



Guide Technique

Icreate - Scope

Groupe 3: Vers l'infini et au-delà
Porteur de projet: L'Observatoire de Paris

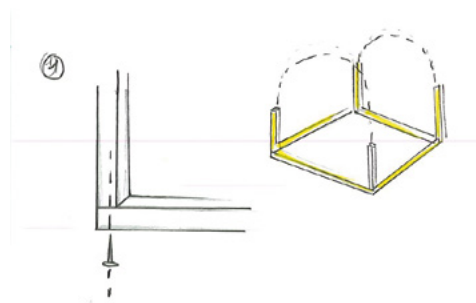
LOGICIEL

Liste des logiciels utilisés:

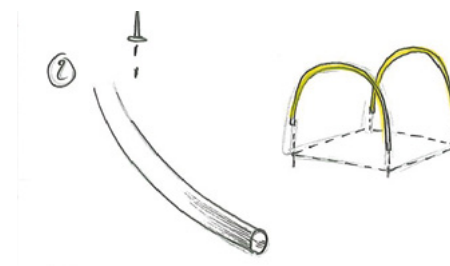
- Unity
- Visual Studio
- GitLab
- un téléphone mobile (son gyroscope)
- câble HDMI ou VGA
- câble audio
- câble USB
- application mobile Sensors2OSC
- un vidéoprojecteur à focale courte
- Illustrator
- Photoshop
- indesign

MONTAGE

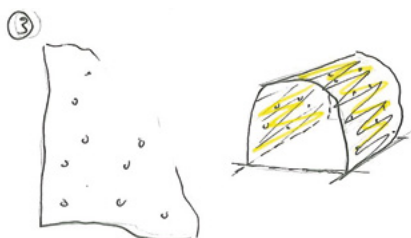
- 4 tasseaux de bois 1,70m de haut
- vis
- scotch
- 2 arcs de cercle pliables et ajustables de 3m de long
- 8 serre-joints noirs
- perceuse / visseuse
- toile noire percée 10 x 1,50m
- toile blanche 1,50 x 1,80m
- carton



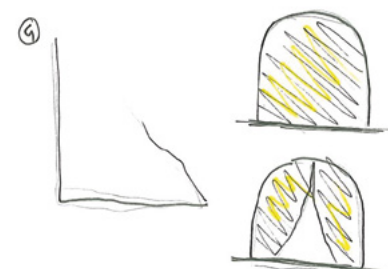
Base de la structure en tasseau de bois vissés.



Arc modulable en acier/caoutchouc à mémoire de forme.



Bâche plastique noire autour de la structure, pour la plonger dans l'obscurité.



Bâche plastique blanche opaque pour la projection au niveau de l'entrée.



How to launch SCOPE on your computer in 9 steps?

1. Download [the build branch](#).
2. Transfer **org.sensors2isc_3.apk** file to your phone and install it.
3. Plug in a projector. (Optional.)
4. Plug in an audio system. (Optional.)
5. Connect your phone and computer to the same network.
6. Check your IP address.
7. In the **Sensors2OSC** app:
 - go to settings,
 - enter your IP**,
 - set the Port number to 9000**,
 - exit settings,
 - enable Send Data option**,
 - turn on Gyroscope**.
8. Play *Bande Son.mp3* file. (Optional.)
9. Launch **iCreate 2019 – SCOPE.exe** application.

For more details see [the technical guide for implementation and installation of the project](#).

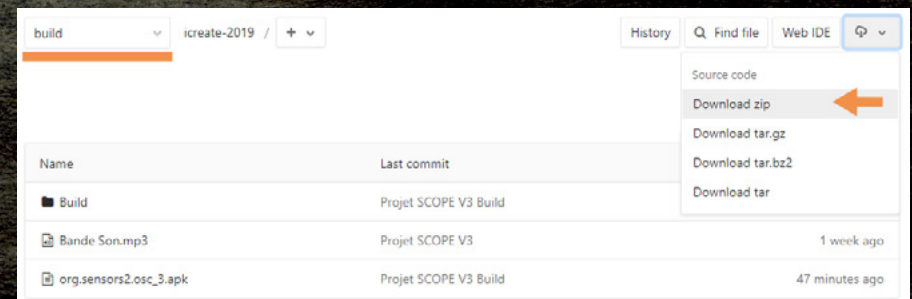
A technical guide for implementation and installation of the project:

1. Necessary material

In order to successfully install and use the project SCOPE a user has to be in possession of a mobile phone with a gyroscope and a computer allowing for an access to the internet with a default music player. To fully experience the designed interaction there is a need for a user to provide a projector, basic audio system, HDMI/VGA and audio cables, and for a PC to be equipped with HDMI/VGA and audio out port and as well.

