fl (https://profile.intra.42.fr/searches)

ppipes

(https://profile.intra.42.fr/)

Remember that the quality of the defenses, hence the quality of the of the school on the labor market depends on you. The remote defences during the Covid crisis allows more flexibility so you can progress into your curriculum, but also brings more risks of cheat, injustice, laziness, that will harm everyone's skills development. We do count on your maturity and wisdom during these remote defenses for the benefits of the entire community.

# SCALE FOR PROJECT CPP MODULE 01 (HTTPS://PROJECTS.INTRA.42.FR/PROJECTS/CPP-MODULE-01)

You should evaluate 1 student in this team

¥

Git repository

git@vogsphere.msk.21-school.ru:vogsphere/intra-uuid-15f12f87-0292-4be

# Introduction

- Only grade the work that is in the student or group's GiT repository.
- Double-check that the GiT repository belongs to the student or the group. Ensure that the work is for the relevant project and also check that "git clone" is used in an empty folder.
- Check carefully that no malicious aliases were used to fool you and make you evaluate something other than the content of the official repository.
- To avoid any surprises, carefully check that both the evaluating and the evaluated students have reviewed the possible scripts used to facilitate the grading.
- If the evaluating student has not completed that particular project yet, it is mandatory for this student to read the entire subject prior to starting the defence.
- Use the flags available on this scale to signal an empty repository, non-functioning program, a norm error, cheating etc. In these cases, the grading is over and the final grade is 0 (or -42 in case of cheating). However, with the exception of cheating, you are encouraged to continue to discuss your work (even if you have not finished it) in order to identify any issues that may have caused this failure and avoid repeating the same mistake in the future.
- Remember that for the duration of the defence, no segfault, no other unexpected, premature, uncontrolled or unexpected termination of the program, else the final grade is 0. Use the appropriate flag.

You should never have to edit any file except the configuration file if it exists. If you want to edit a file, take the time to explicit the reasons with the evaluated student and make sure both of you are okay with this.

- You must also verify the absence of memory leaks. Any memory allocated on the heap must be properly freed before the end of execution.

You are allowed to use any of the different tools available on the computer, such as leaks, valgrind, or e fence. In case of memory leaks, tick the appropriate flag.

# **Disclaimer**

Please respect the following rules:

- Remain polite, courteous, respectful and constructive throughout the evaluation process. The well-being of the community

depends on it.

- Identify with the person (or the group) evaluated the eventual dysfunctions of the work. Take the time to discuss and debate the problems you have identified.
- You must consider that there might be some difference in how your peers might have understood the project's instructions and the scope of its functionalities. Always keep an open mind and grade him/her as honestly as possible. The pedagogy is valid only and only if peer-evaluation is conducted seriously.

# **Guidelines**

You must compile with clang++, with -Wall -Wextra -Werror
As a reminder, this project is in C++98 and C++20 members functions or containers are NOT expected.

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 Forbidden Function:

- Use of a "C" function (\*alloc, \*printf, free)
- Use of a function not allowed in the subject
- Use of "using namespace" or "friend"
- Use of an external library, or C++20 features

# **Attachments**

subject.pdf (https://cdn.intra.42.fr/pdf/pdf/13160/en.subject.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").

