VR Assembly Basics

The **VR Assembly System** in SimLab Composer provides an intuitive, code-free framework to design step-by-step 3D disassembly and reassembly procedures for Virtual Reality and interactive 3D desktop environments. By using a visual node graph, you can map out exact mechanical assembly sequences, enforce part dependencies, and build realistic interactive training scenarios where certain bolts, covers, and retainers must be removed in a strict, realistic order.

Core Features & Capabilities

- **Node-Based Sequence Control:** Define precise procedural order using a simple left-to-right flow diagram.
- **Component Types & Interchangeable Parts:** Define identical items (such as short/long bolts or standard washers) into groups so users can place them back into any matching hole during reassembly.
- **Tool Assignment & Animations:** Require specific tools (such as wrenches, hex keys, or torque drivers) to loosen or tighten components, complete with keyframed action animations and ratchet sound effects.
- **Ghosting & Placement Feedback:** Set visual ghost transparency indicators and audio cues for valid or invalid part placements.
- **Training Builder Integration:** Trigger custom 2D text notifications, audio instructions, or UI popups upon component disassembly.

Video Tutorial

Watch the SimLab VR assembly basics tutorial:

https://www.youtube.com/embed/5dwvKgaDiyU

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