Computing Fundamentals Assignment

Due Date : 14 November, 2022

PROJECT PLAN

Documentation and Program Specification:

The programme must replicate the Student PDP format using HTML with the use of HTML5 semantics, a separate linked CSS file, and JavaScript functions. This website also allows users to input data and export the results into a text file.

Over 40 of the 177 available CSS properties were used on the website, Firstly, a base website with HTML was made and the table as well as the buttons that make up the website, then a separate CSS file is created and linked to the HTML to give a style template, lastly the buttons within the website are then given functions using Java script to allow users to show and hide contents of the website as well as generate a textfile with all the inputted data mimicking what a student would experience if they come across the PDP website.

OUTLINE OF WORK

Goal of the Website :

The goal is to make the website as interactive as possible compared to a simple Microsoft Word form; it is intended to encourage students to fill out their PDPs and interact with the website rather than simply viewing it. The objective is accomplished using multiple interactive media, including:

1. **Details properties** : Enables new users to learn more about the use of PDP

Graphical user interface, application

Description automatically generated

That expands into an explanation :



CODE :

A computer screen capture

Description automatically generated with medium confidence

1. **PseudoClass** : Allows user to interact with buttons

Button before hover :

Diagram, icon

Description automatically generated

Button after hover :

Diagram

Description automatically generated

CODE :

Text

Description automatically generated

1. **Iframe** : Projects an external website about the computer science modules so that students can be inspired and discover further their course before writing their PDP. User get to scroll and open links within the external website in the iframe.

Graphical user interface, text, application

Description automatically generated

CODE :



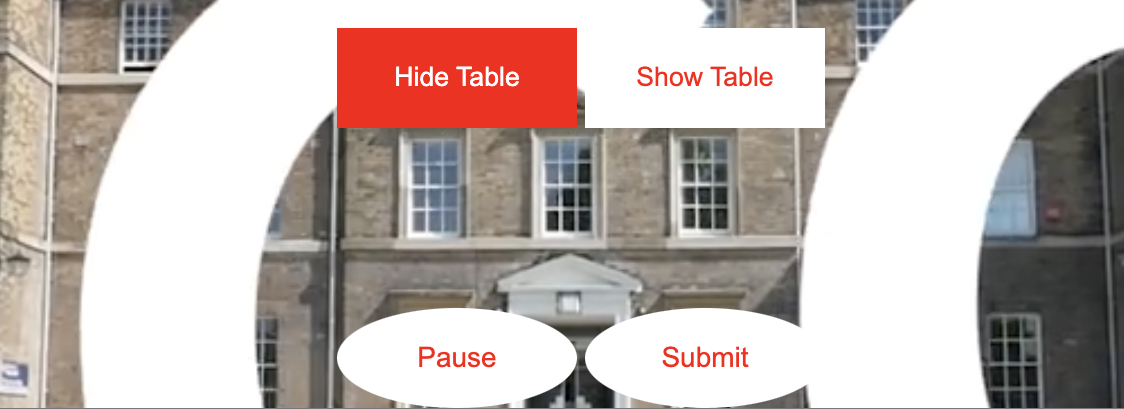
1. **JavaScript** : Enables user to hide/show PDP table and play/pause video

* ***Script to Hide/Show PDP Table :***

When show button is pressed :

***Graphical user interface, calendar

Description automatically generated***

When hide button is pressed :

CODE :

***Text

Description automatically generated***

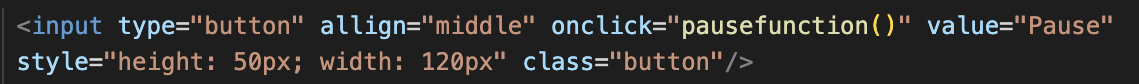
In order to do this, I named each and every one of my tables, which my website consists of 3, with <table id=”divtable1”> and so on. I then made a button and id’ed it <button id=”showbutton”> and use JavaScript show() and hide() function to hide and show the tables by calling them out one by one. Ex. $(“#showbutton”).click(function(){$(“#divtable1”).show();}

* ***Script to Play/Pause video:***

A picture containing text

Description automatically generated

CODE :



The code shows the making of button using input property instead of <button></button>, this is used so that the script that follows after this function will work :

Text

Description automatically generated

A pause button is made in the body and is activated with the pausefunction(), the pause function is made within JavaScript . When the content of the button is “Pause”, it means that the video background is currently playing and if the user decides to press the button, the video will pause.

* ***Script to Generate a Textfile with values inputted by user :***

1. JavaScript – Save Data, the values within the text area will be printed into a separate textfile

Once the Submit button is pressed, an alert will appear informing the user that their work has been submitted. The user's inputted data will then appear in a text area under the pause and submit button, allowing the user to review what they have entered.

Alert :Graphical user interface, application, Word

Description automatically generated

Text Area :

Text

Description automatically generated

The website will then generate a textfile corresponding to the text area values, allowing users to open it as a word document.

Graphical user interface, text, application

Description automatically generated

Submit button before vs after pressed (with the help of pseudoclass):

A picture containing icon

Description automatically generated VS A picture containing diagram

Description automatically generated

Example output text file :

Graphical user interface, text, application, email

Description automatically generated

CODE :

Text

Description automatically generated

The first part of the function with (document.finaloutput.valuesplaced.value) is suggesting that all the values of the text areas of the website be combined into one large text area that holds inputs of the whole website. This is done by putting a <form> outside the <table> and naming the form  so that it can be called within the submitfunction(). The text area is also named, this is so that we can call it in the submitfunction() and put the values of all the textarea into it.

The second part of the function, was inspired by this website, <https://stackoverflow.com/questions/65137434/how-can-i-save-a-txt-file-from-the-value-of-a-textarea>. Which allowed me to input the values of the large textfile in the first part of the submitfunction() into a variable called text. This variable is then called into variable blob, which is **an opaque reference to, or handle for, a chunk of data**. Variable anchor() is also made it **a string method that is used to create the HTML <a> element.**

PROJECT EVALUATION

While creating this website, I learned more about java script functions and CSS properties. I discovered that separating html and css files makes my work much more manageable and readable.

One of the greatest obstacles I faced was printing the values of the textarea inputs because there were multiple text areas so I had to combine the information from each of them into a single textfile. As a result of conducting additional research on using blob and built-in textarea-to-textfile instructions and javascript, I was able to proceed with my original plan, as the textarea values now generate a textfile.