Assignment Report

Candidate number: 230916

Module: Introduction to Multimedia

Degree: undergraduate

Date of submission: 16/11/2020

1. Introduction

This report outlines the work carried out as a part of assignment of the module to explain the development of the websites and the vector function used in animation development.

1. Design and Development

2.1 Website development

Firstly, about the root page. It is restructured on the basis of lab3 part3[1] with a much better navigation bar which has some interactivity(It will change colour and size when you put the pointer on it). Its theme is to feel tranquility. To cater to the theme, I added a copyright-free cool image[2] and a copyright-free light music[3] download from the Internet to create the atmosphere and don’t need to worry about copyright issues. To make sure that the site which is identical when viewed in all main browsers, I prepared two kinds of audio[4]:mp3 and odd because a single format cannot be recognized by all main browsers. The main content of this page is a poem[5] that makes people feel peaceful, and on the right side of the page are links to other pages. I added an icon[6] to every page by adding <link rel="icon" type="image/x-icon" href="123.ico"> in the <head></head> to make them look more like mature websites and the original icon makes this website feel like an experiment. The main color of the root page is brown, because brown is reminiscent of coffee and cozy which meets the topic very well. At the beginning, the picture could not fit the screen well, so I added these code “background-size:100% 100%;”[7] in style.css to make the picture automatically fit the page size and this is very useful so I don’t have to bother to crop the picture. Sometimes there will be a blank space at the top of the page. I added this code “border:white 1px solid;”[8] in style.css solved it very well although I do not know how the blank place be generated. The distinct sections look very rigid, so I added these codes “background-color:rgba(120,0,0,0.1);”[9] to make them slightly transparent and look more natural, the first three numbers determine the color and the last number determine the transparency and in this way, only the background would become transparent and not the text. In order to keep the heading up text in the middle, I added this code “text-align:center;”, also I added this code “height:100px; line-height:100px;”[10] to center it up and down otherwise the text would only be center left and right. In the main section and sidebar section, I added this code “font-family:Times;”[11] to change the font because the default font is too boring and maybe make viewer annoying. In chrome, music cannot be played automatically, so I put the play controller in the middle of the page so that the viewer can see it at a glance and choose to play.

Secondly, about my hobbies page. At first glance, he may not be able to bring you peace, or the deep black and white tone even make you feel oppressed. But I think hobbies need to be immersed in it, and heavy colors are more deeply rooted in people’s hearts. When you adapt, you can feel the tranquility of the deep sea. I made the header and footer slightly transparent by using background-rgba in css to highlight the main body in the middle, giving the page a sense of hierarchy. In the four main sections, I used black toned pictures[12] and white fonts to cater to the main theme of the page, while making the text content legible. I also try to make the text in the section poetic and the corners be curved to reduce the oppression caused by dark colors.

Thirdly, about the video greeting and lab works. I want to record a video of myself but also want to remain mysterious, so I used special effects software[13] to change my appearance in the video, and make the video more interesting and anonymous. I used javascript myVid=document.getElementById("MyVideo");

myVid.addEventListener('ended',function(){

window.location.href="PeacePavilion.html";

}); to make the browser automatically jump to the previous page after the video is played to avoid a slight embarrassment. The color of the example looks lifeless, so I used a lighter color in my lab3 part3 by the code of the color like #FF0066, and my lab4 exactly the same as the example given by the Canvas.

2.2 Animation development

To meet the requirements : Contains both imported bitmap images (e.g. JPEG, Gif, PNG etc.) and drawn vector graphics objects. There must be at least 2 animated vector objects in the scene. I used javascript to create 8 vector elements in the animation conclude 7 raindrops and 1 sun and make them move. I hope that there will be more and denser raindrops, but I did not create more raindrops because I am afraid of causing the animation to freeze. And I don’t know how to easily repeat the animation effect of a raindrop. So I try to make the raindrops fall slower, so that it is easy to see the speed and shape changes of the raindrops.

Inspired by the final explosion sound of the audio, it reminds me of a nuclear explosion, like an erupting sun. I want my animation to have a sense of contrast, so before the sun comes out, I let the raindrops come out, creating a contrast between cold and heat, water and fire, hope and despair, the sun that brings dawn and the sun that brings destruction. To enhance the contrast, I make the sun “ease-out”. This way it seemed to stop before the explosion, making the next explosion seem unpredictable and unexpected

There are two image objects, one is our background, the other is the protagonist, a helpless plane. The background is mainly brown, just like the root page. The background is monotonous, the long-term monotony and the monotonous black of our small plane make people feel annoying, which makes the final destruction not so terrible, but brings a kind of tranquility. I let the background move down at a constant speed to give the visual effect of a small plane moving upwards. At the same time, the raindrops are falling. I used "ease-in"(motion changes) to change the speed make them more like real raindrops. The falling speed of each raindrop is not exactly the same. I think this irregular raindrop also gives people a sense of urgency, paving the way for the coming sun.

To meet the requirements : Animation should include Shape (or size), Motion and Colour changes. I let the raindrops grow longer as they fall(shape changes) and the sun falls to a stop and grows larger and turns from yellow to white (motion, shape and colour changes).

To meet the requirements : Visual content shows a reasonable element of synchronisation with the soundtrack and Animation lasts for at least 10 seconds. I adjusted the time for each element to complete the animation effect, and the visible animation lasts about 13 seconds. I also added a start button to make sure the animation and the audio can start together.

1. Conclusion

I believe my project has completed the necessary items. There is a home page with a name, a short text introduction and a image, a video greeting page with a 7 seconds video clip, a hobbies page describing my personal hobbies and a coursework page link to lab3 part3, lab4 and this report, A Vector animation with sound using JavaScript in my project. All web pages meet the basic requirements and have good browser compatibility.

But I think there are many things that can be better, such as more flexible navigation bar, more interactivity, more refined animation, more carefully selected pictures and music.

I will try to make useful navigation bar and add more button to enhance interactivity and improve visual effects of the animation.

1. Reference

[1] lab lecture: <https://canvas.sussex.ac.uk/courses/12899/pages/week-3-vector-graphics-and-web-development?module_item_id=799122>

[2] Copyright-free image site: <https://unsplash.com>

[3] Copyright-free audio site: <https://freesound.org/>

[4] Online audio file converter: <https://convertio.co/zh/audio-converter/>

[5] "Spirit of the four seasons" Author: Kaizhi Gu

“On the stock tower” Author: Zhihuan Wang

[6] Icon generation website: <https://tool.520101.com/diannao/ico/>

[7] A scripting technology community website: <https://www.jb51.net/css/692634.html>

[8] A developer community: https://blog.csdn.net/bgzclxqq/article/details/81155086

[9] A developer community: https://www.php.cn/css-tutorial-412305.html

[10] A developer community: <https://www.php.cn/css-tutorial-410515.html>

[11] A developer community: <https://www.w3school.com.cn/css/css_font.asp>

[12] Copyright-free image site: <https://unsplash.com>

[13]snapchat: <http://www.snapchat.com/>