Session 2

Interactors and Interactables

Is there anything missing from the Session 1 Solar System Experience? What would be a good way to improve it?

Generative Art – Made with Unity

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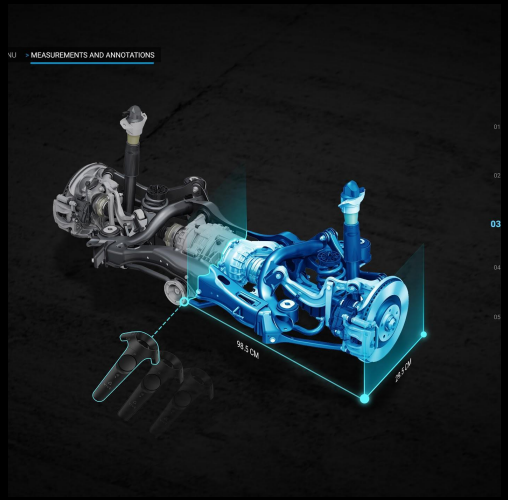
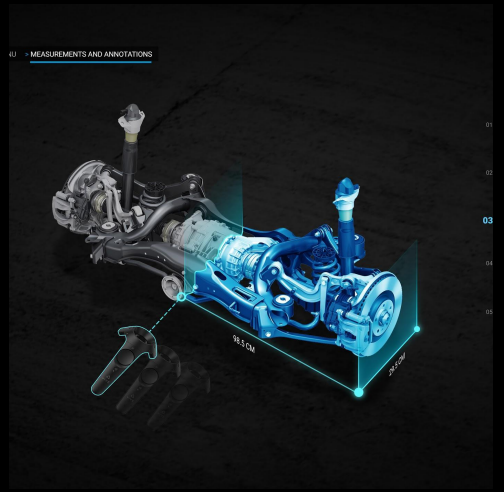
Instructor(s)



Instructor Name
Instructor Title
Instructor Company



TA Name
TA Title
TA Company

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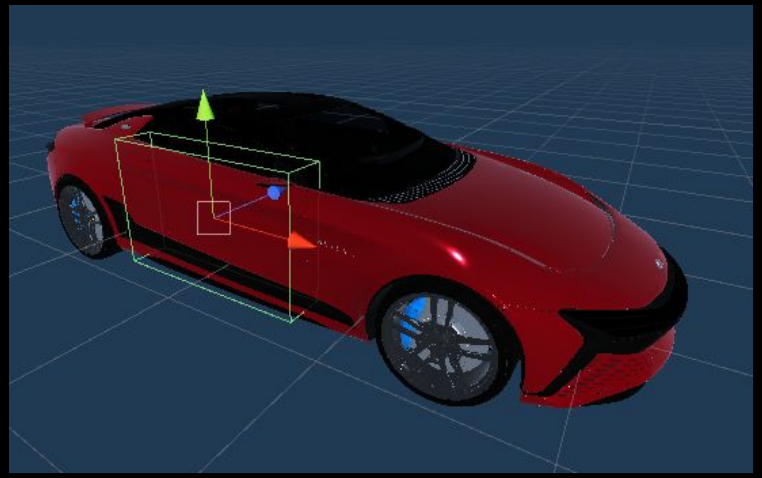
Session Goals



In this session, you'll:

- Create a **Capstone Project Design Brief**
- Identify different **Input Modes** and **Interactions** in VR
- Utilize and Customize **Interactable Events**

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Today’s Agenda

Capstone Project Design Overview
Create a Design Brief

VR Controller and input overview
Customize Select and Activate usage with XR Interaction Toolkit

Interactor Types
Configure Interactor parameters

Interactable States
Use Interactable States to show when an object is selectable by a user

Activity 2: Capstone Kickoff and Creating Interactions

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Example Capstone Projects

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VIRTUAL REALITY
SHOPPING EXPERIENCE
INTERACTIVE INTERIOR DESIGN
STRANDMON
$229.00
$99.00

