



Module Code & Module Title

CC4057NT Introduction to Information System

Assessment Weightage & Type

30% Individual Coursework

Year and Semester

2019-20 Autumn

Student Name: Kushal Shrestha

London Met ID: 19031673

College ID: NP05CP4A190072

Assignment Due Date: 17 Jan, 2020

Assignment Submission Date: 17 Jan, 2020

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. World Wide Web	1
1.2. HTML	2
1.3. CSS	3
1.4. JavaScript	3
1.5 Goal and Objective	4
2. Wireframes	5
1.1. Wireframe of home page	5
2.2. Wireframe of CV page	6
2.3. Wireframe of Blog page	8
2.4. Wireframe of Research page	9
2.5. Wireframe of Contact page	10
3. Testing	11
3.1. Test No 1	11
3.2. Test No 2	12
3.3. Test No 3	14
3.4. Test No 4	15
3.5. Test No 5	17
4. Conclusion	19
Bibliography	21

Table of figure

Figure 1 Wireframe of Home Page.....	5
Figure 2 Home page.....	6
Figure 3 Wireframe of CV page.....	6
Figure 4 CV page	7
Figure 5 Wireframe of Blog page.....	8
Figure 6 Blog page	8
Figure 7 Wireframe of Research page	9
Figure 8 Research page.....	9
Figure 9 Wireframe of About page	10
Figure 10 Contact page.....	10
Figure 11 Testing of home page to next page.....	11
Figure 12 Next page of the navigation bar	12
Figure 13 Testing of video play	13
Figure 14 After the video is played.....	13
Figure 15 Testing of link.....	14
Figure 16 After the link is clicked.....	15
Figure 17 Before testing hover	16
Figure 18 After testing hover	16
Figure 19 Before testing the pop of feature	17
Figure 20 After testing the pop up feature	18

Table of Table

Table 1 Testing of navigation bar	11
Table 2 Testing of video	12
Table 3 Testing of link	14
Table 4 Testing of hover effect.....	15
Table 5 Testing of pop up feature.....	17

COURESEWORK-3

1. Introduction

A website is a set of related web pages located under a single domain name. Similarly, a computer connected to the internet that maintains the series of web pages on World Wide Web. In order to build a website we mainly need internet access, World Wide Web which is the subset of internet and technologies such as HTML, CSS and JavaScript. The combination of all the above technologies should come together to form a website. Firstly Internet should be accessed where Internet is a global computer network which provides different information and also provides communication facilities, consisting of interconnected networks. Before creating a website we should have the knowledge of computer languages such as HTML, CSS and JavaScript where HTML is a Hyper Text Mark-up language which gives structure of webpage whereas CSS is a Cascading Style Sheets that enhances the basics structure by providing different varieties of style and formatting in markup language likewise JavaScript is an object oriented language which is commonly used for creating interactive effects with in web browser.

1.1. World Wide Web

World Wide Web is defined as an internet-based system which connects shares information and allows communicating around the world however; it is not exactly Internet but a subset of the internet. It is a part of internet which is in HTML format and has access via HTTP. It is most commonly known by its short name “The Web”, the web page can also be created with any text editor or word processor. Tim Berners-lee was the inventor of the Web who was an English scientist for sharing research information on nuclear physics and this is the fastest growing part of internet. Several businesses are using their Web sites to advertise job opportunities, publicity and for the purpose of their marketing and so on. (Deitel & Deitel, 2016) The best part of the Web is that we are able to gain knowledge on any particular subject within the comfort of our home.

1.2. HTML

HTML stands for Hyper Text Mark-up Language. HTML is a standardized form of language used for designing documents which will be later on displayed on a web browser. Similarly, it uses a variety of tags and attributes to make a web document in a structural way. HTML is the combination of hypertext and mark-up language which link between the web pages where hypertext stands for the text displayed on a computer's display which can easily be accessed, whereas mark-up language means a language used in computer which uses tags to define elements within a document. HTML is a simple mark-up language and easy to use for creating website. It also helps in developing fundamental about web programming. The best feature of it is that images, videos, along with audio can be added to a website. The first version of HTML was HTML 1.0 which was created by Tim Berners lee in 1991 with the years by years it was upgraded from HTML1.0 to the latest version HTML5. (Bangia, 2013)

The basic structure of HTML document is

```
<!DOCTYPE html>
```

```
<html>
```

```
<head>
```

```
    <title></title>
```

```
</head>
```

```
<body>
```

```
</body>
```

```
</html>
```

Where `<!DOCTYPE>` is an instruction to the web browser about what version of HTML the page is written in, `<html></html>` tag indicate start and end of HTML document, `<head></head>` tag contains the information about the web, `<title></title>` tag contains the web page title, `<body></body>` tag contain the content of web page.

1.3. CSS

CSS is a text-based coding language which describes the style of a HTML document that is written in markup language and it is designed to enable the separation of document content from the presentation of document. CSS stands for Cascading Style Sheets. CSS controls the multiple elements which are displayed on web pages together in same the same time. CSS gives a design to the document of a HTML page and it makes changes differently according to the screen size of the computer. CSS has a maximum capacity of saving the works also stores external style sheets in CSS file.

On October 10, 1994, CSS was first introduced by Hakon Wium lie, the chief technical officer of Opera Software Company and was also working with Tim Berners-Lee at that time. (Deitel & Deitel, 2016) The main merits of CSS is that if the changes are made it can control several areas at the same time with one command line. Only few line of code can create and change a website efficiently by a web designer as they don't have to change each page whereas many difficulties are faced by the developers and web browser due to the different level of CSS where one type of CSS is enough. CSS is lacking in the case of security as it is an open-text based system which does not protect it from being overridden and anyone can make access to the CSS file and make changes.

1.4. JavaScript

JavaScript is a programming language that runs on the user's machine which is commonly used in web development. It is used for further improvement if HTML pages and it does not require to be compiled. It minimizes the time required for execution of the program as it does not require for connection to the server. JavaScript can change HTML (CSS) style and can hide and show HTML elements. JavaScript and Java are not similar language yet they are the trade mark of Oracle in the U.S and other countries but their syntax, semantic and uses differ from each other.

The developer of JavaScript was Brendan Eich in 1995, which was first appeared in a popular browser of that time called Netscape. The original name of the language was LiveScript but later on renamed as JavaScript. JavaScript is annually updated by Ecma

international. JavaScript is used everywhere in the web because it is very fast, relatively simple to learn, implement and also can be run immediately within the client-side browser. There are many resources to learn JavaScript and it is possible to develop entire JavaScript app from front to back by only using JavaScript. The main demerit of JavaScript is that in some cases the code executes on users' computer can be exploited for malicious purposes. The interpretation of JavaScript is differently by different browser furthermore server-side script will often produce the same output and also client side cannot be predicted. (Larson, 2019)

1.5 Goal and Objective

The main goal and objective of website is to provide quality content on a web page. The goal of the website is to make good portfolio which gets regularly updated with new information about the content of the website. The agenda of this website is to make people easier to reach personal, professional and technical information about me through the portfolio and also to get easily in touch with me for providing them the service they are seeking for. Therefore, the web page is for providing the knowledge that I have acquired throughout the research so that it can be helpful for the readers. The intention of the portfolio website is for getting known by the overall world what I knowledge and skills I have and how can I serve them with the same skills and knowledge in an efficient way for that I have included different information about me such as Curriculum vitae, blog and contact so that it will be easy to get accessed, where curriculum vitae hold all my personal and professional details similarly blog included all the researches I have done and have been working on whereas contact contains a form to be filled and my contact details like E-mail address, phone number so on.

