VIST405

Project 1

Immersive Environment Design

For project one we will create a navigable space. Create a 3D environment that a participant can navigate. We will use a simple input (camera, wiimote, keyboard, etc.) and a projection screen (sound is optional).

Task: Design an immersive environment with a body interface

- Theme: Visible / Invisible
- Project type: Projection or HMD (option: stereoscopic display)

Part 1 – Concept

- Develop a concept for an immersive environment that allows a user(s) to navigate the virtual 3D world.
- Incorporate the theme *Visible/Invisible* with a broad interpretation
- Each team needs to find a space for the project or fabricate a physical environment for projection.
- Consider the look of the media environment as well as what gesture that you are going to track, and the process you use for recognizing the motions of the user.
- You will need to create some relationship between the gestures of the user and the response of the system. This relationship should go beyond simple triggering (on/off). Include the quality of the motion in your conceptual design.

Part 2 – Research

You should include two types of research:

- Research on other projects that are related to yours. Make sure the projects relate to your concept and not just the technology.
- Research/ experiments on your own experience in the system

This research needs to be part of your final presentation as well as your blog documentation.

Part 3 – Implementation

You can create your environment in our studio (C306A) or Studio A, but it should be easily movable or disassemble-able. You will need to give context to the set up. What is the environment? What are people doing? What role does the immersive system play?

The focus of this project is the design of the system.

- Consider the method you use to recognize the user (camera, wiimote, etc.). Make sure it makes sense for the environment.
- Focus on creating qualitative relationships between the user's gestures and the system's response.

- Consider the response of your system when people are doing what you expect and when they are not.
- The appearance/ sound of the system's response is an important part of the immersion; be sure to consider this in your design.

Part 4 – Presentation (10 min)

- Slides (5-6 pages)
- Present your concept, title, experience, research and a demonstration of the environment.
- Use supporting images, drawings schematics, screen shots to illustrate the project, the interaction and the environment.
- Technical description
    - Sensing and navigation
    - Programming logic (pseudocode, flow chart)
- ALL of your progress
- Your own experience

Evaluation Criteria

- Aesthetics
- Functionality
- Interaction
- Experience
- Presentation
- Documentation

Time Table

- September 6 Projection Techniques + Research
- September 8 Progress Presentation, Working Session
- September 13 Stereoscopic display demo, Working Session
- September 15 Working Session
- September 20 Working Session, System test
- September 22 Presentation

Good Luck.