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1. INTRODUCTION

1.1 Introduction

This report is about the static website which has been created as our third coursework for the course Information System. The website to be created is a static portfolio website in which there has been 5 different web pages created. The web pages that have been created are, home page, the portfolio page, the blog page, the research page and lastly the form page called Contact US. The website is required to be created using three different tools, HTML, CSS and JavaScript.

The tool HTML (Hyper Text Markup Language) is the standard language that is used in the creation of a webpage. HTML is considered as the skeleton of a webpage as it mainly focuses on structuring the page. However, HTML is not a programming language and only a markup language which is used for the process of structuring and unlike codes used in programming, in HTML tags are used which describe the elements inserted within the tags.

The second tool used is called CSS (Cascading Style Sheet). This tool is a simple language which is used to make the webpage that is created more presentable. Thus, CSS is a tool that helps in the customization of a webpage. With the use of CSS, a developer has control over the text colour, font type, sections in the page, column scale, background image or colour, layout pattern, display sizes and various other features. (tutorialspoint, 2006)

The last tool that is used is called JavaScript, this is a lightweight programming language which is used to make the webpage interactive. However, JavaScript is not related to the programming language JAVA. JavaScript is widely used by web

developers around the globe since it is the only programming language which is suitable for web browsers but still not all browsers support JavaScript.
(hackreactor, 2018)

1.2 Goals and Objectives

Moving on to the goals and objectives of this coursework, the website that was needed to be created should be having at least 5 different pages which had to include different types of tags such as meta, tables, div, form, etc. The three different types of CSS, external, internal and inline. External and internal JavaScript are also in to be included and one of the pages should include a form which had to be validated so that users could fill the form, the form should also give an alert pop-up if any of the fields in the form were left empty or inputs typed incorrectly when submitting.

The different pages that have been created were mentioned earlier in the introduction, now, the 5 different pages can be viewed below with their descriptions;

1.2.1 Home

This is the first page that was needed to be created, which then becomes our home page. Since this page becomes the first page of the website, this page therefore gives the first look of how the website is. Here in the page a navigation bar is present just below the title of the website/page. As this page is the home page of the website, there have been given short description of the other pages of website. The page has been created using different HTML tags like <meta> <title> <div> <table> <header> <style> <footer> and many more. These tags have been used in the creation of the rest of the pages too. There has been included an image slider which presents different images for a certain period of time regarding the topic the website

has been created for. This image slider has been created using JavaScript, `<script>` and image tag ``. After the image slider section comes a small paragraph of text regarding technology which has been written inside a division that was created using the `<div>` tag. After the short paragraph is visible 4 different division that were also created by the `<div>` tag and by adding certain specifications for it such as float and margin. At the end of the page lies the footer section which is similar to the navigation bar.

1.2.2 Portfolio

The second page after the home page is the portfolio page, the main goal of this page is to provide information regarding the developer. The page contains a navigation bar and footer section at the top and the bottom of the page respectively, which is similar to the home page. The main portion of the page is the information giving part of the page that lies in between the navigation and footer section. In this page is included the curriculum vitae of the developer. It is divided into two division that is separation using the property padding, float and margin. On the left division is visible the picture of the developer and his personal information. While on the right division, the professional details of the developer have been written down.

1.2.3 Blog

This page named Blog page talks about the main topic of the website. The goal of this page is to provide information to the viewers about the technology that has been used in this modern period. There can be seen several divisions that have been created which contains information regarding different topics on the main topic modern technology. Also there has been included two images and a button, the image visible can be changed by pressing the button present below the image. Thus, only making one picture visible at a time. This has been created with the use of JavaScript. The navigation and the footer remain the same as it is on the other pages.

1.2.4 Research

The second last page of this website is the Research page. Here in the page the main objective is to show the research that was done for the creation of the website and from where the references have been taken from for the creation of the 5 pages in the website. As like the other pages the navigation and footer section remain the same. Other than that, there are five different other web pages that have been referred to where each page of the created website is referred to one web page that is available on the internet.

There have been five different divisions created. In each division, there has been a table inserted with the use of <table> tag and the table are divided into three columns. On the left column of the table is visible the image of the referred webpage, on the centre column is present the description on why the page has been referred to and on the right column is present the image of the page that has been created.

1.2.5 Contact US

The final page of the website is the Contact US page. As mentioned earlier the tags used in each page is similar. The page is made only for the purpose of connecting the viewers or clients to the developer. Like the other pages the navigation and the footer section remain the same. The page includes a form that has been validated with the use of JavaScript. The form has different input area which the clients need to fill and submit. In case a person filling the form, misses or wrongly enters any of the required information to fill the form and tries to submit then a pop-up alert appears asking the submitter to put in the required information correctly. This pop-up alert is the work of JavaScript. Next to the form is visible a picture of the location of the developer which when clicked takes the clicker to google maps with the location being shown.

1.3 Developing Tools

The website that has been developed is created using three different developing tools, HTML, CSS and JavaScript.

At first, the tool HTML was used as it provides the basic structure of the web pages. With the use of HTML codes, the pages could be formatted easily and without it the text and images would not be displayed properly.

Secondly, the tool CSS was used. As HTML is considered as the bones or skeleton of a web page, CSS then can be considered as the skin. With the use of CSS, the structure of the web page can be customized along with the texts and pictures.

Therefore, CSS has been used to make the page more appealing. The CSS that has been used for the development of this website have been the background image, the use of padding and margins to place the divisions more neatly, the box-shadow and many more.

Lastly the tool JavaScript has been used. The main reason for the usage of JavaScript is to make the website more dynamic and user interactive. JavaScript has many interactive elements, some of them that have been used for this website are the image slider on the home page, the button that changes the image which is present on the blog page and finally the third element is the form validation.

With these three tools a perfect website can be created with a little practice and knowledge.

1.4 Verdict

Web development or designing as it is called has become more advanced and easier with various tools available. There are other tools like bootstraps, typescript, etc. However only HTML, CSS and JavaScript have been used for this particular coursework. The tools used are easy to use and understand as well as these three tools are applicable in many browsers. While web development has become easier, it is only due to the development of these tools. As the coursework has been carried

out successfully, the idea of creating a website has become more diverse and efficient. The proper utilization of tools where it is necessary has been prioritized and unnecessary use or overuse of codes and elements has been minimized with the use of internal and external CSS and JavaScript. Thus, the proper utilization of the three tools has made the development more efficient and effective.

2. DISCUSSION AND ANALYSIS

2.1 Text Editor – Sublime Text

The text editor which has been used to develop the website is Sublime Text.

Sublime Text is used for this development because it is a feature-packed text editor which is available for free unless if the developer wants to get a license for it.

However, the license is not compulsory so it can be considered a free text editor.

The reason why this particular text editor has been chosen is because it has various helpful features that make writing codes and development easier.

Some the various features about this editor are listed below;

- Auto completion of tags.
- Syntax highlights.
- No problem in running the application.
- Fast.
- Allows simultaneous editing of a word in an entire file.
- It also connects itself to browser which displays the work done in the browser with no difficulty.

(Schäferhoff, 2016)

While there are other text editors like VS, notepad++ and some other too. Sublime text is considered one of the most popular text editors. As the coding or web developing can be done easily and the program is fast and stable as well. Therefore, the text editor Sublime Text has been used.

2.2 Wireframe – Balsamiq Wireframes

Wireframes are simple layout of the web pages that are to be created. Wireframes are created before creating a website in order to outline or design the page in a rough manner. Though wireframes are just rough work for a web page, it has a significant role as it acts like a blueprint for a webpage just like how a blueprint works for someone's home. Wireframes decide in which part of the web page lies what elements. Therefore, wireframes are important and should not be overlooked. (Climer, 2001)

There are different tools to develop a wireframe and for this website the wireframes have been created using a tool called Balsamiq Wireframes. Balsamiq Wireframes is a digital designing tool which is available on the internet. It is a user interface design tool which is used to develop wireframes.

(Balsamiq, 2018)

The wireframes for the created webpages will be provided below along with the webpages as the report continues.

