“My Travel Website”

Introduction to Multimedia Coursework Report

Candidate Number:220882

Computer Science G400

Submitted on the 21st of November 2019

1.Introduction

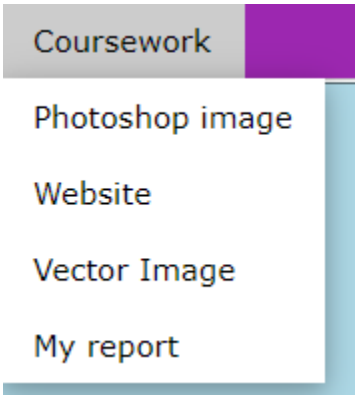
This report is part of the coursework for the module “Introduction to Multimedia” which is part of the Computer Science course(G400) and it entails the procedure through which this Travel Website was made. The subsequent report will demonstrate how HTML5, CSS, JavaScript, Sony Vegas Pro were made use of in order to create this website and every element that it includes such as the Welcome Video and the Vector Animation.

2.Design and Development

Website Development

The website was started off by creating an HTML page using Notepad++ and then by creating its own CSS sheet in order to format the HTML page. Considering the instructions given in the previous labs and the instructions given on the website << https://www.w3schools.com/ >> the first step was to create and style the navigation bar.

The <<w3schools>> website presents the code in order to create a Dropdown Horizontal Navigation Bar which was used in the making of this page and then each different section was divided by adding borders. In addition, the CSS overflow property has been added, thanks to which the page can be scrolled. The five main pages (Homepage, Welcome Video, Hobbies, Vector Animation and Coursework) were created by using HTML and then a Dropdown menu was added for the Coursework page which would give the user a clearer and immediate idea of what they are going to view, therefore when the user hovers the mouse on the Coursework section four separate other sections are going appear which makes it less confusing for the person who is going to use the Website.



The order in which the pages are organized puts the introductory pages first (Homepage, Video and Hobbies) so that the person who uses the website can then move on to the rest of the general content,

so to the Vector Image and then at the end the Coursework pages. The Homepage is represented by the Home icon which is convenient because it is a universally recognized symbol.

A white border was added all around the Navigation Bar by using CSS, in order to make it stand out even more from the background. The color purple was used for the background of the Navigation bar and white for the text so that the text would appear clearer and more understandable to the user and used a light purple background for all the pages for the same exact reason, so that the navigation bar and the content of the page doesn't appear confusing and it doesn't get mixed up with the other elements in the page.

Then a header for each page was created with HTML5 which makes the user aware of what page they are on, therefore for example the Header for the Homepage says, "My Travel Website" and the Header of the Video page says, "Welcome video". Then CSS was used to style the header of each page which has been centered at the top, the color was changed to a dark purple and its height increased.

The homepage shows personal pictures and a centered welcome text at the bottom. After creating four new HTML pages with their own CSS sheets they have been linked to the Navigation Bar. This way it gives access to pages other than the home one so that when the user clicks, for example, on the Video Page they are directed to that page and the video can be viewed.

At the bottom of the screen an introductory text with a heart icon button can be seen and when the button is clicked a YouTube video can be seen. This was done by adding the link to "< >a href" of the heart button.

```
</span>
<button class="btn-secondary like-review">
<a href="https://www.youtube.com/watch?v=S5_DBI0vjIc"</a><i class="fa fa-heart" aria-hidden="true"></i>Click me!
</button>
```

The heart button pops up from the top and in order to achieve this the transform element was used in the CSS sheet that was created for the heart button. Through this the button moves -3px from the top of where it is positioned.

```
.like-content .btn-secondary:hover {
    transform: translateY(-3px);
```

The Welcome Video was made with Sony Vegas Pro used with videos recorded on the phone. The videos have been cut and a welcome text and background music were added. After creating its own HTML page and CSS sheet, the video was added in the Webpage and through CSS it was centered in page.

On the hobbies page I inserted pictures of some of my drawings and a text explaining what my hobbies are, meanwhile by using CSS I put a frame around the text and added a pink background to it.

