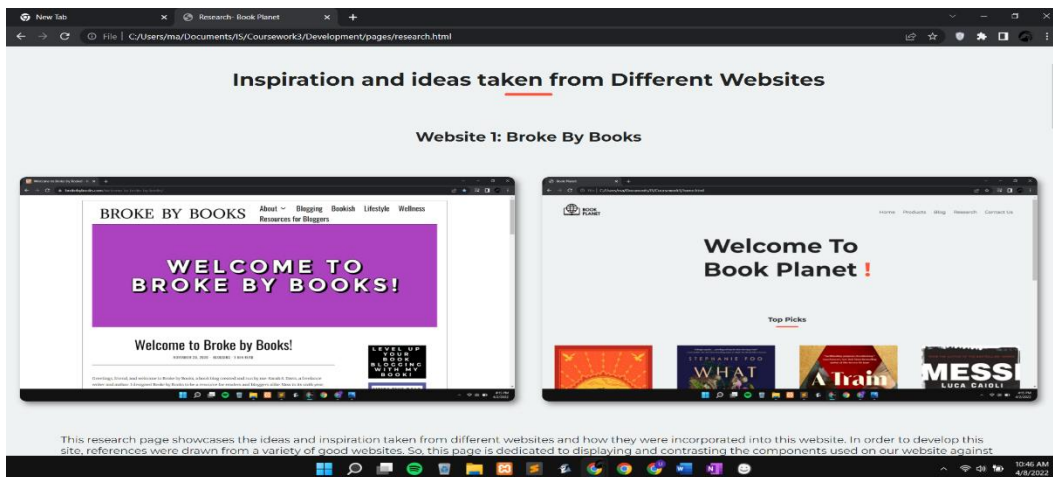


Figure 11: Research page 1

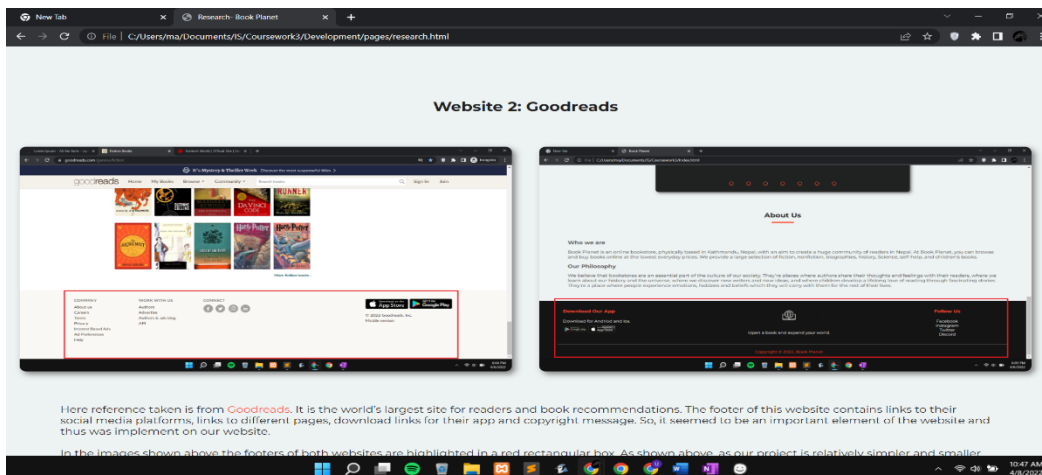


Figure 12: Research page 2

Contact Us Page

The Contact Us page has a form and the form in the Contact Us page is used to receive message of feedback and queries from the users. The first name, last name, email of the user and their message is taken as input in our website and there is a “Send Message button” for sending the message to us. If any field is empty or email address is invalid appropriate error message is displayed and if all data entries are correct then a “Message Sent!” text is displayed.

