



Department of
Biomedical
Engineering



XRPANDA

CANADA

| WORKSHOP 2

Unity Fundamentals

Master the Unity Editor, Physics, Interaction Logic, and UI/UX Basics for XR game development.

January 22-23, 2025 | 7:00 - 8:00 PM





Agenda

01. Unity Editor Fundamentals

Navigate the workbench, understand the interface layout, and master 3D space controls for scene construction.

02. Components & GameObjects

Learn the component-based workflow, transform properties, and the parent-child hierarchy system.

03. Physics & Interaction Basics

Understand Rigidbodies, colliders, gravity, and how to create grabbable objects with specific component configurations.

Snapshot of Workshop 1



Virtual Reality (VR)



Augmented Reality (AR)



Mixed Reality (MR)



Extended Reality (XR)

How VR is Changing the World

01 Concept & Ideation

04 Testing & QA

02 Pre-Production

05 Development & Maintenance

03 Production



Fundamentals

- Scene View (The Stage)
- Game View (The Lens)
- Hierarchy (The Roster)
- Inspector (The Details)
- Project Window (The Inventory)
- Transform Basics



Pan



Orbit



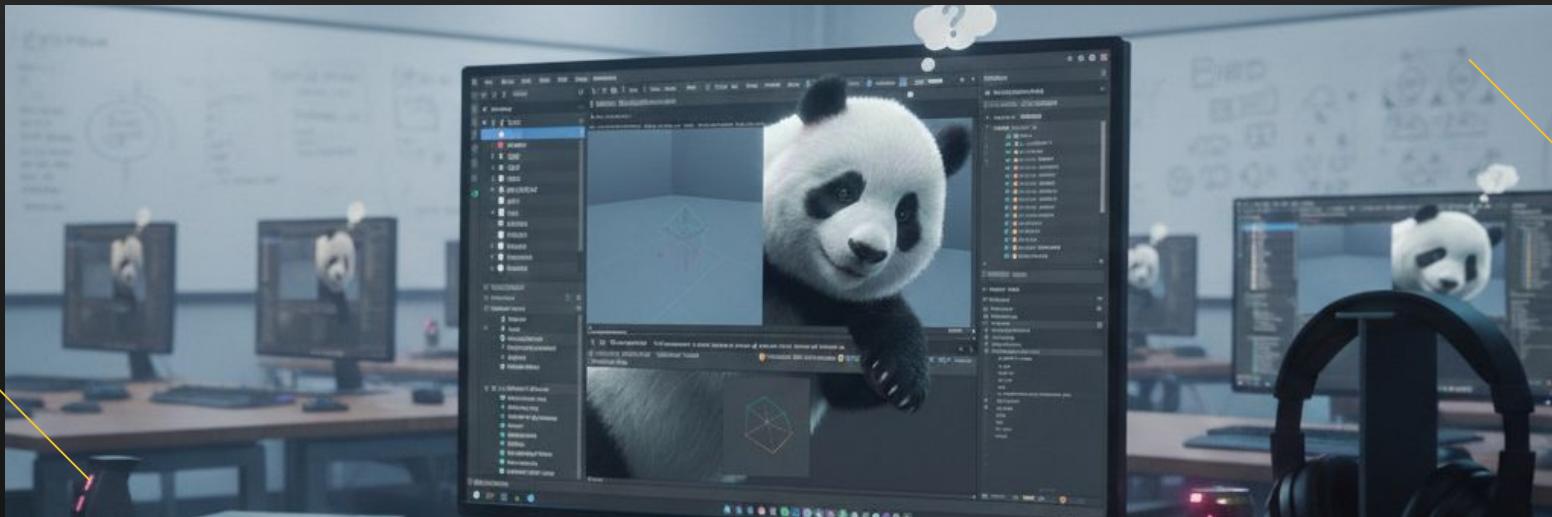
Zoom



Focus



Components and GameObjects Basics



- Component-based workflow in Unity

- Introduction to Prefabs (concept level)

- Common Components: Transform, Mesh
Renderer, Collider

- Adding, removing, enabling, and disabling
components



Importing and Using 3D Assets

- 01 Importing 3D models into Unity
- 02 Supported formats overview
- 03 Placing assets into the scene
- 04 Scale and orientation adjustments
- 05 Applying materials
- 06 Common beginner mistakes

Preparing 3D Assets for Unity (Blender & Online Resources)



- 01 Supported File Formats
- 02 Correct Scale & Units
- 03 Proper Textures & Materials
- 04 Clean Mesh & Topology
- 05 Naming & Organization

Summary & What's Next

Ready to bring your ideas to life in Unity? See you tomorrow at 7:00 PM



Workshop 1: Greyboxing & Asset Sourcing

You've mastered the basics of spatial design and layout



Workshop 2: Modelling, Animation, XR Integration

Creating custom 3D models and integrating advanced XR features



Workshop 3: Physics, Interactions, Final Build

Finally, you'll add physics, interactivity, and polish your completed VR experience

"This is just the beginning — the next reality starts with you."





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Thank you & Wrap-up

We'll take your questions !

