JOBS OF THE FUTURE

Interactive Whiteboard

DIGIJEUNES

01

YOUR TASK

Making an interactive whiteboard with an infrared pen. The pen will act as a mouse and will be interpreted by a Wiimote sensor.

You'll be able to use the system as a normal whiteboard.

WHAT IS NEEDED

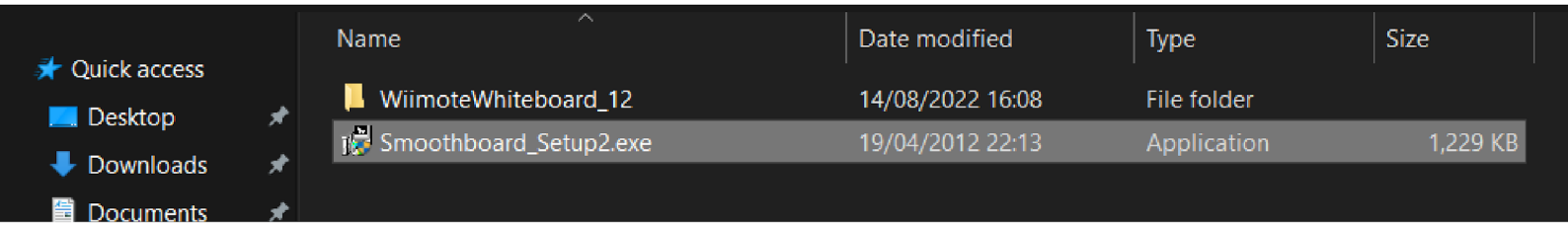
For this project you'll need a few material:

- Computer with Windows
- Video Projector
- Wiimote + Batteries
- Infrared Pen (how to build or buy one on ebay)

02 SOFTWARE INSTALLATION

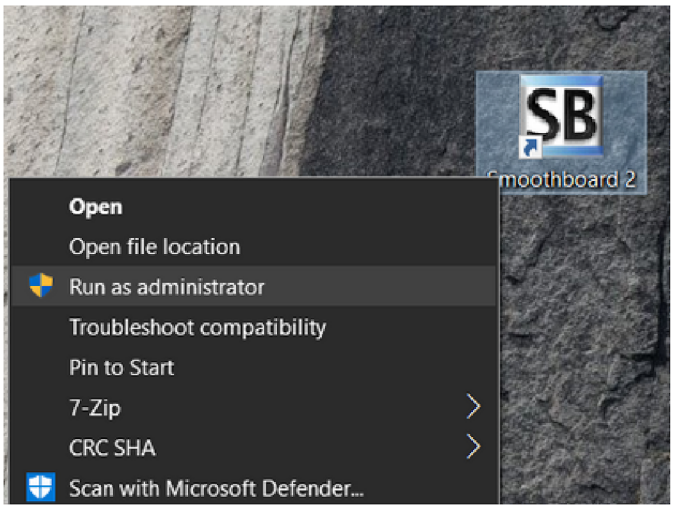
Download the Whiteboard package here [Whiteboard Package] and extract it to your computer.

Launch **Smoothboard_Setup2.exe** by right click on it and choose **"Run as Administrator"**



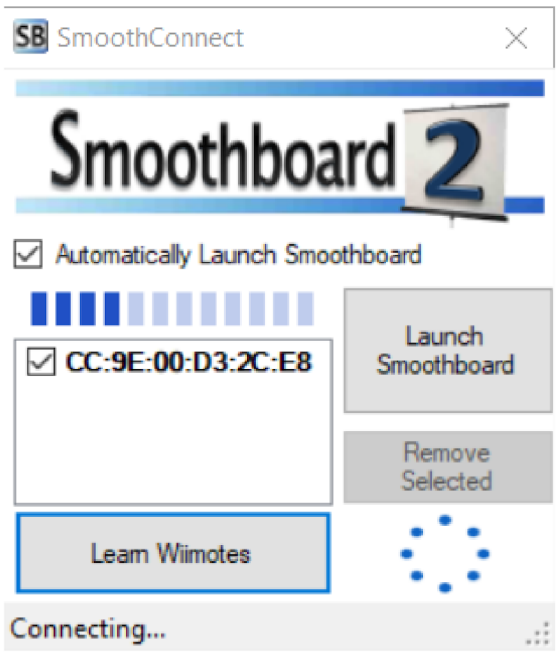
Once the installation finished, run the software in **Administrator mode** one more time.

It may ask a license key, wait a few seconds and choose **"Continue unregistered"**. We only need this software for the wiimote to connect.



