MEK3100 – Programming 2

Programming Project 2

Fall 2021

Due: Friday, 12 November 2021 23:59

Guidelines and warnings:

- Use your own approach and algorithm to write the code.
- You **are not allowed** to use concepts and topics we have not covered in the course yet such as classes and objects.
- Group members should discuss the problem together to come up with a solution (an algorithm) before writing the actual code.
- Any copies from the internet or other groups will give you an automatic **FAIL** for the project for every involved party (the giver and the taker).
- **Each group** must submit **<u>one</u> C++ file** (e.g. **project2.cpp**) at the end, including the source code of the project.
- The submission will be done electronically to Canvas.

Project description

In this project, you need to process some information regarding books such as code, title, author, and publication year. Assume that the maximum number of books is 1000.

Define a structure type (struct) to represent the above-mentioned information about the books. The structure will include a string to represent the title, a string to represent the author, an integer to represent the code, and an integer to represent the publication year. You may also need to have another member for the structure in order to delete or undelete a record.

- Write a menu-driven C++ program with the following options:

```
**********************
Please enter a command:
'A': Add an entry
'D': Delete an entry
'U': Undelete an entry
'P': Print the books
'S': Search in the list
'Q': Quit
**********************
```

- Write a function ***InsertRecord*** that can insert a book record in your data structure.

- Write a function ***DeleteRecord*** that can delete a book record from your data structure using the book code as input. Taking into consideration that the user can change his/her mind and undelete the record later. The user can delete the book using its code only.

- Write a function ***UnDeleteRecord*** that can undelete a book record. The user can undelete the book using its code.

- Write a function ***PrintBooks*** that prints information about all the records available in your data structure.

- Write a function ***SearchForBook*** that enables the user to search for a book using its code. If the code is available in your data structure, then it prints all the other information about that book.

Lykke til 😊