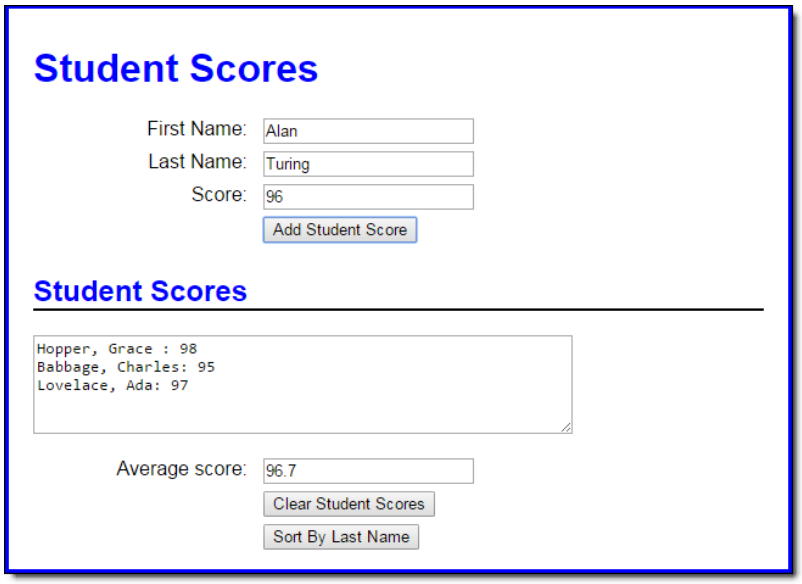
Assignment #4- Develop the Student Scores application

In this assignment, you'll develop an application that tracks student's scores, tallies the average of the entered scores, and sorts the entered students by last name. Then you will store the array in web storage so that it can be retrieved the next time the user loads the page. The interface looks like this:



1. Open the HTML and JavaScript files in this folder:

   `Assign4_start\`

2. In the JavaScript file, note that six functions are supplied. The **$** function. The start of a **displayScores** function. The start of an **addScore** function that ends by clearing the add form and setting the focus on its first field. The start of a **clearScores** function that ends by clearing the display area and setting the focus on the first name field. The start of a **sortScores** function. And an onload event handler that attaches the **addScore**, **clearScores**, and **sortScores** functions to the click events of the appropriate buttons and sets the focus on the first name field.

3. To start, code **two global arrays**, one to hold the score values and the other to hold the strings that display the students' names and scores.

4. In the **displayScores** function, add the code that calculates the average score of all the scores in the first array, and stores it in the text box below the text area. Then, add the code that gets the students' names and scores in the second array and displays it in the text area.

5. In the addScore function, use the push method to save the score in the first array and to save the name and score string (as shown in the text box) in the second array. Then, call the displayScores function to redisplay the updated data. Finally you will need to store the 2 arrays in **localstorage** so they can be retrieved the next time the user visits this webpage. Since arrays can't be stored in localstorage, you will need to **serialize** the array. Serializing the array simply means convert the array to string by using the **join()** function.

6. Now you will need to go back to where you declared the 2 global array variables and write code that will retrieve the 2 arrays from localstorage. Since the values in local storage will be strings, you will need to **split()** them on whichever character sequence you chose in step 5

7. In the clearScores function, add code that clears both global arrays as well as clear the localstorage.

8. In the sortScores function, add code that sorts the students by last name and then re-displays the score information.

Rubric (10 points) The assignment will be assessed according to the following criteria:

-- Problem Has Been Solved and meets all requirements based on the Written Instructions (10 pts)

-- Mostly Meets Requirements (7-9pts)

-- Somewhat Meets Requirements (4-6pts)

-- Rarely Meets Requirements (1-3pts)

-- Not Attempted (0 pts)