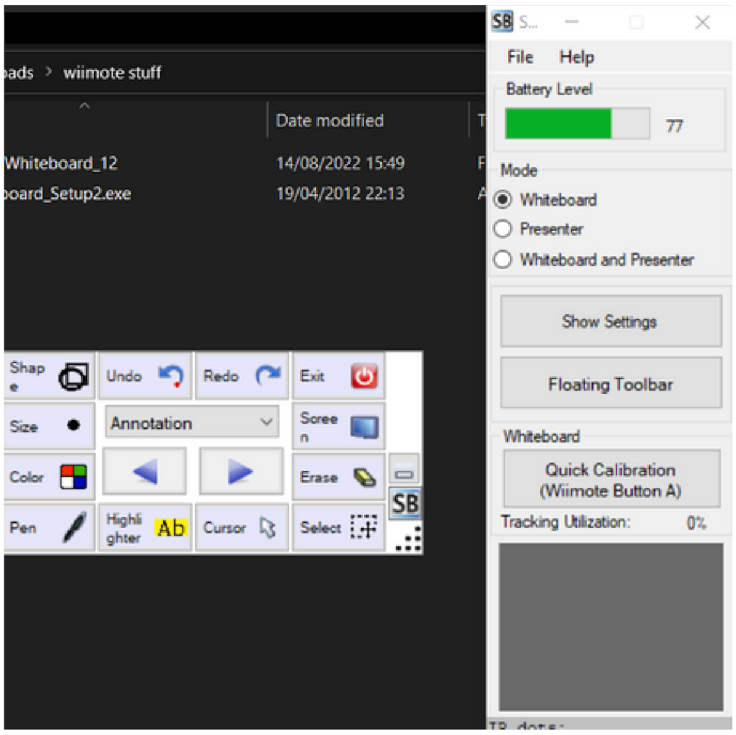
Smoothboard will try to find your Wiimote and can take a bit of time.

When it find it, click on **"Launch Smoothboard"**.

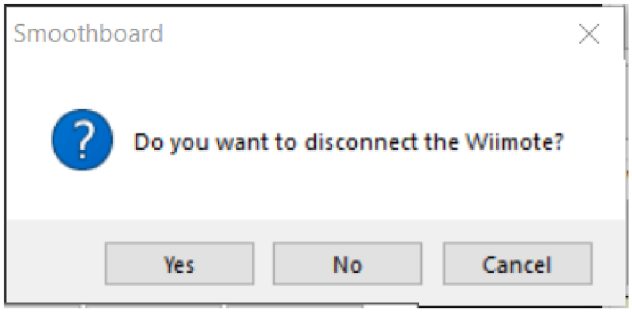


03 SOFTWARE INSTALLATION

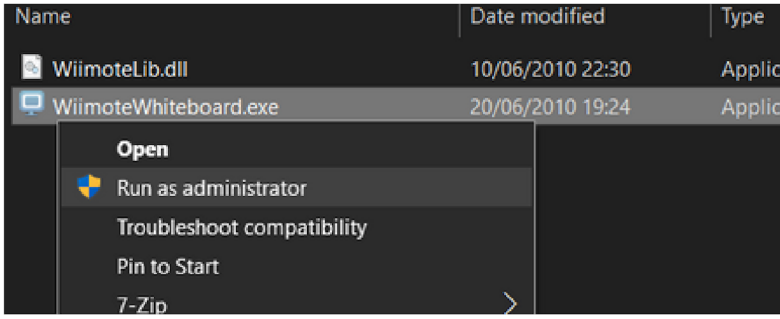
Now that **Smoothboard** have you Wiimote connected, you can **quit it**.



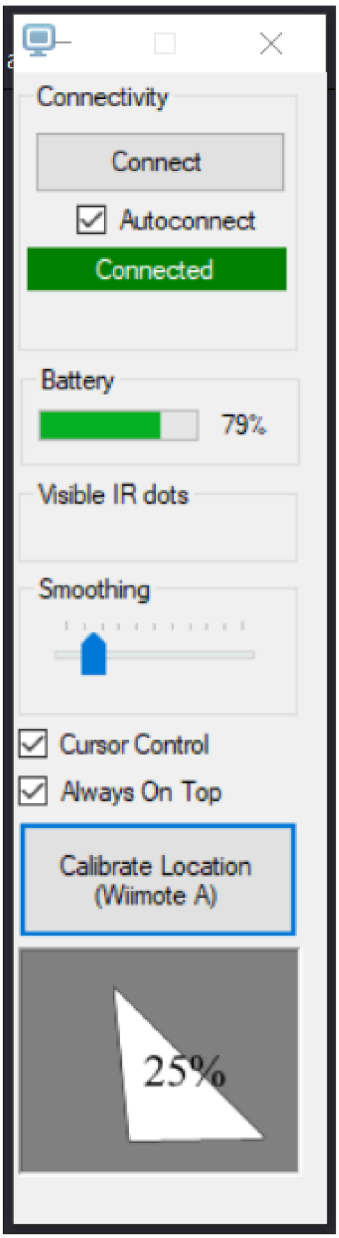
It will prompted you if you want to disconnect the Wiimote, choose "No".



