Week 12 Programming Assignment

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Here is the link for my repository, in which you will find all the edited code files and such.
https://github.com/Aarhus-University-ECE/assignment-12-SirQuacc

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(Code) In this exercise you will create a *Duration* class in C++.

(a) Start by creating a basic *Duration* class with a private integer attribute *time* that represents a number of seconds that have elapsed. Create a public method *getDuration()* that returns the value of the *time* attribute for an object instance:

In duration.cpp

```
int Duration::getDuration()
{
   /* complete this method */
}
```

Remember to the method in the header file

Hint: Review the lecture slides for how to define a C++ class. Don't forget that you need to create both a header file (`.h`) and an implementation file (`.cpp`). You will need to compile your Duration class as a library, as shown in the lecture slides.

Hint: Do not include a *main* function in your class definition. You will create a *main* method later in your separate test program.

All of the code and bits can be found in the repository at src/duration.cpp and include/duration.hpp and the tests are found in /tests/src/tests.cpp

That said, the remainder of the task descriptions don't make sense to include here, so instead I've included the pdf for those in text/Assignment_Week12.pdf

On the next page is the duration.hpp file, the rest can be found as mentioned in the repo.

```cpp
#ifndef _DURATION_HPP_
#define _DURATION_HPP_

class Duration{
private:
    int time;
    int alarm;
    bool alarmHasBeenSet;
    bool checkAndUpdateAlarm();

public:
    Duration();
    ~Duration();
    Duration(int t);
    int getDuration();
    bool tick();
    bool tick(int amount);
    void setAlarm(int t);
};

#endif
```