2.3 Website

The website that has been created contains the following pages that are mentioned below;

i. Home

The first page present in the website is the page named 'Home'. This is the first look or the first impression of the website. This page has been created to give a short outlook on what the website is about.

The contents that are present in this page are listed below,

- Title and navigation bar: the first content of the Home page is the title and the navigation bar. There have been created two small divisions that cover the entire width of the page. On the top division the name of the website has been given which is 'Technological Life' and below this division rests the other division that contains our navigation bar which will be the link to the other pages that are there in the website.
- Image slider: secondly, comes the image slider. This is a division for images where a single picture stays for about 3 seconds and slides out and comes in another picture. This has been created with the use of JavaScript. There are three images, each of which will be visible for about 3 seconds and change into another picture, this becomes a continuous never-ending cycle.
- Text division: below the image slider, there is a small division of text visible which says something about technology with respect to this modern era.
- Divisions: after the text division, there has been created 4 similar divisions that have small spacing between each other which makes it look neat. The four divisions consist of small information regarding the four other pages.
- Footer: at the bottom of the page lies the footer section. The footer section consists of a table which has a single row and two columns. The first column contains the name of the site and on the other column, there are five different icons present each resembling the pages available on the site which is linked to other pages respectively.

The wireframe of the page is given below;

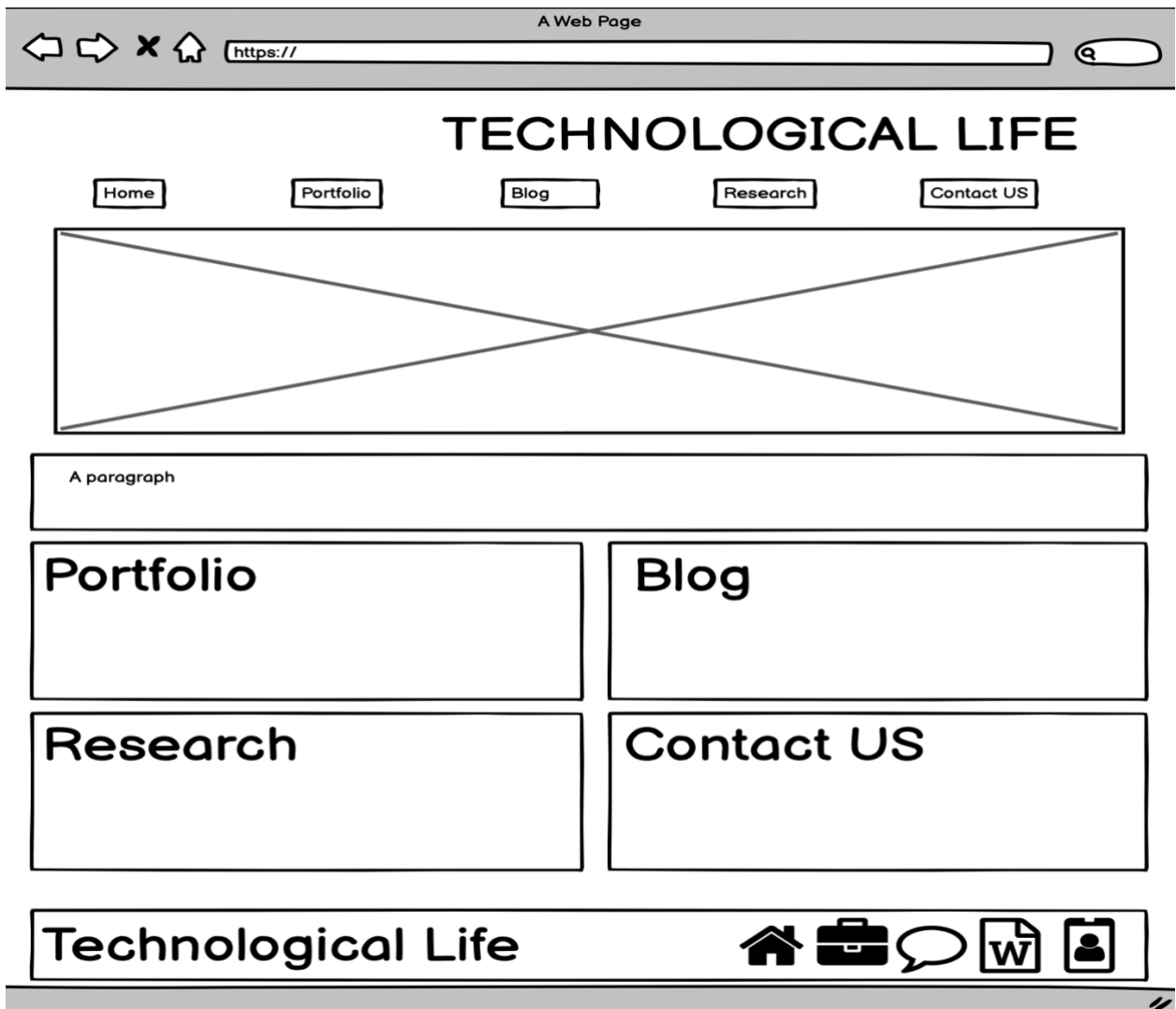


Figure 1: Wireframe of Home page

Since the home page would not fit in a single picture there has been two pictures provided for the home page,