2. Wireframes

Wireframe is a planning of a site's structure and functionality in which lines and vertices are represented and an image or set of images which displays the functional element of website. It important design tool with black and white line drawing used in web development. Wireframe is used by developers to make simple virtual design. (Yoo)

1.1. Wireframe of home page

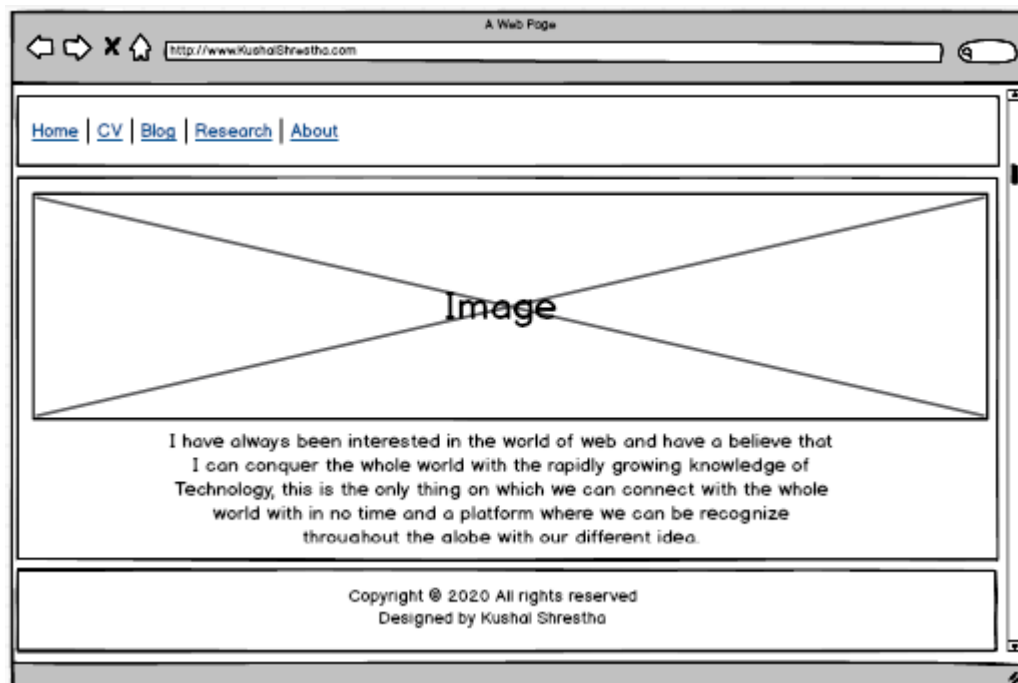


Figure 1 Wireframe of Home Page

In the above figure, it describe about the home page of the website which includes a navigation bar on the top with five section (i.e. home, CV, Blog, Research, About), image at the centre, text below the image and footer at the bottom.

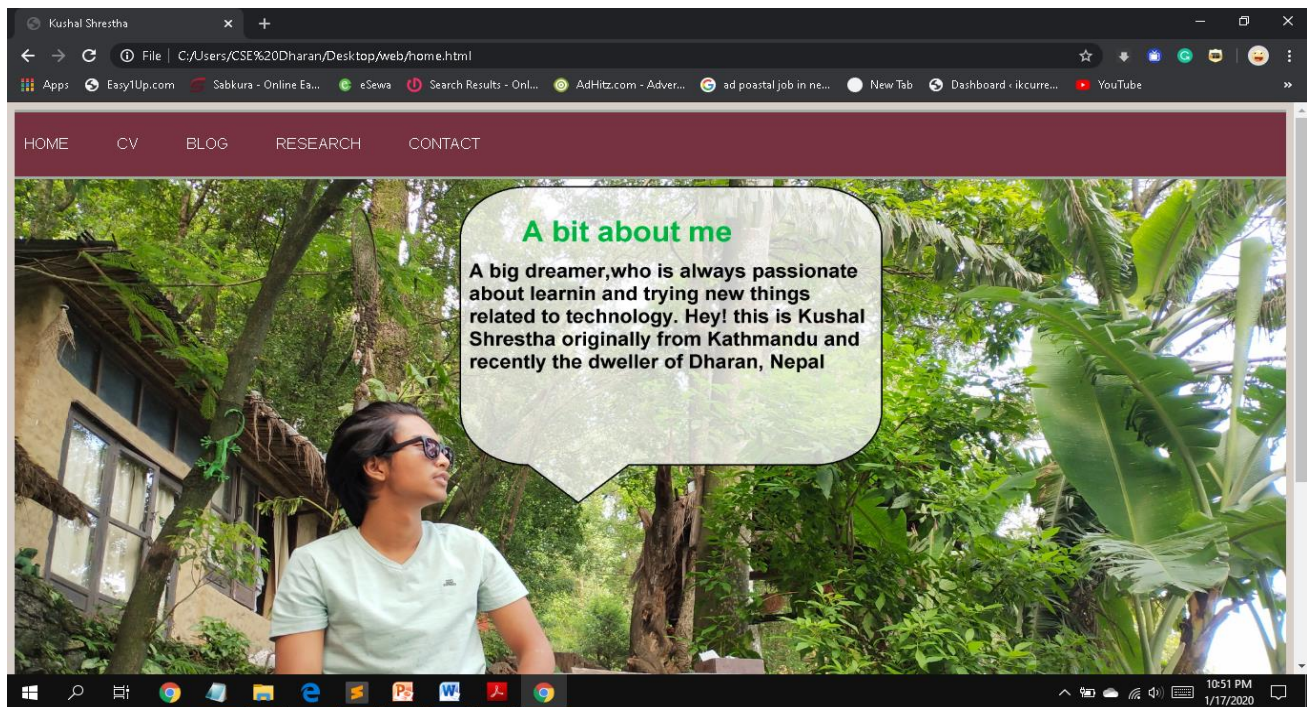


Figure 2 Home page

2.2. Wireframe of CV page

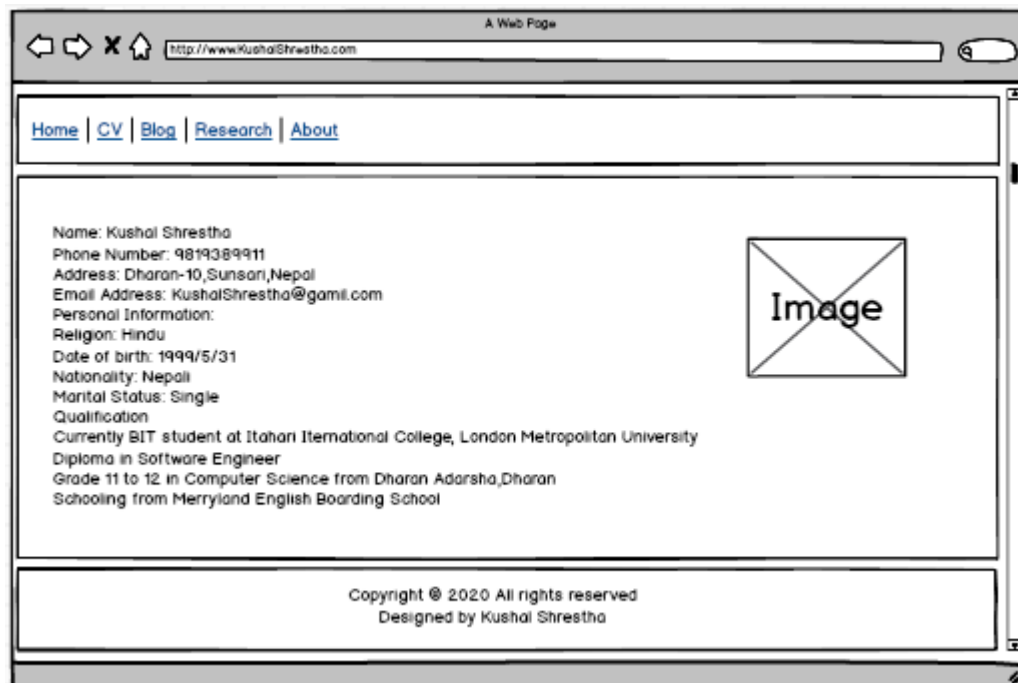


Figure 3 Wireframe of CV page

In the above figure, it describe about the CV part of the portfolio where all the personal, professional and technical details are mention with a small password size image on the right hand side of the page.

