Preparing People to Lead Extraordinary Lives

LOYOLA
UNIVERSITY
CHICAGO

DEPARTMENT OF
Computer Science

Comp 170 - Assignment
People and Marriage

As in the course syllabus, late assignments will not be accepted unless you have a completed the process for using a late pass before the due date.

1. Submit

Online as instructed in class before the due date and time.

2. Format

Java program using proper programming style and with appropriate comments in the code.

3. Content

Summary: Write a complete program to keep track of people and their possible marriages. People have a name (you decide the format), age, and sex. Two people over the age of 18 may get married if neither one is married currently. Marriages can be annulled or ended any time after which people can marry again.

Most Important: Use good OOP techniques! Decide what classes you need first. It is helpful to ask "what are the key nouns in the system requirements?"

Details and suggestions:
   a. Define a good and complete class for Person. Add useful methods (possibly isMarried, canMarry, age,…). I suggest you store date of birth and calculate the age the person is today.
   b. Be able to print out the current list of people in the system.
   c. Think about how you want to identify people (full name, last name, person id, pick from list by index, etc.)
   d. Allow multiple people to be added by the user
   e. Provide some way to keep track of current marriages (some type of collection may be useful)
   f. Allow the user to attempt to marry two (already entered) people, test to see if that is allowed, and confirm the result to the user
   g. Allow the user to attempt to end an existing marriage. If it makes sense, update the system and confirm the result to the user
   h. Be able to print out the current list of marriages (you pick the format)

i. Be sure there is some way to end the program. Before ending print out the list of all people and the current marriages.

Test your program fully and carefully. Try a few things that should not work. Be sure your program catches input errors and asks the user to reenter.

4. Grading
25 points total. No points if will not compile. -5 points for any class not fully defined or not well structured. -1 to -3 for logic errors and missing requirements depending on severity. Up to -5 for poor programming style. Up to -5 for lack of sufficient comments.