

Lab 2: Movie class

Create a new project and write the **interface** and the **implementation** of the class **Movie** according to the requirements listed below:

- **Member variables**
 - Title of the movie stored as a **string**
 - Year when the movies was released stored as an **int**
- **Default constructor**
- **Overloaded constructor**
 - **Parameter:** A **string** storing a movie title and an **int** storing the year when the movie was released
- Function **getMovieTitle**
 - Returns the name of the movie.
- Function **getYear**
 - Returns the year when the movie was released.
- Function **setMovieTitle**
 - **Parameter:** a **string** storing a movie title
 - Replaces the name of the movie stored in the calling object with the name passed by the parameter.
- Function **setYear**
 - **Parameter:** an **int** storing a year
 - Replaces the year of the movie stored in the calling object with the year passed by the parameter.
- Function **print**
 - Prints the movie title and the year in this format:
Title (year)
- Function **sameYear**
 - **Parameter:** An object of the class **Movie**
 - Compares the year of the movie stored in the calling object to the year of the movie passed by the parameter.
 - Returns true if the year when they were released are the same, false otherwise.
- **Destructor**

Include a **Main.cpp** file to test your **Movie** class. Make sure you test **every** function.

Do **NOT** write any implementation in the class interface. All **implementation** should be written in the **.cpp** file (you are doing **separate compilation**).

Make sure to:

- Add the **name header** with your name, date, etc. as shown on the syllabus, **same format**. Note that this is worth 1 pt. on labs and exams. The name header must be at the top of every file.

- Pass by **reference** when needed and add the **const** modifier to the parameters **ONLY when necessary**.
- Do **NOT** use a **return** statement without returning anything! → **return;**
- Do **NOT** use the **break** and **continue** statements (there are no switch statements to use **break**).
- Do **NOT** use global variables **ever**.
- Do **NOT** modify any of the given code.
- Do **NOT** create any additional functions.
- Use the **const** modifier when necessary for **member functions**.

Keep in mind the following:

- Divide your code in meaningful blocks for readability.
- Name your variables using descriptive names.
- Use all appropriate conventions for naming.
- Do not leave unnecessary spaces or lines in your code.

Output

The format for the output is up to you. Make sure you test ALL your functions.