

CST 3503
Instructor: Adnan A. Khan
Spring 2021

Assignment 4

Assignment Due Date: Monday December 13, 11:59 pm

Exercise:

Create a class template called *GenericVector*. The class should have the following members:
(Reference: Fig 18.2 and Fig 18.3)

- a) Private Data Member: *vec* (a vector of type parameter).
- b) Public Member Functions:
 - *push*: This public function should accept an argument and insert its value at the end of the vector. (Hint: can use vector's *push_back* method)
 - *last*: This function should accept no argument and return the value of the last element of the vector.
 - *print*: This function will print all the elements in vector.
- c) After you have created the class template, develop a test program (containing *main()*) that will do the following:
 - i. declare an object of *GenericVector* where the type parameter will be replaced by double.
 - ii. enter at least 3 double values into the *vec* data member of object created in (i).
 - iii. use the *last* function to print the last element of the object's *vec* data member.
 - iv. use the *print* function to print all elements of the object's *vec* data member. use a stream manipulator to ensure that 2 digits are printed after decimal.

Submission:

Submit the assignment via Blackboard. From the CST3503 Course in Blackboard, Click *Assignments and Classwork* tab on the left panel to access the Assignment. Click on Assignment4, then scroll down. Click on the browse button to attach the zipped (.zip) file.

- Name of the zipped file will be your lastname_assign4 (e.g., khan_assign4)
- Make sure zipped file contains all .cpp and .h files.
- Do **not** submit only .sln file as it cannot be opened from another computer.

Late Submission:

- 10% off each week from due date.