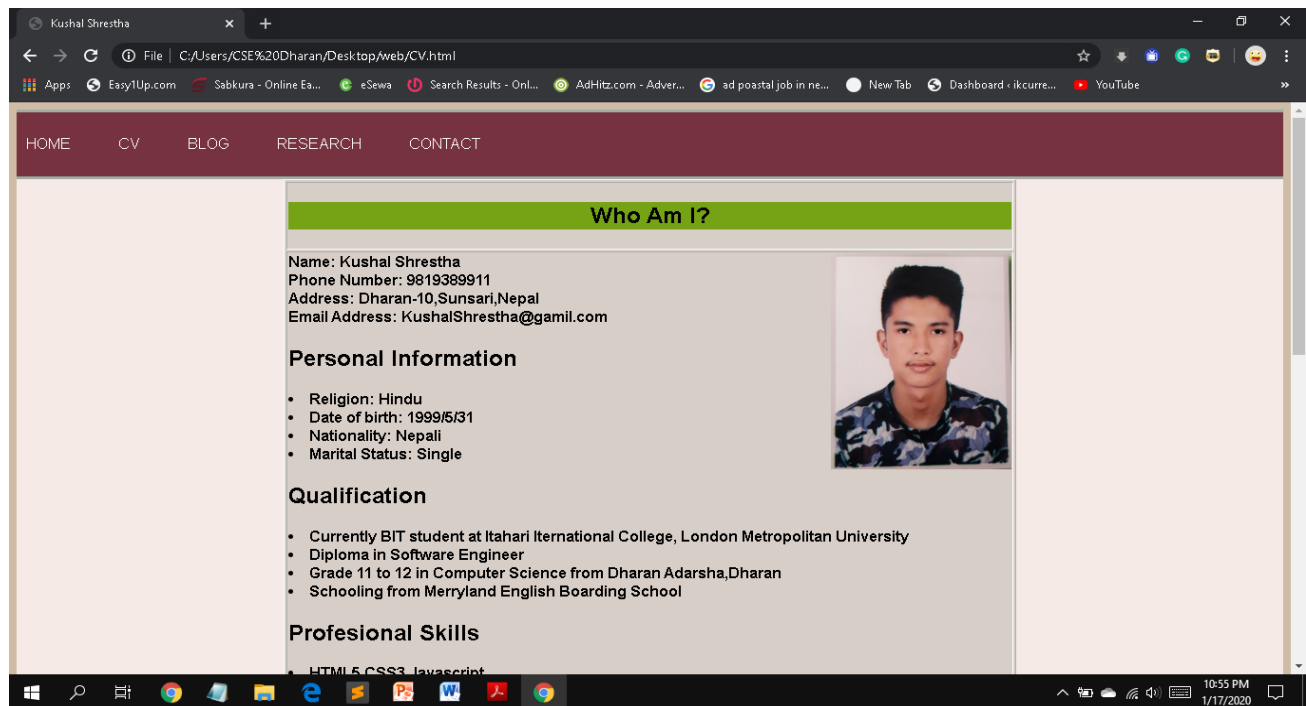


Figure 4 CV page

2.3. Wireframe of Blog page

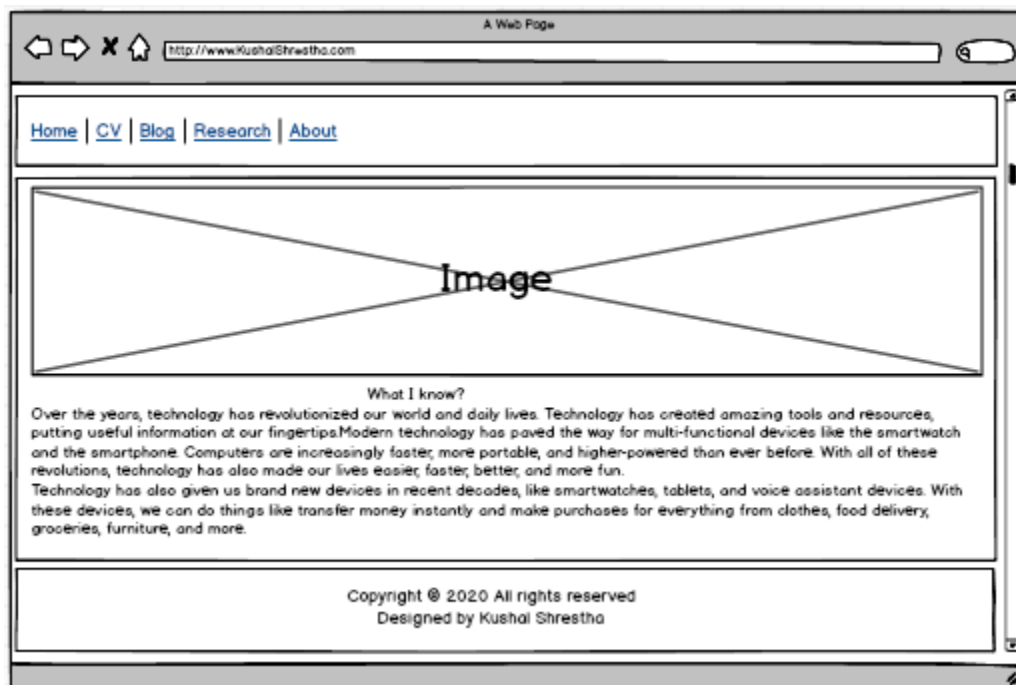


Figure 5 Wireframe of Blog page

In the above figure, it describes about the Blog section of the portfolio where there is an image on the centre covering the both side and text about the information of the research.