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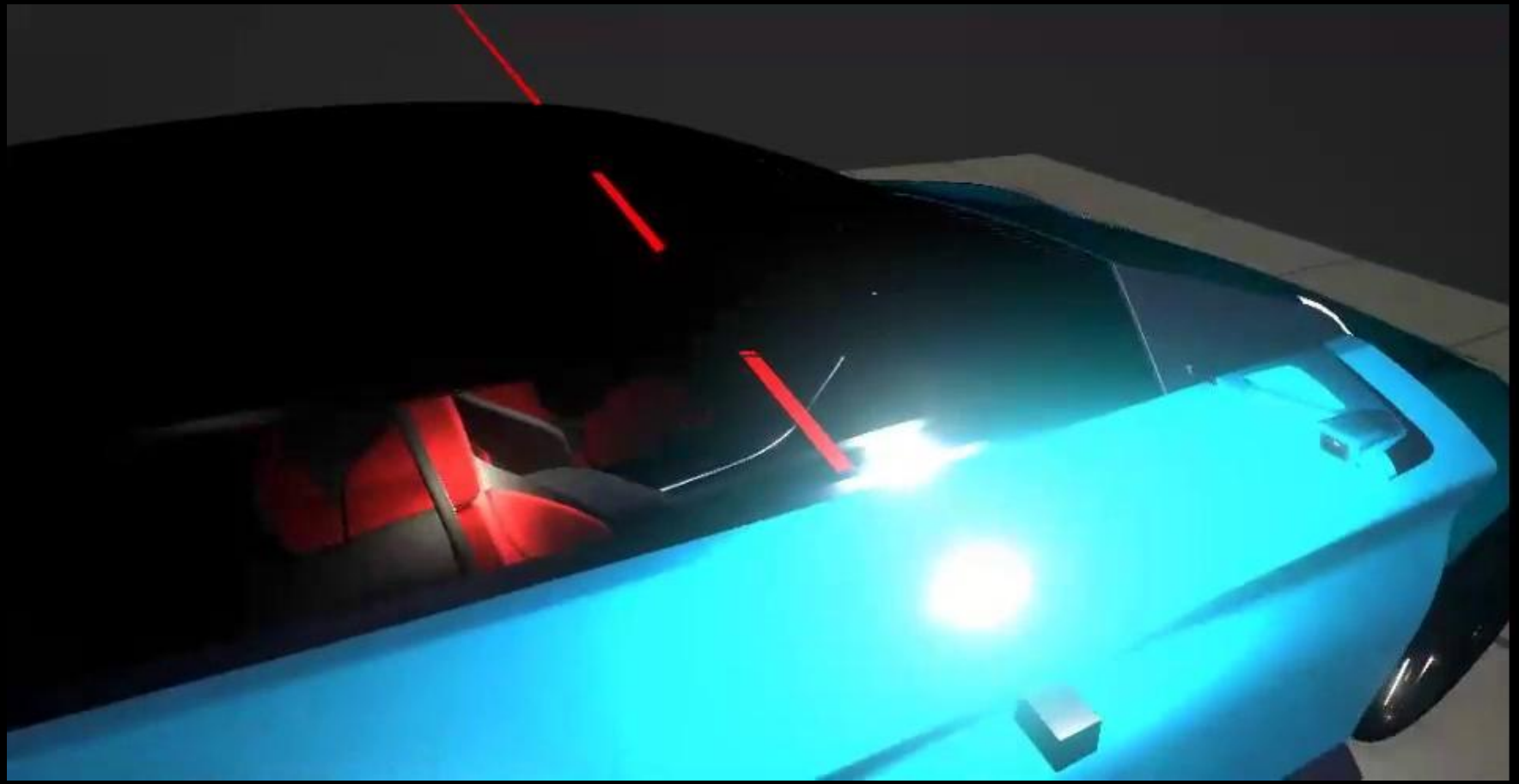
EXCITEMENT
Unite
Copenhagen
2019



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Capstone Projects

What? What goal is your VR project trying to accomplish?

Who? Who is your target audience?

How? What kind of actions can your users perform in your application?

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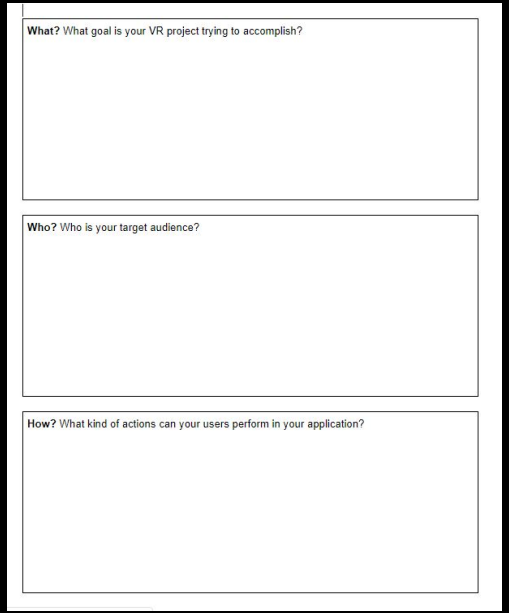
Design your Capstone Project

1. Download the Design Brief
2. Create a document and answer these three questions:
   - What goal is my VR Project trying to accomplish?
   - Who is the target audience of this Project?
   - What kinds of actions can users perform in this project?