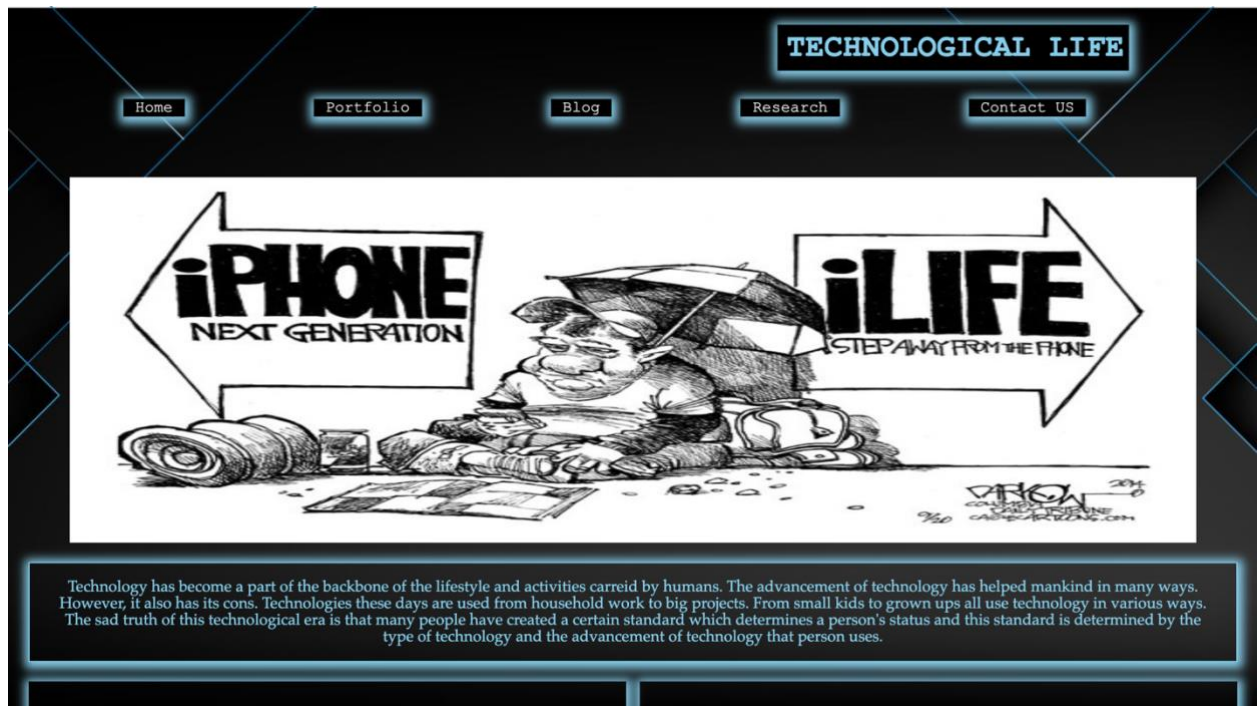


Figure 2: First part of the Home page

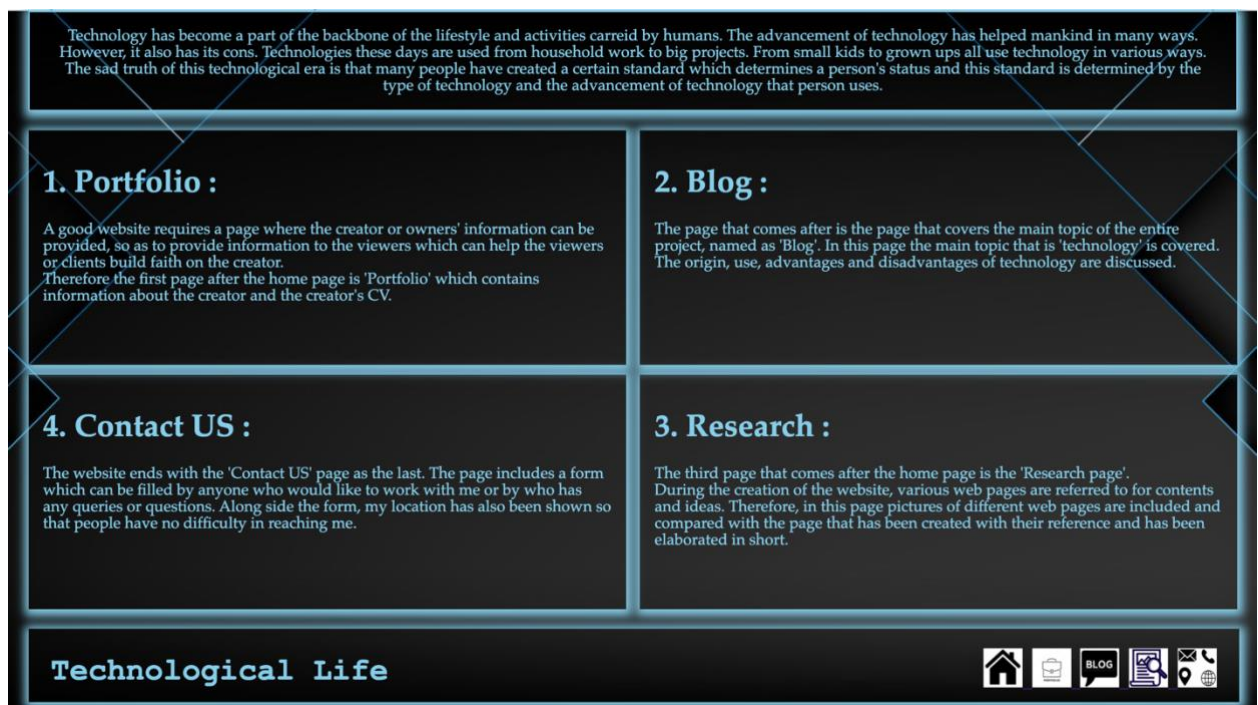


Figure 3: Second part of the Home page

ii. Portfolio

The second page of the website is the 'Portfolio' page. This page is created to provide the user or viewers the information regarding the developer.

The contents of the page are given below,

- Title and navigation bar: the top most part of the page contains the title and navigation bar which is same as the on in the home page.
- Curriculum Vitae: after the navigation bar comes the main part of the page that is the curriculum vitae. It is divided into two division. The first division on the left includes a table inside it. The table contains two columns and five rows. In this table there are different personal information about the developer along with a picture of the developer. In the division to the right, the personal details of the developer can be seen.
- Footer: the bottom of the page has the footer section as mentioned above in the home page.

Wireframe of the page is given below,

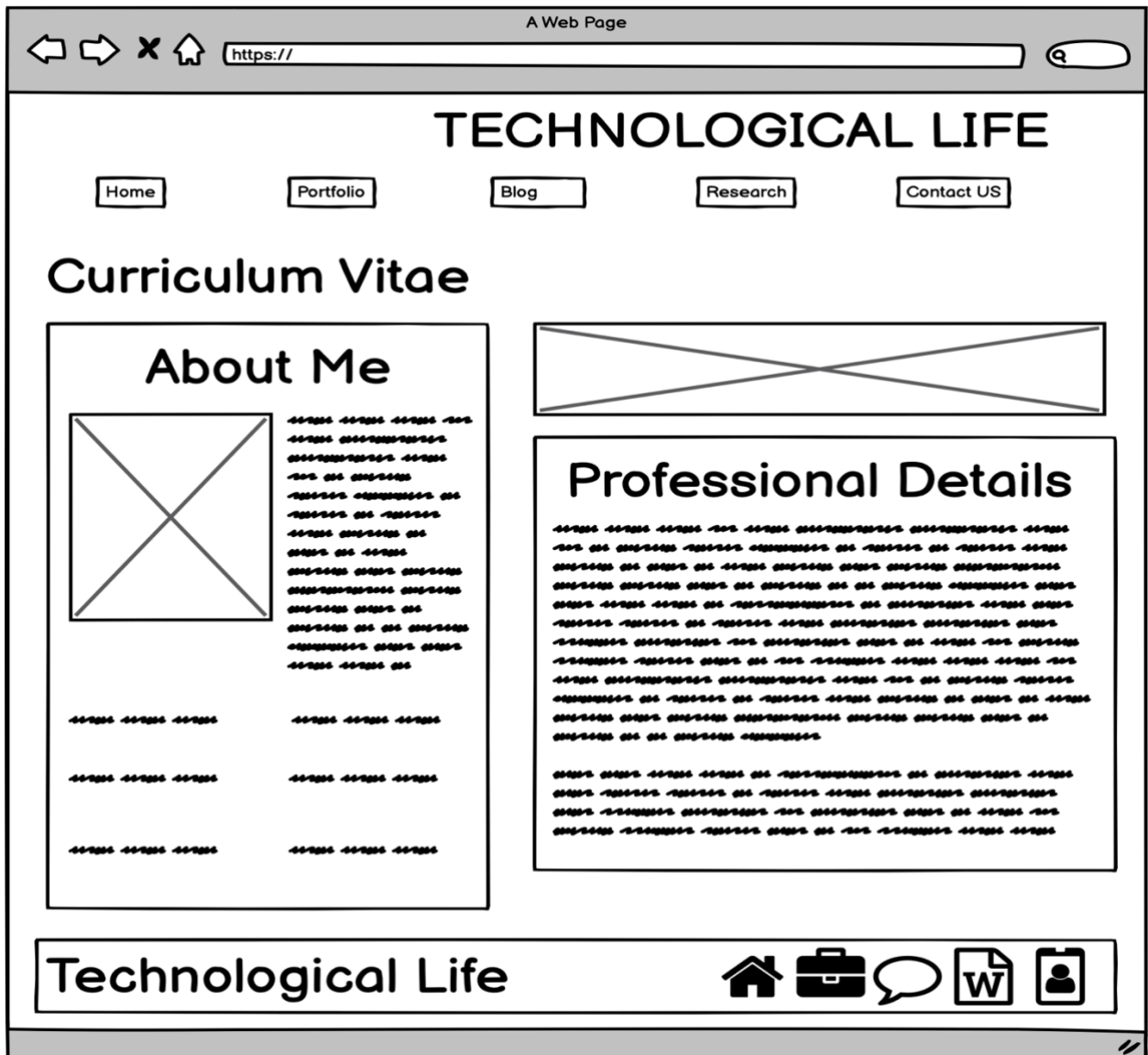



Figure 4: Wireframe of Portfolio page

The image of the page can be seen below,

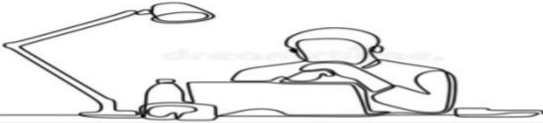
Curriculum Vitae

About Me :



I am Farhan Ibrahim, currently a first year undergrad student studying Networking at Islington College, Kathmandu and finished my schooling from St. Augustine's School, Kalimpong. A highly motivated first year student, striving for greatness, putting everything I can and have into whatever I do. However, I don't usually do alot of things but whenever I do something I make sure I do it at its finest. Other details about me can be found throughout the page.