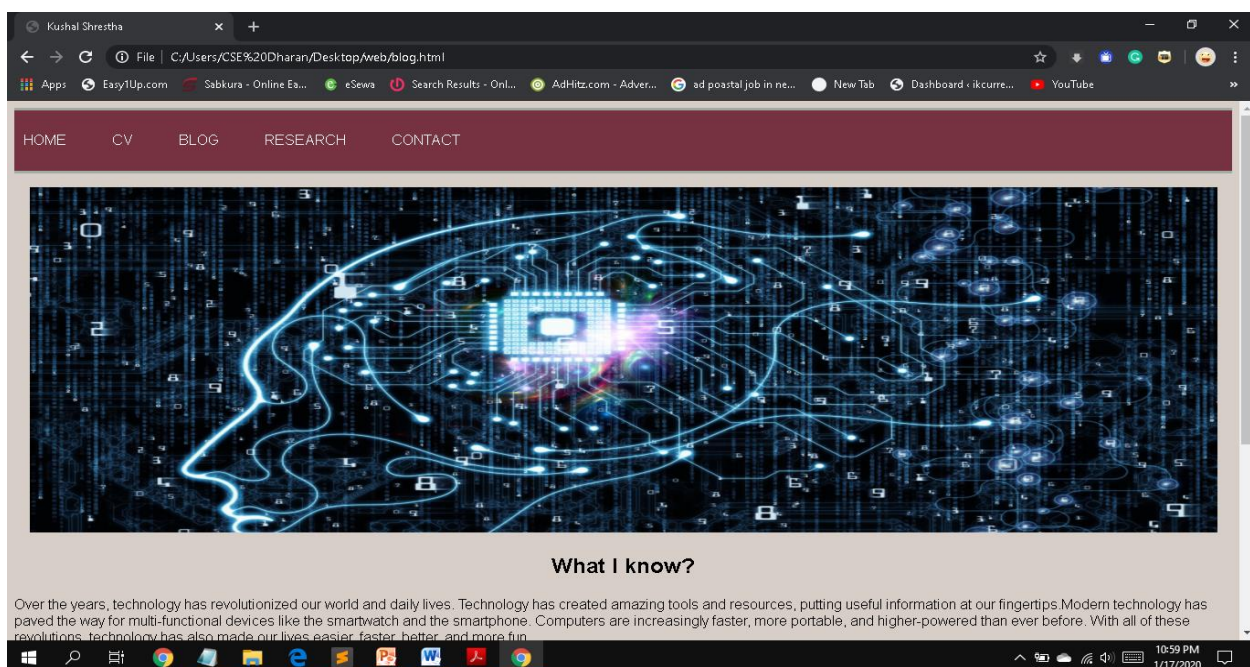


Figure 6 Blog page

2.4. Wireframe of Research page

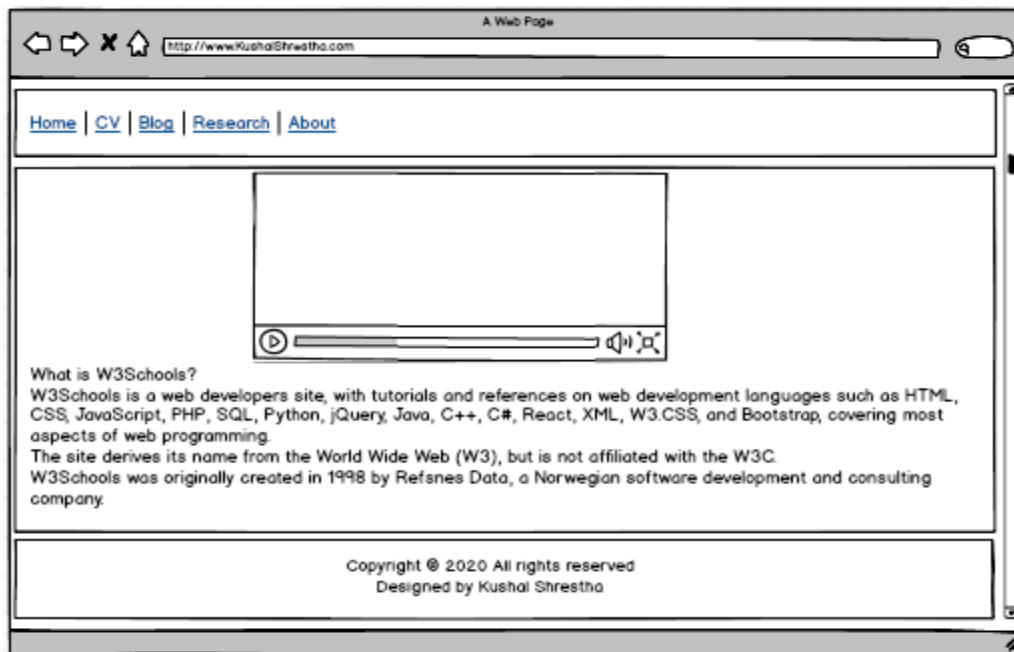


Figure 7 Wireframe of Research page

In the above figure, it describes about the Research section of the website which includes a video and photo that is aligned at the centre with text under that which gives reference of the research.

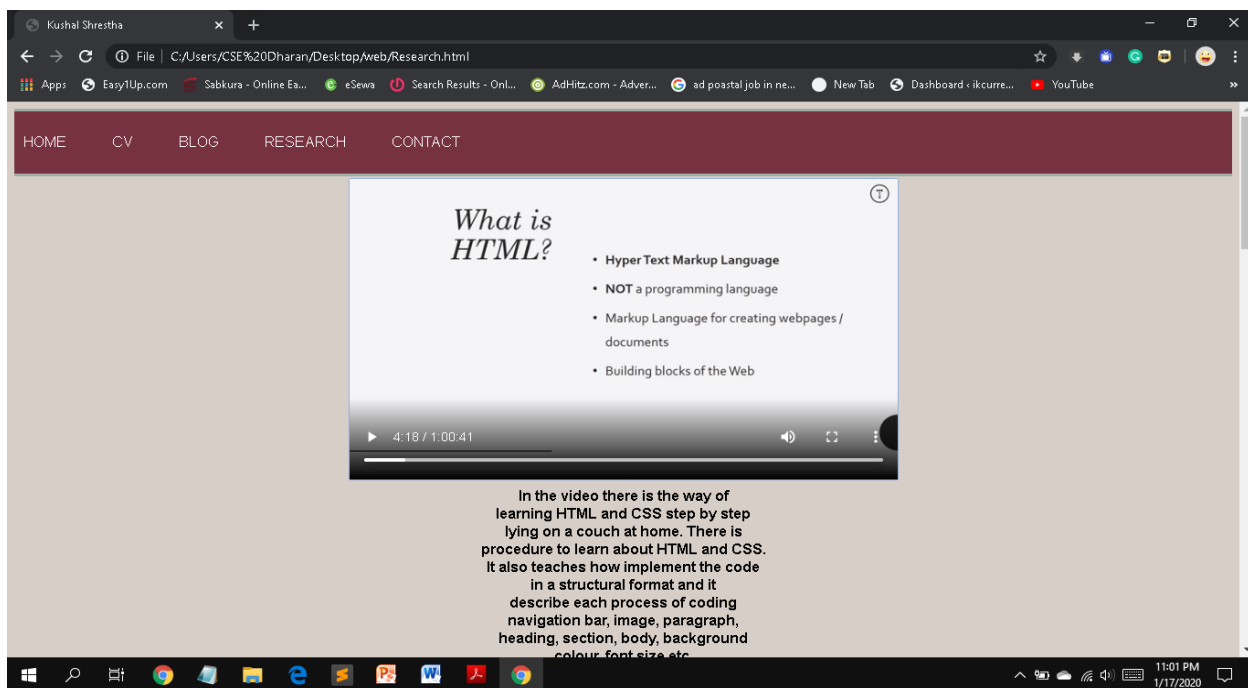


Figure 8 Research page

2.5. Wireframe of Contact page

A wireframe of a web browser window titled "A Web Page" with the URL "http://www.KushalShrestha.com". The browser's address bar shows the URL. The page has a navigation bar with links: [Home](#), [CV](#), [Blog](#), [Research](#), and [About](#). The main content area features a "Get In Touch" form with the following fields: "Name" (text input), "Email Address" (text input), and "Message" (text area). Below the fields is a "Submit" button. The footer contains the text: "Copyright © 2020 All rights reserved Designed by Kushal Shrestha".

Figure 9 Wireframe of About page

In the last figure of the wireframe, it provides a form with contact details to be in touch.

A screenshot of a web browser window showing a contact page. The browser's address bar shows the file path "C:/Users/CSE%20Dharan/Desktop/web/Contact.html". The page has a navigation bar with links: [HOME](#), [CV](#), [BLOG](#), [RESEARCH](#), and [CONTACT](#). The main content area features a "Get In Touch" form with the following fields: "First Name" (text input), "Last Name" (text input), "Email Address" (text input), "Password" (text input), and "Gender" (radio buttons for Male, Female, and Other). The form is set against a dark purple background.

Figure 10 Contact page

3. Testing

3.1. Test No 1

To test the navigation bar link to go next page

Objective	To test the navigation bar link to go next page.
Action	When we click the navigation bar link, next page of the website is open.
Expected Result	The next page of the navigation bar should be open.
Actual Result	The next page is opened.
Conclusion	The test no 1 is unsuccessful.

