**🎯 Complete VR Setup for Meta Quest in Unity (with XR Toolkit + OpenXR)**

**✅ STEP 1: Start a New Unity Project**

* Use Unity Hub → Create a **3D (URP optional)** project.
* Unity Version: **2022.3 LTS** or newer is recommended.

**✅ STEP 2: Set Up Android Build Platform**

1. Go to **File > Build Settings**.
2. Select **Android** → Click **Switch Platform**.

⚠️ Unity will take a few minutes to reimport assets.

**✅ STEP 3: Install XR Plugin Management**

1. Go to **Edit > Project Settings > XR Plugin Management**.
2. Click **Install XR Plugin Management**.

**✅ STEP 4: Enable OpenXR for Android**

1. After installation, go to **Project Settings > XR Plugin Management**.
2. Select the **Android** tab.
3. ✅ Tick **OpenXR**.
4. Unity will prompt to install **OpenXR Plugin** — click **Yes**.

**✅ STEP 5: Install Required Packages**

Go to **Window > Package Manager**, and install these:

1. **XR Interaction Toolkit**
   * Click **+** → **Add package from Unity Registry** → Search: XR Interaction Toolkit
   * Click **Install**
2. When prompted to **Enable Input System**, click **Yes and Restart**.
3. **OpenXR Plugin** (already added in Step 4, confirm it's installed)
4. (Optional) **Oculus XR Plugin** – if you prefer Oculus SDK, but **OpenXR is recommended**.

Download the starter assets and the xr device controller

Then follow this steps :  
**(open the sample go inside you will find preset in that select the default left controller and default right controller ,first select left in inspector of left make default the left controller at the top click it follow same step for right controller then go to the edit->project setting -> preset-> for the left controller give the name left and for the right controller give the name right )**

**✅ STEP 6: Configure XR Interaction Toolkit**

After installing XR Interaction Toolkit:

1. Go to **Edit > Project Settings > XR Interaction Toolkit**
2. Set:
   * ✅ **Input System Backend**
   * ✅ **Interaction Layer Mask**

**✅ STEP 7: Configure OpenXR Settings**

1. Go to **Project Settings > XR Plugin Management > Android > OpenXR**.
2. Click **+ Add Interaction Profile**:
   * ✅ **Oculus Touch Controller Profile**
   * ✅ **Hand Tracking Subsystem** (if using hand tracking)
   * ✅ **Meta Quest Support** (if available)
3. Set OpenXR as **Default** under the **Feature Group** section.

**✅ STEP 8: Player Settings (for Android / Meta Quest)**

1. **File > Build Settings > Player Settings > Android**:
   * Company Name: e.g., VishwasTech
   * Package Name: e.g., com.vishwas.vrproject
   * **Minimum API Level**: Android 10 (API Level 29) or higher
2. Under **Other Settings**:
   * ✅ Scripting Backend: **IL2CPP**
   * ✅ Target Architectures: **ARM64**
   * ✅ Graphics API: **OpenGLES3** (remove Vulkan)
3. Under **XR Plug-in Management > OpenXR > Android**:
   * Confirm **Oculus Touch Controller** and **Meta Quest Support** are checked

**✅ STEP 9: Setup Sample XR Rig**

1. Go to **Assets > Samples > XR Interaction Toolkit**.
2. Import **Default Input Actions**.drag it to herarchy
3. In your scene:
   * Add **XR Origin (VR)** from **GameObject > XR > XR Origin (VR)**.
   * Add **XR Interaction Manager**.

**✅ STEP 10: Build & Deploy to Meta Quest**

1. Enable **Developer Mode** in the **Meta Quest app** (on your phone).
2. Connect your headset to your PC with USB and **allow USB debugging**.
3. In Unity:
   * **File > Build Settings**
   * Select **Build and Run**.
4. Or export .apk and install using **ADB**:
5. adb install your\_app.apk

**📦 Optional Tools:**

* **Meta Quest Developer Hub (MQDH)**: For easy app sideloading & logs  
  [Download here](https://developer.oculus.com/downloads/package/oculus-developer-hub/)

Would you like me to generate a **setup diagram image** or **PDF checklist** of these steps for easier reference?