! Add reference photos or design inspiration to your document

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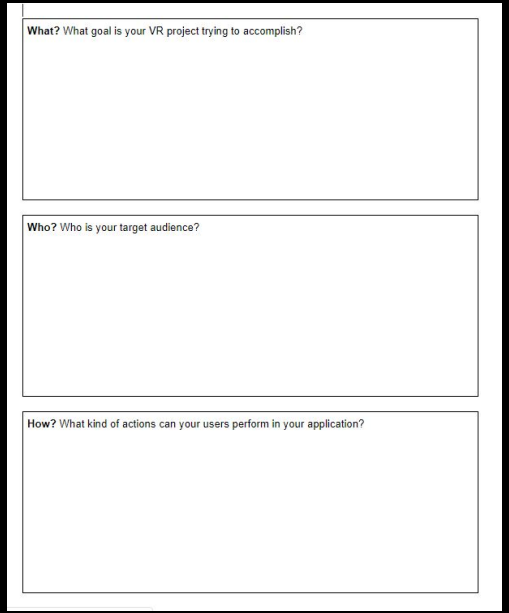

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VR Controllers and Input

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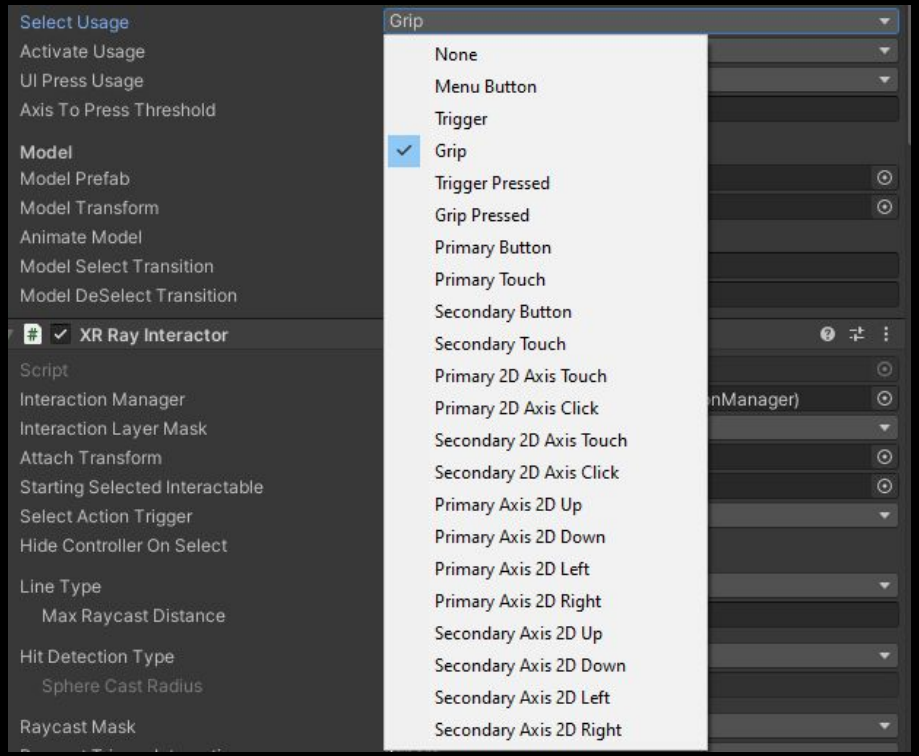
XR Interaction with the XR Controller Script

Three interaction Usage Types:

Select Usage

Activate Usage

UI Press Usage



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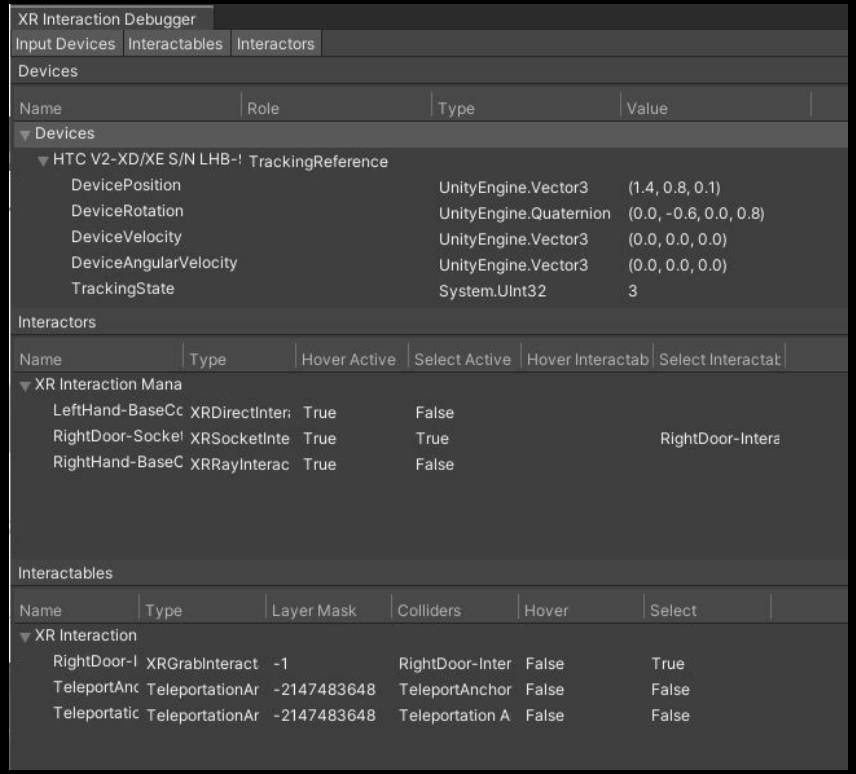
XR Input Mechanisms



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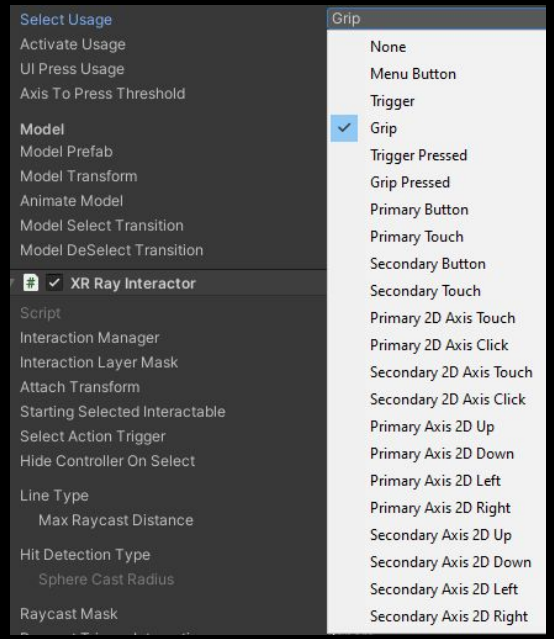
Customize the XR Controller

1. Create a new scene and add a ground plane and a cube primitive
2. Create and configure a Grab Interactable component on the cube
3. Add an XR Rig and set your preferences for Select and Activate Usage on the XR Controller Scripts



! Experiment with the other inputs in the usage dropdown - what buttons do they map to on your controller?

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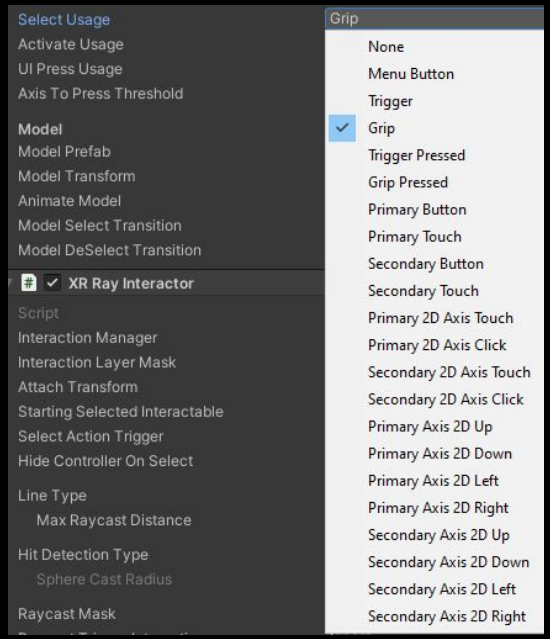