The Coursework button includes all the separate coursework done in the lab. The report page shows a pdf file of the written report which has been embedded on the site.

How I developed the Vector Animation

The first step was to create an HTML for the Vector Animation page which was then linked to the main Webpage. The Animation was mainly made by using Raphael and JavaScript. The animation starts by

pressing the start button which was created by adding the “onclick” element, so that the user can start the animation whenever they want, which makes it easier for them. The button element has also been referenced on the main Webpage HTML.

```
var startbutton=document.getElementById("button");
startbutton.onclick=tOne;
```

The Raphael document, the audio and a background paper were the first variables to be added in order to make sure that the animation would function correctly.

```
window.onload= function (){
var paper = new Raphael(document.getElementById("veca"), 800, 600);
var audio = new Audio("Funk-tabulous.mp3");
var backGround = paper.rect(0,0,800,600);
```

Then two animated circles that change color and shape were created by creating the two circle variables and then using the animate element and the circles are animated in a way such as that they are filled slowly by a “purple-pink” color and a pink toned stroke. This was done by using the “fill”, “stroke”, “stroke-width” and “stroke-capacity” elements, these variables can be seen from the start since the script “. hide” wasn’t added. This was done so that when the user opens the page for the Vector Animation it doesn’t appear plain, as the only thing that they would see would be a blue background, therefore the two circles animate as soon as the page gets opened.

```
var circleone = paper.circle(220, 190, 90).animate({fill: "300-purple-pink", stroke: "#ffc0cb" , "stroke-width": 80, "stroke-opacity": 0.5}, 500);
var circletwo = paper.circle(620, 440, 90).animate({fill: "300-purple-pink", stroke: "#ffc0cb" , "stroke-width": 80, "stroke-opacity": 0.5}, 500);
```

A text saying “Get ready!” first appears on the screen as soon as the start button is pressed, then this text is followed by the “Here we go!” one and both of them are synchronized to the beat and lyrics of the song. Then four different circles that were already used at the beginning appear one by one by matching again the beat of the audio, therefore as soon as the audio counts “1,2,3,4” one circle and a number appear on the screen.

```
function CircOne() {
circleone.hide();
circletwo.hide();
texttwo.hide();
cOne.show();
cOne.animate({fill: "300-purple-pink", stroke: "#ffc0cb" , "stroke-width": 80, "stroke-opacity": 0.5}, 600, CircTwo);
teOne.show();
}
```

This was done by implementing the animate script for the four circles and the “show” one for the numbers text and by matching them to the beat of the numbers that can be heard in the audio. The numbers were simply created by using the “paper.text” variable and adding appropriate attributes to them so that they would appear starker and more evident.

```
var teOne = paper.text(100, 390, '1').attr({font: '80px Arial', 'font-weight': 'bold', 'fill': '#f0f', stroke: '#000'}).hide();
var teTwo = paper.text(300, 390, '2').attr({font: '80px Arial', 'font-weight': 'bold', 'fill': '#f0f', stroke: '#000'}).hide();
var teThree = paper.text(500, 390, '3').attr({font: '80px Arial', 'font-weight': 'bold', 'fill': '#f0f', stroke: '#000'}).hide();
var teFour = paper.text(700, 390, '4').attr({font: '80px Arial', 'font-weight': 'bold', 'fill': '#f0f', stroke: '#000'}).hide();
```

The animation then proceeds to show a scene with a bitmap background which was found on the internet (https://wallpapersafari.com/w/J6uXpY), with a drawn white ground, snowman and a