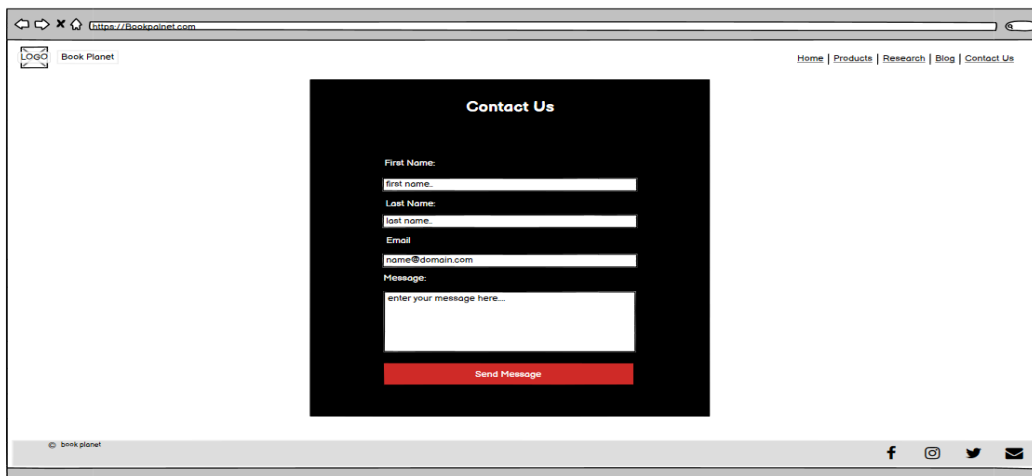


Figure 13: Wireframe of Contact Us page

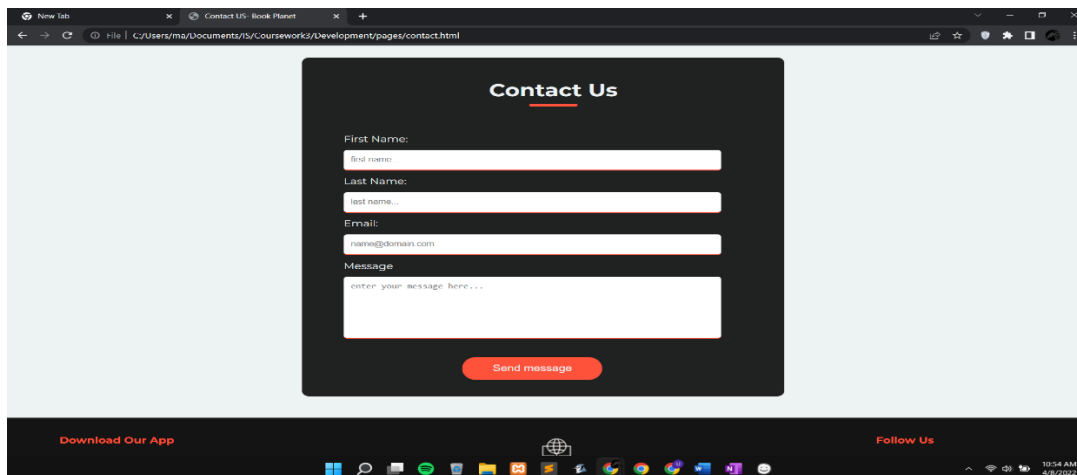


Figure 14: Contact Us page

3. Testing

Test 1 - To Navigate in Image slider using the radio buttons (JavaScript)

Test No:	1
Objective:	To Navigate in Image slider using the radio buttons (JavaScript).
Action:	<ul style="list-style-type: none">➤ In the image slider in the home page, radio buttons are made with JavaScript “<i>setInterval()</i>” to navigate between the images. So, to test the functionality radio button was pressed.➤ Here, the second radio button was pressed for testing.
Expected Result:	The second image will appear after pressing the second radio button.
Actual Result:	The second image appeared after pressing the second radio button.
Conclusion:	The test was successful.

Table 1:Table of test 1

Screenshots:

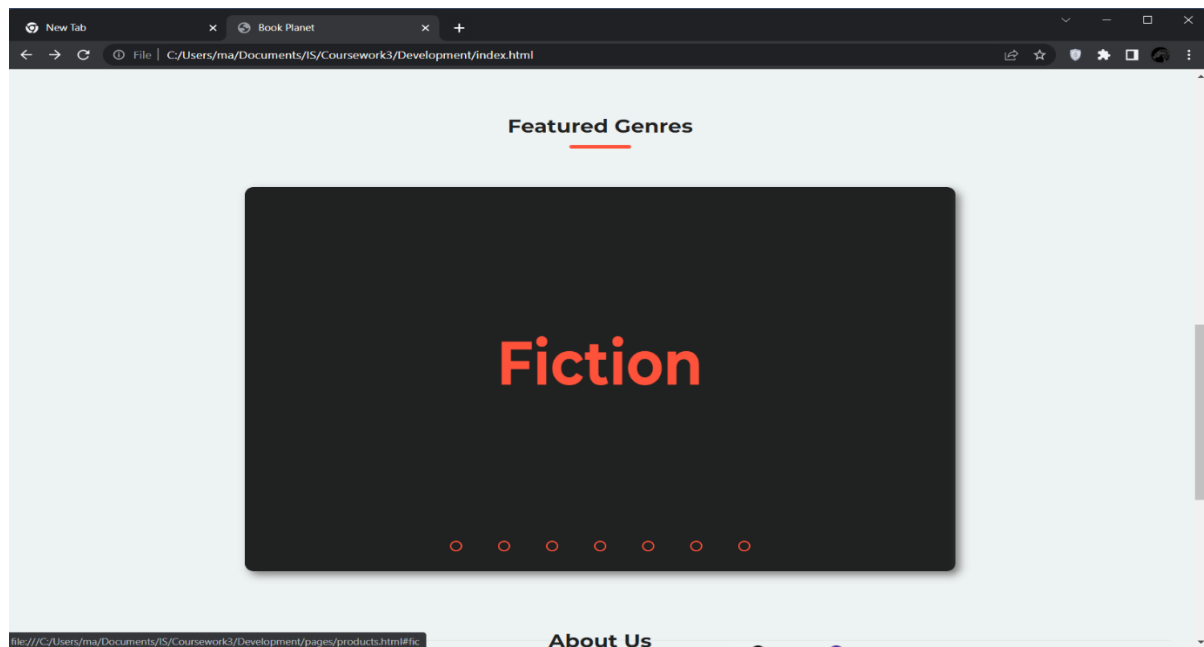


Figure 15: Before clicking second radio button

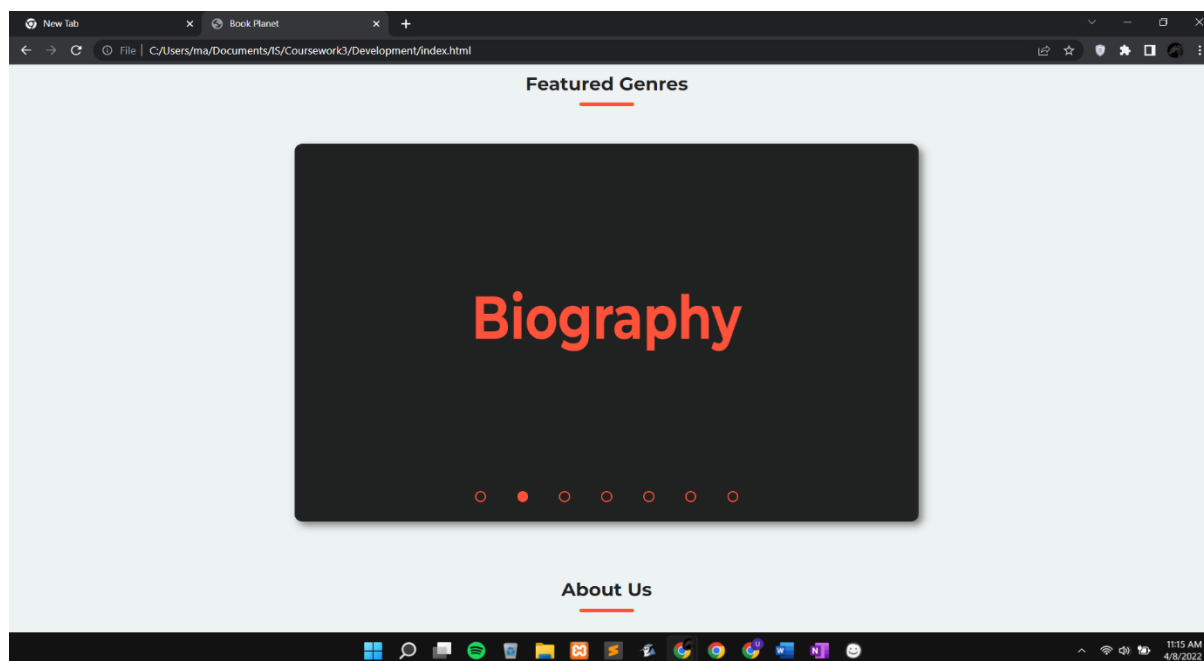


Figure 16: After clicking second radio button

Test 2 - To Check for Error message in form for invalid or empty fields (JavaScript)

