

# Digital solution to study group activities

Students: Clément GALINIER, Maxime LEROY, Théo LOPES, Michelle MAUFRAND  
Tutors: Mélissa COURLA, Sybille CAFFIAU



## The context

DOMUS, a space dedicated to experiments involving users in real or simulated situations, is currently studying human interaction in remote working situations. More precisely, it is interested in how humans in real life interact with people in VR and vice-versa.

From an idea

To a project

## The project

Our project is to create the first step in this experimentation, by creating 3D real-life rooms and creating communications between the two worlds.

Remote people will use VR as well as smartphones or web pages. People in the real room and remote people will communicate using speakers and microphones.

## The practical example

We will be creating a classroom to allow students, who cannot come to school for health reasons, to work with their classmates on a group project

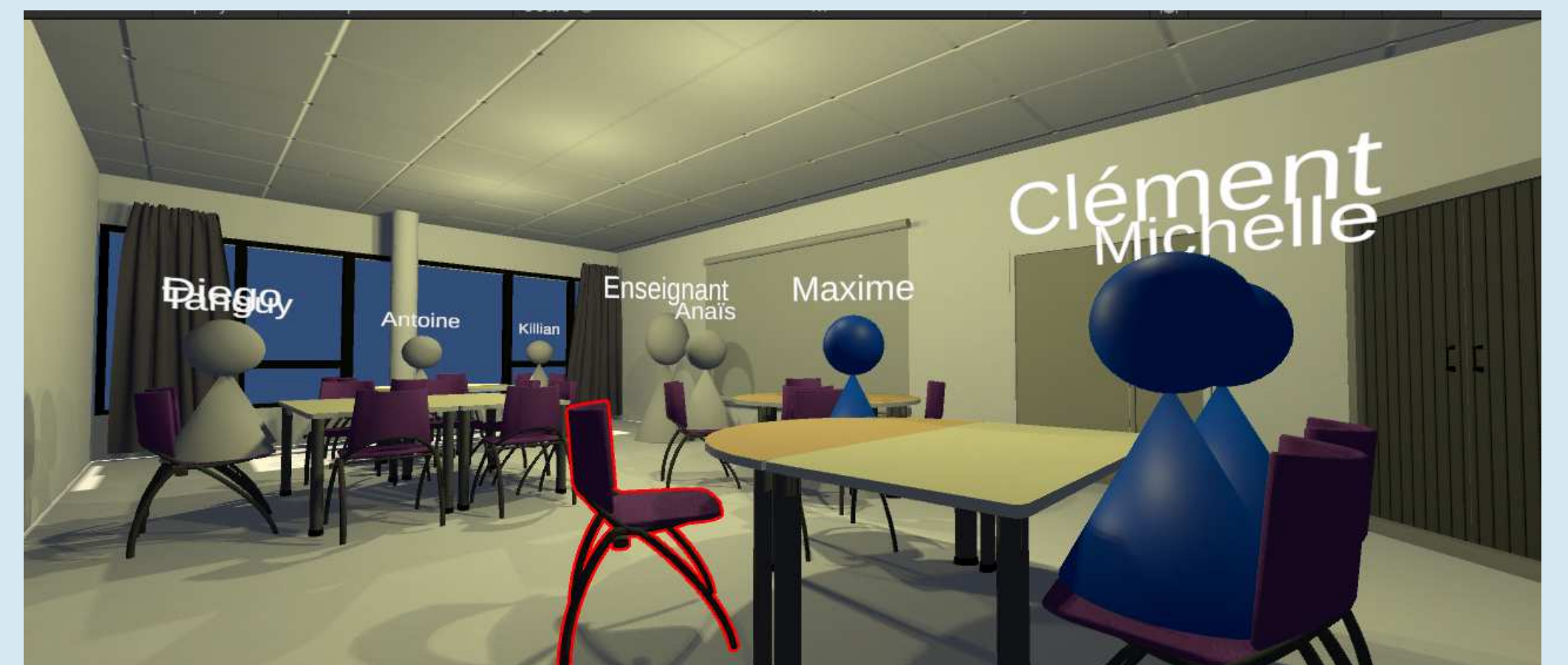
## Different applications

- Experimentations for the laboratory DOMUS, corresponding to the first scene modeled
- Adaptation of the scene to modelize a classroom for school

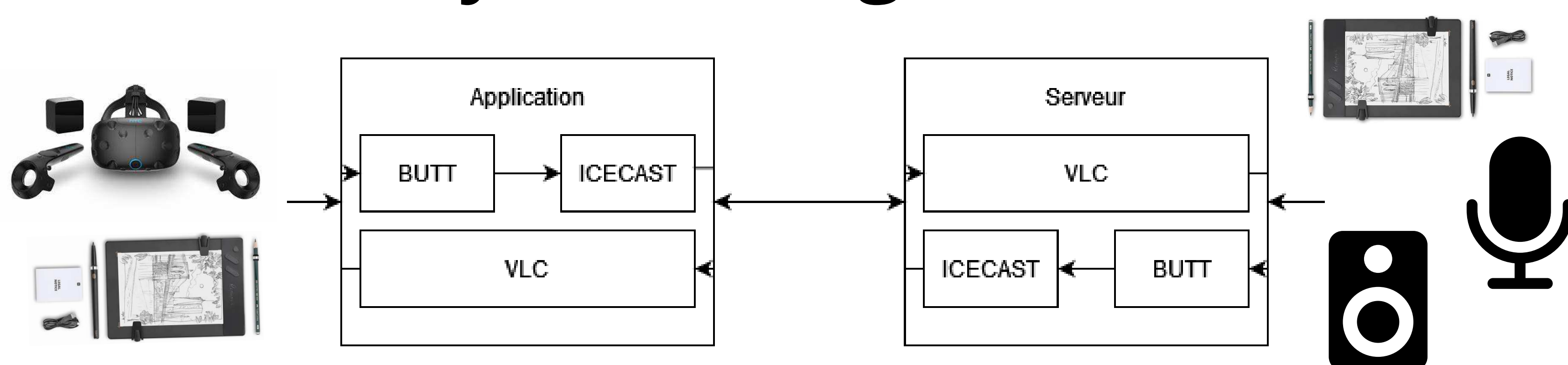
## Needs for the modelization:



- Modelization of the 3D room with Unity
- Interactions in the 3D representation in VR
- Possibility to navigate via Android and web



## System diagram



## List of connected devices

- VR headset (HTC Vive): allows the remote student to communicate with his/her colleagues
- Graphic tablet Repaper: allowing diagrams to be shared with others
- Microphone and loudspeaker system: allows students in the room to communicate with the remote student.

## Conclusion

We are currently working on the development of the VR solution. Tests are planned. At each meeting with our tutors, we improve the solution a little more. Experiments should be carried out before next year.

