The Interdisciplinary Approach To The Use Of Immersive Technology

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What You Will Learn

- Recognize key techniques and equipment in immersive technology;
- Understand how the humanities, design, tech & business collaborate in immersive projects;
- Experience the collaborative development process through practice.

What is Immersive Technology

Virtual Reality (VR)

Mixed Reality (MR)

Augmented Reality (AR)

What is Immersive Technology

Extended Reality (XR)

Virtual Reality (VR)

Mixed Reality (MR)

Augmented Reality (AR)

What is Immersive Technology

Extended Reality (XR)

Virtual Reality (VR) | Mixed Reality (MR) | Augmented Reality (AR) | Real World

Fully Digital | Hybrid Digital | Digital Overlay | Fully Physical

What is Immersive Technology

Extended Reality (XR)

Virtual Reality (VR) | Mixed Reality (MR) | Augmented Reality (AR) | Real World

Fully Digital | Hybrid Digital | Digital Overlay | Fully Physical

Key Techniques & Equipment

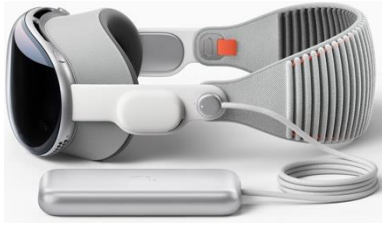
Hardware

Meta Quest 3

Apple Vision Pro

Display Systems

VR Headset



AR Glasses

Sensing Devices

Haptic Gloves

Capture Tools

360° camera

Insta360 Pro

Techniques

Tracking

Eye-Tracking; SLAM(Simultaneous Localization and Mapping)