Test No:	2
Objective:	To Check for Error message in form for invalid or empty fields (JavaScript)
Action:	➤ First name, last name and message fields were left empty and an invalid email address was given.
Expected Result:	The appropriate error messages will be shown.
Actual Result:	The appropriate error messages were shown.
Conclusion:	The test was successful.

Table 2: Table of test 2

Screenshots:

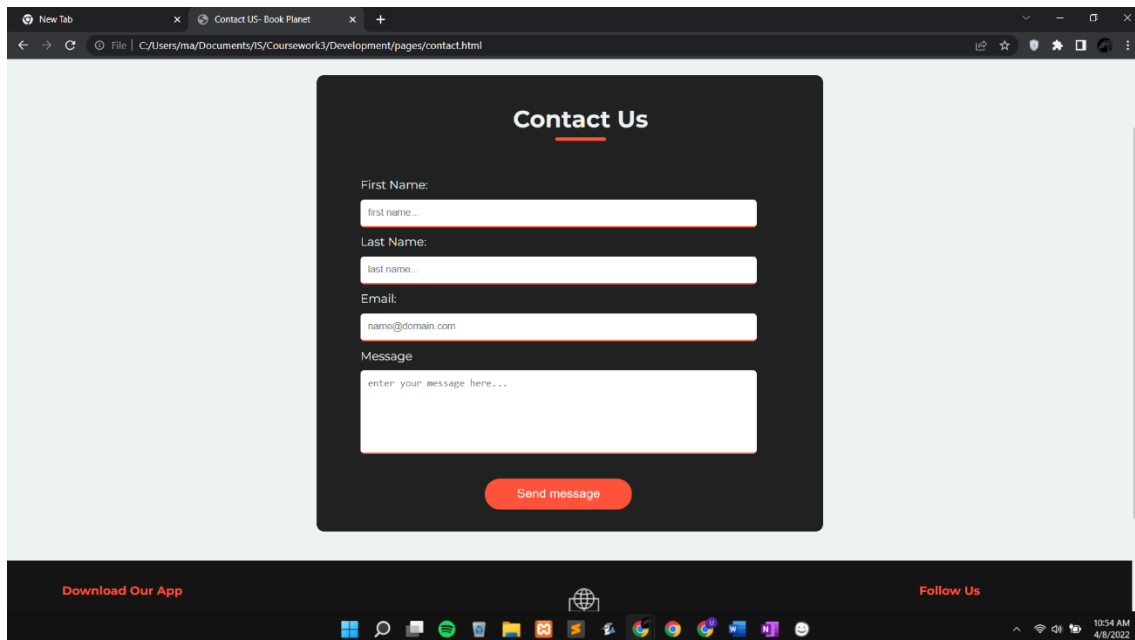


Figure 17: Before submission with empty and invalid fields

The screenshot shows a web browser window with a 'Contact Us' form. The form is titled 'Contact Us' and has four input fields: 'First Name', 'Last Name', 'Email', and 'Message'. The 'First Name' field is empty and has a red error message 'first name cannot be blank.' below it. The 'Last Name' field is empty and has a red error message 'last name cannot be blank.' below it. The 'Email' field contains the text 'name@domain.com' and has a red error message 'Invalid email address.' below it. The 'Message' field is empty and has a red error message 'Please type your message.' below it. At the bottom of the form is a red button labeled 'Send message'.

Figure 18: Before submission with empty and invalid fields

Test 3 - To Check for Success message in form for valid field entries (JavaScript)

Test No:	3
Objective:	To Check for Success message in form for valid field entries (JavaScript)
Action:	<ul style="list-style-type: none"> ➤ First name, last name and message fields were filled and a valid email address was given.
Expected Result:	The appropriate success messages will be shown.
Actual Result:	The appropriate success messages were shown.
Conclusion:	The test was successful.

