# **Basics8 - Templates**

## **Due Date**

- See Piazza for due date and time
  - o Grading the next day
- Submit program to perforce in your student directory
  - Sub directory called:
    - /Basics8/...
  - o Fill out your Basics8 Submission Report.pdf
    - Place it in the same directory as your solution
    - Enter the final Changelist number of your submission
    - Enter the number of test passed
    - Write up a quick discussion in the report
      - What you learned from this basics

## Goals

- Templates in C++
  - Understand Templates
  - o Understand Argument deduction
  - Understand Overloading templates
  - Understand Call Templates
  - Understand Full Specialization
  - o Understand Partial Specialization

## **Assignments**

- General:
  - Have fun learning Templates bigger and better, dig into the books:
  - o Answer the questions about Templates for each problem:
    - Fill in the answers to:
      - A() G()
  - o For this assignment you will not be able to run as is
    - Comment out,
    - Conquer and Divide
  - o Follow the directions
    - This is an extra credit problem
    - All have to work or NO credit
    - ALL must by 0 warnings!
      - it's possible

- Learn Templates not that hard, but looks confusing
  - Read and learn
    - I left bread crumbs everywhere
  - Hunt and research the material
    - You are ninjas
      - o So go kill this assignment
- If you are unhappy with this Template assignment
  - o Blame the Language developers....
    - xoxoxoxxo Ed
- Make sure that your program compiles and runs
  - o Warning level 4 warning free.
  - Your code should be squeaky clean.
- We are using Perforce
  - o You should have received the document describing how to login.
    - Please look at the documentation and videos under the reference directory
  - Submit program to perforce in your student directory
    - Sub directory called: /Basics8/...
      - As described above
  - o All your code must compile from perforce with no modifications.
    - Otherwise it's a 0, no exceptions

## Validation

Simple check list to make sure that everything is checked in correctly

- Did you do answer all the questions (initial answers are incorrect)?
- Do they compile and run without any errors?
- Warning level 4 free?
- Submitted it into /Basics8 directory without the extra files?
- Can you delete you local drive, regrab the Basics8 directory?
  - o Is all the code there?

### Hints

Most assignments will have hints in a section like this.

- This is pretty easy Basic assignment
  - Learn Templates by look at the C++ Template book
  - Sometimes it may not be obvious
- I expect this assignment to be completed quickly for most of the students
  - o Please make sure you fully understand this code without a debugger.
  - o Many little lessons here for those who put in the effort.
- Enjoy