Laiout As

DXF JANITORS USER MANUAL

Learn how to use the program

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Innhold

1. Before using the program

The program is not guaranteed to be compatible with DXF files saved in AutoCAD as "AutoCAD 2018 DXF". When saving the DXF file in AutoCAD, ensure that the filed is saved as one of the versions marked with a checkmark.

Figure 1: Picture from File type selection when saving a file in AutoCAD.

2. Launching the program

Locate the dxf_janitors.exe file after downloading the bundle from: <link>

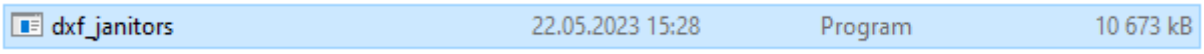


Figure 2: Screenshot of how the executable file looks

3. Open a file in the program

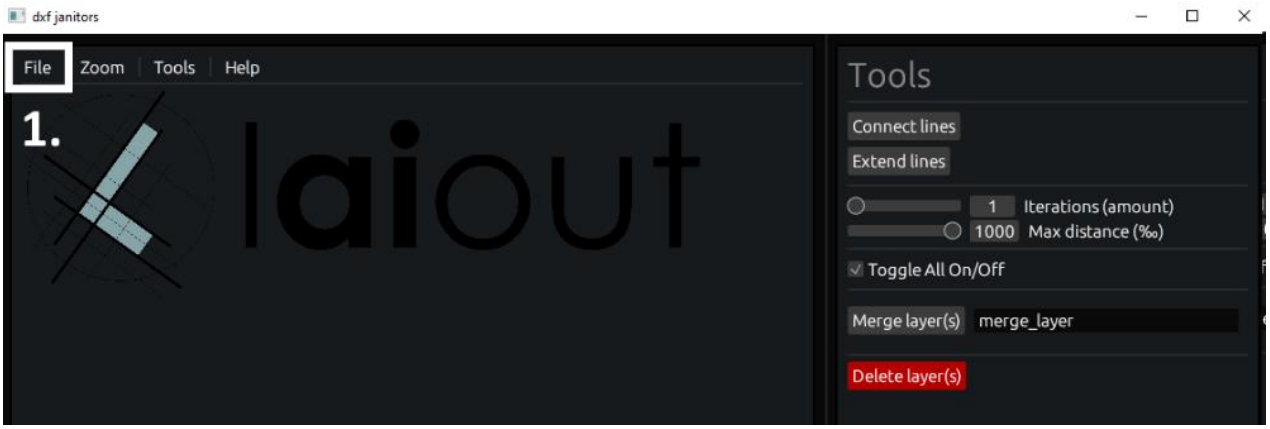
1. Press **File > Open file**.

    1a. Alternative: Press "**Ctrl + O**" on the keyboard.

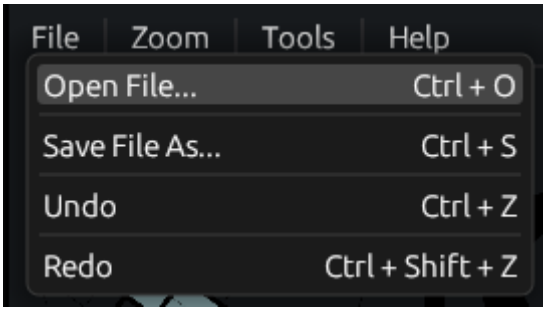
2. Pick a DXF file to open in your local file directory.

3. Press **open**.

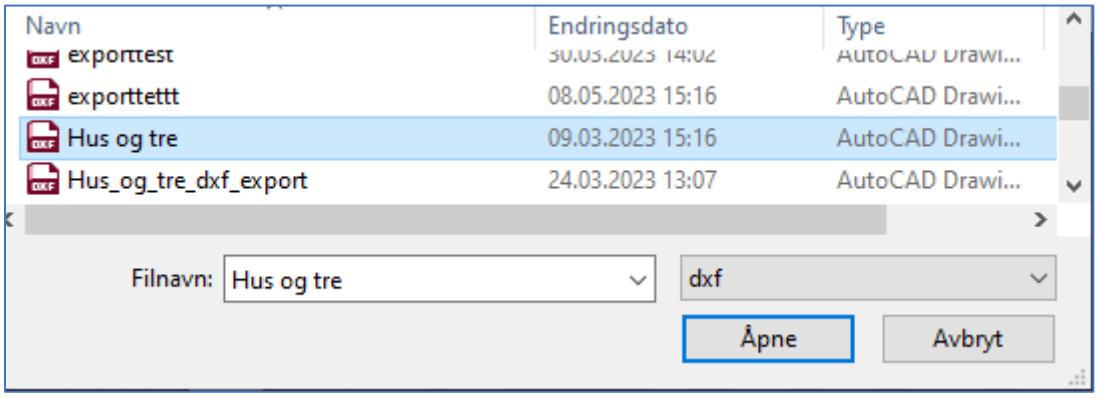
1. Press “**File**”.



