Master of Information Management & Systems
Final Project Showcase

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VR the Change

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Why virtual reality?
Why Virtual Reality?

- Storytelling Capabilities
- Immersiveness
- Increased Empathy
The Narrative
The Narrative

- Make a person re-experience their day-to-day life. Highlight activities that have a potential to be environmentally sustainable.

- Connect this experience to a compelling narrative about climate change, in this case the migration of Monarch butterflies.

- A goal of creating awareness and empathy, to encourage sustainable behavior.
What makes an experience compelling?
Components of a Compelling Experience

- Empathy
- Motivating
- Information visualization
- Freedom

- Design

- Non-jarring
- Intuitive
- Appropriate audio-visuals
- Friendly, engaging

Research

Development
Challenges
Challenges

Technical Constraints
- New to Unity
- Limited hardware
- Limited collaboration

Diverse Expectations
- Varied opinions
- Range of VR experience

Lack of design conventions in VR
- No standard package
- No standardized documentation

Lack of research standards for VR
- No heuristics with which to evaluate VR
Process
Process — Rapid Iteration & User Feedback

- Onboarding experience
- Audio, visual, haptic cues
- Aesthetics & comfort
- Teleportation
- Accessibility
- Gamified experience
What we built?
What we built?

- Development
  - Bedroom - Kitchen
  - Interactions - Assets

- Environments
  - Canada-California-Mexico
  - Outside Environment
What we built?

Day-To-Day Interaction at a Micro Level
Impact & Findings

**Behavior**
“I guilted myself into composting more stuff... Even though it may take an extra couple of seconds.”

**Attitudes**
“I thought about how empty my fridge was when I was at home, and thought about buying groceries just to fill it.”

**Engagement**
A majority of our intervention participants claimed to have thought back to the butterflies, or the nature scenes.

A majority of our intervention participants spoke to their friends about the experience.

Sweet-spot found between number of objectives and engagement with educational narrative.
Reflections & Future Work

- Polish the current narrative
- Embed within a larger ecosystem
- Consider integrating a social aspect within VR
- Make VR the Change more accessible to a range of platforms
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Questions?