

COMP 1409 Lab 3-a (2 points)

In-class lab

Work with a partner. A local fitness club needs to model the attributes and behaviors of their club members. Write a class called Member. Include appropriate comments for each class element.

Here are the relevant attributes of a Member object. These must be the ONLY fields in your class. All the attributes must be passed to the object constructor and initialized in the constructor.

- first name
- last name
- height (inches)
- weight (pounds)
- year of birth
- year of joining the club
- current year

Here are some of the behaviors of a Member object. Each of these is a method that returns the specified information when it is invoked.

- `getFullName` returns the member's full name, e.g. "Joe Smith"
- `getHeightInches` returns the member's height
- `getWeightPounds` returns the member's weight
- `calculateYearsJoined` returns the number of years the person has been a member
- `calculateAge` returns the calculated age of the member
- `calculateAgeAtJoining` returns the age the member was when they joined
- `getsDiscount` returns true if the member qualifies for a discount. People who qualify for a discount are either:
 - under the age of 12 and members for at least two years
 - at least 65 years of age
 - members for at least 10 years

Demonstrate your completed project to your instructor or TA before leaving the lab and be sure we have checked it off for each member of the team. A suggested solution will be given during the next class and labs that have not been checked off will not receive any points.

If you run out of time or have to miss class it is your responsibility to do the lab at home and submit it to the appropriate D2L dropbox before next class.