

## EXECUTION

[Comp] MAKE => obtaining an executable with make gives 0.5pts

[CL] Command Line (1.00pt) / the file **c01.txt** is an empty city

Provide c01.txt on the command line as follows:

```
./projet c01.txt
```

Then quit the program with the Exit button. Run it again with:

```
./projet
```

Then use the Open Button to open **c01.txt**

=> 0.5 pt for each successful case = the program starts and there is nothing to draw.









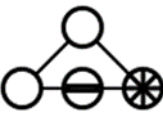


[Stub] unused Buttons (1.50pt)

Run the program with **c01.txt**. Check that the use of the 6 buttons “shortest path”, “zoom in”, “zoom out”, “zoom reset”, “edit link” and the node type selection produce a short message (stub) in the terminal.

=> 0.25 pt for each button stub.

[Crit] sequence of files for checking the criteria values (3 pt)

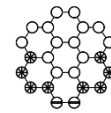
Stay in the running program to open files **c01.txt** to **c12.txt** in a sequence for checking the expected criteria values (**visible in next table**). => 0.25 pt for each correct file values.

<b>c01</b>	<i>Rien affiché</i>	Informations ENJ: 0.0000 CI: 0 MTA: 0	<b>c07</b>		Informations ENJ: -1.0000 CI: 0 MTA: 0
<b>c02</b>		Informations ENJ: 1.0000 CI: 0 MTA: 2e+100	<b>c08</b>		Informations ENJ: -1.0000 CI: 707107 MTA: 0
<b>c03</b>		Informations ENJ: 1.0000 CI: 500000 MTA: 2e+100	<b>c09</b>		Informations ENJ: -0.3333 CI: 1e+06 MTA: 1e+100
<b>c04</b>		Informations ENJ: -0.3333 CI: 1e+06 MTA: 40	<b>c10</b>		Informations ENJ: -0.3333 CI: 1e+06 MTA: 60
<b>c05</b>		Informations ENJ: 0.0000 CI: 500000 MTA: 1e+100	<b>c11</b>		Informations ENJ: 0.0000 CI: 2.41421e+06 MTA: 76.5685
<b>c06</b>		Informations ENJ: 0.0000 CI: 500000 MTA: 1e+100	<b>c12</b>		Informations ENJ: -0.5000 CI: 3e+06 MTA: 65

Projects providing only partially correct results will be evaluated on a case by case basis with RB to ensure a uniform evaluation. For example: a penalty of -0,25pt is applied to an incorrect criteria value but the maximum total penalty is -1pt per criteria.

For example, if some project give incorrect values only for MTA for multiple files, or if some need to restart the executable for each test file.

### [OSO] Open1-Save1-Open2-OpenSaved (3.5pts)

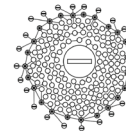


Informations	
ENJ:	0.1666
CI:	2.39532e+07
MTA:	112.631

Run the program and use Open button to open **g01.txt** (0.5pt + 0.5pt for criteria values)

Use the Save button to Save the file as **ddd.txt** (1.pt)

*Check the source code that the saved file is produced from the data structures and NOT by copying the opened file line by line : report such case as **fraud** and put **Opt** in this column and column AN.*



Informations	
ENJ:	0.2137
CI:	1.96896e+08
MTA:	470.087

Use the Open button to open **g02.txt** (0.5pt + 0.5pt for criteria values)

Use the Open button to open the saved file **ddd.txt** (0.25pt)

Use the **New** button followed by the Open button to open the saved file **ddd.txt** (0.25pt)

In case the file g02.txt cannot be opened, 1 pt is lost but another file is used to continue the test of the sequence of actions. -0,25pt per incorrect MTA value for g01 and g02.

### [ED] Error Detection and resulting behavior (1.5pt)

Run the program and use Open button to open **g01.txt**

Do NOT quit the program ; use the Open Button again for trying to open **e01.txt**. The error message should appear in the terminal (pop-up window is ok too) (0.5pt) In addition, the drawing area should be empty (0.5pt).

Use the Open button to open **g02.txt** (0.5pt)

In case the file g02.txt cannot be opened, another file is used to test the last action.

