

# VR-Browser

Degree programme : BSc in Computer Science | Specialisation : Computer Perception and Virtual Reality  
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It is becoming very easy to create a VR scene, for instance Unity3D but it is still very hard to share it with others. What we aim to create a single platform for people to share and browse VR scenes. We also think that connecting people with VR could bring something more to the experience. Changing scene should be easy without having to restart the application or download and install another scene.

## Sharing

With the rapid development of 3D graphics and virtual reality (VR) headsets, creating a 3D scene is becoming increasingly easy and fast, yet the process of sharing it with others is still long and complex. What we provide is a framework to simplify the sharing of scenes, anyone that would like to showcase something in VR can create their own scene with Unity 3D and then easily share it with the rest of the world.

With our VR-Browser scenes can contain links to other scenes and the user can use these links in the VR world to change scene, the same way a user using a web browser would be able to change pages when clicking on a link, but in 3D.

## Runtime

Because our goal was to support dynamic links in scenes that allows us to browse scenes like we would browse the web. We needed a way to make scenes (with scripts and graphical assets) loadable at runtime and we achieved this by creating a custom package containing all the required data that we can then load at runtime into Unity 3D.

## Interactivity

Virtual reality (VR) is a great tool to increase immersion but it can also be fantastic to connect, do things together in a virtual world, think for example drawing together or teaching people how to assemble a watch with a live example that they can touch.

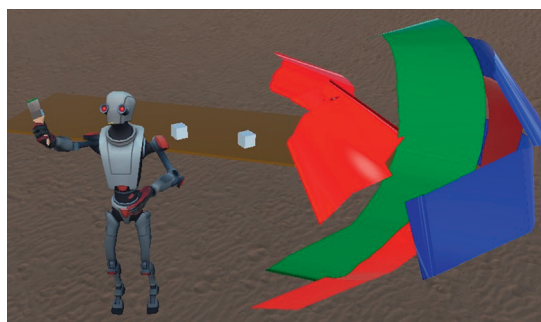
The scenes created with our framework will be almost automatically be made to work networked so any developer can easily create a social experience.

## Works everywhere

Our framework is designed to work cross-platform (Windows and Linux at the moment), on top of that designing a 3D application for VR is also heavily



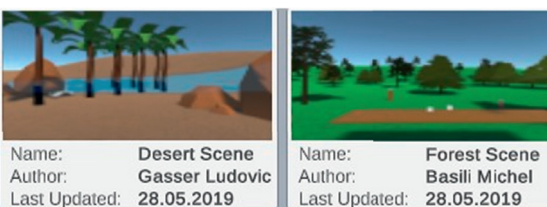
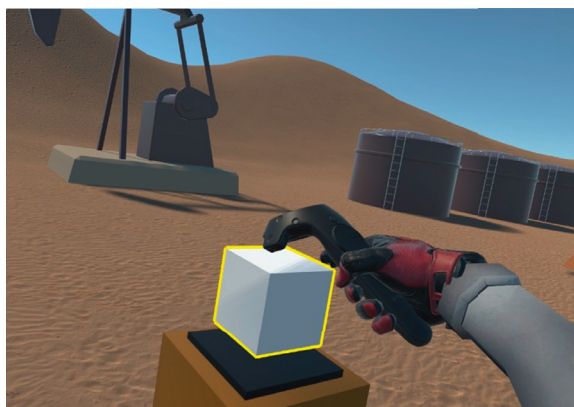
Michel Basili



A player painting in 3D



Ludovic Gasser



A player pressing a button to change scene & The VRBrowser client UI to choose scene