Virtual Reality for Palliative Care

**Project #1**

**Virtual Reality Distraction Therapy for Pediatric Injections**

Our first assignment will be a relatively simple one, allowing for an introduction to the technical means of creating an environment in virtual reality using real-time drawing tools (TiltBrush, Blocks, and Masterpiece VR.)

The goal of the assignment is to create a short, one minute visual experience in VR that will be presented to a child about to receive an injection, distracting and soothing them from the anticipation of the needle’s “pinprick.” This procedure is already in active medical use and has proven effective.

We will hear directly from physicians and young patients at **Hasbro Children’s Hospital**, who will give us some insight into the nature of their fears, and what kind of environment might help them through.

Workflow for Project #1

2/14 Classtime

Project #1 introduction, including input from medical professional.

Technical overview/tutorial.

Form student groups: four groups of three.

Schedule tutorial help sessions.

First week work (2/14-2/20)

Design discussion with group members based on input from medical professional.

Design hypothesis and sketches as per assignment spec.

Building of assets for project: construct forms, map textures: Tiltbrush, Quill, Masterpiece, Blocks (for advanced students ZBrush, Blender.)

Importing of assets into Unity.

2/21 Classtime

In-progress crit of hypotheses and sketches and assets.

Technical review of arrangement of forms in Unity, lighting and navigation issues.

Instructions/tutorial for creating animated touring Unity.

Schedule tutorial help sessions.

Second Week work (2/21-2/27)

Arrange forms in Unity according to narrative unfolding of the experiencing.

Adjust lighting and atmosphere.

Practice navigational strategy.

Perform navigational strategy while recording video for presentation to class.

2/28 Classtime

First half of class: Final presentations of Project #1.

Second half of class: Introduction of Project #2.