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Professional Details

Work experience :

- worked as an event manager for the UFC for 1 year.
- working as a sales manager for the American Top Team gym.

Educational Background :

- Schooling (ICSE):** Saint Augustine's school, Kalimpong, India
- High-school (HSEB)(2018-2020) :** Business management at Ace Higher Secondary School, Kathmandu
- University(2021-Current) :** BSc (Hons) in Networking and IT Security at Islington College

Skills :	Hobbies :	Language :
<ul style="list-style-type: none">Graphic designingHTML, CSSTeamworkCustomer service	<ul style="list-style-type: none">GamingWatching combat sportsPracticing mma	<ul style="list-style-type: none">EnglishHindiNepaliTibetan

Figure 5: Portfolio page

iii. **Blog**

The third page of the website is the 'Blog' page. This page can be considered the main page of the website as it covers the main topic of the website. The topic being technology and its effect on students along with its advantages and disadvantages. The contents of the page are given below,

- Title and navigation bar.
- First division: the first division contains the heading of the topic which is then followed by a short essay on how technology has affected students.
- Second division: the second division contains a table with two columns and two rows in which the advantage and disadvantages have been discussed.
- Third division: the third division followed contains the conclusion of the essay on technology.
- Image & button: after the conclusion, there has been included a picture and below the picture is a button. The button allows the user to change the image. The two images that change show the two sides of technology.
- Final division: the last division present after the image contains a short paragraph that describes the pictures above.
- Footer.

The wireframe and the picture of the page is given below,

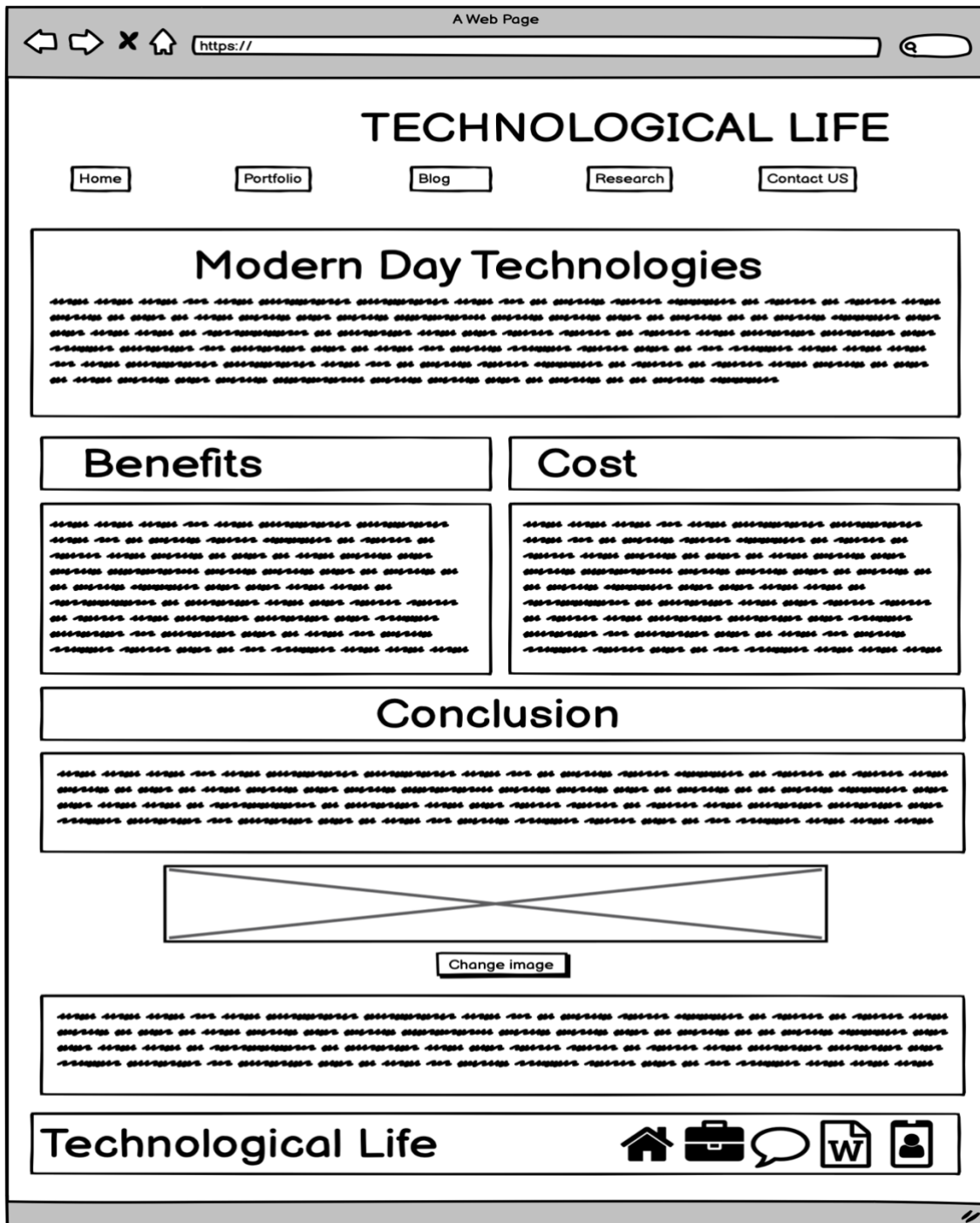


Figure 6: Wireframe of Blog page



Figure 7: First part of Blog page

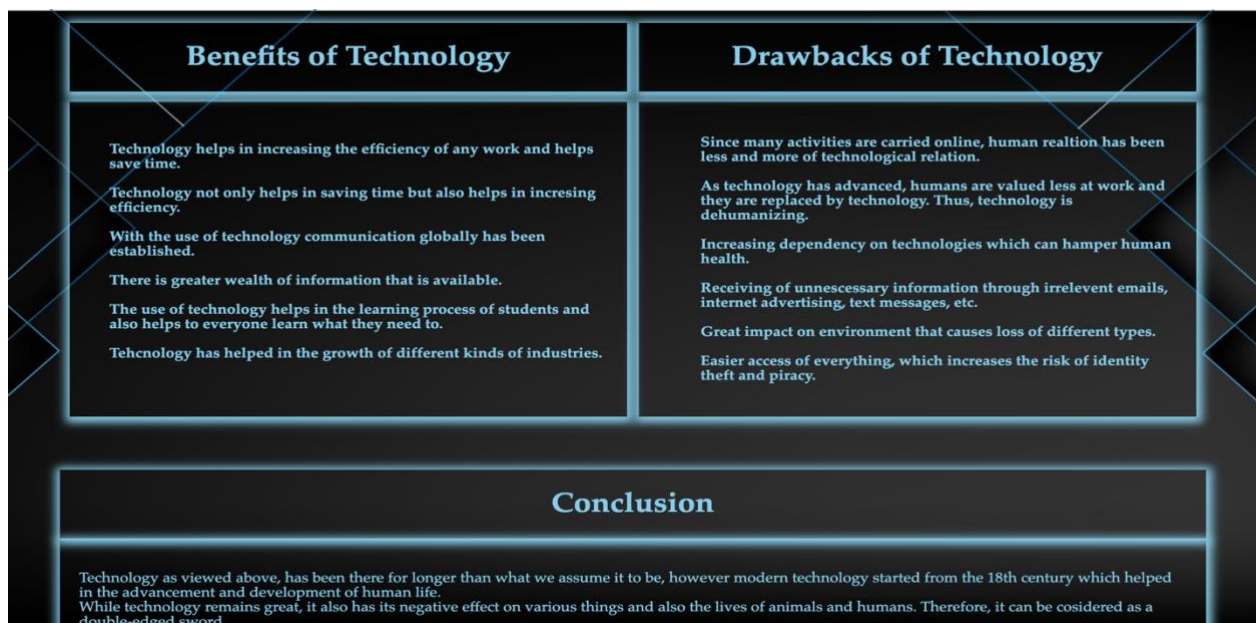


Figure 8: Second part of Blog page

Conclusion

Technology as viewed above, has been there for longer than what we assume it to be, however modern technology started from the 18th century which helped in the advancement and development of human life. While technology remains great, it also has its negative effect on various things and also the lives of animals and humans. Therefore, it can be considered as a double-edged sword. In the final part, the various advantages and disadvantages of technology is discussed. Clearly, there may be more advantages but with that the disadvantages and its negative impacts cannot be looked away. The ones who use the technology may not realize the negative impact but there will be environment or animals or even other humans who will suffer. After all whatever technology we have, we should be grateful for it as it is because of technology that we are living this life. However, it should not be misused and the harm done by it should be reduced so that everyone can live peacefully.

