



CERTIFIED  
**User**  
VR Developer

# Exam Objectives

## Unity Certified User VR Developer

The **Unity Certified User VR Developer** certification exam will test the candidate's ability to create VR experiences and programs within Unity software. The exam objectives are aligned with current industry standards set by professionals and educators. Individuals will be expected to have at least 150 hours of Unity software use and training to obtain this certification. *Also, while not required, familiarity with C# programming and VR software and hardware (including tethered and standalone headsets) can help candidates learn Unity VR Development more easily.*

Individuals who have earned the Unity Certified User VR Developer certification have demonstrated mastery of the following skills:

### 1. Basic Unity Concepts for VR Development

- 1.1. Define essential VR concepts, including but not limited to stereoscopic vision, how VR differs from other forms of XR, tracking methods, and VR input methods
- 1.2. Demonstrate how to use Package Manager to manage packages, including but not limited to the XR Interaction Toolkit
- 1.3. Demonstrate how to import or modify assets, including Prefabs
- 1.4. Given a scenario, identify how to use the Transform component to position, rotate, and scale an object in the scene
- 1.5. Identify the correct primary interface window to complete a given task while using the default workspace
- 1.6. Manage components in the Inspector Window

### 2. Building a Scene for VR

- 2.1. Given a scenario, identify common preplanning techniques, including design documents, flow charts, animatics, character model sheets, prototyping, greyboxing, storyboarding, concept art, and proportional level scaling
- 2.2. Identify correct methods to implement environment design with 3D objects using finalized assets
- 2.3. Identify various types of light and when to use Baked vs Realtime lighting

### 3. UX Implementation for VR

- 3.1. Identify the steps to create a basic UI using World Space for a VR scene, including the use of Canvas, Button, Image, Text, and the Event System
- 3.2. Given a scenario, determine the components needed for a user to physically manipulate objects, including but not limited to Colliders, the XR Grab Interactable, and Rigidbodies

- 3.3. Identify types of player locomotion, including degrees of freedom, moving an avatar, 3-axis motion, 6-axis rotation, and rotating along an axis
- 3.4. Given a scenario, identify optimal VR interactions regarding health and safety
- 3.5. Differentiate between attributes of audio sources, including but not limited to 2D and spatial audio

#### **4. Scripting with Unity**

- 4.1. Given a scenario, select the appropriate basic C# code to achieve a goal that requires knowledge of properties, variables, methods, basic data types, or binary operators
- 4.2. Given a scenario, select the appropriate Unity class to achieve a goal. Classes include Vector3, GameObject, Collider, Rigidbody, or AudioSource
- 4.3. Given a scenario, identify how to handle a collision or trigger Enter, Stay, or Exit event

#### **5. Troubleshooting and Playtesting**

- 5.1. Given a problem discovered in playtesting, identify areas to troubleshoot, including Static objects, missing Colliders, missing Rigidbodies, incorrect settings, Is Trigger, Is Kinematic, or Use Gravity
- 5.2. Identify types of logs in the Console
- 5.3. Identify errors output to the Console and the steps to fix them, including null references, missing end of line markers, or syntax errors
- 5.4. Identify correct optimization methods when working on a VR scene, including but not limited to camera occlusion culling, removing unused objects, or level of detail (LOD)