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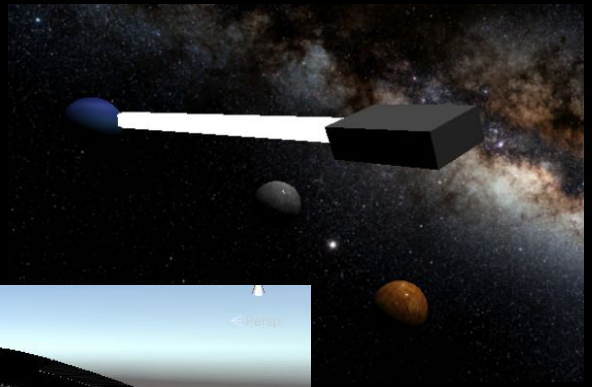
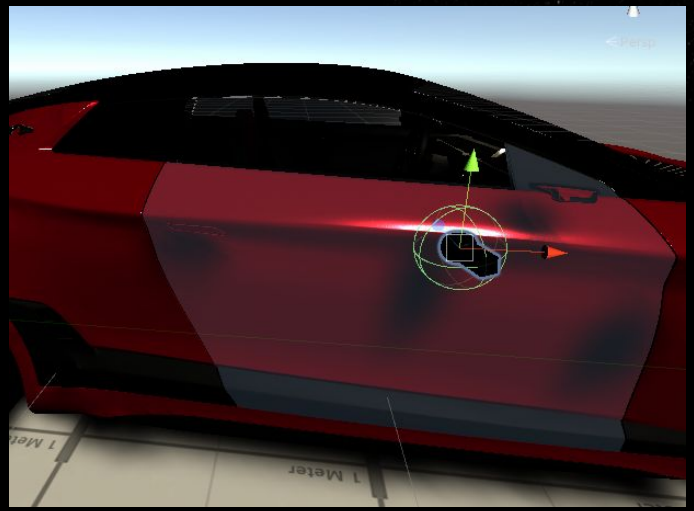
Interactor Types

Ray Interactors

Direct Interactors

Socket Interactors





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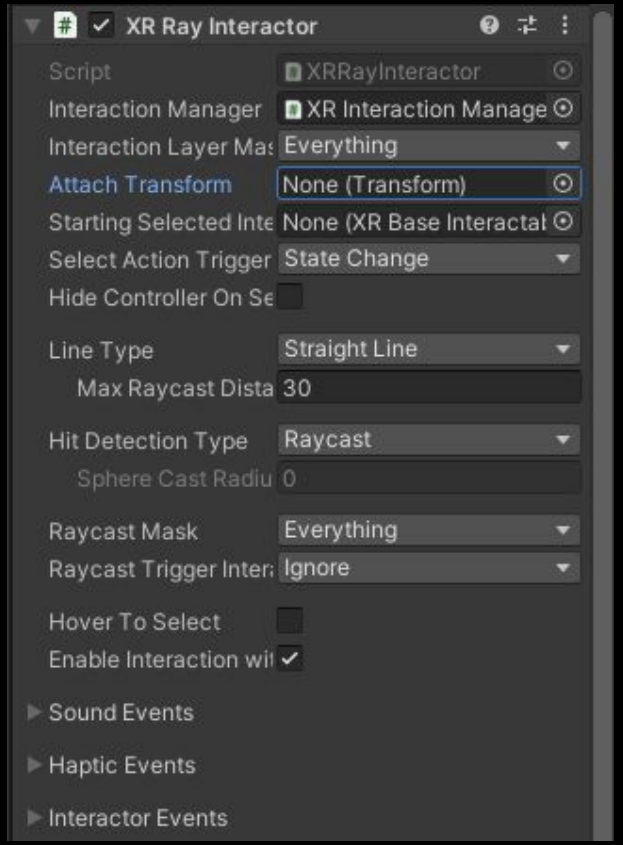
Ray Interactor Parameters

- Toggle Select vs Hold
- Raycast Map
- Line Type
- XR Interactor Line Visual
- Raycast



