

CDP 3-D Artifacts and Digitization Workshop

Digital Video: Because the World is Not Flat

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Agenda

- Introduction
- Applications
- Considerations
- Development process
- Delivery and Metadata
- Resources
- Examples
- Questions

Introduction

- Digitization of Analog Motion Pictures, Videotape
- Streaming Video
- Virtual Reality: 3-D Objects, Exhibits and Tours
 - ◆ Panorama
 - ◆ Objects
 - ◆ Scenes
 - ◆ Movies

Applications

- Panoramas



- Objects



- Scenes



- Hot Spots

Why Use It?

- Ease and low cost of creating
- Ease and low cost of viewing
- Can easily be shared and distributed
- Interactivity increases your web site's stickiness
- It's just plain cool

Uses for CHI's

- Taking visitors to facilities which the public cannot usually visit
- Letting the public come along to remote research areas
- Documenting localities as part of research activities
- Enhancing online exhibits by providing more informative images

Uses for CHI's

- Providing access to collections in a distributed manner for education or research
- Allowing people who cannot physically visit to have a similar experience to those who can

Development Process

- Plan
 - ◆ Determine user experience
 - ◆ Create detailed production specifications and document it
 - ◆ Address issues of:
 - ☞ People
 - ☞ Equipment
 - ☞ Time
 - ☞ Budget

Development Process

- User Experience
 - ◆ The amount of vertical tilting possible
 - ◆ The amount of horizontal panning possible
 - ◆ The amount of zooming into or out of the panorama that is desired
 - ◆ The actual view that they will have - i.e., the location of the single point of observation

Development Process

- User Experience
 - ◆ The look and feel of the object manipulation
 - ◆ The background for the object
 - ◆ The quality level of the image

Development Process

- Production Specifications
 - ◆ Method of capturing the source images
 - ◆ The number of horizontal/vertical views and number of frames in the loop at each horizontal/vertical view
 - ◆ Special considerations for the image capture, such as lighting details, background, or special filters

Development Process

- Production Specifications
 - ◆ Frame size and QuickTime compression/quality settings
 - ◆ Location or site plan
 - ◆ Number of panoramas and their location on the site plan

Development Process

- Production Specifications
 - ◆ Method of capturing the source images, including the camera and lens, the height of the camera, and the lens orientation (landscape or portrait)
 - ◆ Time of day (or night) for the image capture session
 - ◆ Number of shots captured around the pivot point for each panorama

Development Process

- People
 - ◆ Multimedia development experience
 - ◆ Still photography or scene rendering experience
 - ◆ Videography and video frame capture if using video as a means of capturing images
 - ◆ Graphics editing experience

Development Process

- Equipment
 - ◆ Hardware
 - ◆ Software
 - ☞ QuickTime VR Authoring Studio
 - ☞ VR Toolbox's VR Worx

Development Process

- Equipment
 - ◆ Image Capture
 - ☞ Video camera
 - ☞ Tripods
 - ☞ Object Rigs
 - ☞ Turntables
 - ☞ Cool objects