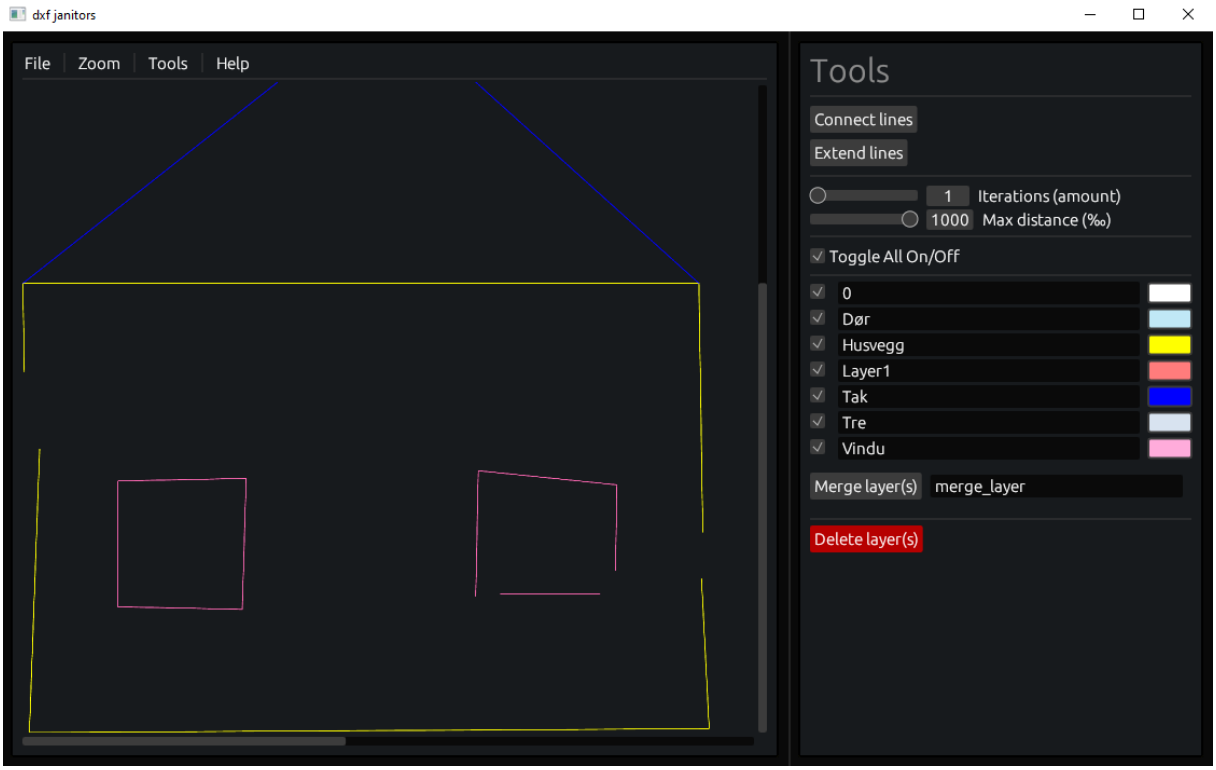
2. Press “**Open File**”



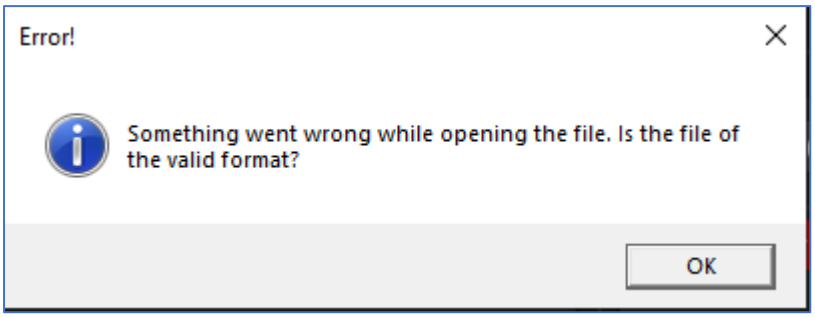
3. Pick a DXF file to open in your local file directory and press “**Open**”.