“vacuum”. In order to make the white ground a “paper.rect” was created and which was adapted to the dimension of the lower part of the screen. Then the snowman was created mostly by using the variable “paper. circle” with the attribute “fill: black”, in order to create its eyes and buttons then the variable “paper. rect” with the attribute “fill: black” was used in order to create the hat. Meanwhile for its mouth the variable “paper.ellipse” with the attribute “fill: red” was implemented. The vacuum was also created by using the “paper.rect” and “paper.ellipse” variables with the respective “fill: grey” and “fill: red” attributes. The element “. to Front” also had to be added in order for these variables to be shown because otherwise they were being cover up by the bitmap image and the “white ground”.

```
var cOne = paper.circle(100, 190, 30).hide();
var cTwo = paper.circle(300, 190, 30).hide();
var cThree = paper.circle(500, 190, 30).hide();
var cFour = paper.circle(700, 190, 30).hide();
var teOne = paper.text(100, 390, '1').attr({font: '80px Arial', 'font-weight': 'bold', 'fill': '#f0f', stroke: '#000'}).hide();
var teTwo = paper.text(300, 390, '2').attr({font: '80px Arial', 'font-weight': 'bold', 'fill': '#f0f', stroke: '#000'}).hide();
var teThree = paper.text(500, 390, '3').attr({font: '80px Arial', 'font-weight': 'bold', 'fill': '#f0f', stroke: '#000'}).hide();
var teFour = paper.text(700, 390, '4').attr({font: '80px Arial', 'font-weight': 'bold', 'fill': '#f0f', stroke: '#000'}).hide();
var sman = paper.image("snowman.jpg",0, 0,800,400).hide();
var snowg = paper.rect(0, 360, 7400, 7400).attr({fill:"white", stroke: "none"}).hide();
var snoww = paper.image("snowt.jpg",3, 360, 7400, 7400).hide();
var falw = paper.circle(100, 10, 10).attr({'fill': "white"}).hide();
var falwo = paper.circle(200, 10, 10).attr({'fill': "white"}).hide();
var falwt = paper.circle(300, 10, 10).attr({'fill': "white"}).hide();
var falwtr = paper.circle(400, 10, 10).attr({'fill': "white"}).hide();
var falwf = paper.circle(500, 10, 10).attr({'fill': "white"}).hide();
var falwfi = paper.circle(615, 10, 10).attr({'fill': "white"}).hide();
var snb = paper.circle(150, 450, 70).attr({fill:"white", stroke: "black"}).hide();
var snbt = paper.circle(150, 350, 55).attr({fill:"white", stroke: "black"}).hide();
var snbf = paper.circle(150, 270, 40).attr({fill:"white", stroke: "black"}).hide();
var eyeo = paper.circle(135, 270, 5).attr({fill:"black", stroke: "none"}).hide();
var eyet = paper.circle(170, 270, 5).attr({fill:"black", stroke: "none"}).hide();
var hat = paper.rect(120, 170, 60, 60).attr({fill:"black", stroke: "none"}).hide();
var hatr = paper.rect(110, 230, 80, 10).attr({fill:"black", stroke: "none"}).hide();
var mouth = paper.ellipse(150, 290, 20, 10).attr({fill:"brown", stroke: "black"}).hide();
var butto = paper.circle(150, 330, 5).attr({fill:"black", stroke: "none"}).hide();
var butti = paper.circle(150, 360, 5).attr({fill:"black", stroke: "none"}).hide();
var buttf = paper.circle(150, 390, 5).attr({fill:"black", stroke: "none"}).hide();
var cannon = paper.rect(600, 450, 30, 80).attr({fill:"grey", stroke: "black"}).hide();
var can = paper.ellipse(615, 580, 40,60).attr({fill:"red", stroke: "black"}).hide();
var finals = paper.circle(615, 450, 10).attr({'fill': "white"}).hide();
```

As soon as “four” can be heard in the audio file, the animation moves to the next keyframe where five snowballs fall from the top of the frame one by one and they are animated in a way so that they fall in sync to the beat of the audio, therefore for each beat one of the five snowballs fall until the fifth one falls into the “vacuum”. In order to do these five different functions for the five snowballs were created and after the previous snowball falls it gets hidden thanks to the “. hide” element and the next snowball will be seen thanks to the “. show” element.

```
function CircOne() {
circleone.hide();
circletwo.hide();
texttwo.hide();
cOne.show();
cOne.animate({fill: "300-purple-pink", stroke: "#ffc0cb" , "stroke-width": 80, "stroke-opacity": 0.5}, 600, CircTwo);
teOne.show();
}
```

