

KINE 458: Virtual Interactive Worlds

TOPICS FOR TODAY

- ❖ VR Development
 - VR Overview
 - VRTK Overview
 - VRTK Setup
 - Demo

Virtual Reality Tool Kit Development



Virginia Commonwealth University
Gavin Alberghini
(alberghinig@vcu.edu)

What is Virtual Reality?

- ▶ “Virtual reality is an interactive computer-generated experience taking place within a simulated environment. It incorporates mainly auditory and visual feedback, but may also allow other types of sensory feedback.”
- ▶ If you're interested in some application areas of VR, I have included one of my presentations on VR utilized for Database Visualization. That presentation can be found by clicking on the icon below.

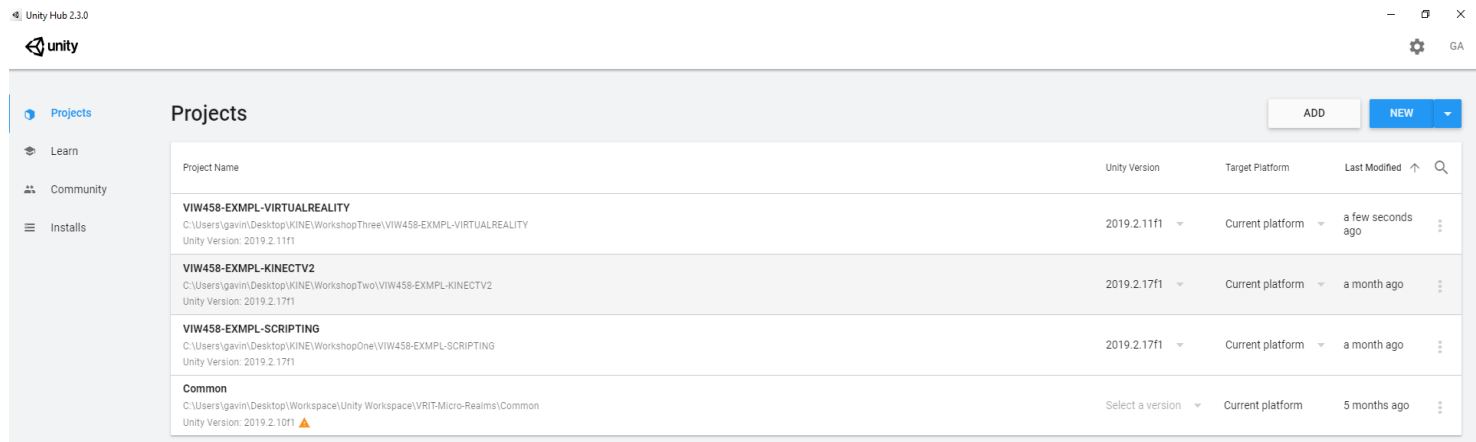


DBVVR



Getting Started with VRTK

- ▶ Step one: Create an empty Unity project in Unity Hub.









Session #03



Getting Started with VRTK







- Step two: Download the 3.3.0 version of VRTK from blackboard. Located in “Course Documents”/”Technology Workshops”/”Workshop Three”

 steamvr_unity_plugin-1.2.3	3/12/2020 6:13 PM	File folder	
 VIW458-EXMPL-VIRTUALREALITY	3/13/2020 4:32 PM	File folder	
 VRTK-3.3.0	3/12/2020 6:13 PM	File folder	
 VIW458_VIRTUALREALITY	3/13/2020 7:31 PM	Microsoft PowerP...	1,154 KB
 VRTK-3.3.0	3/12/2020 6:04 PM	Compressed (zipp...	6,503 KB
 steamvr_unity_plugin-1.2.3	3/12/2020 6:05 PM	Compressed (zipp...	31,802 KB