4. If the file opening was successful, a visual drawing of the file is displayed with a list of the current layers.



5. If the file opening was invalid, an error message is displayed:

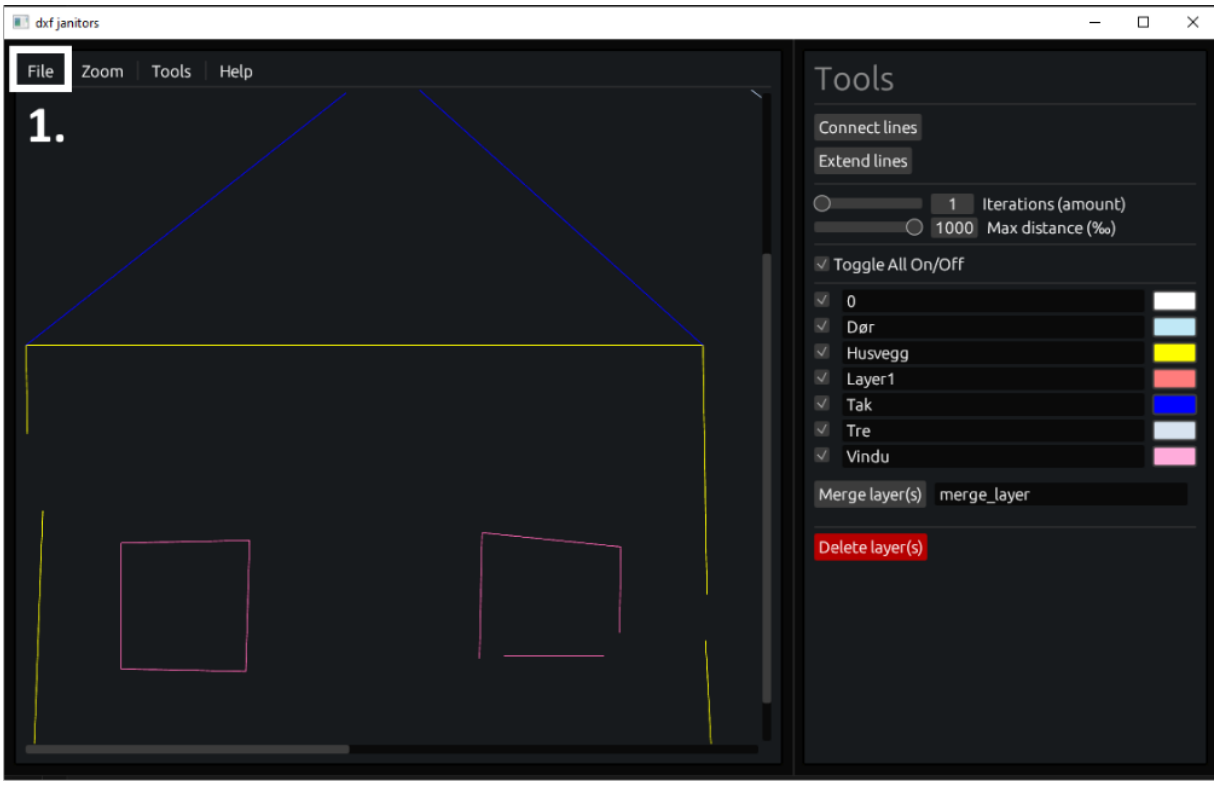


4. Saving a file in the program

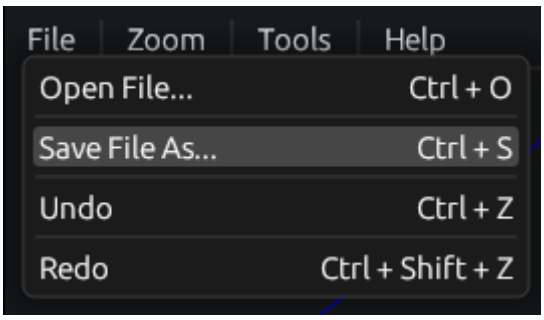
Pre-condition: A file needs to be opened in the program in order to save it.

1. Press **File > Save File.**
    a. Alternative: Press "**Ctrl + S**" on the keyboard.
2. Choose a location for the file in your local directory.
3. Pick a name for the saved file.
4. Press "**Save**".

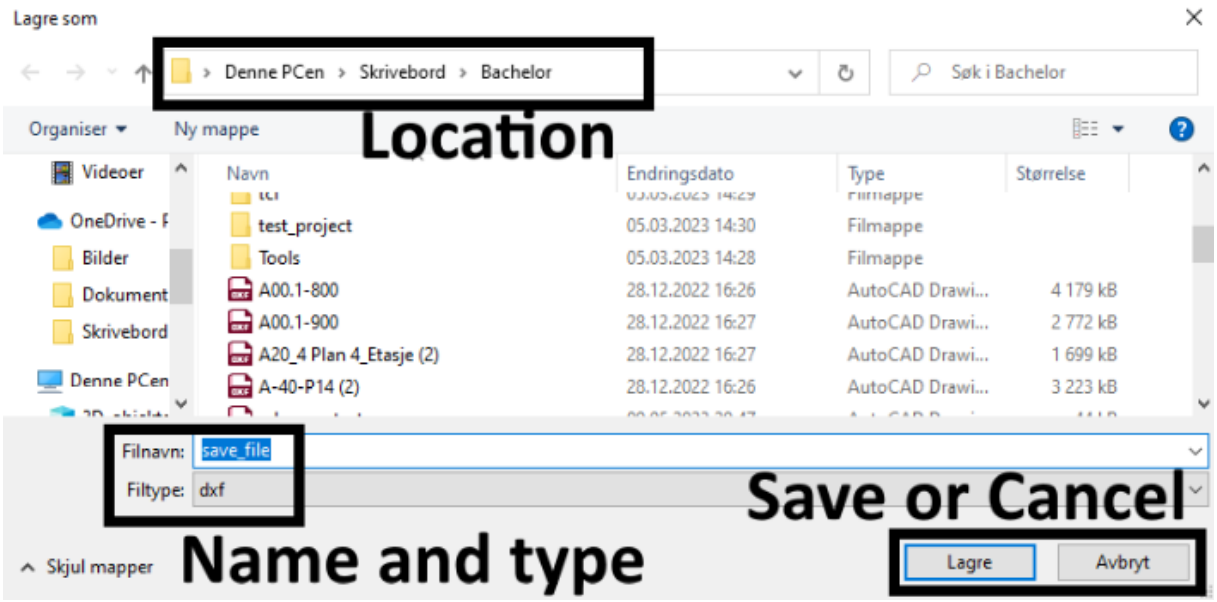
1. Press "**File**":