[change image](#)

The above two picture which can be viewed by clicking on the 'change image' button shows the two sides of technology. The first picture shows an old man trying to use a modern toothbrush of which he has no idea of how it works and seems not so fond of the new technology. On the other hand, the second picture shows how technology has helped to bring a family together. Thus, no matter what technology it is, it usually has two sides, one which is appreciated and the other being not appreciated.

Technological Life

Figure 9: Third part of Blog page

iv. Research

The fourth page is the 'Research' page. During the development and creation of the pages for the website, different web pages on the internet have been referred to for the designing of the pages. In this page, the different referred pages are compared to the pages that have been created using the respective referred pages.

The contents of the pages area as follows,

- Title and navigation bar.
- Divisions: the main part of this website contains five divisions, with each division containing tables which have been divided into three columns and a single row. In the first column, the picture of the referred web page has been given which when clicked opens the page in a new tab. The middle column includes the description of why the page has been referred and what has been implemented from the page. In the last column, the picture of the pages that have been created are given. The divisions have been created in the same sequence as of the pages from one to five.
- Footer.

The wireframe and image of the page is given below,

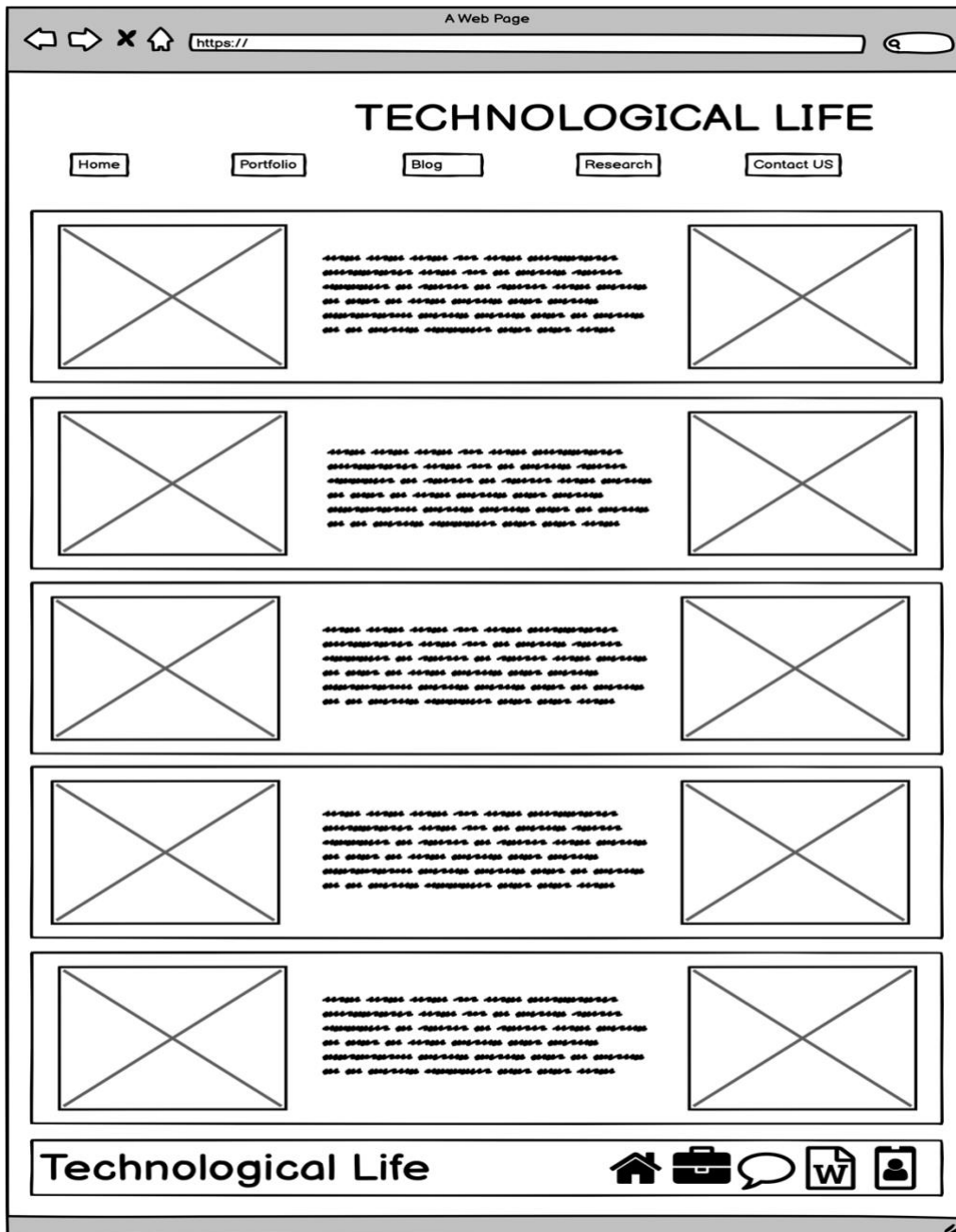


Figure 10: Wireframe of Research page

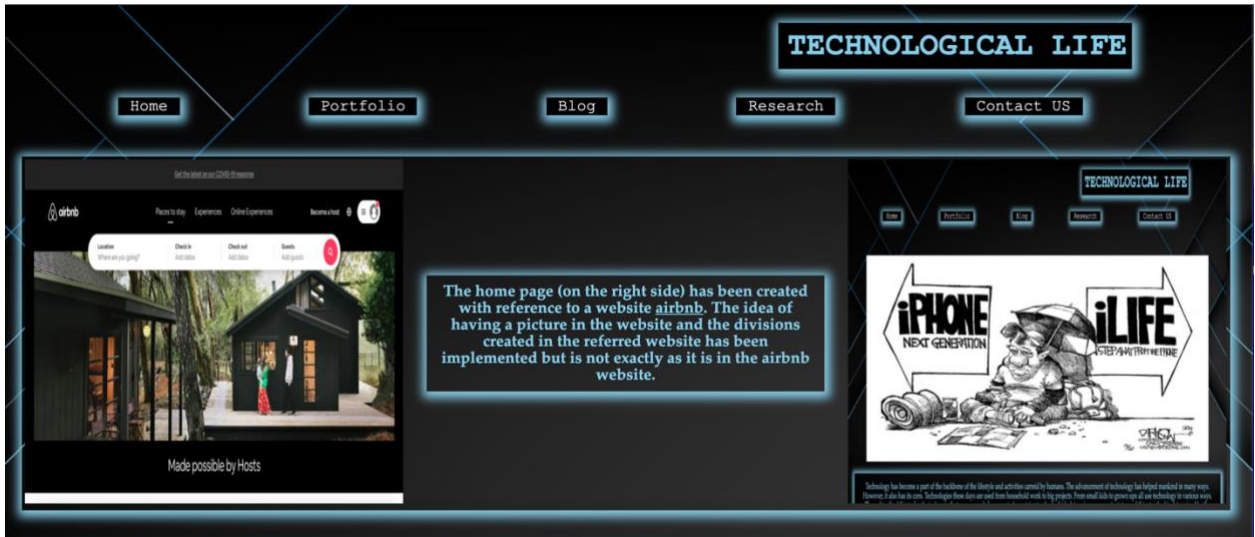


Figure 11: First part of Research page

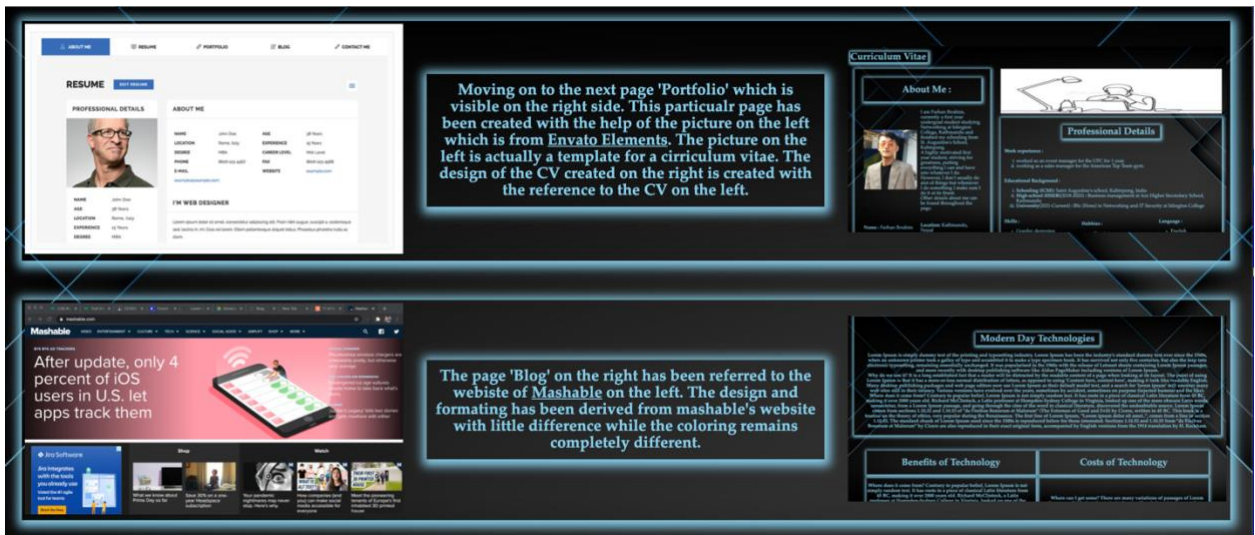


Figure 12: Second part of Research page

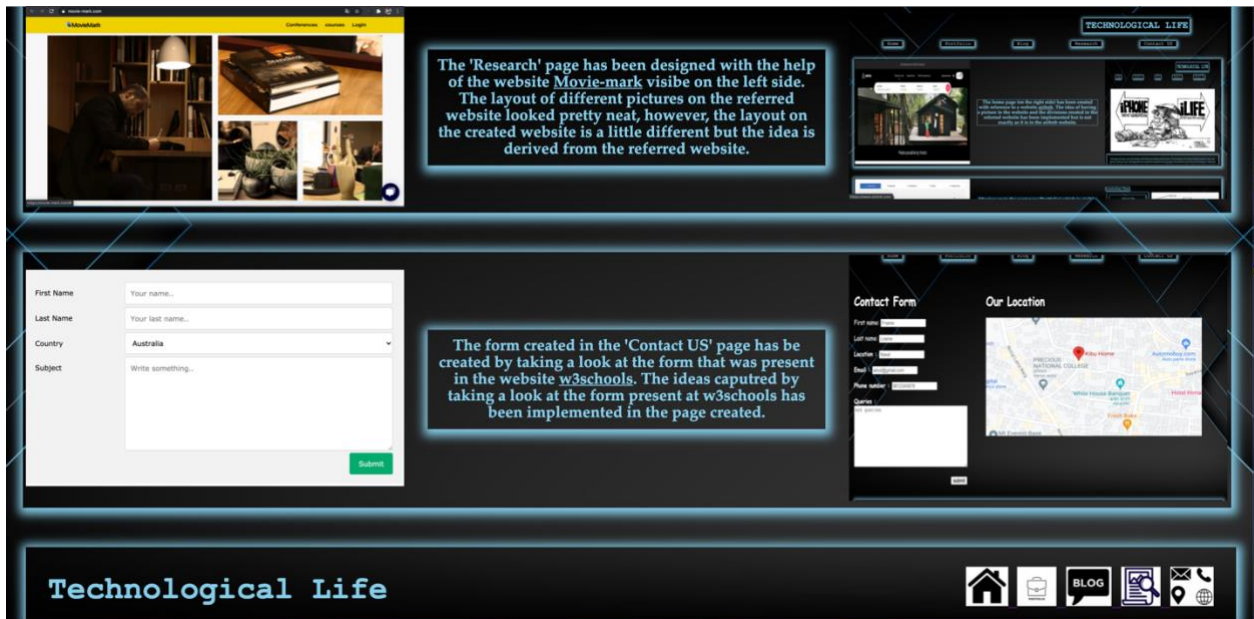


Figure 13: Third part of Research page

v. Contact US

The final page of the website is the 'Contact US' page. The page is made just for the purpose of building a way to connect the viewers with the developer. The page contains a validated form which the users can fill and submit if they have any queries.

The contents of the pages are given below,

- Title and navigation bar.
- Form: on the left side of the page is available a form that has been validated with the help of JavaScript. The form contains various fields which need to be filled by the submitter. If in case the user has not filled the form and continues to submit then a pop-up alert will appear asking the submitter to fill the empty field. Thus, in order to submit the form, all the fields included in the form have to be filled.
