COSC 1560 – Computer Programming II

Assignment 12
Deadline April 23, 2021

The class Sport, and the 'main' function, developed in Assignment 11, are to be updated as follows:

1) The Sport class should be set-up in files Sport.h and Sport.cpp. The 'main' function should be in a file named SportMain.cpp.
2) The modifier function to set the date of the next scheduled game of a Sport should verify that the argument being passed is a valid date *(month between 1 and 12, etc.)*. If the data is not valid then it should be set to January 1, 2000.
3) The modifier for the number of teams participating in a Sport should verify that the argument being passed is a valid number. If it is a negative number then the number of teams participating in the Sport should be set to 5.
4) The 'populate' function should call the modifier functions to set data members of the Sport.
5) The 'display' function should call the access functions to return the data members of the Sport.
6) In the 'main' function, the user should be asked how many Sports need to be processed (*instead of 3 as in the previous assignment*). An array of the appropriate size should be created.
7) In the 'main' file, create a function called 'averageNumTeams' to take an array of Sport as an argument, and the number of objects in the array. Within this function display the average number of teams participating in all Sports in the array.
8) In the 'main' file, create a function called 'displaySports' to take an array of Sport as an argument, and the number of objects in the array. Within the function declare a pointer to point to a specific element of the array. Use the pointer to go through the array, element by element, and display each Sport. *Remember that there is a 'display' member function in the Sport class.*
9) In the 'main' file, create a function called 'orderSports' to take an array of Sport as an argument and the number of objects in the array, and order the Sports based on the date of the next scheduled game. After this function is called, then call 'displaySports'.

THE DEPARTMENT STANDARDS FOR "STYLE GUIDELINES" SHOULD BE FOLLOWED IN ALL CODE.