2. Press "**Save File As**":



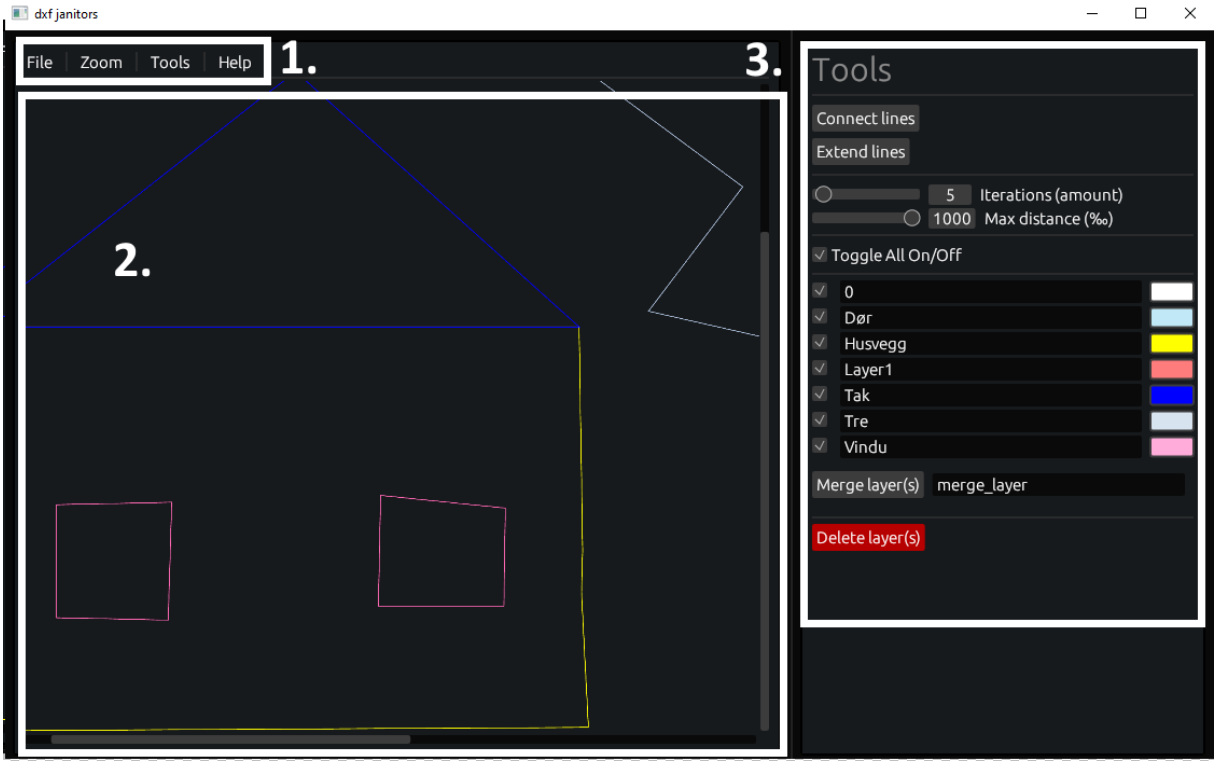
3. Pick a name for the file, and location to save it in your local file directory:



NOTE: Wait a couple of seconds before closing the programing, while the system is saving the file.

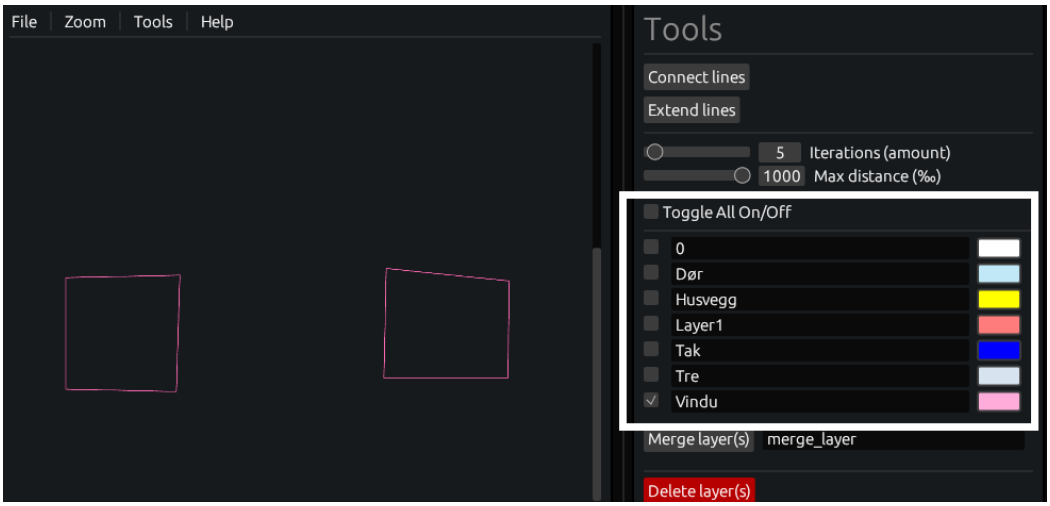
5. Basic controls

The software design is split into three parts. Part number one is a toolbar that consists of action related to opening, saving, undo, redo and zooming actions. These are actions that are available through key bindings and is not frequently used by the user. The second part focuses on visualization of drawing. It is interactive, and the window can be resized included zoomed and adjusted to user's preference. The third part is the tool section, it contains information about every layer and actions that can be useful.