| ₩ Yes | ™ No |
|-------|------|
|       |      |

## 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".

| 屬 Yes | ₩ No |  |
|-------|------|--|
|       |      |  |

## 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

| The Zombies must be destroyed when appropriate.  |  |
|--|--|
|  |  |
| n 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 t   | the stack (so implictly deleted  |
| at the end of the function), or allocated on the heap then explicitly del  | leted.   |
| The student must justify his choice.   |  |
|  | -<br>■ No  |
|  |  |
|  |  |
| ex03   |  |
| As the subject says, this exercise requires the student to turn in a "mademonstrate that the exercise works as intended (for example, using able to explain how it proves anything. If it does not, you MUST NOT   | console output, etc). The student has to be  |
| ex03   |  |
| All the classes and functions required by the subject must exist   |  |
| and work as specified, otherwise, no points for this exercise.   |  |
| The Zombies must be allocated<br>n the constructor of the ZombieHorde, and should be allocated as ar   | n array  |
| either on the stack, either explictly using new[], in which case they sh   | • :  |
| be deleted in the destructor. The student must explain his choice.   |  |
| R Yes  | ₩ No   |
| res  | ₪ NO   |
| ex04   |  |
|  |  |
| EXU4   |  |
|  |  |
| ex04  There is a string containing "HI THIS IS BRAIN", then a pointer  |  |
| ex04  There is a string containing "HI THIS IS BRAIN", then a pointer o it, then a reference to it, and it is displayed through the pointer ther   | n  |
| ex04   | n  |
| 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   | n<br>≅ No  |
| PX04  There is a string containing "HI THIS IS BRAIN", then a pointer o it, then a reference to it, and it is displayed through the pointer ther hrough the reference. As the subject says, really, that's it, no tricks or anything.  |  |
| 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.  |  |
| There is a string containing "HI THIS IS BRAIN", then a pointer o 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.   | ® No   |
| There is a string containing "HI THIS IS BRAIN", then a pointer o it, then a reference to it, and it is displayed through the pointer then hrough the reference. As the subject says, really, that's it, no tricks or anything.  Results  Res | ■ No  ain" function, and it must, when run, console output, etc). The student has to be  |
| There is a string containing "HI THIS IS BRAIN", then a pointer o it, then a reference to it, and it is displayed through the pointer then hrough the reference. As the subject says, really, that's it, no tricks or anything.  Responsible Yes  As the subject says, this exercise requires the student to turn in a "mademonstrate that the exercise works as intended (for example, using  | ■ No  ain" function, and it must, when run, console output, etc). The student has to be  |
| There is a string containing "HI THIS IS BRAIN", then a pointer or 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.  Respectively  | ■ No  ain" function, and it must, when run, console output, etc). The student has to be  |
| 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 there through the reference. As the subject says, really, that's it, no tricks or anything.  Results   | ■ No  ain" function, and it must, when run, console output, etc). The student has to be  |
| 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 there through the reference. As the subject says, really, that's it, no tricks or anything.  Revos  As the subject says, this exercise requires the student to turn in a "material demonstrate that the exercise works as intended (for example, using table to explain how it proves anything. If it does not, you MUST NOT exos  All the classes and functions required by the subject must exist and work as specified, otherwise, no points for this exercise.  | ■ No  ain" function, and it must, when run, console output, etc). The student has to be  |
| There is a string containing "HI THIS IS BRAIN", then a pointer oo it, then a reference to it, and it is displayed through the pointer ther hrough the reference. As the subject says, really, that's it, no tricks or anything.  Revos  As the subject says, this exercise requires the student to turn in a "mademonstrate that the exercise works as intended (for example, using able to explain how it proves anything. If it does not, you MUST NOT exos  All the classes and functions required by the subject must exist and work as specified, otherwise, no points for this exercise. The "identify" function  | No  in" function, and it must, when run, console output, etc). The student has to be grade this part.                          |
| There is a string containing "HI THIS IS BRAIN", then a pointer oo it, then a reference to it, and it is displayed through the pointer ther hrough the reference. As the subject says, really, that's it, no tricks or anything.  Revos  As the subject says, this exercise requires the student to turn in a "mademonstrate that the exercise works as intended (for example, using able to explain how it proves anything. If it does not, you MUST NOT exos  All the classes and functions required by the subject must exist and work as specified, otherwise, no points for this exercise. The "identify" function in the "Brain" must return the representation of "this", or any other trice.   | No  in" function, and it must, when run, console output, etc). The student has to be grade this part.                          |
| There is a string containing "HI THIS IS BRAIN", then a pointer oo it, then a reference to it, and it is displayed through the pointer there hrough the reference. As the subject says, really, that's it, no tricks or anything.  Respect 1988  Respect 1989  | No  ain" function, and it must, when run, console output, etc). The student has to be grade this part.                         |
