## **Computing Science and Mathematics**

## **CSCU9T4 Practical (5th February)**

Spring 2018

Building further on the work of the last two sessions, you are asked to further modify the Training record program. Recall that it is OK to discuss general points with your colleagues, but that copying is a serious offence. If there is any suggestion of sharing of code between class members then you will be asked to submit your code and it will be checked for plagiarism.

## Checkpoint

Demonstrate to a tutor your modified TrainingRecord program. It should include the (functioning) Remove button. Be sure to test your work thoroughly before showing to the tutor! The remove button should only remove the record specified, and no other. Make sure the other buttons still work correctly.

## THE DEADLINE FOR CHECKING THIS WORK IS THE LAB ON 26th FEBRUARY 2018.

- 1. Add a Remove button to the GUI and implement its functionality. Now when you enter a Name, Month, Day and Year and click Remove, the Entry on that date for that person should be removed from the running record. (If you haven't already done so, you need to make adding a new record more robust, ensuring that you can't add a record with the same Name, Month, Day and Year as one already present. This is a rather simplistic way of ensuring unique entries. Normally you would consider a more realistic scenario in which a person can have multiple training sessions per day and you'd either add a unique entry number to distinguish entries, or use the time of day to distinguish entries. This is not required for the purposes of this practical.)
- 2. Improve the appearance of the GUI. This should include using the setEnabled method with the buttons to ensure that they can only be used when appropriate. For example, at the start, the only enabled button should be Add.
- 3. (Optional extra for more of a challenge). Add a new button Weekly Distance? When you click the button, the program should display all records for the named person for the last seven days (including today). You will need to investigate the Calendar class more fully to implement this part.

Now you have all the right records, you just need to use the distance to calculate the total number of distance for each class of exercise (swim, cycle, run) for that person for this week. Add to the Weekly Distance? output the distance this week. Be careful to add the right things together.