Array of Students Test Plan CISS 160 Katharine Wunderle

First, I programmed the event for the Add Student to Grading Array button, and to make sure my array worked correctly, I set up temporary output on my large label to display the student name and course grade along with the index number. I made sure the index increased by 1 and the number changed each time along with the reflecting new input. I verified that if the user tried to put in more than 5 values, they would receive an error message and calculations would not proceed. Next, I added and checked my validation, making sure text was entered in the student name text box and a number less than or equal to 100 was in the course grade text box. If either of these were untrue, an error message would pop up and calculations wouldn’t continue. Then I visually verified that when the button was clicked, the text boxes would be cleared making way for new data, and a message would pop up stating the student has been added to the appropriate array index. Next, for the Display Array Button click event, I made sure that my string concatenated properly, displaying each name and course grade with its array index on a new line. I tested several different sets of names and values including if it was null and then checking the see that my NOT ENTERED message was displayed in the string. Next was the average grade for all of the students in the array. I made sure that my student count tallied and displayed correctly, and also that the average calculated the right value by testing several different sets of values on a separate calculator. Finally came the clear button event, where I visually verified that when pressed, would clear the input textboxes of any data and clear the list of student names and grades from the array label. I then retested all my input and calculations to make sure all the array values and variables were reset, and new array could be entered in.