2. Software Requirements and Installation Procedure

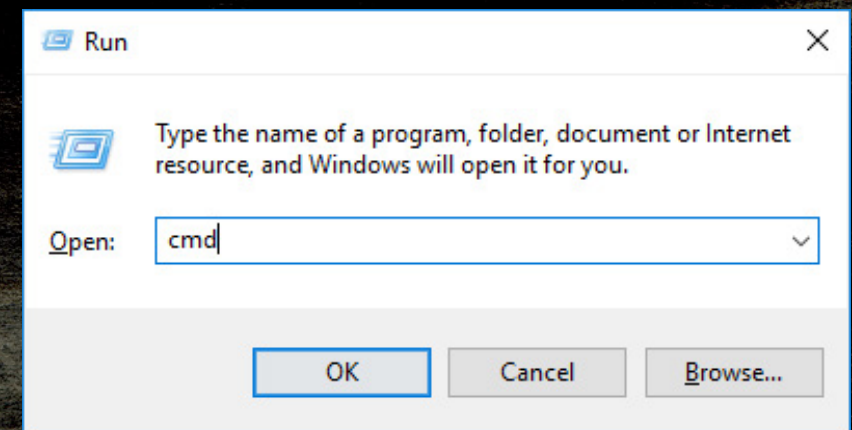
The phone has to be running on Android 2.2 or newer and on the computer there has to be Windows installed, besides there are no specific system requirements. To proceed with an installation procedure the user is asked to download the files from GitLab - Université de Nantes which are available [here](https://gitlab.univ-nantes.fr/E17C693X/icreate-2019.git) or clone the build branch using the command: `git clone --single-branch --b build https://gitlab.univ-nantes.fr/E17C693X/icreate-2019.git` in Git Bash. There is no need to download the whole source code in order to launch the app or to use Git (a distributed version-control system) if somebody is inexperienced. A simple download from a previously provided link will do the work. One can use a



As a next step the user is obliged install the **Sensors2OSC** app on the phone he will be using. One is strongly encouraged to use the way recommended by the team. It requires the user to transfer the newly obtained `org.sensors2isc_3.apk` file onto his mobile device (e.g. via USB cable). Further, to start the installation process, one has to simply locate and click the file on his phone. Then the user is asked follow the instructions appearing on a mobile screen and give his consent to install the app. After finishing it one should move forward to the configuration of the settings of a project.

3. Procedures for setting up and launching the project

At this point one can plug in the the projector and audio system according to his needs. More importantly, the user is obliged to connect his mobile phone and computer to the same network. After the connection is successfully established one should check his IP address by typing `ipconfig` in a **Command Prompt**. To enter the Command Prompt one should press the combination of keys **Windows + R**, type `cmd` and ap-



One should have in mind that highlighted IP on the screenshot below is just exemplary and shows where the user has to look for his IP address. The number values will differ from the ones on the figure.


```

C:\Users\ola44>ipconfig

Windows IP Configuration

Ethernet adapter VirtualBox Host-Only Network:

    Connection-specific DNS Suffix  . : 
    Link-local IPv6 Address . . . . . : fe80::2158:9d69:ede7:6a08%3
    IPv4 Address. . . . . : 192.168.56.1
    Subnet Mask . . . . . : 255.255.255.0
    Default Gateway . . . . . : 

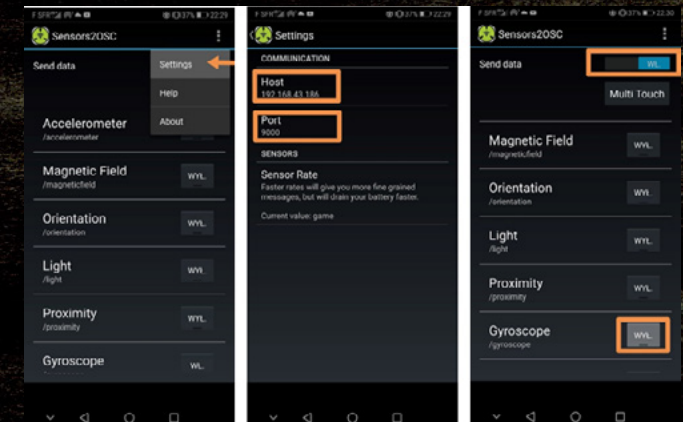
Wireless LAN adapter Local Area Connection* 1:

    Media State . . . . . : Media disconnected
    Connection-specific DNS Suffix  . : 

Wireless LAN adapter Wifi:

    Connection-specific DNS Suffix  . : 
    Link-local IPv6 Address . . . . . : fe80::1409:110:103:1fbb%17
    IPv4 Address. . . . . : 192.168.43.186
    Subnet Mask . . . . . : 255.255.255.0
    Default Gateway . . . . . : 192.168.43.9
  
```

Then the user is asked to open the settings of the **Sensors2OSC** app and set his IP address into the field Host. To enable the proper functioning of the SCOPE project the Port number must be set to **9000**. One can change it in the field right under the Host field. After exiting settings, the Send Data option must be turned on along with the Gyroscope.



On the figures below it is demonstrated where exactly to look for the mentions options and fields.

One last step before launching the **iCreate 2019 – SCOPE.exe** file located inside the Build folder is to play the **Bande Son.mp3**. At this stage everything is set up and ready to be experienced by the end user.

MERCI!