The fifth snowball is hidden by using the “. hide ()” element when it “falls” into the vacuum and it is then replaced by another snowball which gives the visual effect that it’s “thrown out” out of it and then the animation makes it seem as if the same snowball is repeatedly bouncing on different sides of the screen just to end up where it come from again.

```
function snowee() {
falwfi.hide();
finals.show();
finals.animate({cy: 10 , cx: 615}, 500,'ease-in', doublesnow);
}
snowee();
```

In order to achieve this effect different functions were created, which command the directions where the snowball would hit, therefore the first function makes sure that the snowball hits the top of the screen but at the exact “x” coordinate which is where the snowball would realistically hit first, then it falls onto different coordinates left and right, until it reaches a function with the same coordinates as the first function, so at the top of the screen, and it falls again into the vacuum and the loop continues. The color of the snowball continuously changes as it hits different sides of the screen in order to do this the “fill” element was used with different functions and the color repeatedly varies between “white” and another chosen color. In the second-last function the yellow ball falls into the “vacuum” and comes out white like at the beginning. To make sure that the snowball falls into the vacuum again the coordinates of where the vacuum is were used.

```
finals.animate({cy: 10 , cx: 615}, 500,'ease-in', doublesnow);
}
snowee();
function doublesnow() {
finals.animate({cy: 700, cx: 50, fill:"green"}, 500, 'ease-out', snotw);
```

3.Conclusion

The main task of the project was to create a Website with an easily navigable interface, which visually doesn’t look confusing and contains all the specified pages, each with its own header.
The colors and the interface of the website are consistent and never change. The Homepage has images with an introductory text and the Dropdown Coursework page mostly consists of HTML pages (except the Website coursework) which show directly each coursework and the user can choose what to see first. The Website meets the general criteria and has also some extra elements such as a Home icon, the Dropdown menu, a video created from the beginning and a like button at the bottom which if clicked on directs the user to a YouTube video. Therefore, the coursework meets the main set requirements.

The website could be improved by adding a slideshow of the pictures on the homepage and a more centered navigation bar. The line under the “Click me!” icon could also be gotten rid of.
The Welcome video could also make use of more effects, transitions and perhaps filters, overlays and borders.
The hobbies page could have a slideshow of the hobbies with more images and maybe with a separate list of the hobbies.
On the other hand, the Vector Animation could use of something more interactive and perhaps could include a simple game, maybe using the snowman in it. More complex drawings could’ve also been made and it could’ve been in a way so that the background changes to every beat of the audio file.

4.References

Dropdown Navigation bar:
https://www.w3schools.com/howto/howto_css_dropdown_navbar.asp

How to make an Home Icon:
https://www.w3schools.com/w3css/w3css_icons.asp

Inserting images to HTML:

https://www.w3schools.com/html/html_images.asp

Scrolling property:
https://www.w3schools.com/cssref/pr_pos_overflow.asp

Adding Navigation bar borders:

https://www.w3schools.com/css/tryit.asp?filename=trycss_navbar_vertical_borders

Creating HTML links:
https://openclassrooms.com/en/courses/2479876-build-your-website-with-html5-and-css3/2490386-creating-links

Code color:
https://htmlcolorcodes.com/

Embedding a document:
https://stackoverflow.com/questions/5565759/how-to-embed-a-document-in-html-page

Raphael:
https://dmitrybaranovskiy.github.io/raphael/reference.html

Vector Animation Image:
https://wallpapersafari.com/w/J6uXpY

How to add link to an Icon:
https://stackoverflow.com/questions/18566608/how-do-i-add-an-a-link-to-an-icon-in-bootstrap

How to use Raphael:

https://code.tutsplus.com/tutorials/an-introduction-to-the-raphael-js-library--net-7186

Heart button:

https://www.w3resource.com/icon/font-awesome/web-application-icons/heart.php

Song used in the Welcome Video:

https://www.youtube.com/watch?v=gykWYPrArbY