SCALE FOR PROJECT PISCINE CPP (/PROJECTS/PISCINE-CPP) / DAY 01 (/PROJECTS/42-PISCINE-C-FORMATION-PISCINE-CPP-DAY-01)

Introduction

The subject of this project is rather vague and leaves a lot to the user's choice. This is INTENDED. The questions in this grading scale, however, are very focused and concentrate on what we think is the core of each exercise, what we want you to grasp. So we would like you to do the same : You can and should tolerate moderate deviations in filenames, function names, etc ... as long as the exercise basically works as intended. Of course, in case the student you are grading really strayed too far, you should not grade the exercise in question at all. We leave it to your good judgement to determine what constitutes "straying too far".

The usual obvious rules apply : Only grade what's on the git repository of the student, don't be a dick, and basically be the grader you would like to have grading you.

Do NOT stop grading when an exercise is wrong.

Guidelines

You must compile with clang++, with -Wall -Wextra -Werror

Any of these means you must not grade the exercise in question:
- A function is implemented in a header (except in a template)
- A Makefile compiles without flags and/or with something other than clang++

Any of these means that you must flag the project as Cheat:
- Use of a "C" function (*alloc, *printf, free)
- Use of a function not allowed in the subject
- Use of "using namespace" or "friend" (Unless explictly allowed in the subject)
- Use of an external library, or C++11 features (Unless explictly allowed in the subject)

Attachments

Subject (/uploads/document/document/1019/d01.en.pdf)

ex00

As the subject says, this exercise requires the student to turn in a "main" function, and it must, when run, demonstrate that the exercise works as intended (For example, using console output, etc ... The student has to be able to explain how it proves anything). If it does not, you MUST NOT grade this part.

ex00

There must be a ponyOnTheHeap function that allocates a new Pony using "new", then deletes it (Using "delete", obviously).
There must be a ponyOnTheStack function that allocates a new Pony on the stack (WITHOUT using "new" or "malloc", then.)

☑ Yes ☒ No

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ex01

ex01

Theoretically, two choices here are right : Either changing the allocation to be on the stack and not on the heap (So, don't use "new" anymore, and handle a std::string without using the pointer), or adding a "delete panthere;" after the std::cout.
Ask the student to explain WHY he did what he did before marking this as done. He has to answer something other than "Meh, it just works".

☑ Yes ☒ No

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ex02

As the subject says, this exercise requires the student to turn in a "main" function, and it must, when run, demonstrate that the exercise works as intended (For example, using console output, etc ... The student has to be able to explain how it proves anything). If it does not, you MUST NOT grade this part.

ex02

All the classes and functions required by the subject must exist and work as specified, otherwise, count as wrong.
The Zombies must be destroyed when appropriate. In newZombie, it should be allocated on the heap, returned, and then deleted in the main(). The student must explain why.
The Zombies created by randomChump must either be allocated on the stack (so implictly deleted at the end of the function), or allocated on the heap then explicitly deleted. The student must justify his choice.

☑ Yes ☒ No

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ex03

As the subject says, this exercise requires the student to turn in a "main" function, and it must, when run, demonstrate that the exercise works as intended (For example, using console output, etc ... The student has to be able to explain how it proves anything). If it does not, you MUST NOT grade this part.

ex03

All the classes and functions required by the subject must exist and work as specified, otherwise, count as wrong.
The Zombies must be allocated in the constructor of the ZombieHorde, and should be allocated as an array, either on the stack, either explictly using new[], in which case they should be deleted in the destructor. The student must explain his choice.

☑ Yes ☒ No

ex04

ex04

There is a string containing "HI THIS IS BRAIN", then a pointer to
it, then a reference to it, and it is displayed through the pointer then through
the reference. As the subject says, really, that's it, no tricks or anything.

☑ Yes ☒ No

ex05

As the subject says, this exercise requires the student to turn in a "main" function, and it must, when run, demonstrate that the exercise works as intended (For example, using console output, etc ... The student has to be able to explain how it proves anything). If it does not, you MUST NOT grade this part.

ex05

All the classes and functions required by the subject must exist and work as specified, otherwise, count as wrong.
The "identify" function in the "Brain" must return the representation of "this", or any other trick that equates to "the adress of the current instance".
The "getBrain" function should return a REFERENCE to the Brain of the current Human. With the main() that the subject provides, it must, as the subject says, display two identical adresses.
The student should be able to explain why he did this.

☑ Yes ☒ No

ex06

As the subject says, this exercise requires the student to turn in a "main" function, and it must, when run, demonstrate that the exercise works as intended (For example, using console output, etc ... The student has to be able to explain how it proves anything). If it does not, you MUST NOT grade this part.

ex06

All the classes and functions required by the subject must exist and work as specified, otherwise, count as wrong.
The student must choose to store the Weapon either as pointer or as a reference in HumanA and HumanB.
In HumanA, BOTH are acceptable if justified, even if theoretically the reference is better, since the Weapon exists from creation until destruction and never changes.
In HumanB, only the pointer is acceptable, since the field is not set at creation time, so it can not be a reference.
The student must justify his choices correctly.

☑ Yes ☒ No

ex07

ex07

The program must work as the subject specifies.
A reasonable amount of errors must be handled. If you can find an error that isn't handled, and isn't completely esoteric, count as wrong.
The program must read from the file using an ifstream or equivalent, and write using an ofstream or equivalent.

☑ Yes ☒ No

ex08

As the subject says, this exercise requires the student to turn in a "main" function, and it must, when run, demonstrate that the exercise works as intended (For example, using console output, etc ... The student has to be able to explain how it proves anything). If it does not, you MUST NOT grade this part.

ex08

All the classes and functions required by the subject must exist and work as specified, otherwise, count as wrong.
The "action" function must use an array of pointer to member functions to choose which action should be called. Any if/elseif/elseif/else or other crap like this counts as wrong.

☑ Yes ☒ No

ex09

As the subject says, this exercise requires the student to turn in a "main" function, and it must, when run, demonstrate that the exercise works as intended (For example, using console output, etc ... The student has to be able to explain how it proves anything). If it does not, you MUST NOT grade this part.

ex09

All the classes and functions required by the subject must exist and work as specified, otherwise, count as wrong.
Must work exactly as the subject requires.
As with the previous exercise, the action to take when using "log" must be determined using an array of pointers to member functions.

☑ Yes ☒ No

ex10

ex10

The program must work as the subject specifies.
Any error that isn't handled = count as wrong.

☑ Yes ☒ No

Ratings

Don't forget to check the flag corresponding to the defense

✔ Ok

Empty work | Incomplete work | Invalid compilation | Cheat | Crash

Forbidden function

Conclusion

Leave a comment on this evaluation

Preview!!!