- Image: next to the form, on the right side is a picture of the location of the developer. The image is linked to google maps which means that if the users click on the image, it will open a new tab which will open google maps with the location of the developer.
- Footer.

The wireframe and the image of the page is given below,

A Web Page

https://

TECHNOLOGICAL LIFE

Home Portfolio Blog Research Contact US

Contact Form

First Name:

Last Name:

Location:

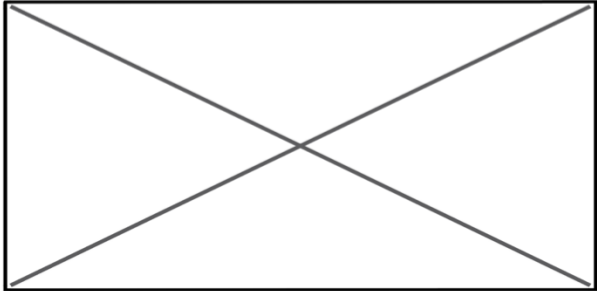
Email:

Phone number:

Queries:

State your queries here.

Our Location



Technological Life




Figure 14: Wireframe of Contact US page

Home Portfolio Blog Research Contact US

Contact Form

First name:

Last name:

Location :

Email :

Phone number :

Queries :
Ask queries

Our Location

Map showing location of Kibu Home in Naxal, India. Landmarks include Precious National College, White House Banquet, Fresh Bake, Automobuy.com Auto parts store, and Hotel Hima.

<https://www.google.com/maps/place/Kibu+Home/@27.7244604,85.3069916,17z/data=!3m1!1e3m1!1s0x39eb196eb4774d27:0xd22b00b2c6d0d59615m2!1m1!1s2!1m2!1s27.72445614d85.3091885>

Figure 15: Contact US page

3. TESTS

3.1 Test 1 – Image Slider

The first test to be conducted is of the image slider. Here in this test, the periodic change of image will be tested where the image present on the home page is to change at certain interval of time.

Test	1
Objective	To change the image present on the page change on its own at certain interval of time.
Action	Home page is opened. The first picture is visible which then slides and the next picture becomes visible while the first picture is not visible for certain time.
Expected Result	The image should change after every 2 seconds.
Actual Result	The image changes after every 2 seconds.
Test	Test successful.

Table 1: Test for image slider



Figure 16: Test for image slider (first image)



Figure 17: Test for image slider (second image)

3.2 Test 2 – Image change on click of a button

In this second test, the button that is supposed to change the image on a click is to be tested. This image and button are available in the Blog page.

Test	2
Objective	To change the image when the button is clicked.
Action	The button 'change image' is clicked. The button is supposed to change the image on above the button when clicked.
Expected Result	Change of image when the button is clicked.
Actual Result	The image changes when the button is clicked.
Test	Test successful.