| There is a string containing "HI THIS IS BRAIN", then a pointer oo it, then a reference to it, and it is displayed through the pointer there hrough the reference. As the subject says, really, that's it, no tricks or anything.  Revos  As the subject says, this exercise requires the student to turn in a "material demonstrate that the exercise works as intended (for example, using able to explain how it proves anything. If it does not, you MUST NOT exos  All the classes and functions required by the subject must exist and work as specified, otherwise, no points for this exercise. The "identify" function in the "Brain" must return the representation of "this", or any other trice hat equates to "the adress of the current instance". The "getBrain" unction should return a REFERENCE to the Brain of the current Hundrich in the current and the current Hundrich in the current and return a REFERENCE to the Brain of the current Hundrich in the "grain" unction should return a REFERENCE to the Brain of the current Hundrich in the "grain" unction should return a REFERENCE to the Brain of the current Hundrich in the "grain" unction should return a REFERENCE to the Brain of the current Hundrich in the "grain" unction should return a REFERENCE to the Brain of the current Hundrich in the "grain" unction should return a REFERENCE to the Brain of the current Hundrich in the "grain" unction should return a REFERENCE to the Brain of the current Hundrich in the "grain" unction should return a REFERENCE to the Brain of the current Hundrich in the "grain" unction should return a REFERENCE to the Brain of the current Hundrich in the "grain" unction should return a REFERENCE to the Brain of the current Hundrich in the "grain" unction should return a REFERENCE to the Brain of the current Hundrich in the "grain" unction should return a REFERENCE to the Brain of the current Hundrich in the "grain" unction should return a REFERENCE to the Brain of the current Hundrich in the "grain" unction should return a REFERENCE to the Brain of the current | ■ No  ain" function, and it must, when run, console output, etc). The student has to be grade this part.  ck  nan. With the    |
| 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 there through the reference. As the subject says, really, that's it, no tricks or anything.  Revos  As the subject says, this exercise requires the student to turn in a "material demonstrate that the exercise works as intended (for example, using table to explain how it proves anything. If it does not, you MUST NOT exos  All the classes and functions required by the subject must exist and work as specified, otherwise, no points for this exercise. The "identify" function in the "Brain" must return the representation of "this", or any other trice that equates to "the adress of the current instance". The "getBrain" function should return a REFERENCE to the Brain of the current Hummain() that the subject provides, it must, as the subject says, display in the subject says, display in the subject says, display in the subject provides, it must, as the subject says, display in the subject says.   | ■ No  ain" function, and it must, when run, console output, etc). The student has to be grade this part.  ck  nan. With the    |
| 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 there through the reference. As the subject says, really, that's it, no tricks or anything.  Revos  As the subject says, this exercise requires the student to turn in a "material demonstrate that the exercise works as intended (for example, using able to explain how it proves anything. If it does not, you MUST NOT exos  All the classes and functions required by the subject must exist and work as specified, otherwise, no points for this exercise. The "identify" function in the "Brain" must return the representation of "this", or any other trice that equates to "the adress of the current instance". The "getBrain" function should return a REFERENCE to the Brain of the current Hummain() that the subject provides, it must, as the subject says, display identical adresses.  | ■ No  ain" function, and it must, when run, console output, etc). The student has to be grade this part.  ck  nan. With the    |
| 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.  | ■ No  ain" function, and it must, when run, console output, etc). The student has to be grade this part.  ck  nan. With the    |
| There is a string containing "HI THIS IS BRAIN", then a pointer o it, then a reference to it, and it is displayed through the pointer ther hrough the reference. As the subject says, really, that's it, no tricks or anything.  Revos  Pex05  As the subject says, this exercise requires the student to turn in a "mademonstrate that the exercise works as intended (for example, using able to explain how it proves anything. If it does not, you MUST NOT exos  All the classes and functions required by the subject must exist and work as specified, otherwise, no points for this exercise. The "identify" function in the "Brain" must return the representation of "this", or any other trice that equates to "the adress of the current instance". The "getBrain" unction should return a REFERENCE to the Brain of the current Hunmain() that the subject provides, it must, as the subject says, display identical adresses. The student should be able to explain why he did this.   | INO  Bain" function, and it must, when run, console output, etc). The student has to be grade this part.  Console with the two |

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, no points for this exercise. 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 theoretical

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.

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, no points for this exercise.

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, no points for this exercise. 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, no points for this exercise.

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.

图 Yes

₩ No

# ex<sub>10</sub>

#### ex10

The program must work as the subject specifies. Any error that isn't handled = no points for this exercise."

|     | tings<br>orget to check t | he flag correspo | anding to the defe | nse              |            |             |         |  |
|-----|---------------------------|------------------|--------------------|------------------|------------|-------------|---------|--|
|     |                           | ₩ Ok             |                    |                  | P Outstand | ing project |         |  |
| A E | Empty work                | ■ No author      | file W Inva        | alid compilation | ■ Norme    | Cheat       | d Crash |  |
|     |                           | Leaks            |                    |                  | l Forbidde | en function |         |  |
| Co  | nclusio                   | on               |                    |                  |            |             |         |  |
|     | nclusic                   |                  | F                  | inish evaluation |            |             |         |  |
|     |                           |                  | F                  | inish evaluation |            |             |         |  |