Title: Heart rate class

Issue date: Tuesday, 6th October 2020
Submission date: Friday, 09th October 2020 (before midnight)

Tasks:

While exercising, you can use a heart-rate monitor to see that your heart rate stays within a safe range suggested by your trainers and doctors. The formula for calculating your maximum heart rate in beats per minute is 220 minus your age in years. Your target heart rate is a range that's 50 - 85% of your maximum heart rate.

1. Create a class called `HeartRates`. The class attributes should include the person's first name, last name and date of birth (consisting of separate attributes for the month, day and year of birth)
   [3 marks]

2. Your class should have a constructor that receives this data as parameters. For each attribute provide get and set functions.
   [5 marks]

3. The class should include a member function that calculates and returns the person's age (in years), a member function that calculates and returns the person's maximum heart rate and a member function that calculates returns the person's target heart rate.
   [6 marks]

4. Write a program that prompts for the person's information, instantiates an object of the class `HeartRate` and prints the information from that object – including the person's first name, last name and date of birth – then calculates and prints the person's age in (years), maximum heart rate and target heart-rate range.
   [6 marks]

   Total = **20 marks**
   (10% of your final coursework mark)

Submission details:

- Please make your submission to BBL – Use the relevant tab to upload your codes.
- **You should submit your header file, your class implementation file and your main.cpp**
- If you DO NOT submit your code your submission will receive **a mark of zero**. Please ensure that your .zip folder that you upload to BBL contains:
  - Header file (.h or .hpp)
  - Class implementation file (.c or .cpp)
  - Main file (.c or .cpp)

  ***All source files (fully commented with author info)**