



NurSim - VR Palliative Care

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Vision

Our vision is to provide nursing students a safe and accurate way to get hands-on experience in hospice and palliative care. This will not only help students manage hospice care in a more positive manner but will also make them more effective at easing patients during their last days.

Mission

Our mission is to create a realistic VR simulation that helps nursing students practice hospice and palliative care while sparing them from the trauma of dealing with the death of a patient.

Key Requirements

Scenario 1 - Care for the patient in the hospital and transition the patient from normal to palliative care.

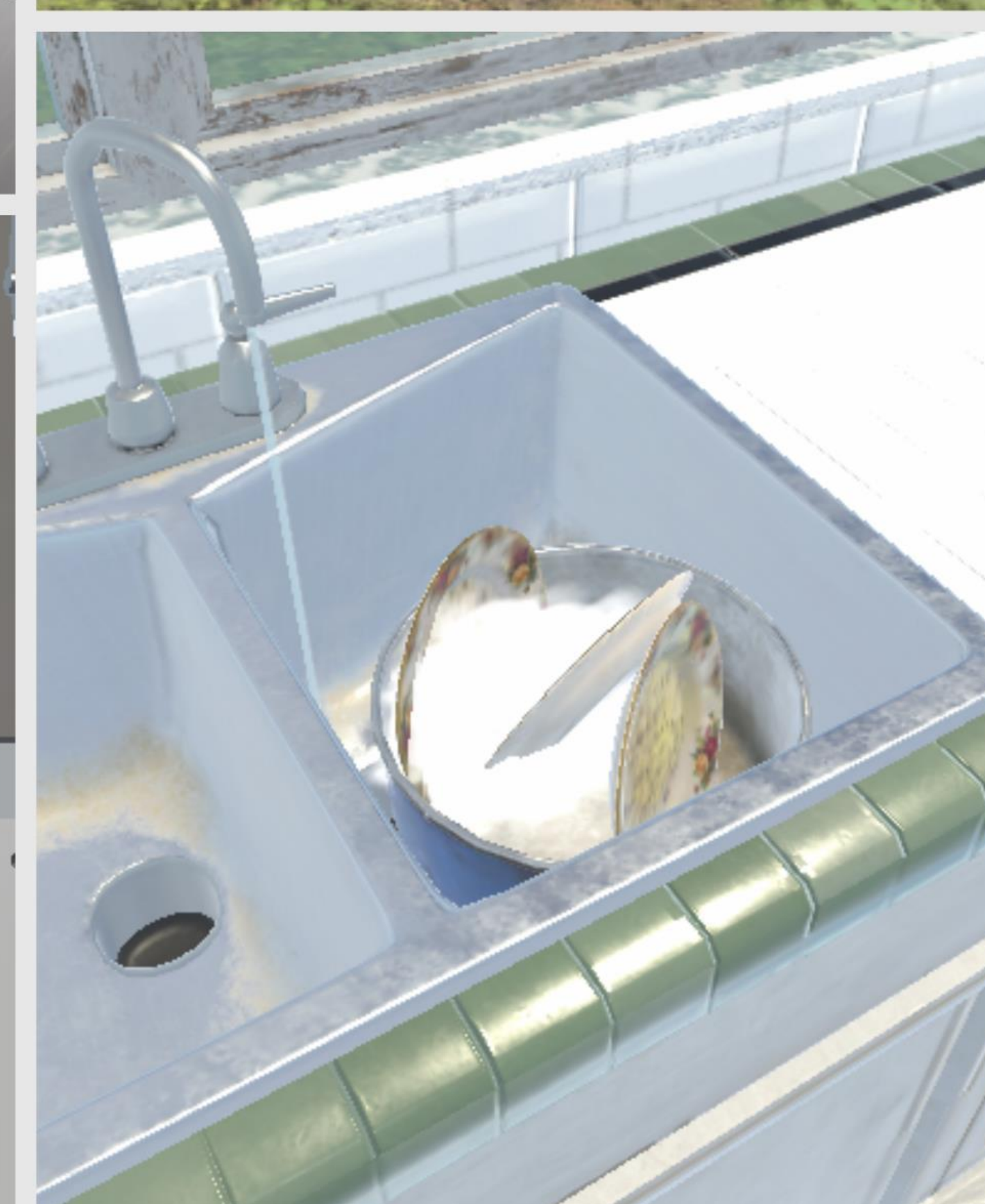
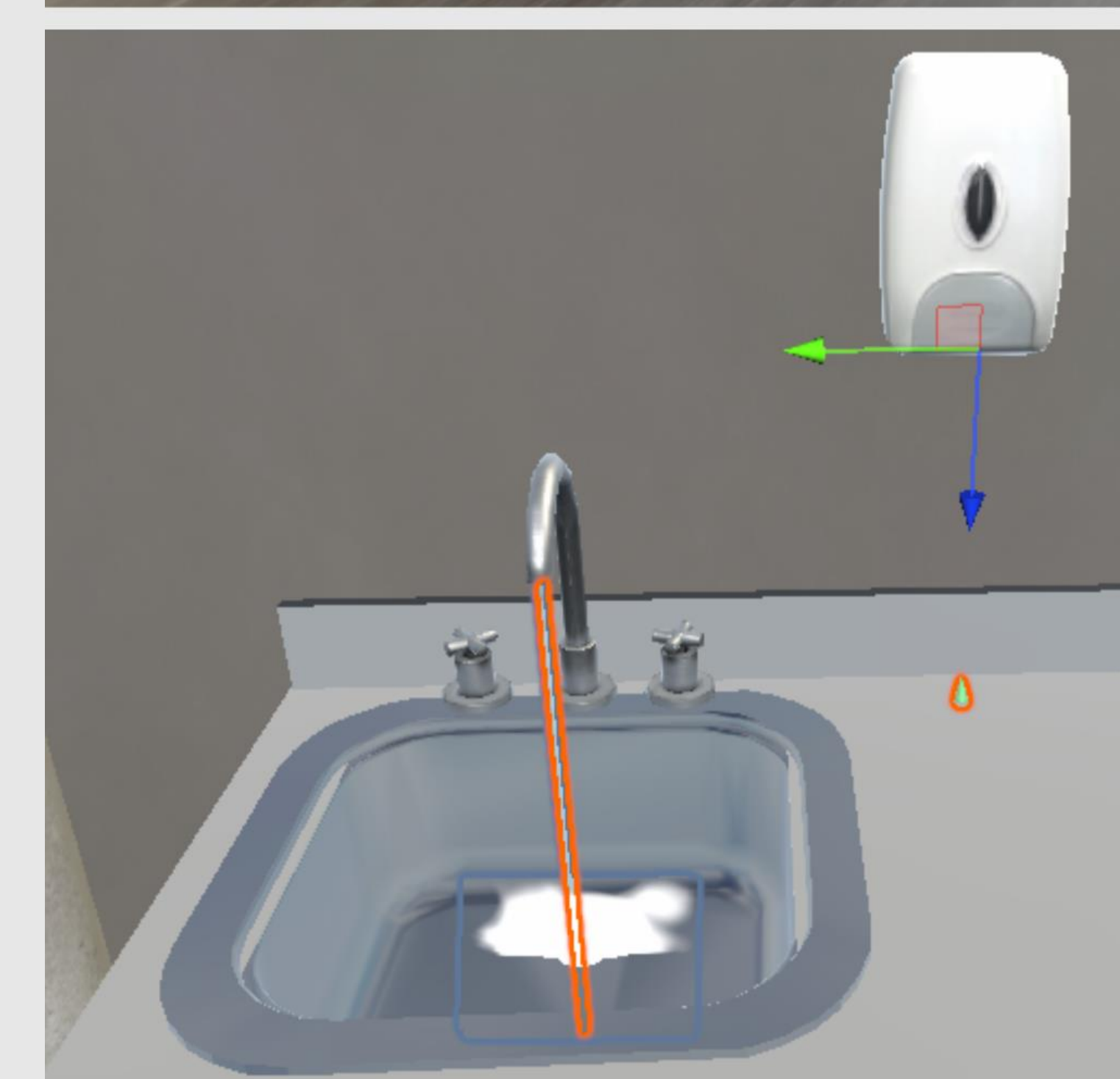
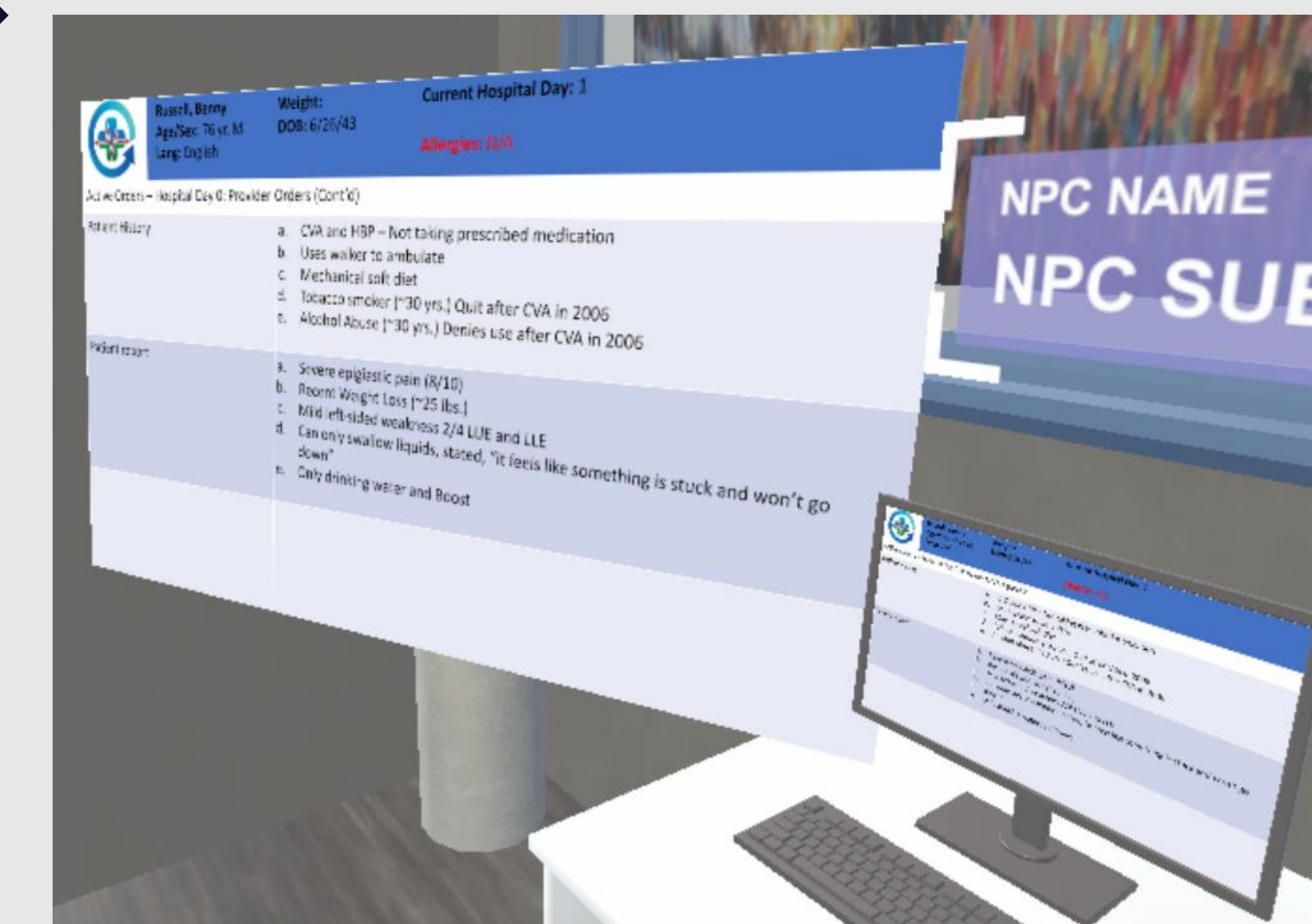
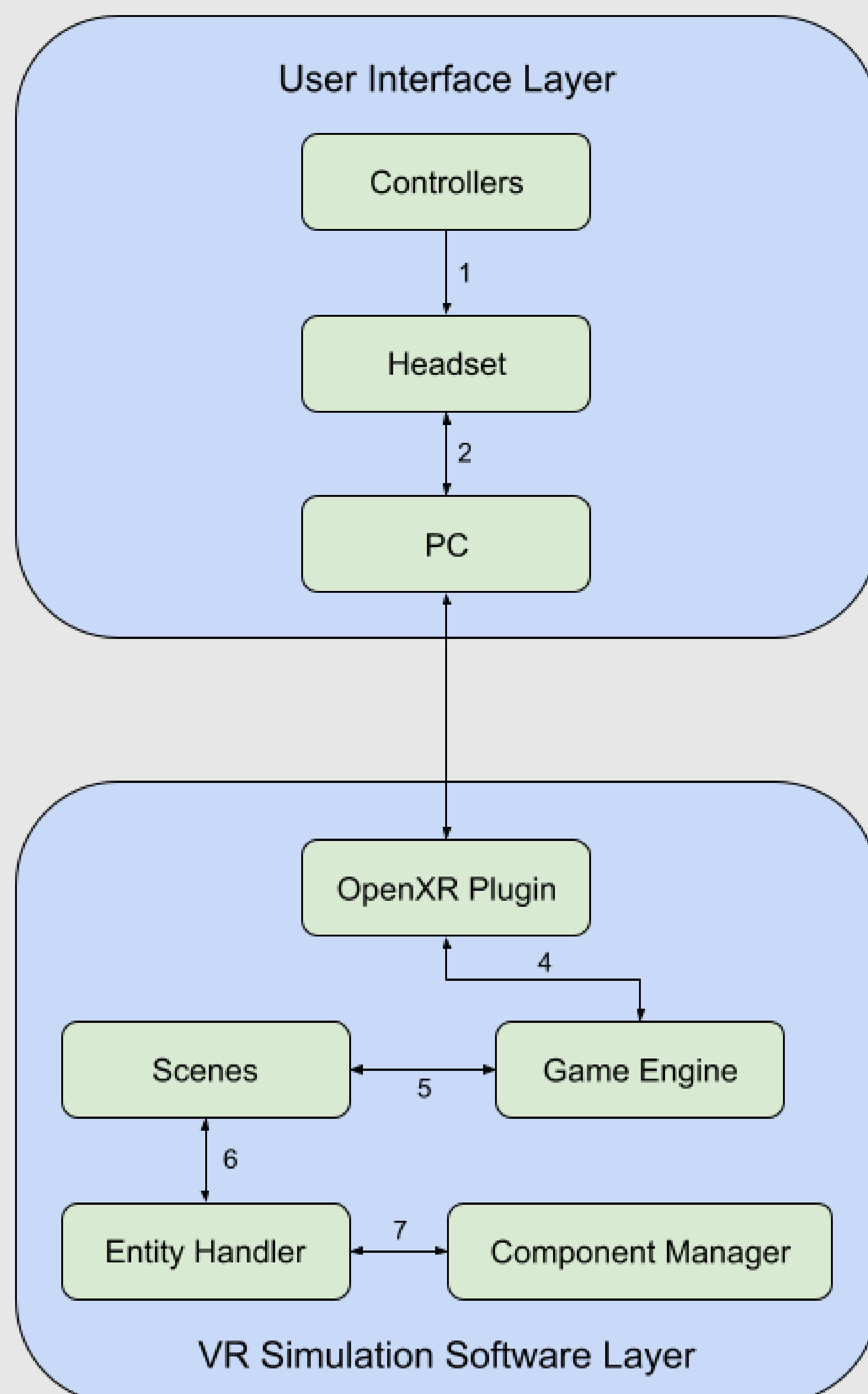
Scenario 2 - Prepare the patient's home for hospice admittance by removing hazardous objects.

Scenario 3 - Perform at-home hospice care, including focused assessments such as vital checks, medication administration, suction, and communication with the patient's family.

Scenario 4 - Perform post-mortem care by pronouncing patient death and preparing for family viewing.

Design Details

Our project consists of two high-level layers: the User Interface Layer and the VR Simulation Software Layer. The User Interface Layer is made up of the systems that enable the user to input data to affect the virtual reality environment and receive feedback on what those effects are. The VR Simulation Software Layer is where the program that dictates what occurs in the virtual reality environment—including how user input affects it and processes how it should be updated—is created and built. When running the program via Unity, the VR Simulation Software Layer sends the updated environment back to the user through the PC. When running the program via the headset, this layer builds and uploads the program to the headset via the PC.



Future Work

- Conduct preliminary usage testing with CSE students
- Conduct final play testing with Nursing students
- Final bug fixes for all scenarios
- Finalize all details of deployment
- Create tutorial for those new to VR