Getting Started with VRTK

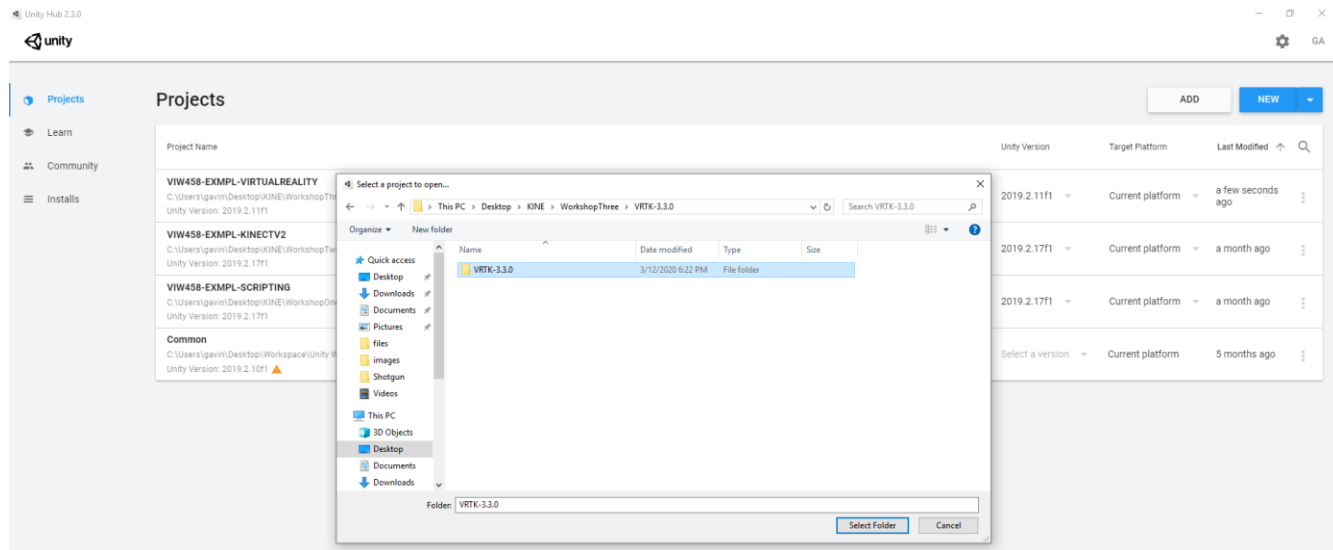
- Step two: Optionally you can also download SteamVR 1.2.3 on blackboard. Located in “Course Documents”/”Technology Workshops”/”Workshop Three”

 steamvr_unity_plugin-1.2.3	3/12/2020 6:13 PM	File folder	
 VIW458-EXMPL-VIRTUALREALITY	3/13/2020 4:32 PM	File folder	
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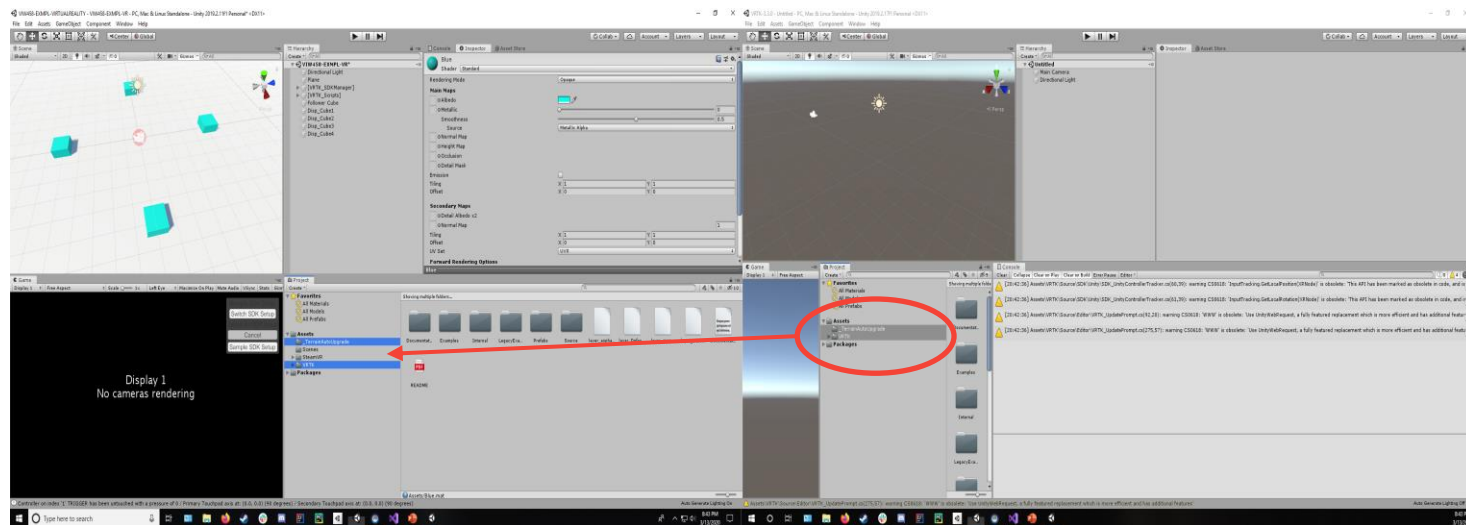
Getting VRTK into your Project