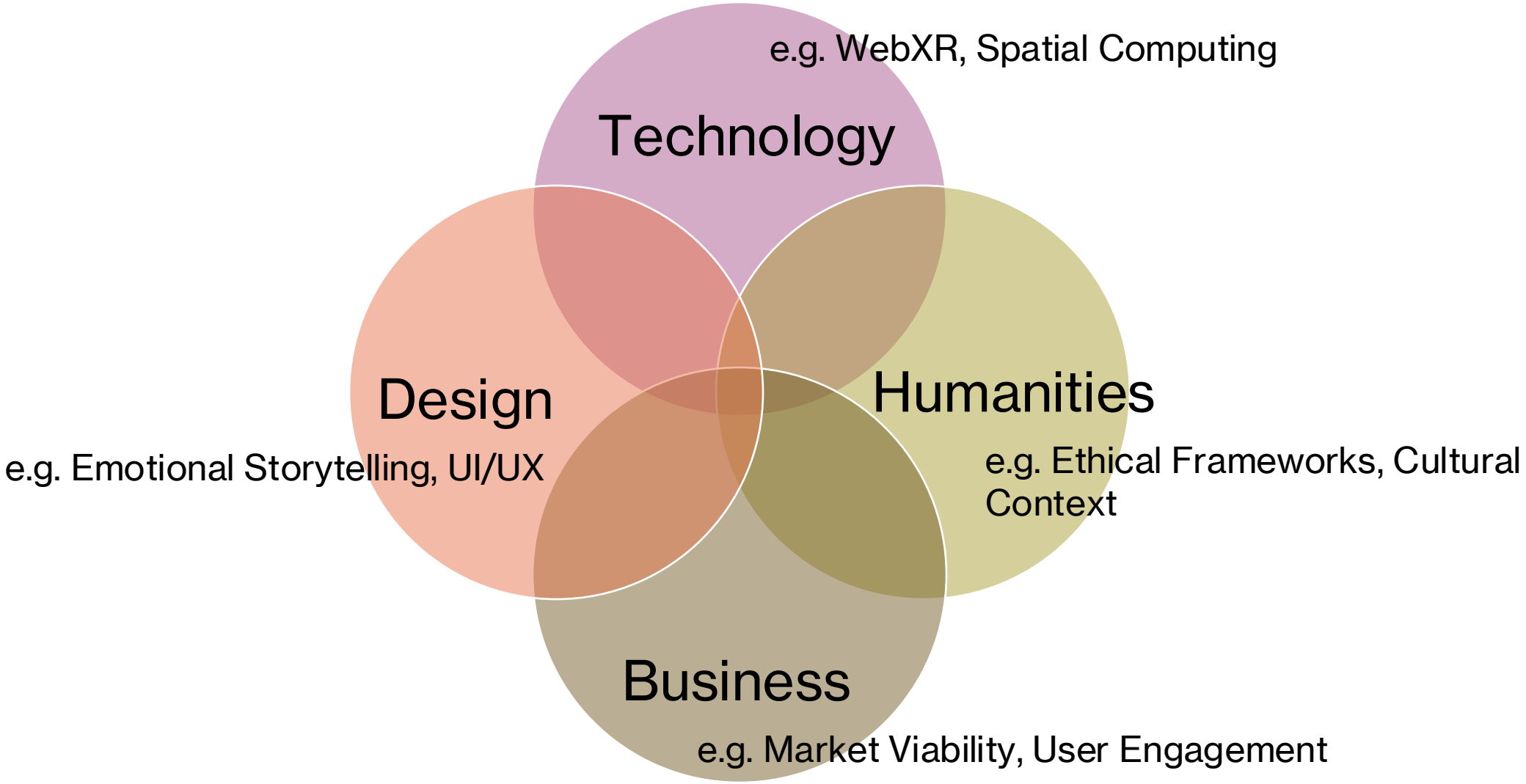
Rendering

Foveated; Ray-Marching

Interaction

Gesture; Voice

Why Interdisciplinary Approach



Applications

Project	Tech Contribution	Design Contribution	Humanities Contribution	Business Contribution
AR Museum	Markerless tracking	Exhibit spatial planning	Historical accuracy review	Sponsorship integration
VR Therapy	Biofeedback sensors	Calming environment design	Patient dignity protocols	Insurance compliance
Pokémon GO	GPS mapping	Charming characters	Local landmarks	Location-based partnerships

