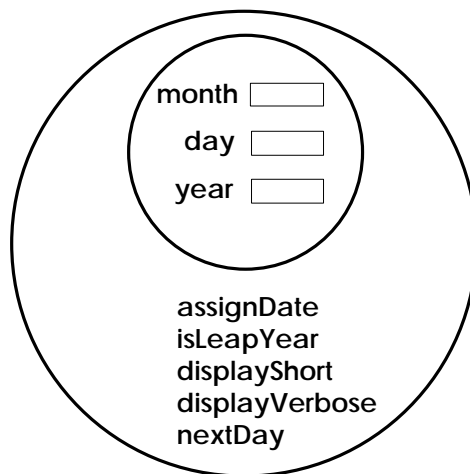


CSCI 301: Introduction to Algorithms and Data Structures
Instructor: Pranava K. Jha

MAINTAINING AND DISPLAYING A DATE

Consider the problem of maintaining and displaying a date. A blueprint appears in the following conceptual diagram.

```
class dateType
```



- The data members are of type `int`.
- `assignDate` assigns a particular date.
- `isLeapYear` returns true if the present year is a leap year, and false otherwise.
- Suppose that the present date is February 11, 2005.
 - Calling `displayShort` would print 2/11/2005.
 - Calling `displayVerbose` would print February 11, 2005.
 - Calling `nextDay` would change the date to February 12, 2005.

Include two constructors: (i) a default constructor and (ii) a constructor with parameters.

You are to design and implement a C++ class that implements `dateType` and then exercise that class in a client program. The program will prompt for the input that will be in the form **mm dd yyyy**. It will halt when month, day or year entered by the user is negative.