LABORATORY 6 – LAB ACTIVITY

1. Make sure you do not have any memory leaks in your program.

2. Implement the following:
    a. A class template *Comparator*, which has a **pure virtual function**, *compare,* that receives two <your entity> elements (Dog/Movie/Tutorial/etc...); the function return type is **bool**.
    b. Two classes which inherit from *Comparator* and implement the *compare* function, in different ways (e.g. *ComparatorAscendingByTitle*, *ComparatorDescendingByAge*, etc...)
    c. Implement a generic sort function, which receives a DynamicVector and a *Comparator* (**pointer or reference**, for polymorphism) and sorts the elements in the vector, according to the *compare* function in the *Comparator*.
    d. Test the function using a DynamicVector of objects of type <your entity>.

Obs: Lecture 6 contains details about polymorphism and pure virtual functions.