

## Homework 5

Object-Oriented Design

Due April 7 at 23:59 pm

Instruction: Please use either Visual C++ or g++ compiler. Please hand it in through Canvas. If necessary, please include a short readme.txt file. For Visual C++, please zip the whole directory of the project (exclude the Debug directory) and submit the zip file.

**Zero point if your code cannot be compiled**

**Zero point if you hand it in late**

**Hint1: You can download the source code examples from the textbooks webpage that is on the syllabus.**

**Hint2: google is a friend. If you search how to use C++ functions, compiling errors, and even tutorials.**

**Five** questions total. All the questions are in the required textbook:

11.6 (15 pts) Student inheritance hierarchy. (No need to write any code)

11.7 (15 pts) Richer shape hierarchy. (No need to write any code)

11.8 (15 pts) Quadrilateral inheritance hierarchy. (No need to write any code)

11.9 (55 pts) (Package Inheritance Hierarchy)

\* The file name contains the main function should be “pro1.cc” or “pro1.cpp.” The main function and the class *Package* are provided. You should design and implement two classes TwoDayPackage and OvernightPackage with TwoDayPackage.h, TwoDayPackage .cpp, OvernightPackage.h, and OvernightPackage.cpp.

11.10 (**Extra** 10 pts) (Account Inheritance Hierarchy)

\* The file name contains the main function should be “pro2.cc” or “pro2.cpp.” You will need to implement three classes – Account, SavingsAccount, CheckingAccount. The pro3.cpp is provided.