Table 1 Testing of navigation bar

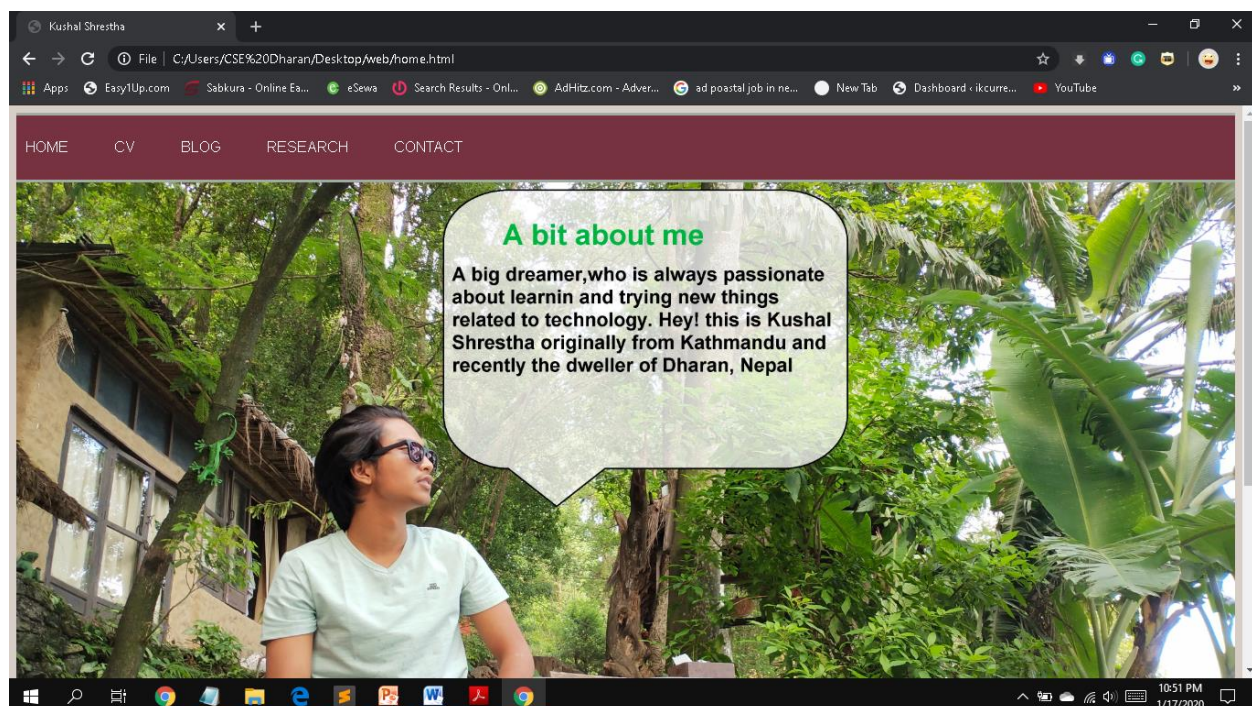


Figure 11 Testing of home page to next page

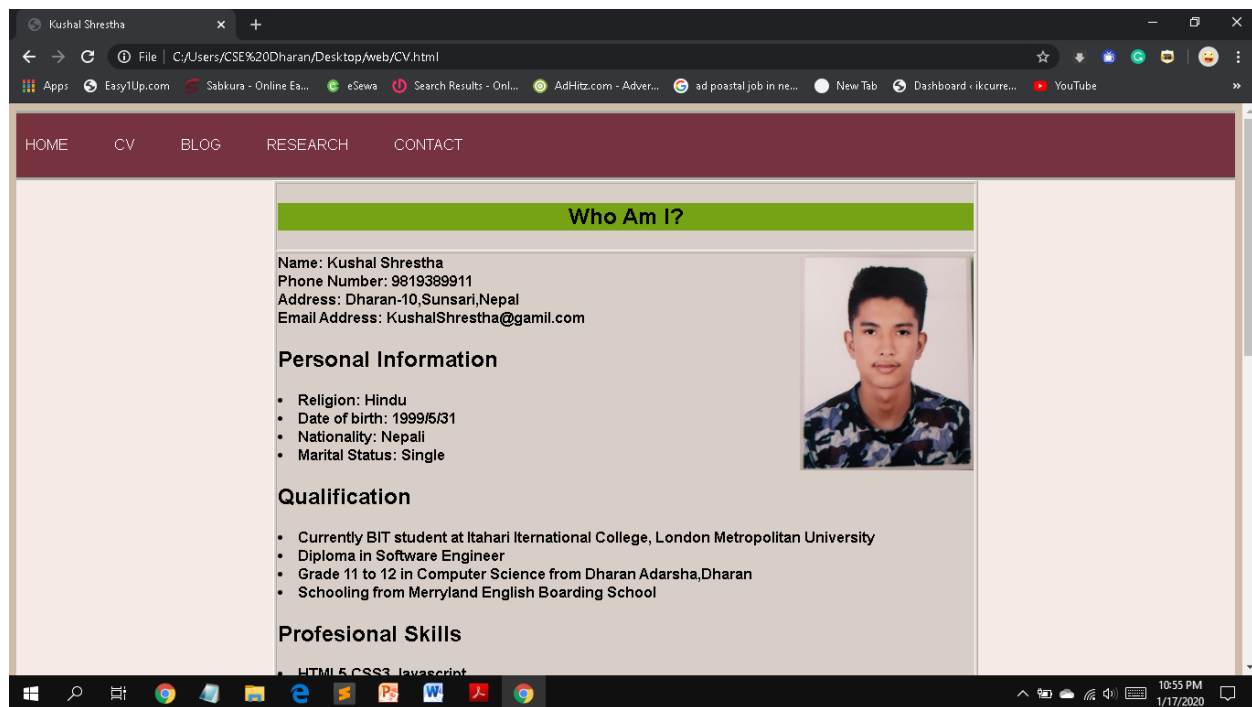


Figure 12 Next page of the navigation bar

3.2. Test No 2

To test the video

Objective	To test the video
Action	The video is played when we click the play button.
Expected Result	The video should be played.
Actual Result	The video is played.
Conclusion	The test no 2 is unsuccessful.