5.1 Hide specific layers

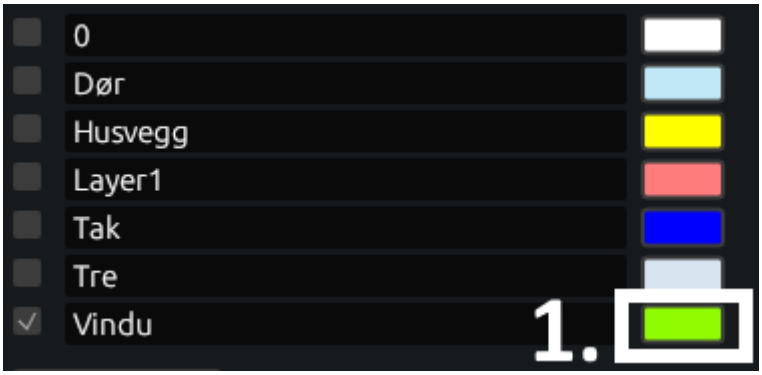
In the list of layers, the checkboxes indicate if the layer should be visible or not. Use the checkboxes to update the visual representation in real-time.



5.2 Change the color of a layer

All the layers are color-coded. The current color of the layers is displayed on the right side of the layer's name. The user can change the colors by pressing the color box.

1. **Press the color box for the option of changing the color.**



2. **Select a new color in the RGB color picker**

5.3 Zoom and interact with the image

The image is interactive through **Click + Drag.** Hold down left mouse-click and drag it to adjust the center of focus.

To interact with the image:

- Hold **Left mouseclick + Drag** wanted direction to adjust the image.

To Zoom:

- Press **Alt + Scroll**
- Use toolbar button **Zoom > Zoom (in or out).**
- Use the keyboard binding: **Ctrl + "+" or "-".**

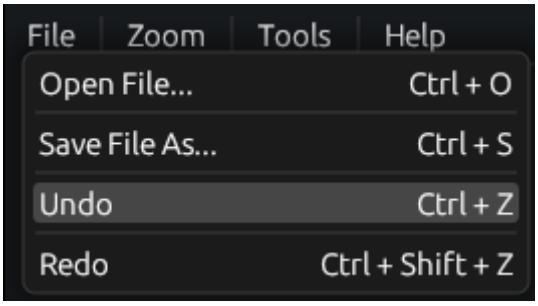
5.4 Undo or redo changes

All changes made to the file is can be reversed through the **undo** and **redo** functionality.

Both Undo and Redo are located under **File** in the toolbar.

To **Undo or Redo**:

1. Press **File>Undo/Redo**



Or

2. Use the keybindings:
    - **Undo:** Press "**Ctrl + Z".**
    - **Redo:** Press "**Ctrl + Shift + Z".**

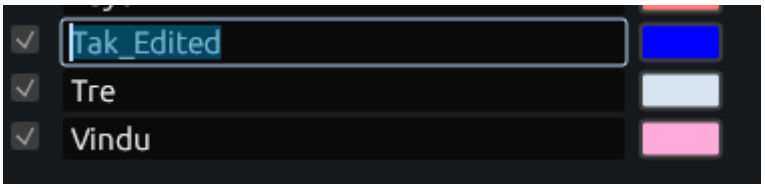
6. Advanced controls

This chapter includes all functionality of the software with a guide on how to use them. It includes before and after figures to see the effect of the functionalities.

6.1 Rename layers

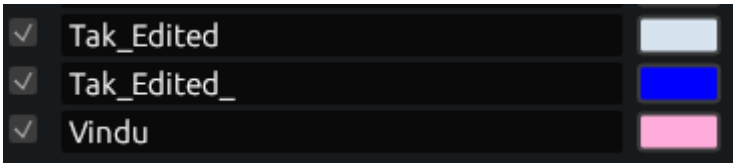
1. Locate the list of layers.
2. Press the text-field of the layer to rename:

3. Edit the name to the new name:



4. Press outside of the text field or press "**Enter**" to confirm the change.

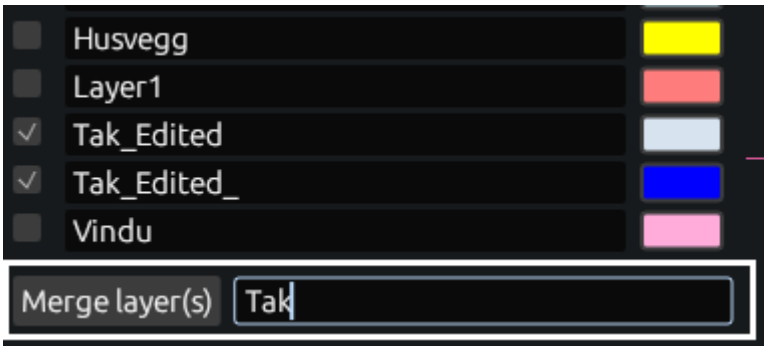
5. If the new name is a duplicate, an underscore is added to the duplicate name:



6.2 Merge layers

Merge layers combines multiple layers into one new layer.

