Project 10 Sample Solution

- Run the provided sample solution

  /home/work/cpe211/Executables/Project_10/Project_10_solution

  There are no input files. All output is generated from code in the main function provided.

  A different main program is used for testing, but if your program output matches using the provided main program, then it will match the one used for grading

- **Once program is working run the comparison script**

  /home/work/cpe211data/Project_10/CompareSolution.bash Project_10.cpp

Project 10

Project 10 Overview

- Implement a Date class using the provided header file, make file and main program
- ***Write all of the code for the methods(functions) of the Date class – this code goes in the file Project_10.cpp and this file is the only file that is to be modified***
- The program is controlled by the code in the main function provided
- Use the Makefile provided to compile the project: command at the terminal is: **make**
- There are no input files

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Project 10 Constraints

- Global variables are not allowed
  - Using global variables, that is variables declared outside of any function body, will result in zero (0) credit on this project

- **Any material from chapters 1-12 is allowed.**

Project 10 Operations

- Several functions are to be written
- Default constructor is to assign a date of 1/1/1900 to the private members of the Date class
- The parameterized constructor is to assign the date specified to the private members of the Date class. The order of the parameters are the month value, day value then year value

Project 10 Operations – Cont.

- The SetDate method(function) is to take the values provided (order is month, day and year) and set the private members of the Date object(variable of data type Date) to those values

- The WriteNumberFormat method(function) outputs the private members of the Date object in the format of mm/dd/yyyy

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Project 10 Operations – Cont.

- The WriteNameFormat method(function) outputs the private members of the Date object in the format of MonthName day, year (This function is extra credit for 5 points)

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Class Objects

- Class objects are the variables declared of the class data type.

  i.e. Date myDate; //myDate is the class object

  myDate.SetDate(6,20,1990) invokes the method SetDate for use on the class object myDate. In particular it sets the month member of myDate to 6, the day member to 20 and the year member to 1990

Class Objects - cont

- In the methods for a class, the members of the class object calling the method are accessed by their name directly
- If a class object is a parameter in a function, then its members are accessed similar to the way structure members are accessed

Class Objects - cont

- When a class object is declared, the constructor is automatically called.
- Constructors usually initialize the class members to some known initial value
- Default constructors are used if no arguments are used in the declaration:

Date myDate; // uses the default constructor
                    // to assign values to the
                    // members of myDate

Class Objects - cont

Date myDate(2,20,2010);

Uses the parameterized constructor and assigns 2 to the month member, 20 to the day member and 2010 to the year member