Table 2: Test for on click button

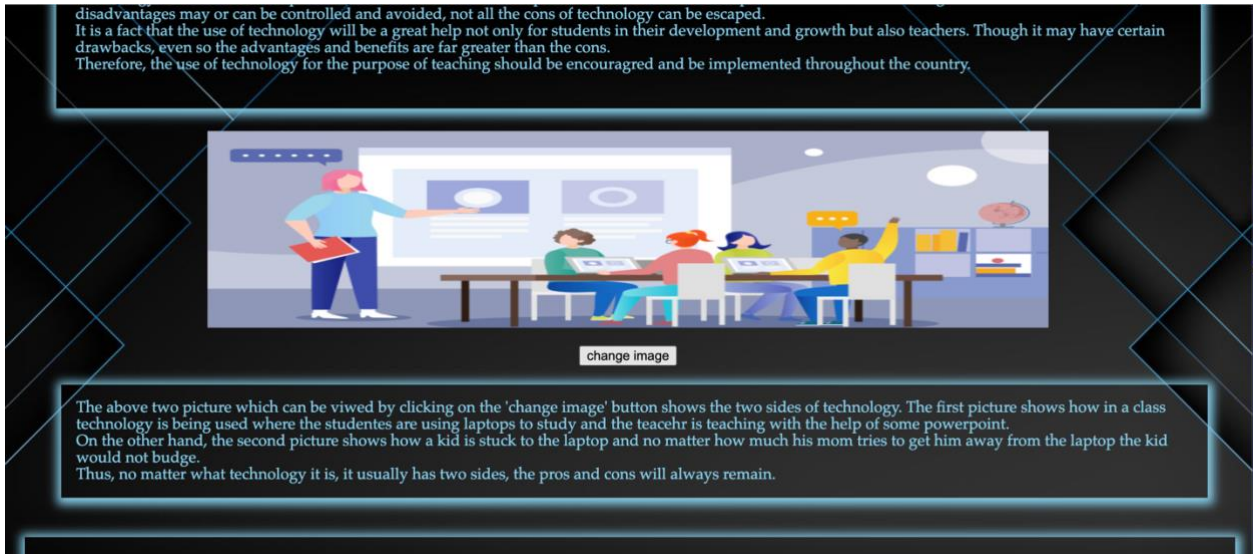


Figure 18: The image that is visible at first.

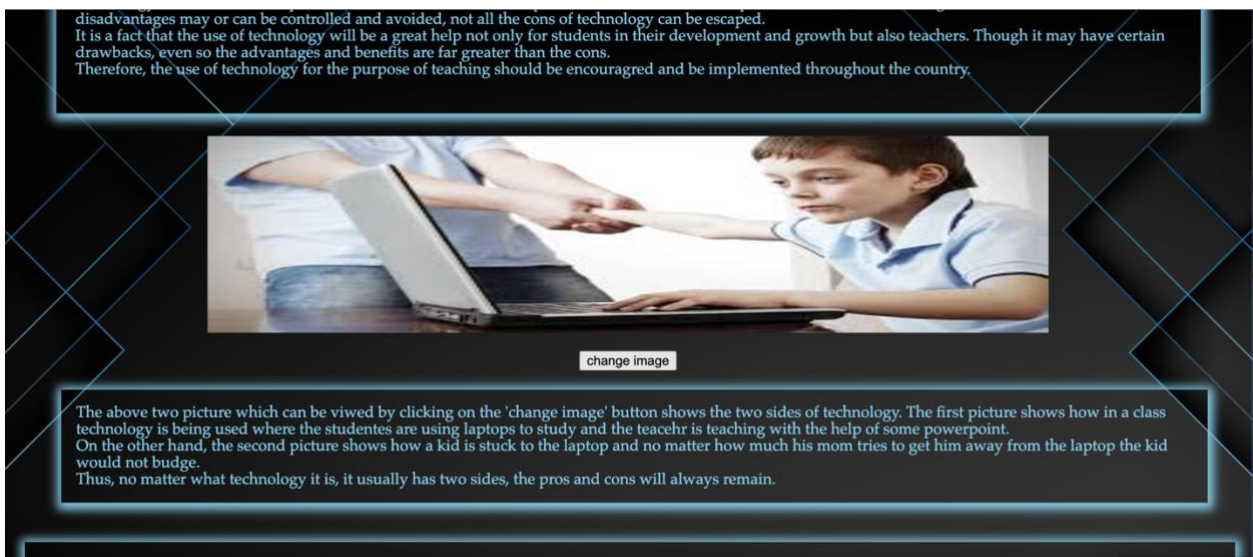


Figure 19: The second image that appears when the button below is clicked.

3.3 Test 3 – Form validation

For the third test, the form/forum that is present in the Contact US page is going to be put to a test.

Test	1
Objective	To send a pop-up alert when the form has empty fields when being submitted.
Action	The form is submitted with an empty field to check if it sends an alert.
Expected Result	With respect to the field that is empty, the alert should include the name of the field.
Actual Result	An alert including the name of the empty field is sent when the form is submitted with an empty field.
Test	Test successful.

Table 3: Test for Form validation

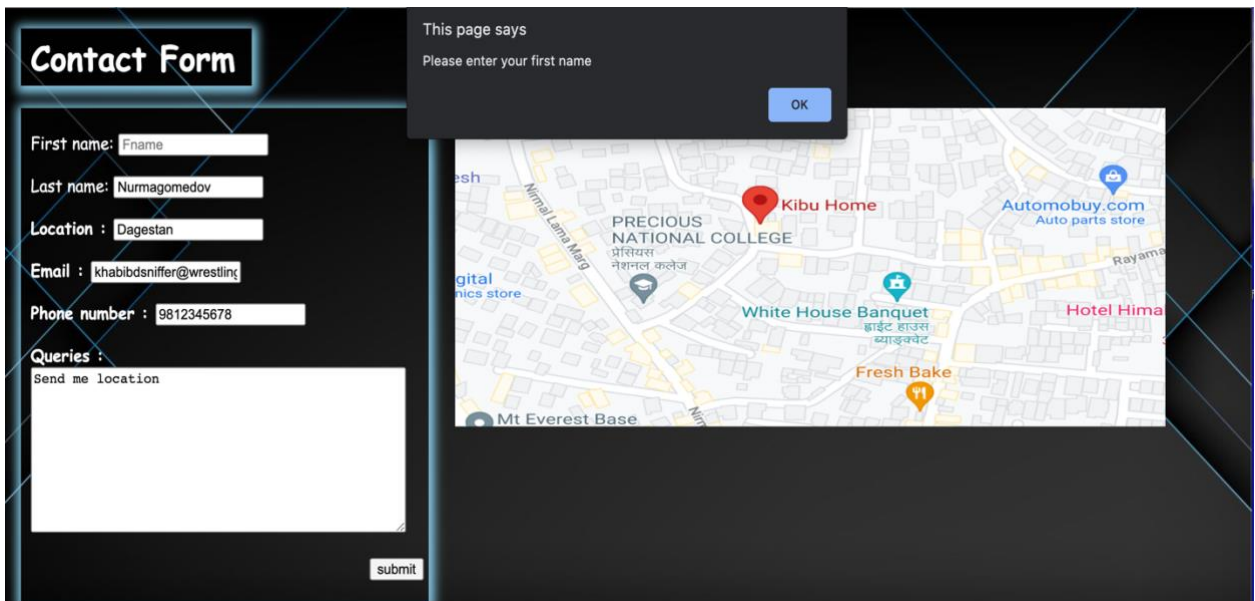


Figure 20: The alert with the name of the empty field when the form is submitted

3.4 Test 4 – Hover effect on Navigation bar

This test will be conducted to test the hovering effect on the navigation bar where when the cursor is hovered above the navigation bar the colour of the words should change.

Test	1
Objective	To change the colour of the words present on the navigation bar when the cursor is hovered above them.
Action	The cursor is hovered above the navigation bar.
Expected Result	The colour of 'Home' should change.
Actual Result	The colour changes from white to sky blue when the cursor is hovered above.
Test	Test successful.