1. Use the checkboxes to select layers before merging.
2. Fill in a new name in the text-field by the "**Merge layer(s)"** button below the list of layers, marked in white in the figure below:



3. Press the button "**Merge layer(s).**

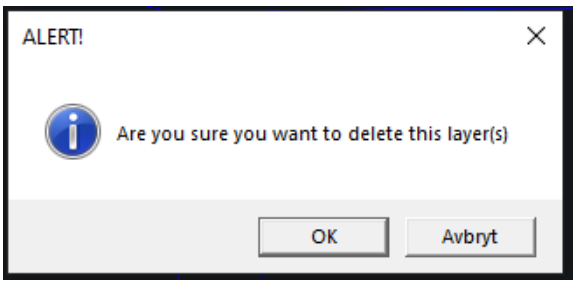
   The layer "Tak_Edited" and "Tak_Edited_" is merged into the new layer "Tak":

6.3 Delete layers

1. Use the checkboxes to select layers to be deleted.

2. Press the **Red delete button** to perform the deletion of the selected layers:

3. After pressed, an alert box is shown to the user to confirm the deletion:

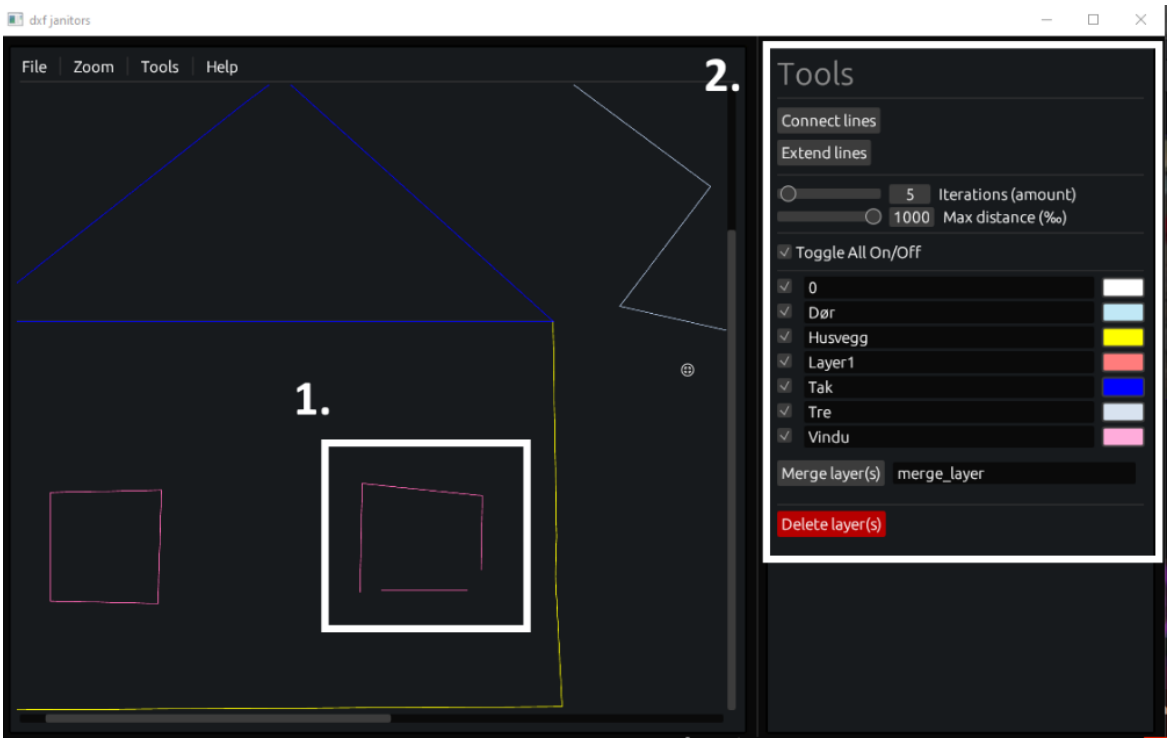


The user must press "**Ok"** for the deletion to be successful.

6.4 Connect and Extend lines

The connect and extend lines functionality is focused on lines that are not connected with each other. The functions create a closed polygon after called. Using the figure below as reference:

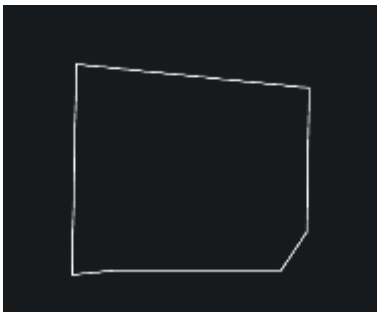
1. Is an example of lines that are not connected.
2. Location of the tools used for connecting and extending lines.



