## **Programming Assignment 5**

Prof. Zhang Fall 2018 Due 10/9, Tuesday

## Write a program that implements and test a C++ class that represents an appointment.

1. First copy the DayOfYear class as studied in class,

(1) You can copy and paste it from the browser: <u>http://storm.cis.fordham.edu/zhang/cs2000/CodeExample\_Savitch/</u> <u>Chapter10/10-03.cpp</u>

(2) or use the following command (from storm) to copy it to your directory:

## ~zhang/bin/copyLab5

The above script will copy the file to your current directory, and name it as lab5.cpp

2. Declare a new class named **Appointment**. The class should have the following information as data members: (for this lab, you can make them all public members)

- date (you can use DayOfYear type, or use two separate ints to represent month and day)
- duration of the appointment given in minutes
- starting hours
- starting minutes
- AM or PM: You can use a string, or a bool type (isAM) to represent this information.
- description of the appointment, e.g., "flu shot", or "hair cut"
- address, e.g., "health care center", "joe's salon"

3. Declare and implement the following **public** member functions for the **Appointment** class:

(a). void DisplayAppointment() // a member function that display the calling object's info.

(b). void InputAppointment()

a member function that interacts with end-user to read the appointment's information. Please include basic error checking, e.g., starting minute has to be multiple of 10, e.g., 0, 10, 20, 30, 40, 50; starting hour has to be between 1 and 12.

Please note the following pitfall when mixing cin>> variable and getline:

http://www.cplusplus.com/forum/general/51433/

https://stackoverflow.com/questions/33316564/mixing-cin-and-getline-inputissues

also, in the textbook: P481 "Pitfall: mixing cin >> variable; and getline" explains this, and provide a solution.

(c). bool occurOnSameDay (Appointment secondAppt)// check if the calling object and "secondAppt" are for the same day

3. In your main function:

Let end-user input two appointments, and then your program should display them in the terminal, and report whether the two appointments are in the same date or not.

## **Requirement:**

1. Please read this coding style guideline: http://storm.cis.fordham.edu/zhang/cs2000/grading.html

2. Please submit your program as follows:

submit2000 LAB5 lab5.cpp