Table 2 Testing of video

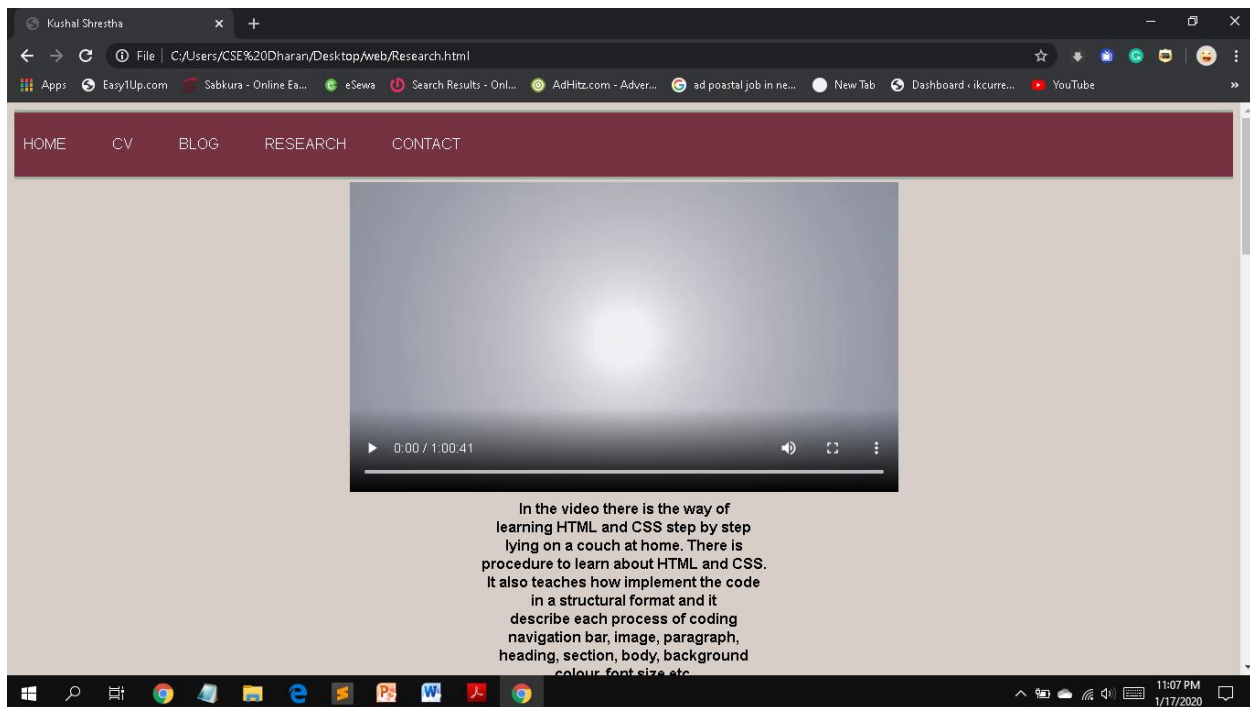


Figure 13 Testing of video play

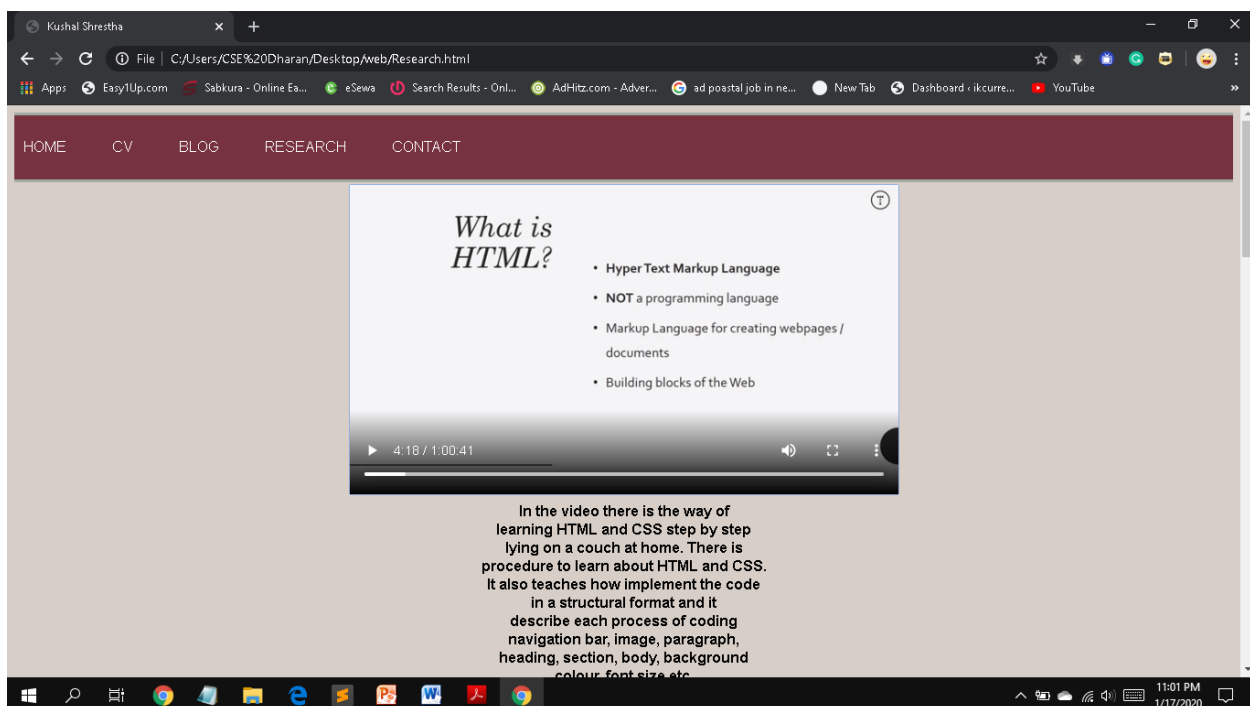


Figure 14 After the video is played

3.3. Test No 3

To test the given link is working

Objective	To test the given link is working.
Action	When we click the link, it should be open in the same page.
Expected Result	The link should be opened when we click the link.
Actual Result	The link is opened.
Conclusion	The test no 3 is unsuccessful.

Table 3 Testing of link

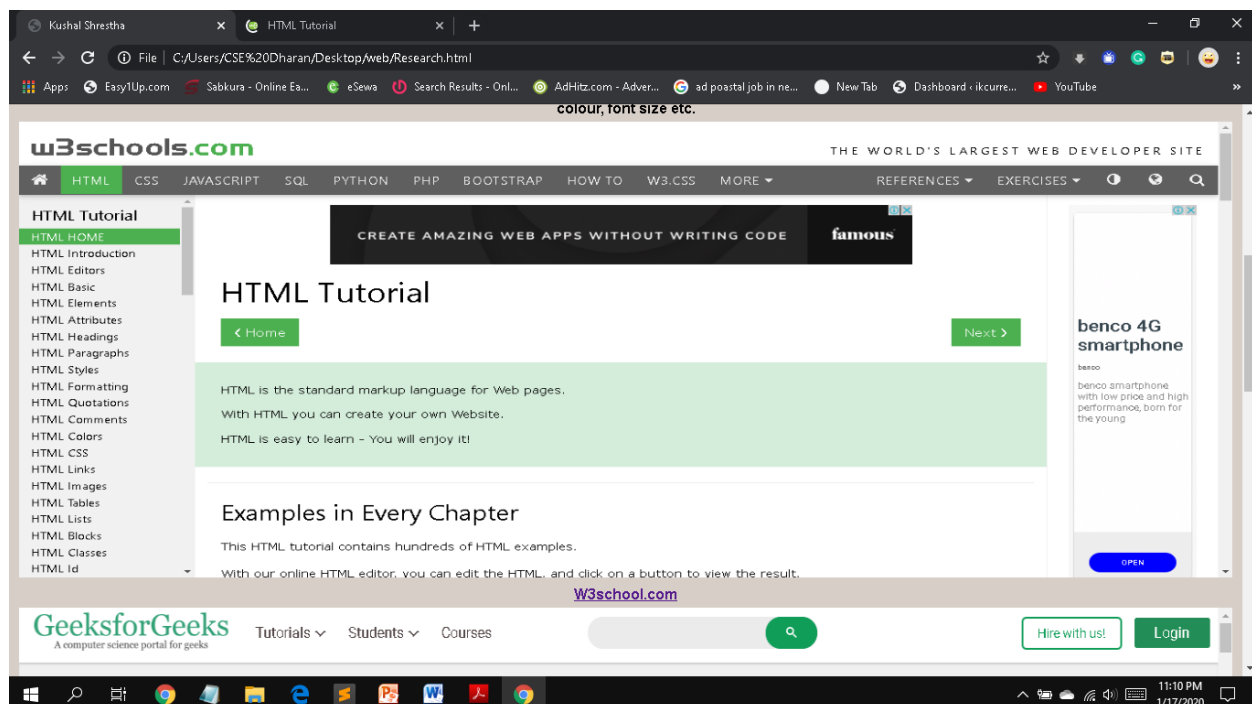


Figure 15 Testing of link

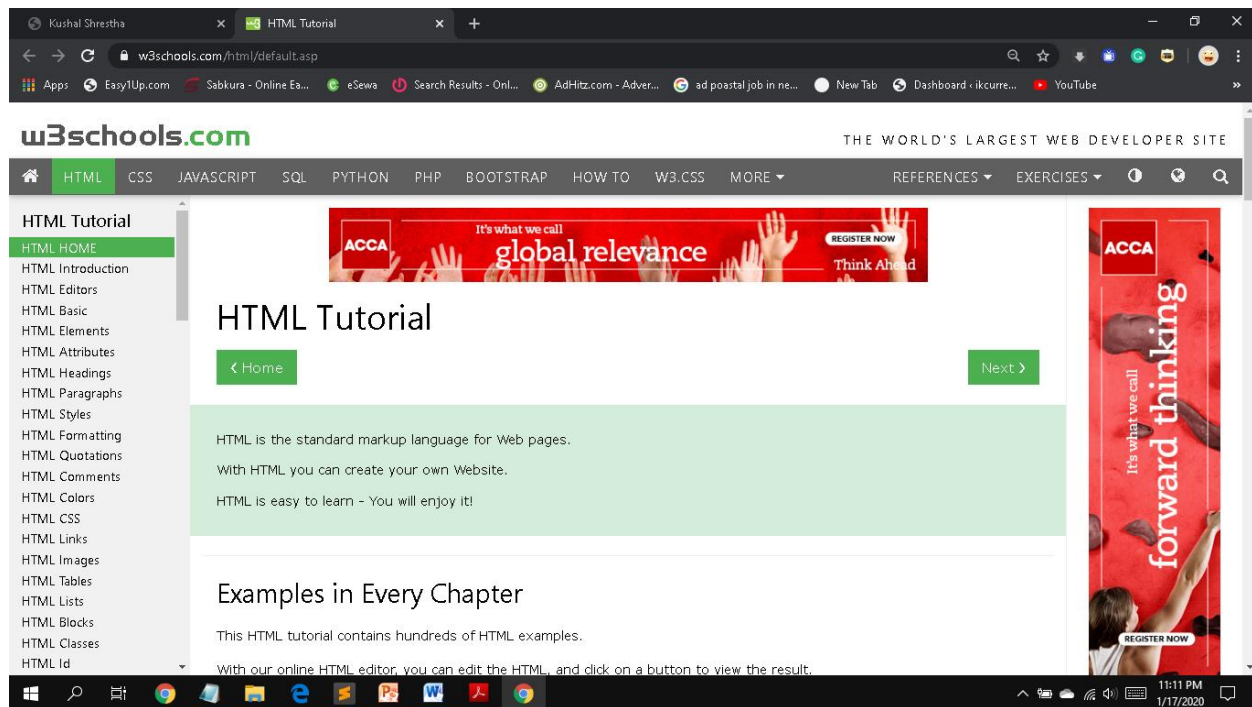


Figure 16 After the link is clicked

3.4. Test No 4

To test the hover effect in navigation bar

Objective	To test the hover effect in navigation bar.
Action	When we click the navigation bar hover effect is observed with the colour in the box size.
Expected Result	The hover effect should be seen in navigation bar.
Actual Result	The hover effect is seen in the navigation bar.
Conclusion	The test no 4 is unsuccessful.

