

CISC 3321

Programming Assignment 3 (20 Pts)

Due at 10:00 PM Central (MyCampus)

This assignment tests your understanding of classes and methods.

Health Profile:

Personal health is one of the hottest topics today. There has been an argument among healthcare providers on the question of sharing computerized health records. Some think sharing them would make it easy to provide quality healthcare, avoid drug conflict, and reduce cost. The opponents believe that privacy may be compromised and some security concerns may arise. Nonetheless, something tells us that the pro group may eventually win, and when they do, we should be ready to sell them our software (the Health Profile that you are about to develop). Follow the instructions below:

- Define a health profile class for a person with the person's last name, first name, gender, date of birth (consisting of separate attributes of months, day and year of birth), height (inches), and weight (pounds)
- Define a class constructor that receives this data
- Provide a set and get accessors for each attribute
- In the class, define methods that calculate and return the person's age in years, maximum heart rate (see handout), and body mass index (BMI – which you already have)
- Your application should prompt for the person's information; instantiates an object of the HealthProfile (or whatever you call it) class for that person, and print the information (first name, last name, gender, date of birth, height and weight). It should also calculate age in years, BMI, maximum heart rate, and target heart rate range. Finally, make sure your application also display the BMI values chart from assignment 1