Case Study: AR for Cultural Revival

Ancient amphora

Culture: Italic

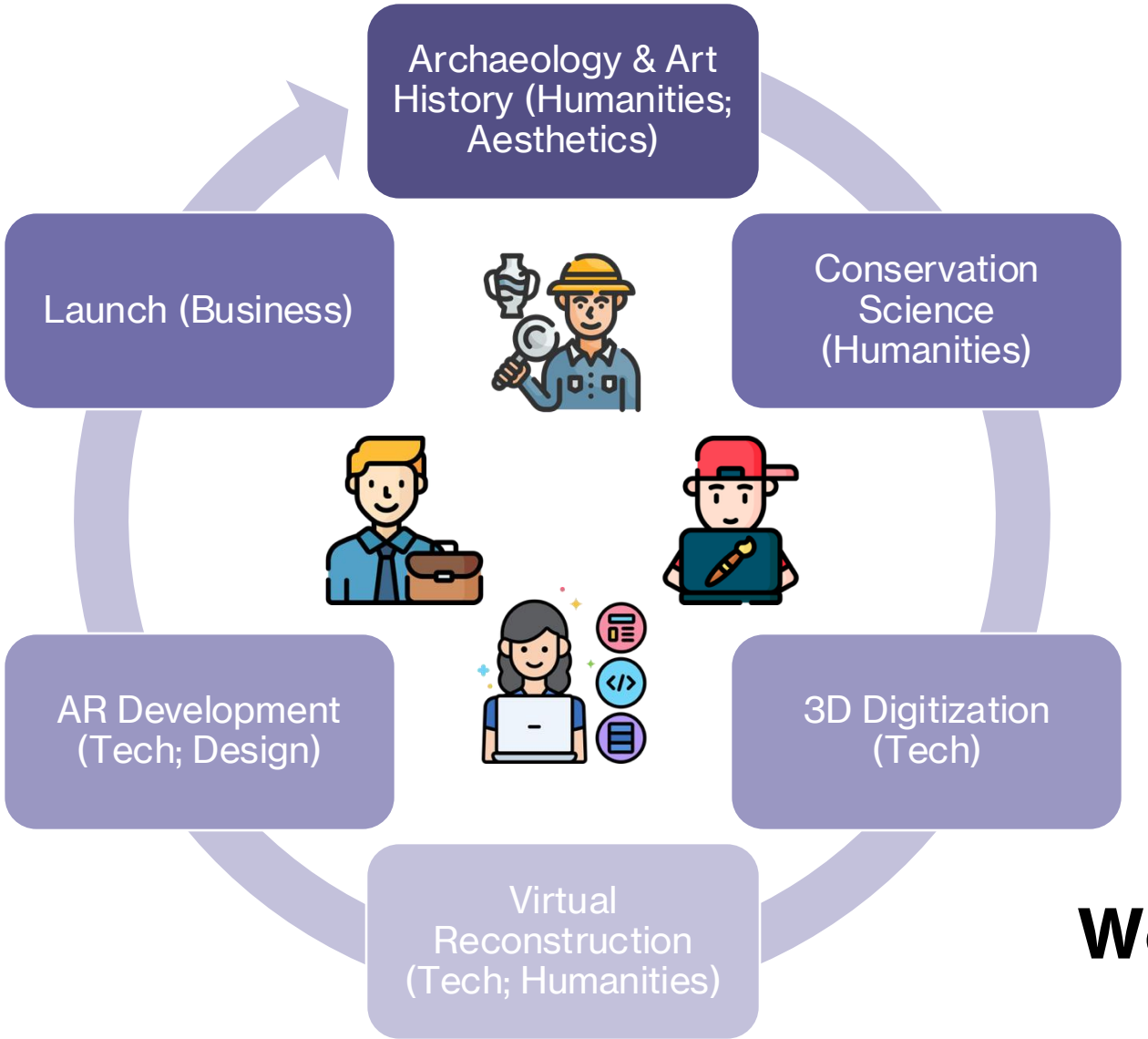
Date: 550-500 BCE

Creation Place: Ancient & Byzantine World, Europe, Central Italy

Period:
Archaic period

AR reconstruction

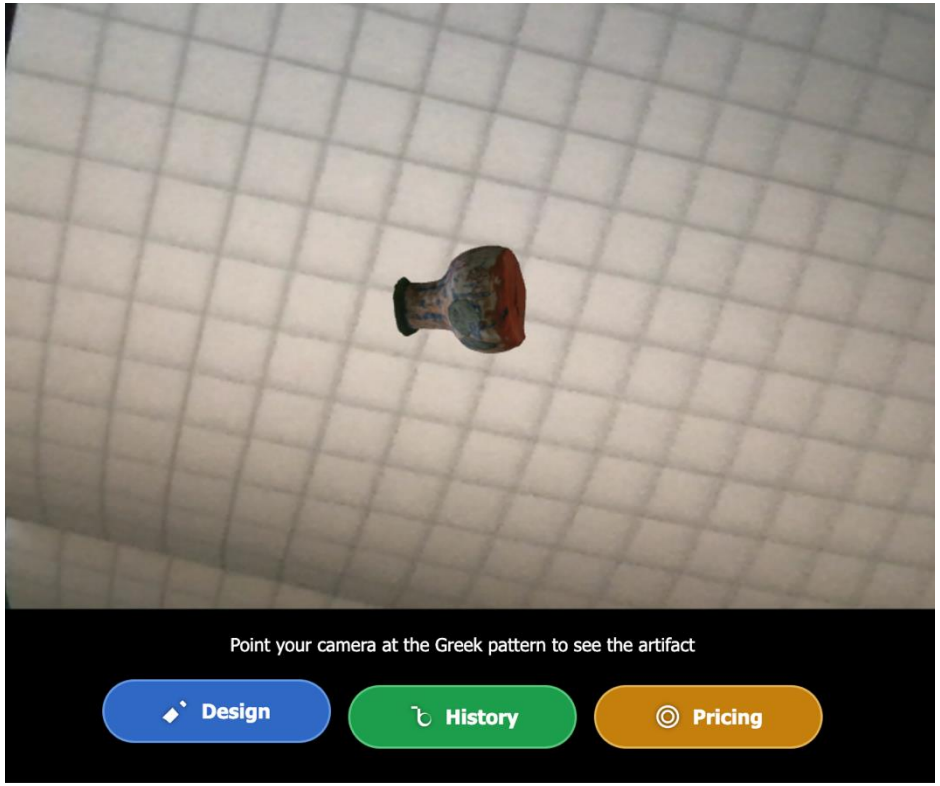
Case Study: AR for Cultural Revival

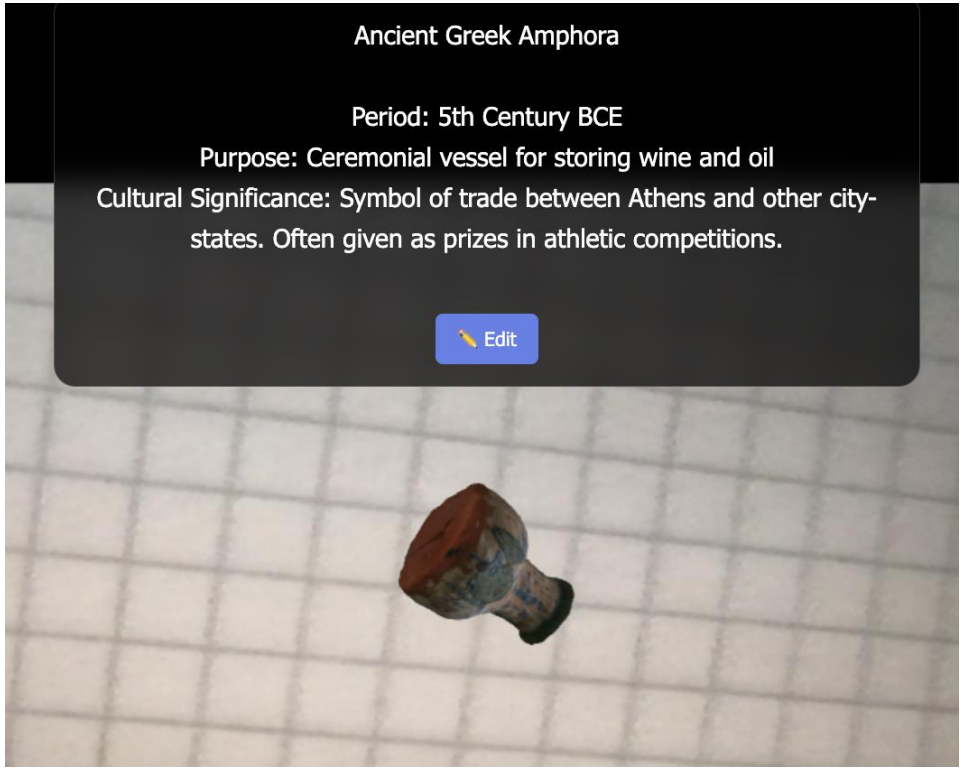


Workflow

Demo:

Case Study: AR for Cultural Revival





Demo:

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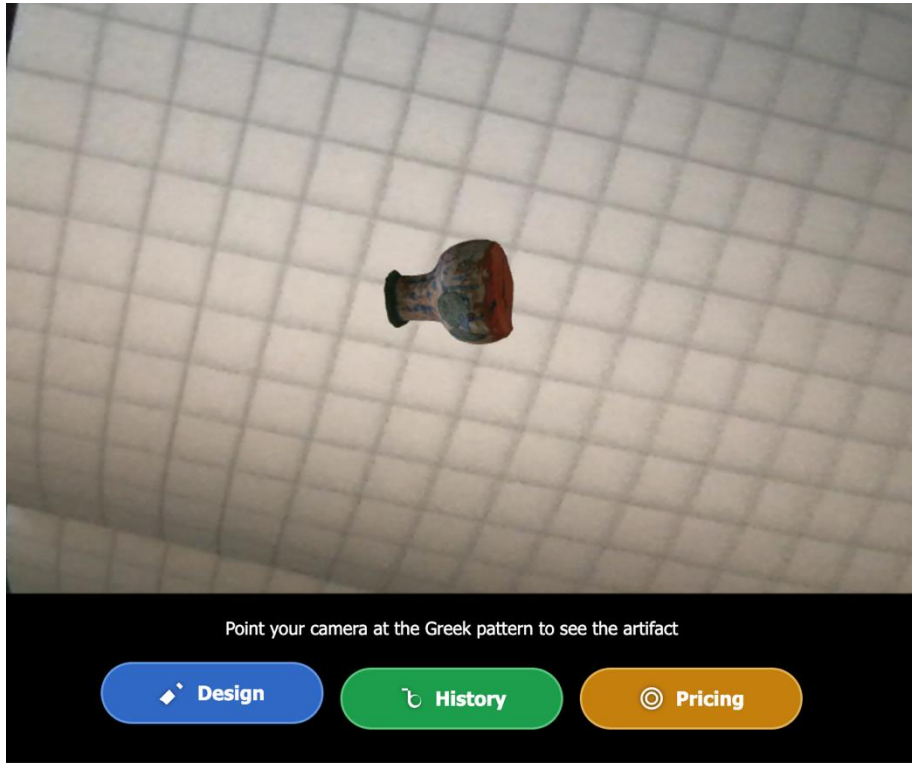

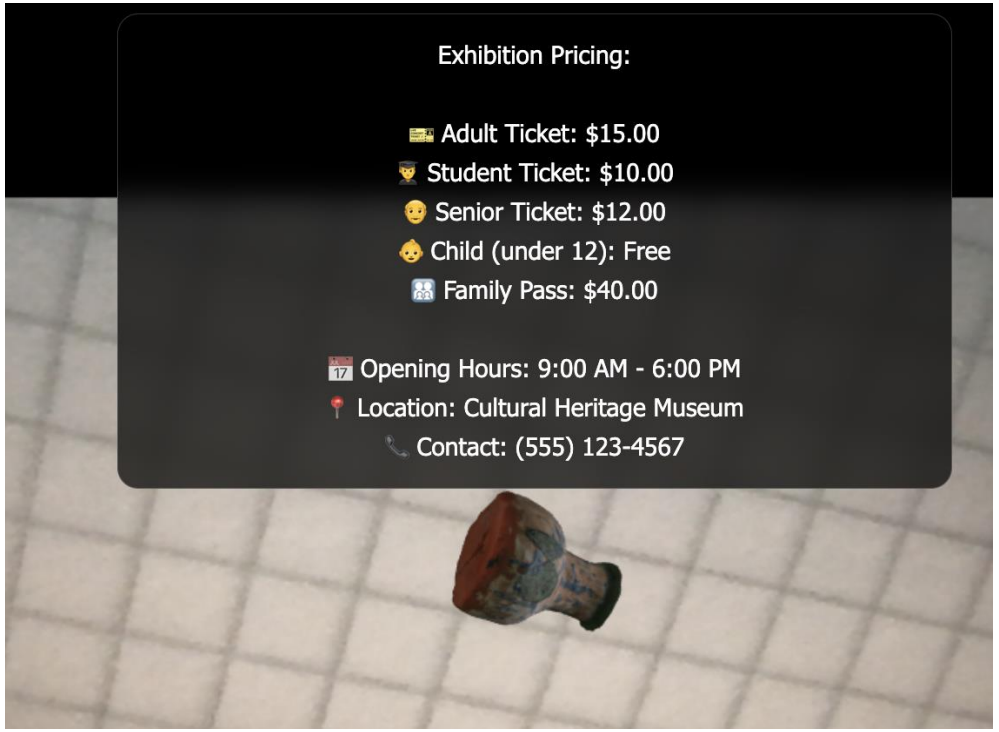

Thank You!

Q&A

Demo:

Code:

- Scan the QR code to try the simple demo or get the code