Table 4 Testing of hover effect

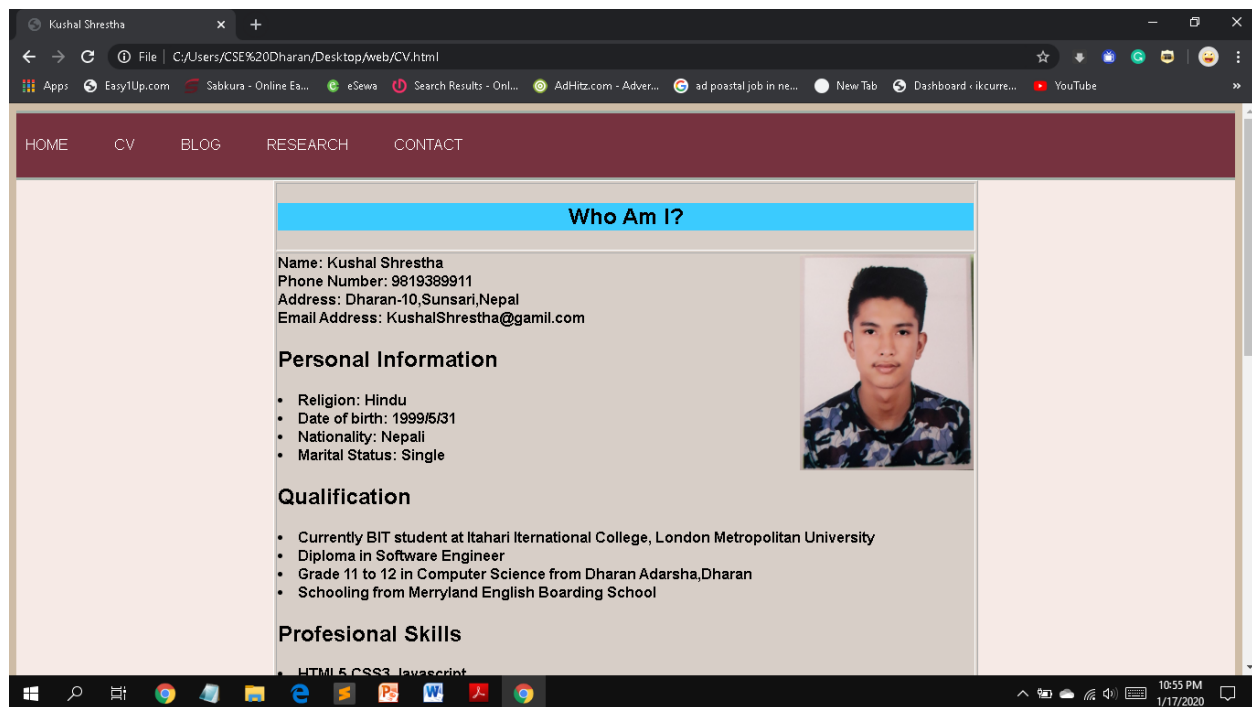


Figure 17 Before testing hover

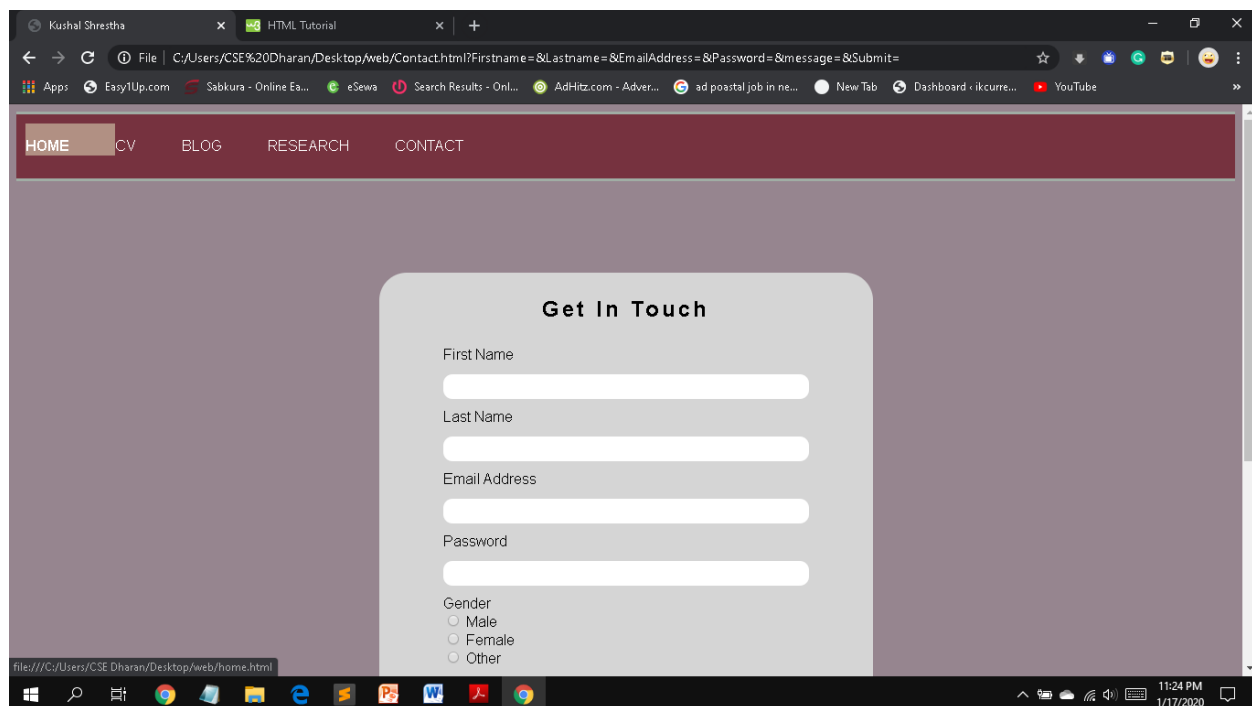


Figure 18 After testing hover

3.5. Test No 5

To test the popup feature

Objective	To test the pop up feature.
Action	The pop up feature should be seen at the top when the user will not enter the data i.e. first name, last name, Email Address, password and gender.
Expected Result	The pop up feature should be seen at the top of the page when the form is filled.
Actual Result	The pop of feature is seen at the top of the feature.
Conclusion	The test no 5 is unsuccessful.