Inside the extracted files, open the **WiimoteWhiteboard_12** folder and launch as **Administrator** the file **"WiimoteWhiteboard.exe"**



04 SOFTWARE CALIBRATION



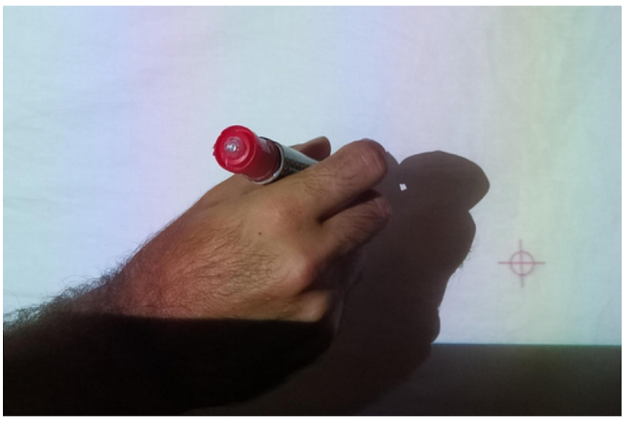
The software start and have this appearance. **It should be already connected to your Wiimote**.

If your wiimote turned off, just **press again buttons 1 & 2** together.

Next click on **Calibrate Location** and then **press the button A** of the Wiimote.

A blank screen appear, you need to **place the Wiimote in a fixed place where it will not move**.
Aim the Wiimote sensor towards the middle of your screen.

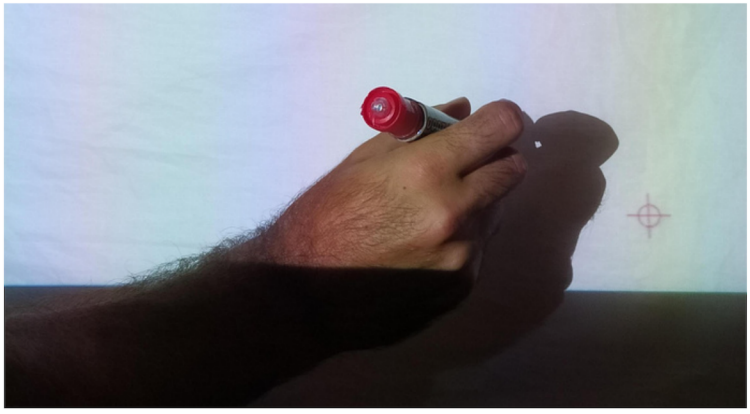
Most of the time, it is recommended to **place your wiimote on the right side** (for right-handed) of the screen and **have 45°** between the screen and the sensor.



05 SOFTWARE CALIBRATION

On the blank screen you should see a cross. Take your infrared pen and put yourself as if you were gonna draw something on the screen.

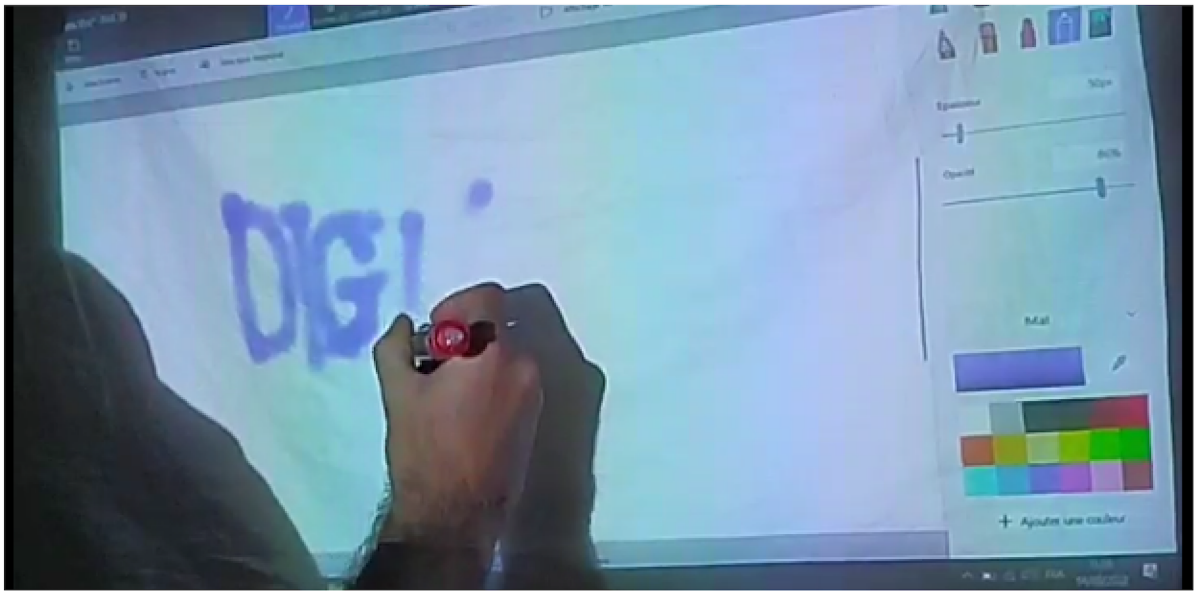
When your position is correct, **press the infrared button**. The cross should disappear and **reappear in an other corner**.



Finish your four corner calibration and voilà. You can now use your Infrared Pen as a mouse.

Try opening **Paint 3D** or any other drawing software to test your new Whiteboard.

Because there is always a bit of difference between where you target and what you see being drawn, it is also recommended to use a big brush as tool of drawing.



Ressources : http://uweschmidt.org/projects/wiimote-whiteboard