Table 3: Table of test 3

Screenshots:

A screenshot of a web browser displaying a 'Contact Us' form. The form is centered on a light gray background. It has a dark gray header with the text 'Contact Us' in white. Below the header, there are four input fields: 'First Name:' with placeholder text 'first name...', 'Last Name:' with placeholder text 'last name...', 'Email:' with placeholder text 'name@domain.com', and 'Message' with placeholder text 'enter your message here...'. At the bottom of the form is a red button labeled 'Send message'. The browser's address bar shows the file path 'C:/Users/ma/Documents/IS/Coursework3/Development/pages/contact.html'. The Windows taskbar is visible at the bottom with various application icons and a system clock showing 10:54 AM on 4/8/2022.

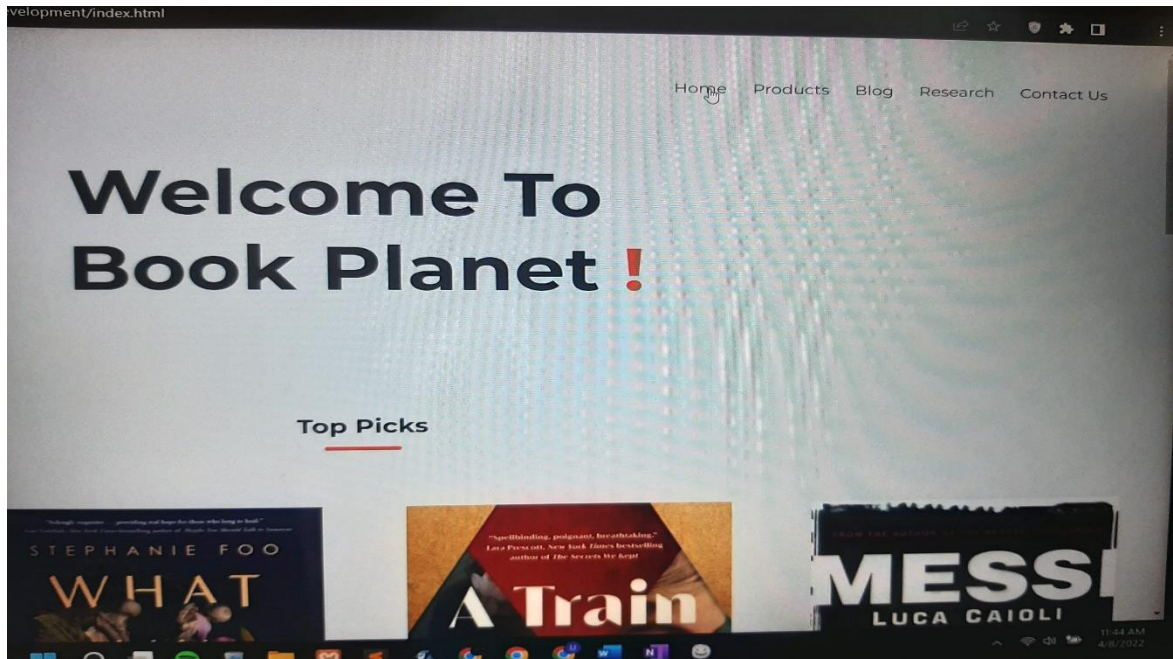
Figure 19: Before submission with valid field entries

A screenshot of the same 'Contact Us' form after submission. The input fields now contain the following text: 'First Name:' is 'utsarga', 'Last Name:' is 'kc', 'Email:' is 'kcutsarga77@gmail.com', and 'Message' is 'hi I wanted to ask if you have sales or not?'. The red 'Send message' button is now disabled and has the text 'Message Sent!' below it. The browser's address bar and Windows taskbar are the same as in the previous screenshot, with the system clock now showing 11:35 AM on 4/8/2022.