Table 5 Testing of pop up feature

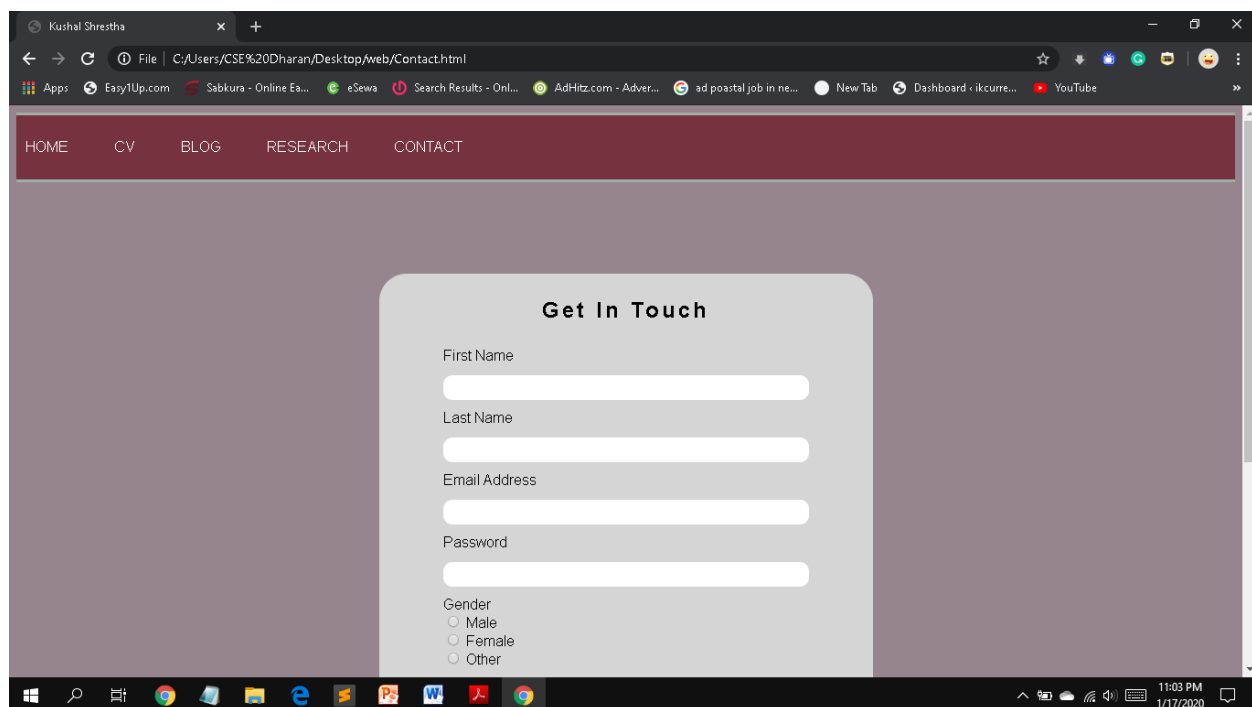


Figure 19 Before testing the pop of feature

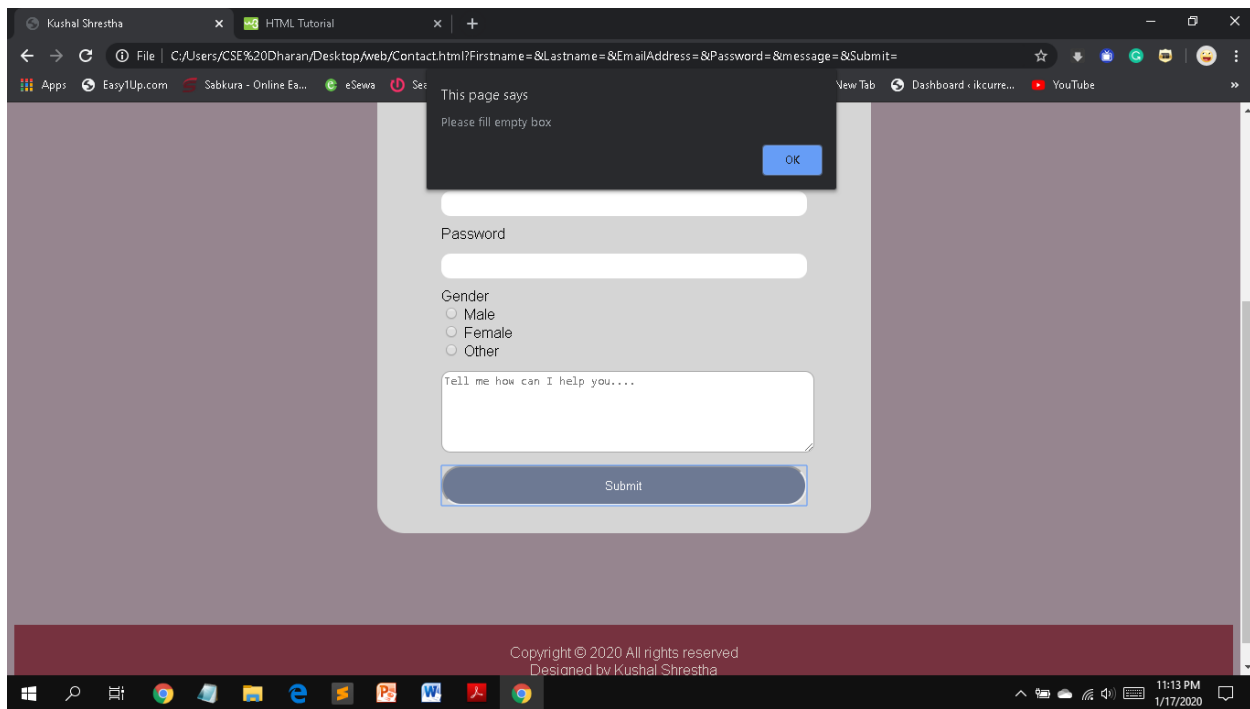


Figure 20 After testing the pop up feature

4. Conclusion

This report presents a short introduction to website and provides knowledge about the components used for building a website. Here in this report there is detailed introduction of WWW, HTML, CSS, JavaScript and Wireframe where we got the knowledge about how a website is developed with the help of HTML, CSS and JavaScript. In order to build the website we should be aware about the uses of HTML, where HTML is Hyper Text Mark-up Language used for designing a web document that will be displayed on a web browser later on, whereas Cascading Style Sheets (CSS) is markup language which describes the style of HTML document and JavaScript is programming language that runs on the user's machine.

In the project different tags, attributes and comment are used for making HTML document. Uses of different tags such as table, div, Meta, image, video, link and form etc. were used to make the HTML document look systematic and formal whereas comment helps to describes about the tags. While preparing the project the codes were well-structured in order to make reader easy to go through the code. In the project navigation bar on the top was inserted where five different pages were divided that were Home, CV, Blog, Research, Contact and footer at the bottom part of the page. In the home page there is image which include my small introduction on it and below that there is my definition about technology. Coming to CV part of the page which include all my personal, professional and technical details whereas in blog part of the page there is a picture related to technology and certain research, fact about the world of web. The research part of the page includes some videos, image and links which are related with HTML, CSS and JavaScript. Finally coming to the last part of the page which is contact that includes a form that should be filled in and contact details to get in touch or to ask quires.

During the project CSS was often used for styling purpose and designing the HTML document differently. There were the used of three different CSS such as external, internal and inline in which external CSS was used to keep style sheets in a separate file likewise internal CSS was used to define between the head tag whereas inline style was used to attach a specific element. It was very helpful to give a design to a

webpage. Due the help of JavaScript it made a creative impact on the web page by creating a pop up feature which made it quite attractive. Before implementing the structure directly on the HTML we made several wireframe in order to make a sample virtual design which was very helpful. The wireframe was a design tool with black and white line drawing used in developing the web. The five different testing was done in the project. The first testing was to test the navigation bar, which should open the next page of the website. The second testing was to the test the video, which should play the video. The third testing was to test the link, which should open the link. The fourth test was to test the hover effect, which should change the colour and last test was to test the pop up feature which should see at the top of the page when the form is empty.

Overall, the uses of different aspects of website were very help full for creating the final website.

Bibliography

Bangia, R. (2013). Learning HTML. In R. Bangia, *Learning HTML*. New Delhi: Khana Book Publishing Co. Ltd.

Deitel, P., & Deitel, H. (2016). Internet & World Wide Web. In P. Deitel, & H. Deitel, *Internet & World Wide Web*. Noida : Pearson India Education Service Pvt Ltd.

Larson, Q. (2019, 09 18). *FreecodeCamp*. Retrieved from FreecodeCamp:
<https://guide.freecodecamp.org/javascript/advantages-and-disadvantages-of-javascript/>

Yoo, F. (n.d.). *Invisionapp*. Retrieved from Invisionapp:
<https://www.invisionapp.com/inside-design/how-to-wireframe/>