Development Process

- Time

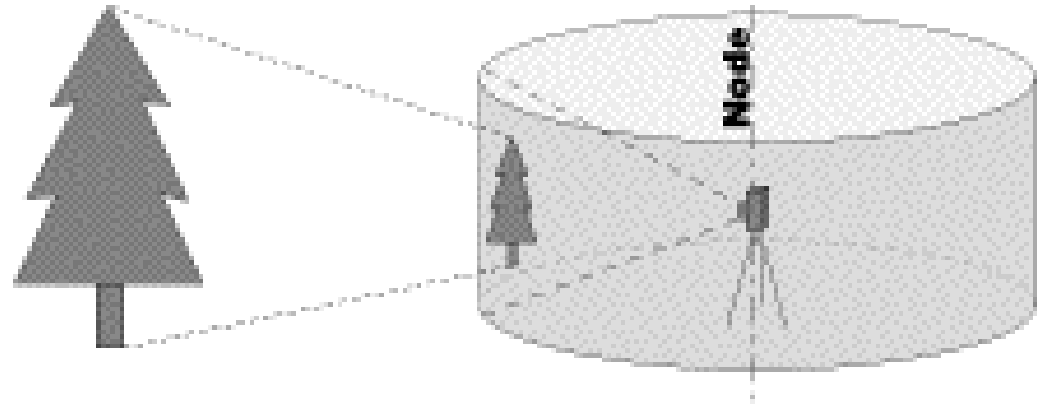


Development Process

- Budget

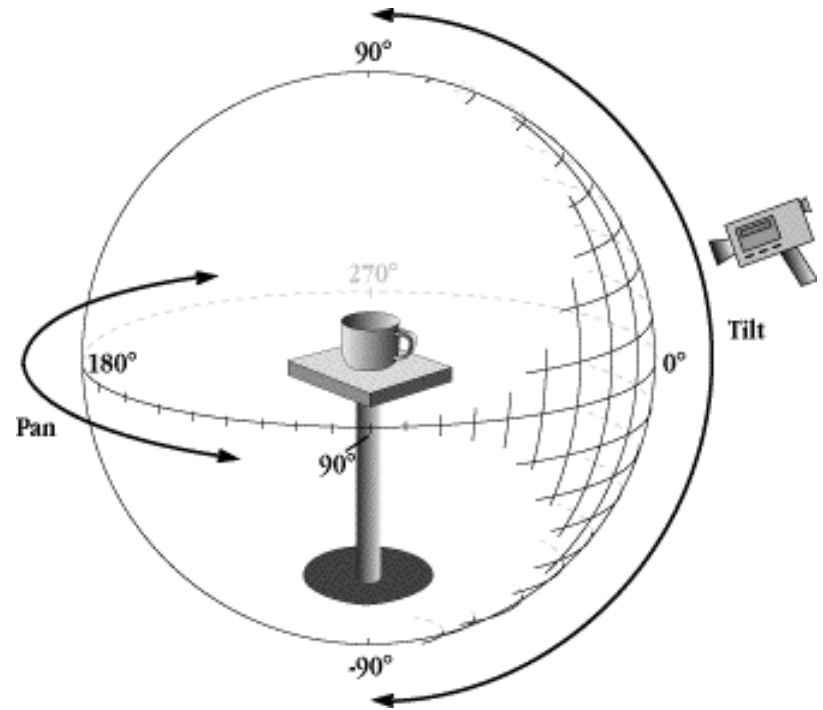
Capturing Images

- Panoramas



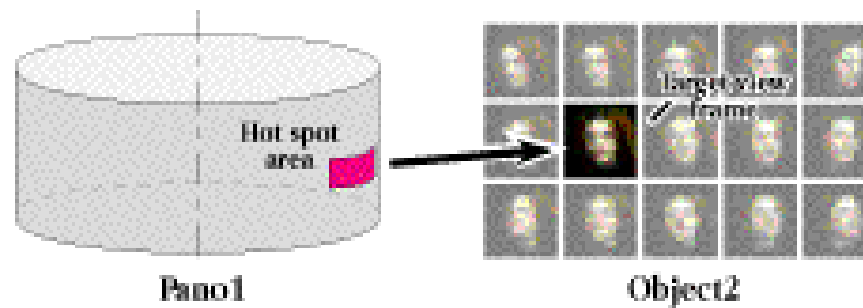
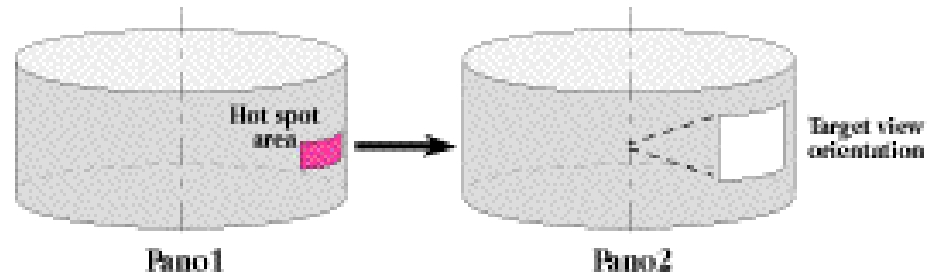
Capturing Images

- Objects



Capturing Images

- Scenes



Authoring

- Software basics
 - ◆ Acquire Images
 - ◆ Stitch
 - ◆ Add Hotspots
 - ◆ Compress
 - ◆ Export

Delivery

- Web
 - ◆ Link to the file
 - ◆ Embedded in the page
- CD's
- Test, Test, Test

Metadata

- Meta tags in the web site
- Create a MARC or Dublin Core record in local and national bibliographic systems

Resources

■ Books:

- ◆ Gulie, Steven W. *Quick Time for the WEB*. Boston, Mass., AP Professional, 2000
- ◆ Kitchens, Susan A. *The QuickTime VR Book: Creating Immersive Imaging on Your Desktop*. Berkeley, CA: Peachpit Press, 1998
- ◆ Stern, Judith L. *QuickTime Pro 4 for Macintosh and Windows*. Berkeley, CA: Peachpit Press, 1999

■ Web:

- ◆ Apple QuickTime Site
 - 👉 <http://www.apple.com/quicktime>
- ◆ Apple QTVR Mail List
 - 👉 <http://www.lists.apple.com/mailman/listinfo/quicktime-vr>
- ◆ Outside the Lines
 - 👉 <http://www.outsidethelines.com>

Examples

- Teaching
 - ◆ University of South Florida, Teacher's Guide to the Holocaust
- Research
 - ◆ UW RealLearning
- Educational/Informational
 - ◆ Boulder Museum of Contemporary Art

Questions

- *“Hell, there are no rules here. We're trying to accomplish something.”*
Thomas Edison