Figure 20: After submission with valid field entries

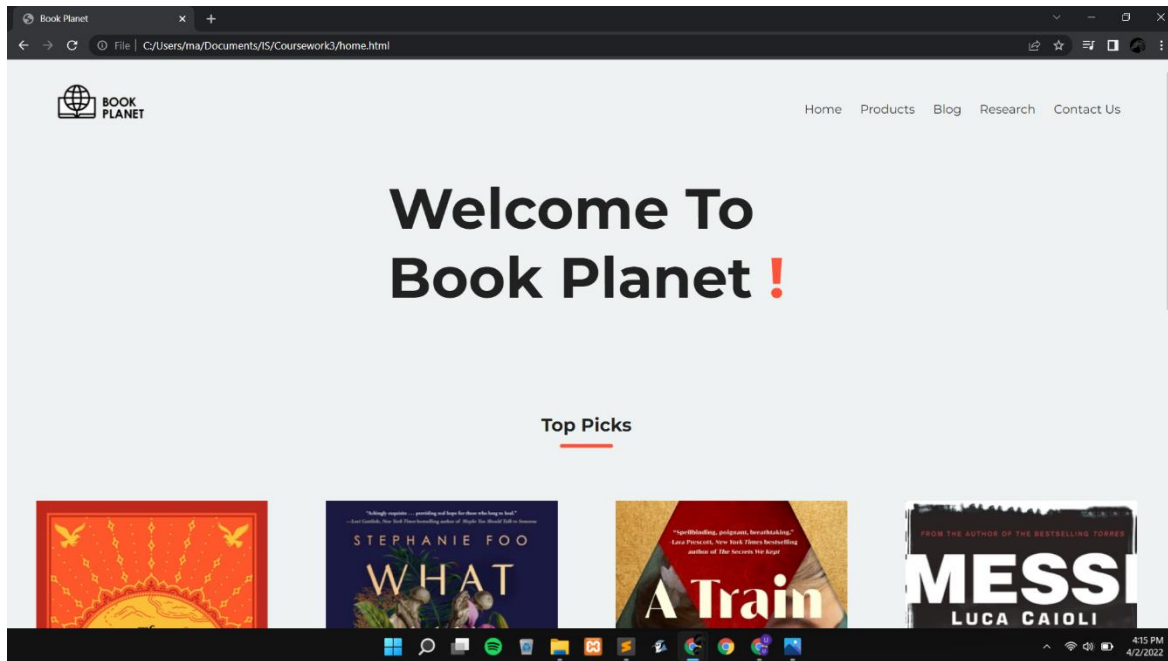
Test 4 - To Check if Cursor pointer hover effect works or not in nav bar (CSS)

Test No:	4
Objective:	To check if cursor pointer hover effect works or not in nav bar (CSS)
Action:	➤ The mouse was hovered over a page header in the nav bar.
Expected Result:	The cursor pointer effect will be shown.
Actual Result:	The cursor pointer effect was shown.
Conclusion:	The test was successful.

*Table 4:Table of test 4***Screenshots:***Figure 21:Hover effect in nav menu*

Test 5 - To test Internal and external links (HTML)

Test No:	5
Objective:	To test Internal and external links (HTML)
Action:	<ul style="list-style-type: none"> ➤ The products page option was clicked in nav bar from home page to test internal link. ➤ The image of first reference website was clicked in research page to test external link.
Expected Result:	The links will direct the users to desired pages.
Actual Result:	The links directed us to desired pages.
Conclusion:	The test was successful.

*Table 5: Table of test 5***Screenshots:***Figure 22: Before clicking link to product page*