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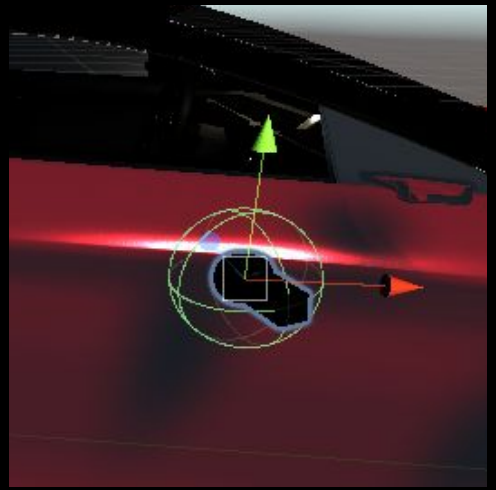
Configuring Basic Interactors

1. Decide whether you want Direct or Ray Interactors to be the main mode of interaction in your project
2. Create Direct Interactors and set them to Active/Inactive depending on your main mode of interaction
3. Configure the parameters of the Ray & Direct Interactor Components to your preference



! Think about how you'd like the controllers and input to function in your Capstone Project. Feel free to make additional notes in your Design Brief

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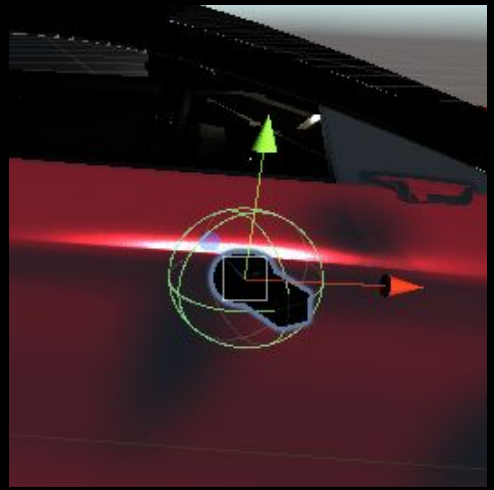

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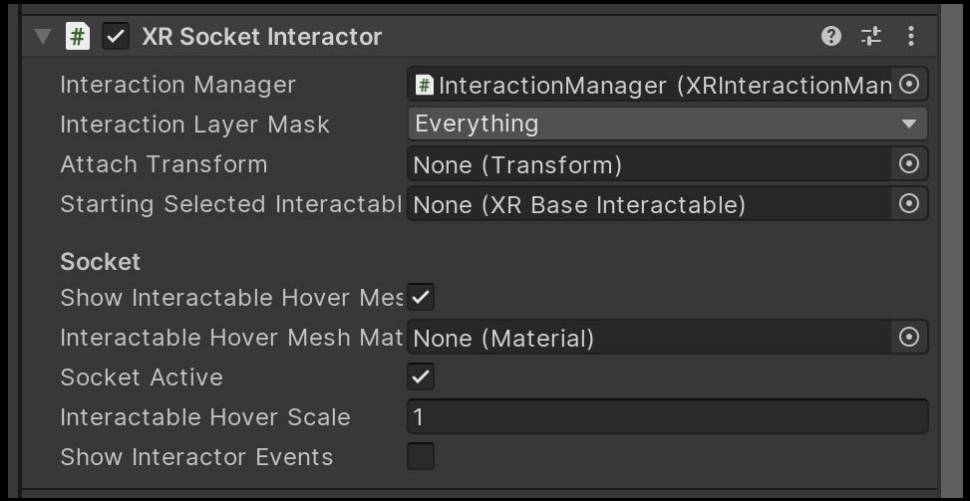
XR Socket Interactors



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Using XR Tint Interactable Visual

