

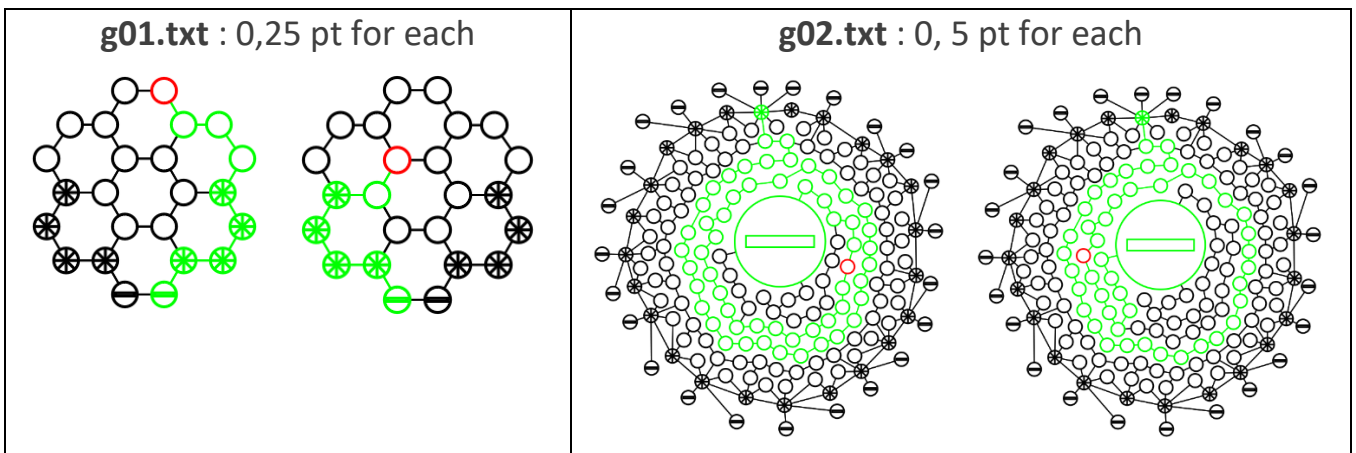
### 3.4 Column [MAKE] => obtaining an executable with make gives 0.5pts

**If it does not work at the first trial, remove the 0.5 point.** Then try to fix the bug if it is obvious (less than 1 min search in the Makefile or the code). If you feel it requires more work, contact immediately **Andrei (in english)** so that he asks the group to upload a new version of the archive file (put me in CC).

### 3.5 Column [OS] Open sequence (1.00pt)

Normally you should be able to make the following tests by opening all the specified files with the Open button. **As soon as one test file makes the program to crash or does not provide the expected behavior/result , Exit the program and start the project again for that test file (this is penalized with -0.5 point each test file, but maximum -1 pt).**

### 3.6 Column [SP] Shortest\_path (1,5 pt) Activate Shortest\_path button



### 3.7 Column [ZD] Zoom & Distorsion (x pt)

Press New and create a single **Transport** node.

Test the node drawing: 3 x zoom-in (0,25 pt) then 2 x zoom-out (0,25 pt) then zoom-reset (0,25pt).

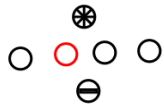
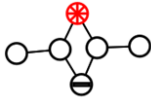
**Enlarge** the window in the 2 dimensions x and y => 0,5pt if no drawing distorsion

Create a **Transport** node *in the extra space obtained by enlarging the window* ; it must be located where the mouse cursor is (0,25 pt).

Do a zoom-out and create another **Transport** node *in the extra space obtained by enlarging the window* ; it must be located where the mouse cursor is (0,25 pt).

### 3.8 Column [City] Editing a city from scratch (8,25 pt)

Press New and do the following steps (in case of error, report [City.step] in column AD ) :

Step/ nb points	opération	quoi vérifier ?
1 <b>3x 0,25pt</b>	Create 1 node <b>of each type</b> ; don't test superposition	The node is created where the mouse cursor is ; the drawing looks like what is asked.
2 <b>1pt</b>	Keep last node type ; try to create a node that produces a superposition	There should be an error message with nature of the error (either in terminal or pop-up). The node must not be created.
3 <b>0,5 pt</b>	Select the housing node as current node	Clicking inside the node must make it the current node => drawn in red
4 <b>0,5 pt</b>	Destroy the current node	A second clic into the same node destroys it ; there is no more a current node.
5 <b>1,5 pt</b>	Select the production node and change its size (0,5pt) + 3 vérifications	Vérification of max (0,25) then min (0,25) size ; for max size check, ok to get the max size or stay unchanged. Check superposition with other node while increasing size: error message (0,5 pt)
6 <b>0,5 pt</b>	Select the transport node and move it (0,25pt)	The center of the node is located where the mouse cursor is ; check superposition: error message(0,25pt)
7 <b>2 pt</b>	Create/destroy a link 	Add 4 housing nodes (like in image). Select the current node and press edit_link, create/destroy a correct link (2x0,5pt); try to create incorrect link : error message (0,5pt) ; detect more than 3 links for housing node: error message (0,5).
8 <b>1,5pt</b>	Save, New, Open ; delete all 	Save (0,5pt), then New then Open (0,5pt) a city like the image. Then destroy all nodes <i>one by one</i> until none is left ; then create one node without crashing (0,5pt).

#### 4. Rendu3 ARCHITECTURE EVALUATION: *lighter checks*

The spreadsheet column AF shows the default maximum of **1** point for ARCHITECTURE.

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

Nb points	Module role / separation of functionalities
0.5	There must be NO data structure of Ville in this module

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

Nb points	Module role / separation of functionalities
0.5	There must be NO dependency to GTKmm in any Model module

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

In the spreadsheets column AG architecture\_violation\_comment, note down the corresponding **code(s)** : e.g. **[A1], [A2]**

## 5. CLASS ENCAPSULATION / MODULARIZATION: (same as rendu2)

The spreadsheet column AH shows the **default maximum of 1 point** for **CLASS**.

**[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 1 pt).

**[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 rendu2).

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 1 pt).

The total of removed points from C1 and C2 is maximum 1 pt.

In the spreadsheet column AI class violation\_comment, note down the corresponding code **[C1],[C2]** together with the **interface name** and the **public attribute name**.

## 6. CODING STYLE (*less criteria*)

The spreadsheet column AJ shows the default maximum of 2 points for STYLE

**[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.

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

In the spreadsheet column AK 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 AL

Keep the violation\_list alphabetically sorted and separate each entry by a comma.