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| L5: | |
| This lab will modify an existing class to extend its features. | |
| Instruction | |
| There is other file CISP430V4L5.ZIP attached. There are three files (date.h, dateImp.cpp and CISP430V4L5.exe) inside the ZIP file. The CISP430V4L5.exe is an executable file. After you extract this file to a desktop, you can double click to generate to the expecting result of this lab. A class dateType is declared in date.h and implemented in dateImp.cpp. The class dateType was designed and implemented to keep track of a date, but it has very limited operations.  In this lab we would like to redefine the class dateType so that it can perform the following operations on a date in addition to the operations already defined(This means keeping the original feature and add some more new features):   1. Create a setMonth function which sets the month. 2. Create a setDay function which will sets the day. 3. Create a setYear which sets the year. 4. Create a getMonth function which returns the month. 5. Create a getDay function which returns the day. 6. Create a getYear function which returns the year. 7. Change the printDate() to print(). 8. Adjust the isLeapYear function so that a year can be decided is a leap year or not. 9. Create a getDaysInMonth function which returns the number of days in the month. For example, if the date is 3-12-2014, the number of days to be returned is 31 because there are 31 days in March. 10. Create a numberOfDaysPassed function which returns the number of days passed in the year. For example, if the date is 3-18-2014, the number of days passed in the year is 77. Note that the number of days returned also includes the current day. 11. Create a numberOfDaysLeft function which returns the number of days remaining in the year. For example, if the date is 3-18-2014, the number of days remaining in the year is 288. 12. Create an incrementDate function which calculates the new date by adding a fixed number of days to the date. For example, if the date is 3-18-2017 and the days to be added are 25, the new date is 4-12-2017.   We need to create a testing program to test the program we created. The name of the program is CISP430V4L5\_MainProgram and the whole file with cpp extension should be CISP430V4L5\_MainProgram.cpp. The test program should do   * 1. Create two dateType objects date1 (3, 15, 2017), and date2 (15, 20, 2018).   2. Call the print function of date1 to display the date1 object’s information.   3. Call the numberOfDaysPassed() of date1 to display the days pass for date1 object.   4. Call the numberOfDaysLeft() of date1 to display the number of the days left for date 1 object.   5. Call the getDaysInMonth() of the date1 to display the number of days in Date 1's month.   6. Call the incrementDate function date1 object to increase 41 days   7. Call the print function of date1 to display the date1 object’s information again.   8. Call the getDaysInMonth() of the date1 to display the number of days in Date 1's new month.   9. Call the print function of date2 to display the date2 object’s information.   10. Call the setDate function of date2 object to set the month to 14, day to 40 and year to 0.   11. Call the print function of date2 to display the date2 object’s information.   12. Call setYear, setMonth and setDay functions of date2 to set the year to 2018, month to 2, and day to 31.   13. Call getYear, getMonth and getDay functions of date2 to display the date2’s information. | |
| The result of the program should look like the picture in the next column. |  |
| Instruction to this lab’s submittion file | |
| Please follow the file name guide line at the assignment section of the class syllabus. This is a lab so replace the A(assignment) to L(Lab). | |
| Please put only programming files(.h, and .cpp) to the proper file named zip file and submit the zip file to the drop box of this lab. | |