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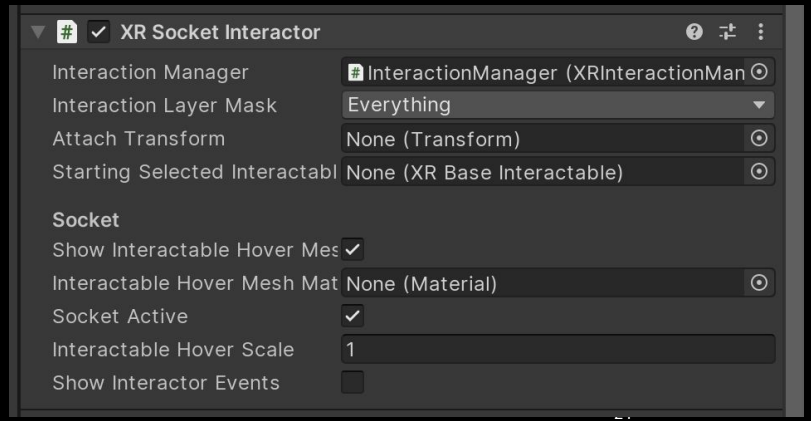
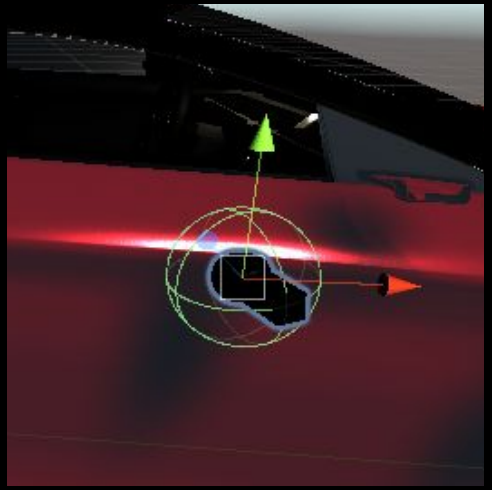
Configuring Socket Interactors

1. Create and configure a Socket Interactor in your project
2. Use XR Tint Interactable Visual and Hover Materials to indicate when objects can be picked up or socketed





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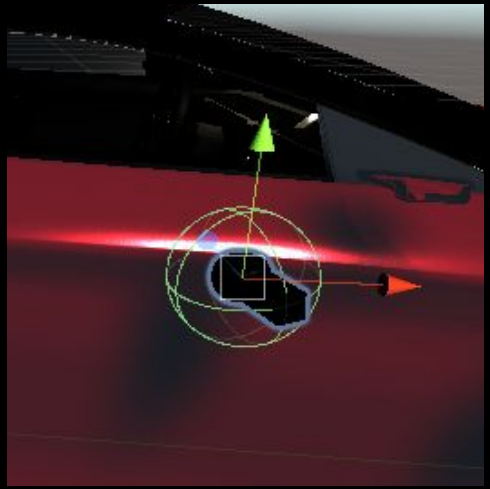

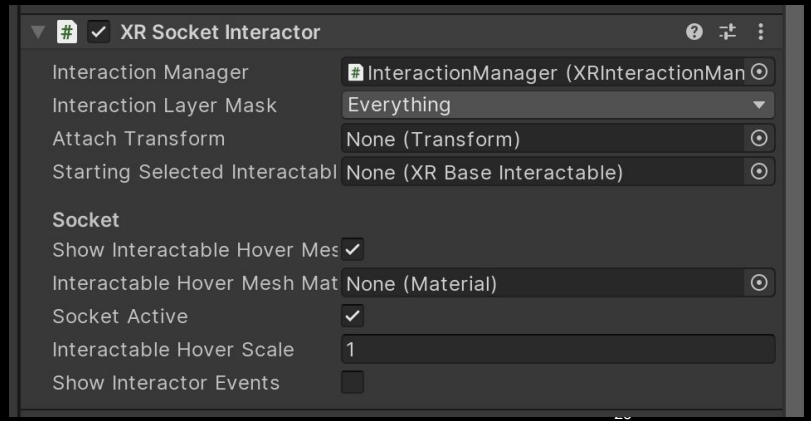

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Activity Session 2

Capstone Project Kickoff

Generative Art – Made with Unity

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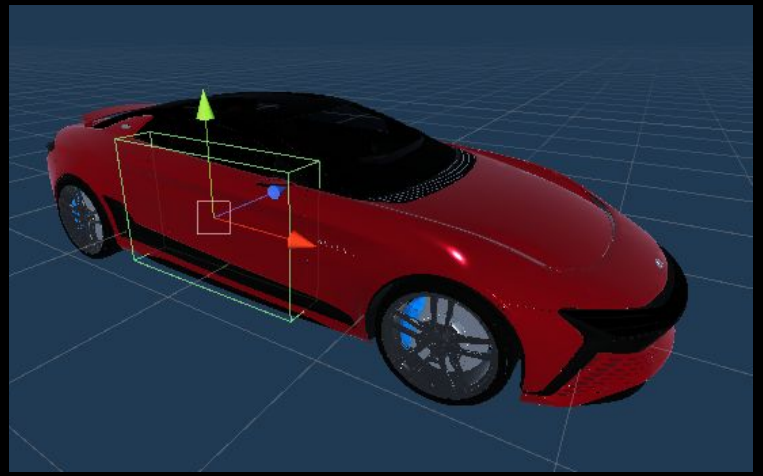
Activity 2 Goals

1. **Attend Activity 2 Office Hours** to review your capstone project brief
    a. Add any additional notes to your design brief, such as interaction mockups or quick sketches



1. Set up your Main scene environment using assets provided in the project
    b. Create a few grabbable objects and sockets

Feel free to ask questions!