**Rendu2 ARCHITECTURE EVALUATION: check these three points**

**[A1]** Architecture features to check for module **projet**:

Nb points (max=0.5pts)	Module role / separation of functionalities
[A1.1] 0.25	There must be NO data structure of Ville in this module
[A1.2] 0.25	connection with <b>gui</b> through <b>gui.h</b> ; a Gui data structure is allowed

**[A2]** Architecture features to check for the **Model sub-system**:

Nb points	Module role / separation of functionalities
[A2.1] 0.50	ville.h must NOT be included in the lower-level modules (same as rendu1)
[A2.2] 0.50	There must be NO dependency to GTKmm in any Model module

**[A3]** Architecture features to check for module **tool**:

Nb points	Module role / separation of functionalities (same as rendu1)
[A3.1] 0.50	The module <b>tool</b> has to be independent from higher level modules as described in “contrainte sémantique importante” of the project description

**[A4]** Architecture features to check for module **gui**:

Nb points	Module role / separation of functionalities
[A4.1] 0.25	connection with the <b>Model</b> sub-system with <b>ville.h only</b> but ville.h can include other interfaces for its own class needs. OK to include tools.h
[A4.2] 0.25	There must be NO function or method call from module Noeud

**[A5]** Architecture features to check for module **graphic** : DISTINGUISH archi b1 from b2

ARCHI pt	Module role / separation of functionalities
<b>[b1]</b> 0.5pt	Same rule as for tools [A3.1]: no dependency to higher level of the Model
<b>[b2]</b> 0.5pt	Same rule as for gui [A4.1] and [A4.2]

=> **Remove the number of point indicated for each feature that is not achieved.**

In the spreadsheets column X architecture violation\_comment, note down the corresponding **code(s) : e.g. [A1.1], [A2.1], [A3.1], [A4.3]** etc...

## CLASS ENCAPSULATION / MODULARIZATION: (same as rendu1 except C2 penalty)

**[C1] Encapsulation violation** : using any global variable or making any attribute public is strictly forbidden in any modules, including static attributes (no problem for methods and static methods).

It is allowed to have static variables (or declared in the unnamed namespace) **in the implementation** of a module ( indicate a warning if there are too many of them).

No problem for struct model made visible in tools.h by the tools module.

=> **Remove 1 point per public attribute or global variable** (max 3pt).

**[C2] Externalization of methods' definition** : whenever a module interface shows a class interface, it should contain only method prototypes. The method definition must be externalized in the module implementation (same as rendu1).

The only *accepted exception* of method definition in the class interface are the **constructors** or **getters** methods that fits onto the same line as the function prototype.

=> **Remove 0.5 point per interface that is not correctly externalized** (max 2 pt).

The total of removed points from C1 and C2 is maximum 3 pts.

In the spreadsheet column Z `class violation_comment`, note down the corresponding **code [C1],[C2]** together with the **interface name** and the **public attribute name**. Indicate that it must be corrected in future assignment.

## **CODING STYLE (less criteria than rendu1 to spare time for execution tests)**

**[L1] Indentation rules** have been ignored **more than 4 times** ; read carefully [the conventions](#) before considering this penalty because we accept some variants. Please note that we don't indent the public/private keywords in class declaration. Indicate only a **warning** if the whole code is consistent in the use of multiple brace styles (e.g. two styles are used but always in the same way, for the same control instructions)

**[L2]** There are **more than 4 wrapping line** in the code (more than 87 char); Indicate only a warning if 4 wrapping lines or less.

**[P2]** Apart from two functions of max 80 lines, all function size must not exceed 40 lines (+tolerance of 4 lines) with geany (with the default font size).

**=> remove 1 point per coding style criteria that is violated**

In the spreadsheet column `violation_list`, note down the **code** representing the violated criteria followed by the file name and the **line numbers** it occurs. For instance **[L2] gui.cc 57,65,80-84** means that this set of lines are violating the wrapping criteria in gui.cc. If the same type of violation occurs more than 5 times, you mention briefly how much larger the problem is in the violation comment column AC

Keep the `violation_list` alphabetically sorted and separate each entry by a comma.