Q1: CSS [6 marks]

You are given Q1.html. Follow the instructions given in Q1.html to produce a web page as shown in the following.

|  |
| --- |
| A picture containing chart  Description automatically generated |

Specific requirements:

* Use Inline styling for the following tasks:

1. change background color of div1 element to orange.
2. Align the title element "Hello Balloons" in the center and change text color to Blue
3. The vertical space between the h1 (title) element and the div1 element must be exactly 10px;

* Use Internal Styling for the following tasks:

1. set the height of each balloon to 100px
2. create a vertical space of 10px between the balloons
3. Horizontally center the balloons in div1 element

Q2: Bootstrap [10 marks]

You are given the following files:

* Q2.html
* resources/\* [4 image files]

You are to add Bootstrap code in Q2.html so that it produces a web page as shown in the following.

|  |
| --- |
| Chart, bubble chart  Description automatically generated |

Specific requirements:

* the header <h1> element is in the center of the browser window and the text color is red-ish color
* the space between the browser top bar and the header <h1> element must be 48px
* Add Bootstrap Carousel Component such that it looks like the figure given above
  + Use ballon1.png and ballon2.png for the carousel on the left
  + Use ballon3.png and ballon4.png for the carousel on the right
  + Use Bootstrap grid system so that when the browser window (viewpoint) is smaller than small breakpoint, the two carousels stack up vertically

Q3: JavaScript [15 marks]

You are given the following file:

* Q3.html

You are to add Javascript code in Q3.html so that it performs the following tasks:

1. When Q3.html is run on the browser, it asks (prompt) the user "Which balloon you like?"
2. Expected user input is one of the following values (case-insensitive):

"BLue", "red", "green", "orange"

If the user input contains empty spaces, e.g. "blue ", remove the empty space

After removing the empty spaces,

if the user's answer is not one of the above values, alert "Provide a valid input!"

note: value comparison must NOT be case-sensitive, i.e., "Blue" is a valid input

Following tasks assume that user has provided a valid input

1. Remove the balloon given by the user from balloons array given in Q3.html.
2. Display the remaining balloon in balloons array in the span element with id "balloons".

Each balloon must be separated by a colon ":". For example,

blue:red:orange

1. Style it with a background color of yellow. For example blue:red:orange
2. Remove the corresponding balloon image given by the user. That is, if the user provides "green", then the "green" balloon image is removed.
3. If user input is NOT "orange" (case-insensitive), move the "orange" balloon inside the "div1" element
4. When the user selects a radio button, change the background color of the balloons to the value given in the selected radio button.

Q4: DOM [10 marks]

You are given the following file:

* Q4.html

You are to build a Shopping Cart web page as shown below.

|  |
| --- |
| Graphical user interface  Description automatically generated |

Specific requirements:

Every time, a new item can be added by clicking the “Enter” button. Each item, once added, is shown in the list, with a checkbox attached at the end. Multiple items can be selected (by ticking the corresponding check boxes) and removed at once (by clicking the “Remove Items” button). Complete Q4.html accordingly.

Q5: JSON & Axios [10 marks]

You are given 2 files: glossary.php and Q5.html.

Host both files on your local WAMP or MAMP server. Visit glossary.php like this (without any parameters) to check what it returns (insert the port number into the URL if necessary):

http://localhost/glossary.php

Basically glossary.php simulates a remote web service that returns a JSON object that represents information about a glossary item.

Your task is to edit Q5.html so that when loaded, this page sends a asynchronous request to glossary.php, extracts these values from the JSON file that comes back:

1. GlossTerm (i.e. "Standard Generalized Markup Language", &
2. para (i.e. "A meta-markup language, used to create markup languages such as DocBook")

and update both the text of displayText1 & displayText2 to display these values. If an error occurs, update displayer instead to show "An error has occurred."

Hint: use a JSON formatter website to help you interpret the JSON string.