

Mixed Reality Storytelling

Fall 2018 Studio Workshop

Professor: Zach Pino

Mondays 6:00pm to 9:00pm @ DTC 6th Floor Studio + ???

Description

As virtual and augmented reality (collectively termed 'mixed reality') technologies are embedded in public locations and become more accessible by users without specialized equipment, designers can now reliably take advantage of the wide variety of opportunities offered by these new immersive technologies. This course will provide a space for students to create these sorts of newly reactive experiences, while experimenting with how traditional narrative models adapt to mixed reality interactions. A variety of tools will be explored — from simple drag-and-drop utilities to code-driven videogame and animation development environments — so that students can envision constructing immersive experiences for a variety of platforms and contexts.

Lessons in mesh-based 3d modeling principles in Autodesk Maya, as well as developing reactive environments in the Unity IDE and Javascript/Unityscript, will all be loosely covered. The choice of development environment and tools will be driven by the needs of student projects. As this medium is new to the world, the emphasis of the course will not be technical mastery of a toolset still in flux, but rather students will be encouraged to create compelling and persuasive animated narratives that take unique advantage of audience immersion. To that end, significant course time through much of the course will be allotted for students to develop their own mixed-reality, immersive narratives.

Format

The class will contain dedicated critique, discussion, and lecture time accompanied by guided tutorials in coding for VR and AR experiences. Most class time, however, will be spent in direct asset and deliverable making.

A diverse set of resources and technical skills will be presented and reinforced throughout the class.

Office Hours

Wednesdays 9am-12pm (Dedicated)

Thursdays 9am-12pm (Global)

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Learning Objectives

- ▶ Gain exposure to mixed reality tools, concepts, opportunities, and limitations.
- ▶ Learn the basics of modeling for and scripting mixed reality development tools
- ▶ Confront challenges in how traditional narrative structures fail when agency is yielded to an audience
- ▶ Develop narrative techniques for persuasively engaging an immersed audience
- ▶ Become comfortable with failure and persevere through technical challenges
- ▶ Acquire a basic understanding of event-based scripting in functional languages
- ▶ Use mathematical and computational principles to address design problems

Format

- ▶ As these technologies are new and in many ways untested, the course will be inherently experimental. The first several weeks of the course will be spent on better understanding the players and devices in the mixed reality space, as well as the technical opportunities and limitations.
- ▶ After settling on a toolset, students will spend the remainder of the course developing — individually or in small teams — a mixed reality experience. This experience may be a designed intervention to a problem, an animated interactive narrative, or a reactive and immersive environment.

AR/VR Development Tools

A-Frame
PrimroseVR
Apple ARKit
WebVR
Unity3D
Autodesk Maya
Google VR
...?

Requirements

- ▶ Command of Adobe Illustrator, InDesign, and Photoshop or equivalents
- ▶ Willingness to prototype many ideas quickly
- ▶ Comfortability with working in teams and providing honest critique
- ▶ Experience in Digital Development or Foundation Digital Media — or equivalent Software Development and 3D Modeling Familiarity — is preferred but not required.

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Expectations

- ▶ Minimum 10 hours of outside-of-class idea development and execution time
- ▶ Weekly research and tutorial completion
- ▶ Weekly deliverables that may require excursions and/or materials sourcing
- ▶ Weekly uploads of code with questions for review

Grading

Students will be evaluated on the scope and ambition of their iteration and exploration, aesthetic quality of their work, participation and collaborative enthusiasm, and the clarity and legibility of their visualized ideas.

■ Contribution ■ Timeliness ■ Regular Development ■ Execution ■ Ambition

