

Game and XR Development with Unity

Session 21
09 October 2022

Course Objectives

01

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Unity Basics

- Tool
- Interface
- Best Practices

02

...

C# Scripting

- Basics
- Unity related functions
- Best Practices

03

...

Game Development Basics

- Effects
- Animations
- Gameplay Mechanics

04

...

VR & AR Development

- XR Development
- Production Pipeline
- Portfolio Projects



[Complete Outline](#)

Session Objectives



- **Shooter Games**
- Pickup System
- Player Respawn
- Data Save (Basic)



Move to Unity →



Portfolio Project – GameDev



Augmented Reality

- superimposes a computer-generated image on a user's view of the real world
- enhances natural environments or situations and offer perceptually enriched experiences



Session Objectives

Unity's AR Foundation Supported Features

Functionality	ARCore	ARKit	Magic Leap	HoloLens
Device tracking	✓	✓	✓	✓
Plane tracking	✓	✓	✓	
Point clouds	✓	✓		
Anchors	✓	✓	✓	✓
Light estimation	✓	✓		
Environment probes	✓	✓		
Face tracking	✓	✓		
Meshing			✓	✓
2D Image tracking	✓	✓		
Raycast	✓	✓	✓	
Pass-through video	✓	✓		
Session management	✓	✓	✓	✓

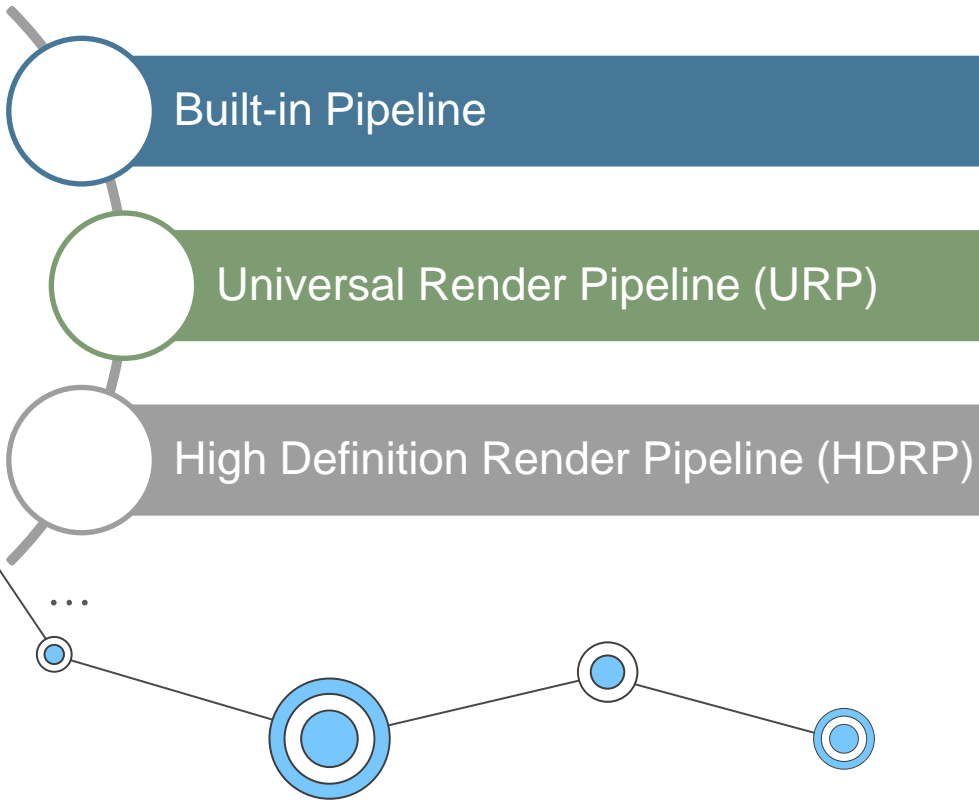
- **Augmented Reality**

- AR & XR Packages in Unity
- Setting up an AR Project

Reference Docs

[About AR Foundation](#)
[AR Foundation Samples](#)
[AR foundation Demos](#)
[ARCore supported devices](#)

Render Pipelines



A render pipeline performs a series of operations that take the contents of a scene and displays them on a screen.

[Reference](#)

Thanks!

Do you have any questions?

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