Unreal Intro to VR/AR: Hackpack

September 14, 2021 / 7:00 PM - 8:30 PM ET

Description

What is Virtual Reality? How do we build stuff for virtual reality? In this workshop, we will be jumping into VR using Unreal Engine! We will be working with the VR template to make our own VR interactions. Along the way, we will be learning more about the game engine and its visual scripting tool, Blueprints!

Learning Outcomes

This is what you will gain from the workshop and why it's valuable to you.

- You will know more about VR/AR
- Applications and Opportunities in the VR/AR space
- Basics of Unreal Engine
- Basics of Unreal Engine Blueprint programming
- Creating VR interactions in Unreal Engine

Prerequisite Knowledge

In order to get the most out of this workshop you should be comfortable with the following concepts:

- Basic Programming concepts such as Data Types (Integers, floats, strings, etc)
- Knowledge of software user interfaces

Pre-Workshop Checklist

Before the workshop, please make sure you complete the following items:

- PC/Laptop compatible with these requirements
 (https://unrealidiot.com/unreal-engine-4-system-requirements)
- Unreal Engine version 4.27 using the Epic Games Launcher. Follow the steps here (https://www.unrealengine.com/en-US/download), Use Creators License.



- VR Headset to test your stuff, if Quest/Quest 2 you will need a Link Cable or setup air link (https://support.oculus.com/link/)
- Try making a test project using the Unreal template (Optional)
- Water to stay hydrated!

Timeline (1.5 hours)

Time	Module	Description
5 min	What is VR/AR?	Discuss the basics of VR and AR
10 min	What can we do with it?	Discussing where VR/AR can be applied and opportunities in the space.
10 min	How do we build stuff?	Discussing how to build VR/AR projects
45 min	Time to build stuff!	A tutorial of Unreal Engine 4 and creating VR interactions using the VR template project
15 min	AMA	Open floor to ask questions

Workshop Lead Contact

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Additional Resources

Hack the North Resources

Hack the North 2021 Event Schedule

Check this out to stay up-to-date on activities, workshops, and other key happenings this weekend.

Workshop-Specific Resources

Download Link for Unreal Engine

Installing Unreal Engine

Slides Link

General Resources

Seeing is believing: PwC.

Unreal Engine Documentation

Complete resources for Unreal Engine

Basics of Unreal Engine

Foundational concepts and skills that are essential for any audience to use Unreal for any purpose.

VR Template Documentation

Documentation of the VR template project in Unreal



Exploring the OpenXR VR Template | Inside Unreal

Recorded stream going over the Unreal VR template

Gameplay Framework

Documentation going over the gameplay frameworks such as Core systems, such as game rules, player input and controls, cameras, and user interfaces.

OpenXR

Open XR website and information

Virtual Reality Best Practices

Best practices for creating VR applications

Unreal Online Learning

Online learning resources by Unreal

