

# CMPS 2010 Lab 11

*Spring 2024*

## Part 1 - Preparing New Source Files (Guided)

- Create a new folder called lab11
- Inside of the lab11 folder set up the following files:

```
Nov  1 05:35 Main.cpp
Nov  1 05:34 Monster.cpp
Nov  1 05:35 Monster.h
Nov  1 05:32 monsters
```

- (Reminder: you can use the linux command “touch” to create empty text files)
  - Main.cpp will contain the same code from lab9, except we will be removing the `struct Monster{};`
  - Instead, you will `#include “Monster.h”` in Main.cpp
  - Monster.h will contain the full `struct Monster{};` declaration
  - Monster.cpp will be blank for now

## Part 2 - Convert struct Monster to class Monster

- In Monster.h:
  - Change your `struct Monster{};` declaration to a `class Monster{};` declaration.
  - Make sure to include any libraries you will need for this class, like `<string>`
  - Make all of the monster attributes private
  - Declare the following public function prototypes:
    - Setters: `setName, setType, setColor, setEyes, setArms, setLegs`
    - Getters: `getName, getType, getColor, getEyes, getArms, getLegs`
- In Monster.cpp:
  - Define the getter and setter functions declared in Monster.h
- In Main.cpp:
  - Update your code to use the class getter/setter functions rather than accessing the attributes directly. So, for example, instead of updating the name like this:

```
monster.name = genName();
```

You would do something like this:

```
monster.setName(genName());
```

**To compile this weeks lab use: `g++ Main.cpp Monster.cpp -o main`**

**Run this command from your [lab11](#) folder to submit your work.**

```
/home/fac/paul/s/submit.sh
```