- Step three: Open the VRTK-3.3.0 folder as a separate Unity project from Unity Hub.



Getting VRTK into your Project

- Step four: Copy VRTK Assets into your project.



Getting VRTK into your Project

- ▶ Step five: If you get stuck follow this video. Don't concern yourself with downloading VRTK, we have already done so for you. Also disregard SteamVR integration.

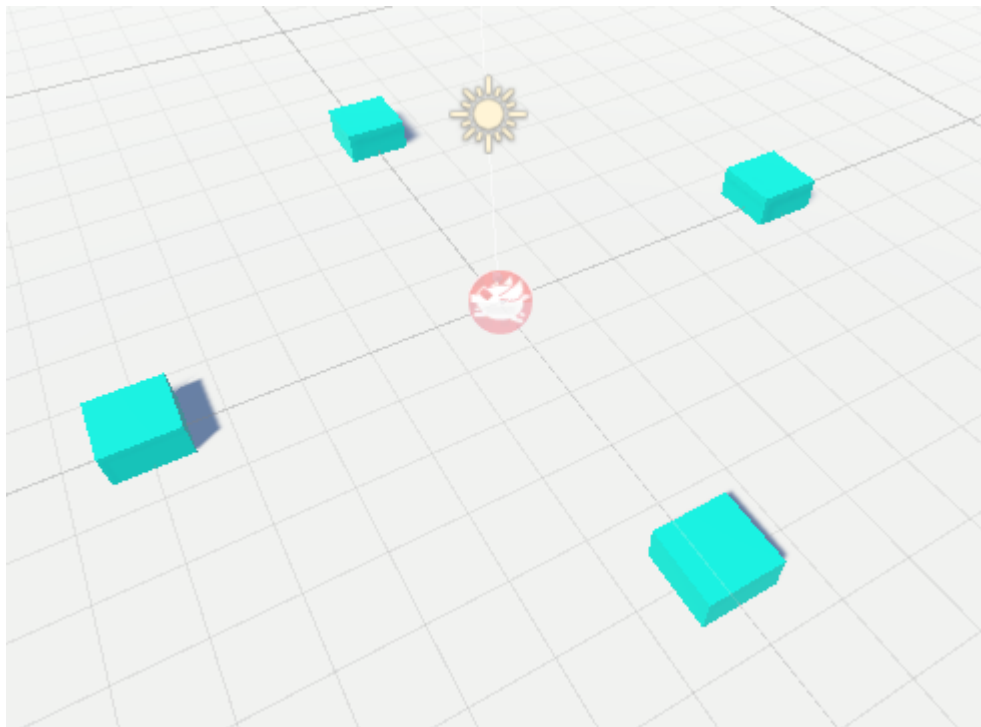


Getting VRTK into your Project

- ▶ Step six: Watch tutorial on scripting for VRTK controllers.



Live Demo



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Additional Resources

VRTK GitHub: <https://github.com/ExtendRealityLtd/VRTK>

SteamVR GitHub: https://github.com/ValveSoftware/steamvr_unity_plugin

VRTK Tutorial Video One: <https://www.youtube.com/watch?v=tyFV9oBReqg>

VRTK Tutorial Video Two: <https://www.youtube.com/watch?v=e2YSTb-Of0M>

Unity hub download: <https://unity3d.com/get-unity/download>





Questions?