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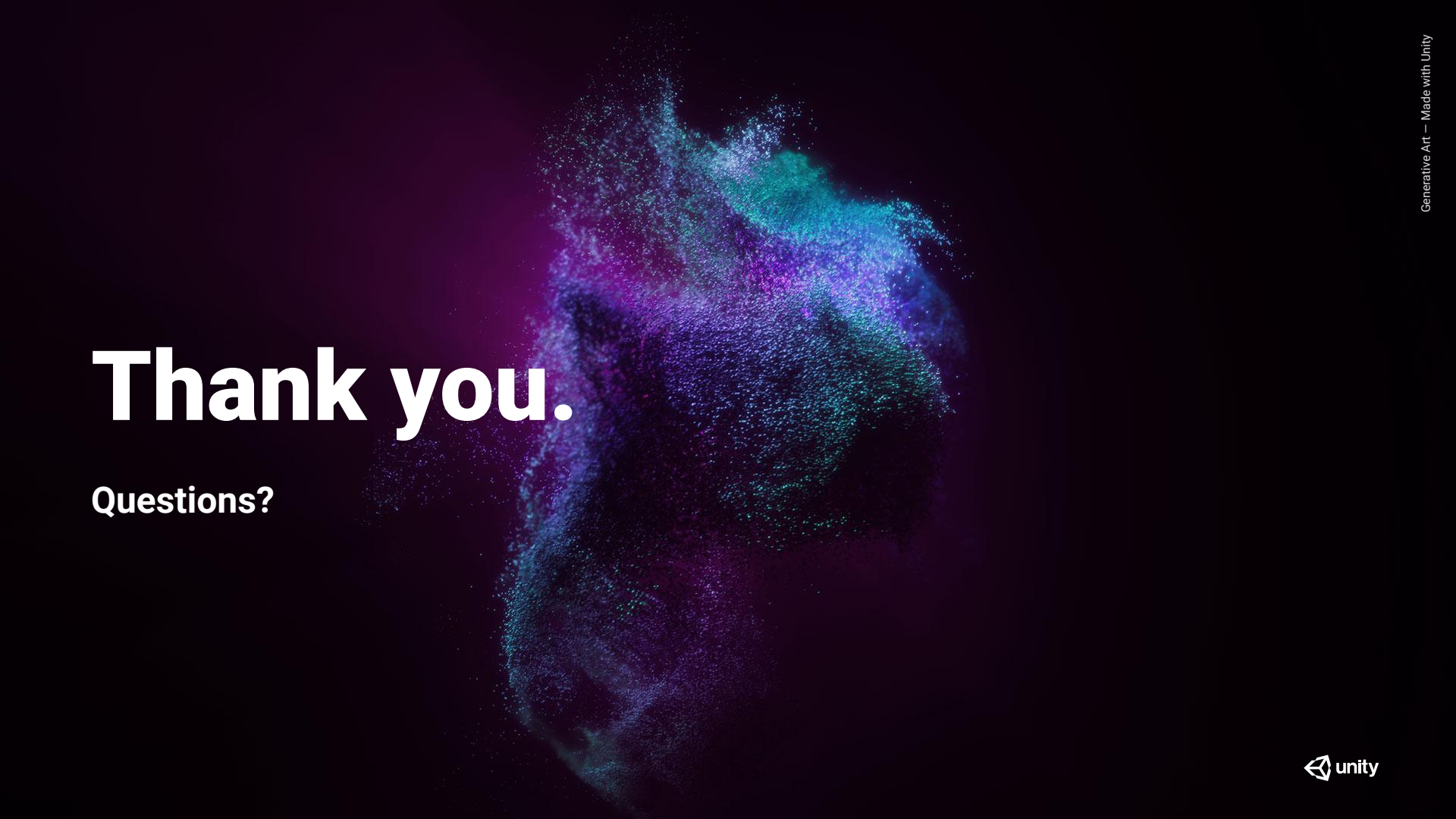
Generative Art – Made with Unity
Thank you.
Questions?
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