Table 4: Test for hovering effect.



Figure 21: The colour when the cursor is not hovered.

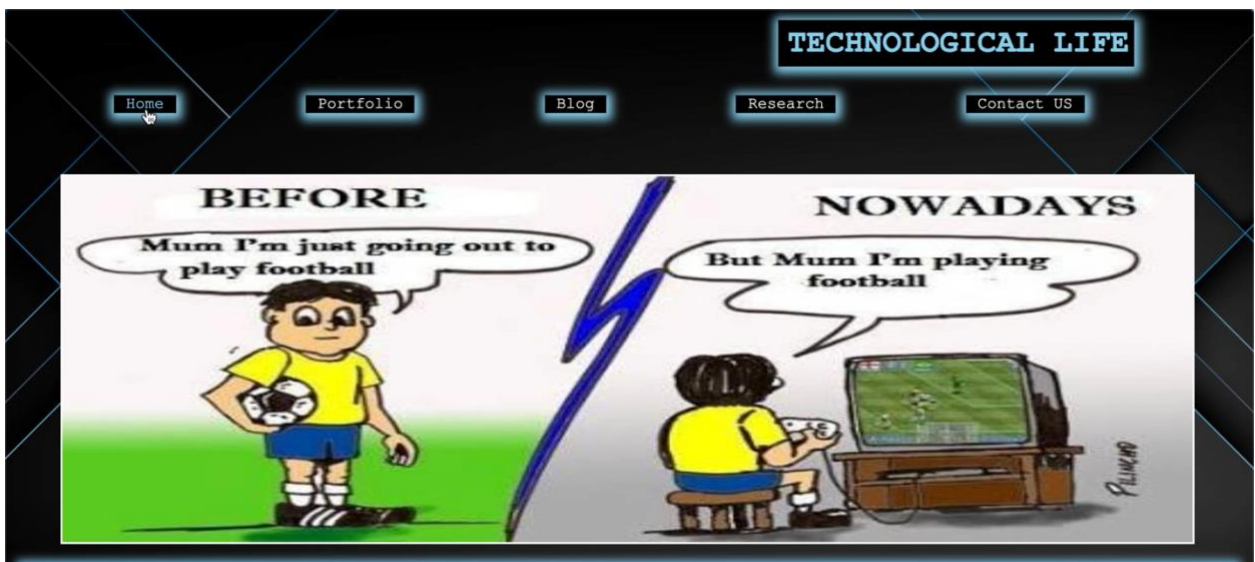


Figure 22: The colour changes to sky-blue when the cursor is hovered.

3.5 Test 5 – Change the webpage through an internal link

For the final test, the link between the Home page and the Blog page will be tested, whether the Blog page will open or not when clicked on it from the Home page.

Test	1
Objective	To change the webpage to the Blog page when the word Blog is clicked on the navigation bar.
Action	First the Home page is opened. The word 'Blog' is clicked on the navigation bar.
Expected Result	The Blog page is supposed to open when Blog on navigation bar is clicked.
Actual Result	The Blog page opens when Blog is clicked on the navigation bar.
Test	Test successful.

Table 5: Test for internal link

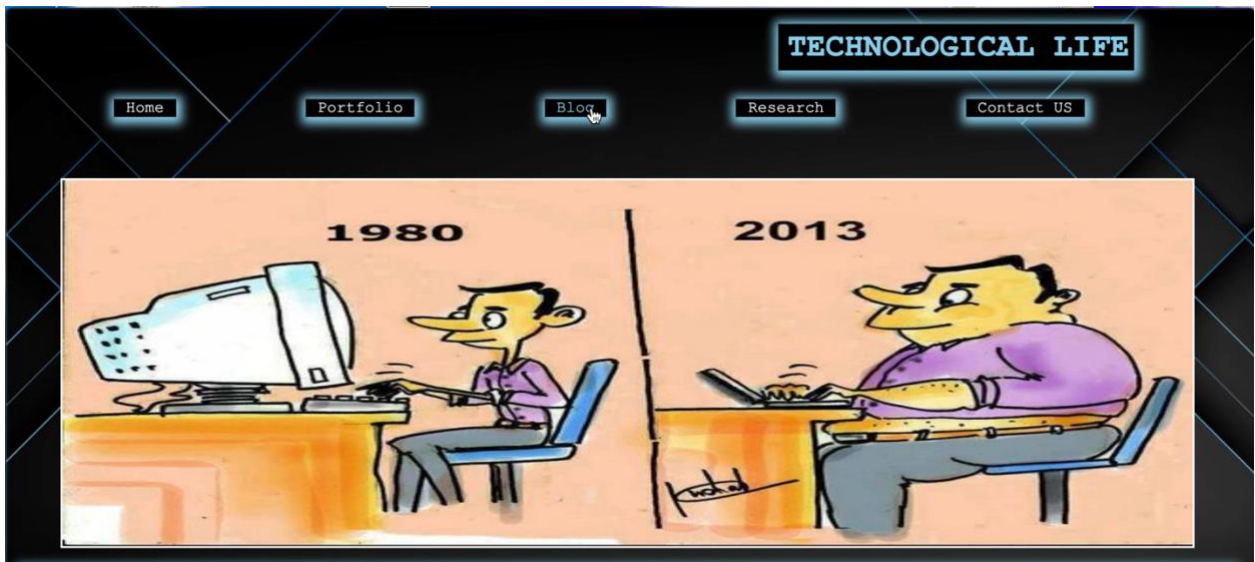


Figure 23: Blog is clicked from the home page.



Figure 24: Blog page opens after Blog is clicked on the navigation bar

4. CONCLUSION

4.1 Conclusion

The main objective of the given coursework was to develop wireframes and a static website using HTML, CSS and JavaScript and to give a small experience of being a web developer, having said that, there were also behind the scenes target of this coursework such as enhancing one's research abilities, improving one's ability to plan and design the given task and put it to work. The planning and the designing of the webpages are done through wireframes which is created using an application called Balsamiq wireframes.

Wireframes are created before the creation of the webpages. It is just a rough work for the pages to be created. The designing of the pages is first done on the wireframe which is then implemented on the pages. Wireframes help in making planning more effective.

Moving onto the main part of the coursework, the coursework includes a basic website that was structured using HTML, design with the help of CSS and made responsive by the use of JavaScript. The codes and tags of these three tools were put together and made to work by the use of a text editor called Sublime Text. The pages that are made for the website are Home, Portfolio, Blog, Research and Contact US. Each page is unique, however only the header and the footer sections are the same in each page. Images of all the five pages have been included in this report along with their wireframes. Various tests have been carried out to examine the quality of the webpages such as its level of receptivity and its features.

Overall, the coursework has been a fun and great for an experience in web development. Not only helping in web development but also in other aspects too like planning, designing, researching.

4.2 Research and Findings

This web development coursework being the first time designing a website, there was little knowledge and experience in designing a website. Therefore, it was quite hard at the initial stages of development, nevertheless as the developing continued the difficulty started becoming less.

There were several sites and videos that were referred to and also the course teacher and the lecture and workshop slides that have been provided in the classroom has been a big help in the completion of this coursework. A website that has been a great help for the creation of this website is W3schools, where all the instructions for creating a website had been given.

As the research were done and implementations were made, several new things and topics were discovered which will certainly help in the future when creating a new website. The coursework has also made me realize my capabilities and has had positive impact on the way I visualize this mental operation.

Therefore, all thanks to our course leader for providing such a fun task and providing a chance to experience the feeling of a web developer.

Bibliography

tutorialspoint, 2006. *What is CSS*. [Online]

Available at: https://www.tutorialspoint.com/css/what_is_css.htm

[Accessed 20 May 2021].

hackreactor, 2018. *What is JavaScript used for*. [Online]

Available at: <https://www.hackreactor.com/blog/what-is-javascript-used-for>

[Accessed 20 May 2021].

Schäferhoff, N., 2016. *The Sublime Text Code Editor – An In-Depth Review*. [Online]

Available at: <https://www.elegantthemes.com/blog/resources/the-sublime-text-code-editor-an-in-depth-review>

[Accessed 21 May 2021].