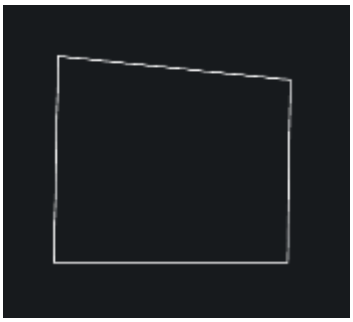
User can choose either **Connect** or **Extend**.

The figures are examples from the figure above:

Connect:



Extend:



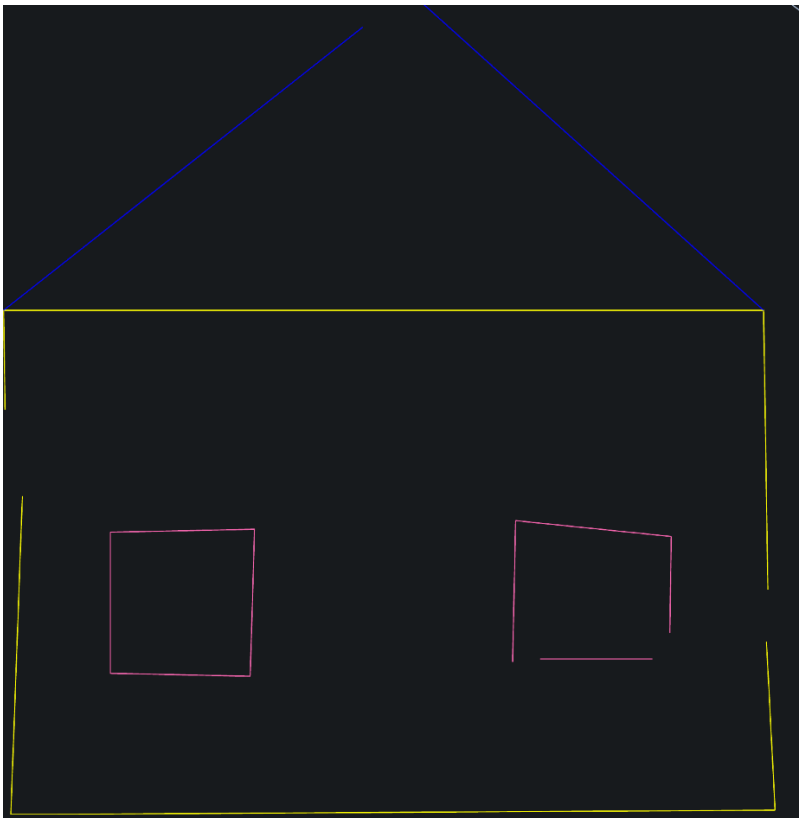
Step-by-step:

1. Use the checkboxes to select the layers the actions should be performed on.

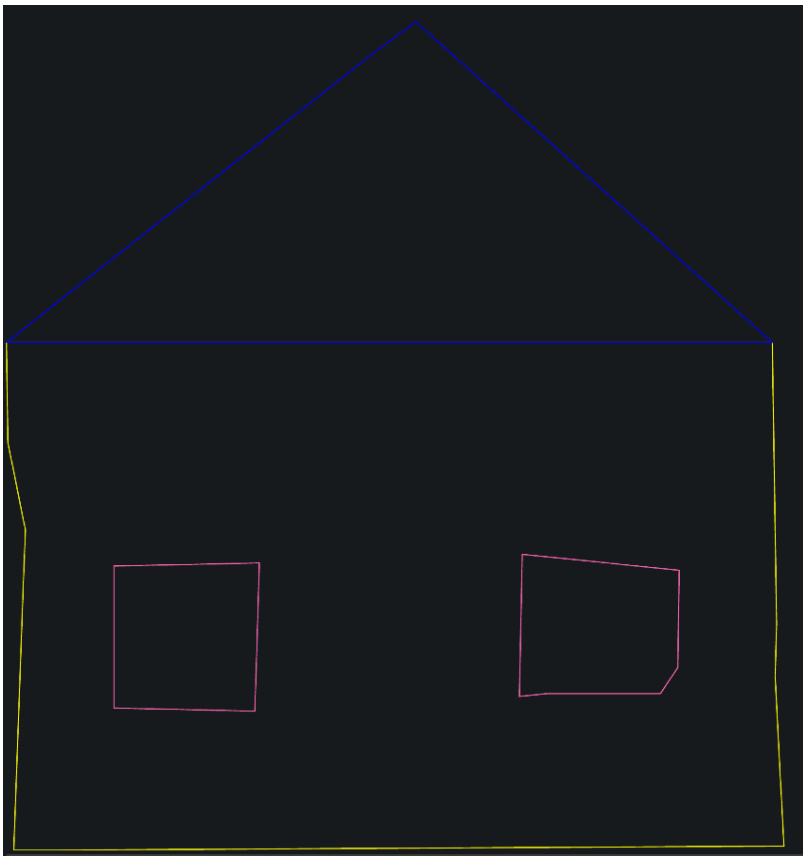
2. Use the iterations slider to decide the number of times the program should try to close lines. In bigger files, the number of unconnected lines can be high and many iterations to complete the drawing is needed.
   The distance slider is the maximum distance between two points that the user wants to close. This is to prevent lines closing across the whole drawing.