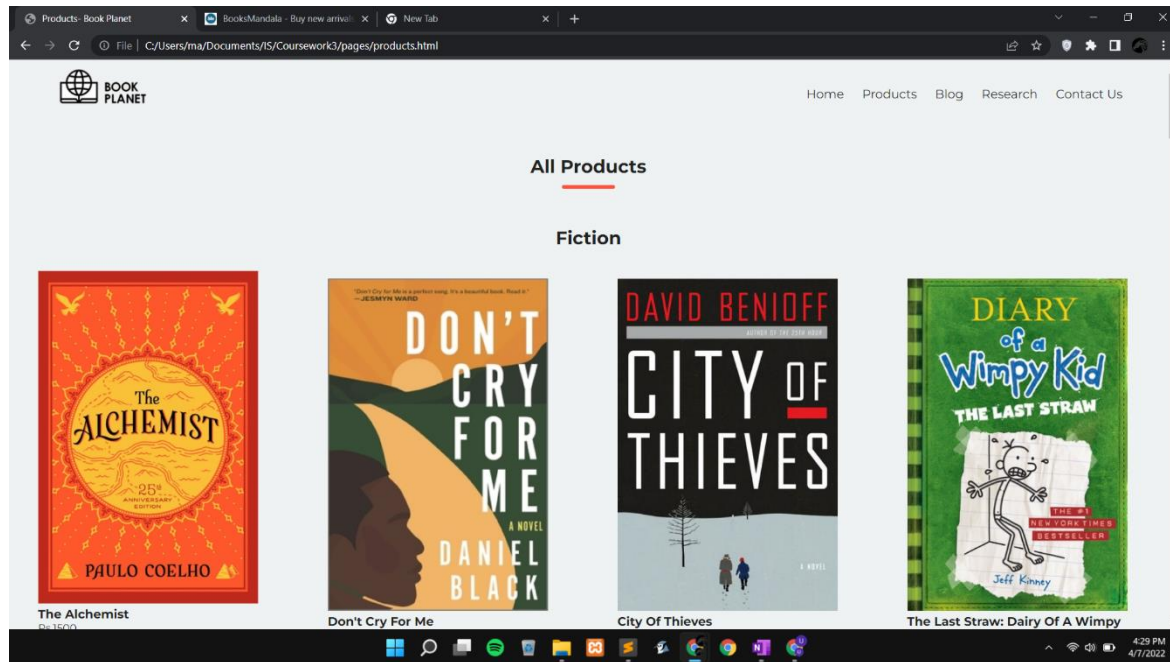


Figure 23:After clicking link to product page

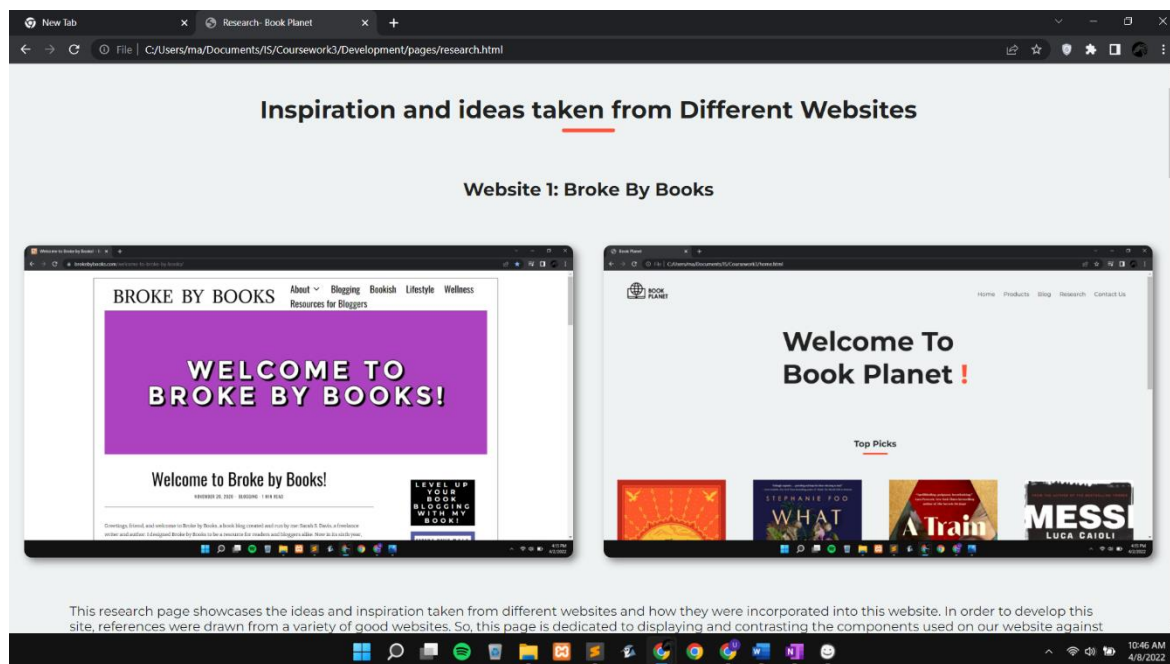


Figure 24:Before clicking link to reference website

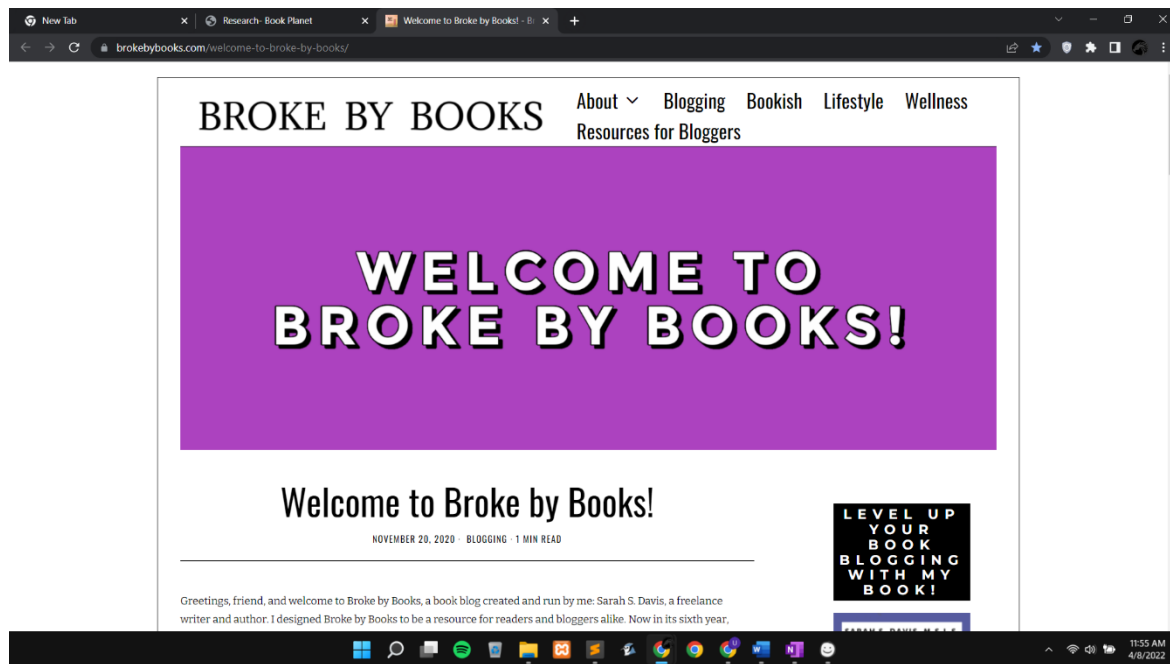


Figure 25:After clicking link to reference website

4. Conclusion

From this project I learnt how to develop a good website using HTML, CSS and JavaScript. I learn the role of all three components in creating a good looking, well structured and interactive website. My understanding of the basics of making a website using these three components has become better and I also got the opportunity to learn newer concepts while doing the research for other websites and tried implementing them in my own project.

The project also helped me get familiar to the text editing software. I learnt new things about Sublime such as its simultaneous editing using multiple cursors and proper use of the Minimap. Along with that, I feel more comfortable using the concepts I knew before.

Through this coursework, I learnt how to make wireframes for our websites. And this process helped me visualize the design and basic functionality of my website in the early stages. I found Balsamiq wireframes to be simple to use and quick for developing a good visual representation of the project.

I learnt how to make custom fonts for the website and got some brief knowledge about the concepts of colour coordination. I learnt how proper file hierarchy is maintained and to give links to pages, images and JS or CSS files in other folders. The concept of form validation became much clearer to me while doing this project and I learnt new ways to display error and success messages in the form. I also learnt different ways of achieving a hover effect using cursor property and hover selector.

To sum up, this was an interesting and enriching project to do as it broadened my horizons on the concepts of web development. I got familiar to the tools used in web development, the process of doing research and finally developing a website. Despite the fact that my work isn't perfect and I still have a lot to learn, I'm happy to have completed this project because it was a genuinely enjoyable and fruitful experience.