3. Choose **"Connect"** or "**Extend**", based on preference.

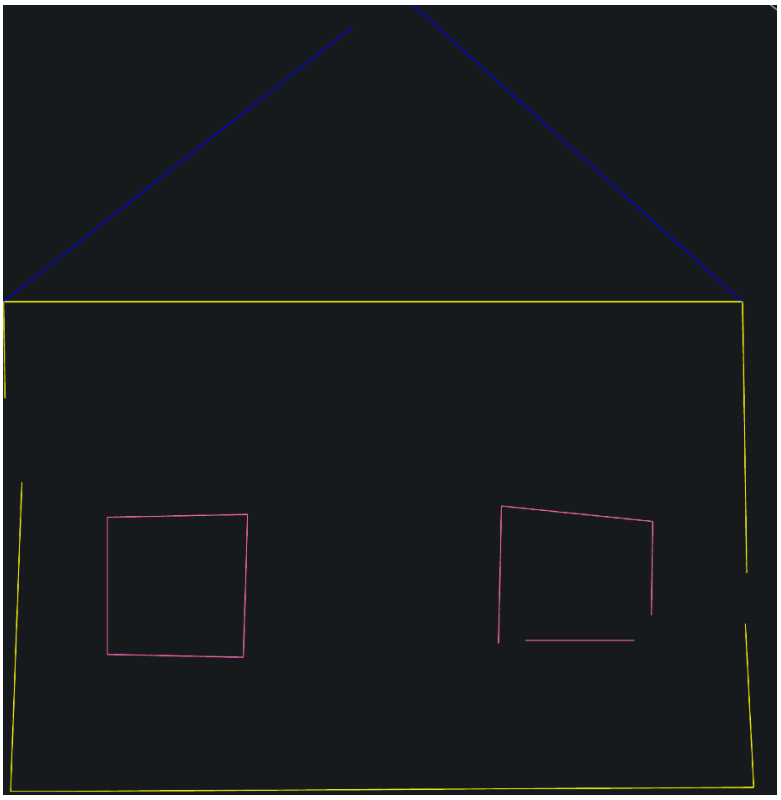
EXAMPLE BEFORE CONNECT/EXTEND



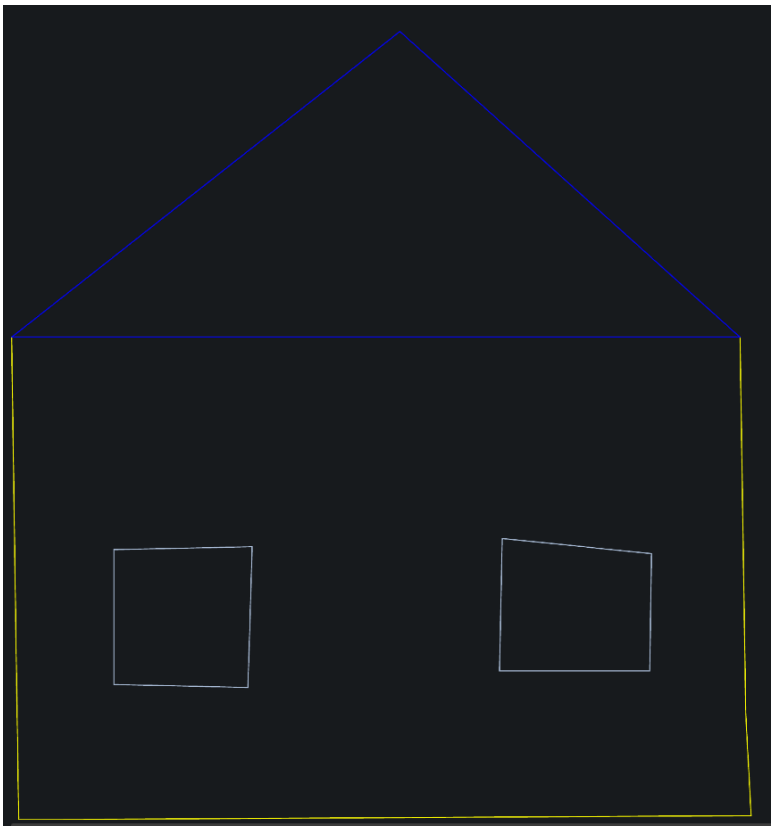
AFTER CONNECT



EXAMPLE BEFORE EXTEND



AFTER EXTEND



7. List of key-bindings

Open file: “Ctrl + O”

Save file: “Ctrl + S”

Undo: “Ctrl + Z”

Redo: “Ctrl + Shift + Z”

Zoom in:

- **“Alt + Scroll”**
- **“Ctrl + ‘+’”**

Zoom out:

- **“Alt + Scroll”**
- **“Ctrl + ‘-‘”**