DOCUMATIC

PARTICIPATORY, ANDROID-BASED MOBILE SHOOTING ASSISTANT, PRE-EDITOR, AND GROUNDWORK FOR SEMI-AUTOMATIC FILMMAKING

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Digital Media Master’s Defense

Committee
Michael Nitsche (Chair)
Carl DiSalvo
Vinicius Navarro
Problem: Documentary Filmmaking (Personal)
Problem: Documentary Filmmaking (Personal)

Plan Subject (PILES) →

Film →

Piece Together →
Problem: Documentary Filmmaking (Structural)

1. Asynchronous, Unorganized Bin of Content

2. Fixed, Linear Viewer Experience
Problem: Legacy Practices

Analog

Digital
Traditional Filmmaking

PRE-PRODUCTION ➔ PRODUCTION ➔ POST-PRODUCTION

Writing ➔ Filming ➔ Editing
Quality Control

PRE-PRODUCTION  →  PRODUCTION  →  POST-PRODUCTION

Early Production

WRITING  →  FILMING  →  EDITING
Efficiency

PRE-PRODUCTION → PRODUCTION → POST-PRODUCTION

Studio System

WRITING → FILMING → EDITING
Cinematic Structuring

**Fiction (linear)**

**Documentary (dynamic)**

- **PLANNING**
  - Fiction: Sequential content planning
  - Documentary: Dynamic content structuring

- **GATHERING**
  - Fiction: Accumulation of content
  - Documentary: Flexible gathering of content

- **EDITING**
  - Fiction: Linear editing process
  - Documentary: Interactive and dynamic editing
Documentary Dynamism

Documentary (dynamic) = Unit of Content

PLANNING

GATHERING

EDITING
Problem: Documentary Filmmaking (Structural)

Pre-Production ➔ Production ➔ Post-Production

Studio System

Writing ➔ Filming ➔ Editing
Problem: Documentary Filmmaking (Structural)

PRE-PRODUCTION → PRODUCTION → POST-PRODUCTION

Documentary Production

WRITING → FILMING → EDITING
Solution: Semi-Automatic Filmmaking

PRE-PRODUCTION → PRODUCTION → POST-PRODUCTION

Documatic System

WRITING → FILMING → EDITING
Dynamic Construction
Design Goals

- Efficiency
  - Manage and Automate
- Independence
  - Not reliant on external networks or communications
- Agency
  - Documentarian Control
  - Non-Destructive
- Adaptability
  - React to Documentary Dynamism
Current Field: Video Organizers

Adobe OnLocation

- Connect Laptop to Camera
- Type Shot, Scene, Location
- Pass footage between studio teams
Current Field: Database Filmmaking

Murtaugh
- “ConTour” - Evolving Documentary

Manovich
- “Soft Cinema”

Murray
- “Experimental TV Lab”

Experimental Television Lab – “World War II Experience: D-Day
Documatic

Automated Organization + Structuring

Documentary

PLANNING

VIDEO ORGANIZERS

DATABASE FILMS

EDITING
Documatic: Video Capture

**Recorder**

**Digital Video Camera**
Documatic: Annotation

Annotation

DOCUMATIC APP

XML Code:

```xml
<?xml version="1.0" encoding="UTF-8"?>
<ProjectManifest name="Long_Dogs">
  <people>
    <person name="Andrew Quitmeyer" title="long dog document"/>
    <person name="William and bear" title=""/>
    <person name="wendy and Clarence" title=""/>
    <person name="Ryan and Sarah and Riley" title=""/>
    <person name="kyle and Tosh" title=""/>
    <person name="Veronica and schaeffer joy" title=""/>
    <person name="maria and bella" title=""/>
  </people>
  <sections>
    <section name="Introduction">
      <clip start="1298491330754" type="exhibit" person="Andrew Quitmeyer" link="false"/>
      <clip start="1298491350425" type="exhibit" person="Andrew Quitmeyer" link="false"/>
      <clip start="1298491371099" type="exhibit" person="Andrew Quitmeyer" link="false"/>
      <clip start="1298491387599" type="exhibit" person="Andrew Quitmeyer" link="false"/>
      <clip start="1298491397530" type="exhibit" person="Andrew Quitmeyer" link="false"/>
      <clip start="1298492491770" type="exhibit" person="William and bear" link="false"/>
      <clip start="1298492771998" type="interview" person="Wendy and Clarence" link="false"/>
      <clip start="1298492992980" type="exhibit" person="Ryan and Sarah and Riley" link="false"/>
      <clip start="1298493303907" type="interview" person="Kyle and Tosh" link="false"/>
    </section>
  </sections>
</ProjectManifest>
```
Function

**RAW DATA**

**SEMANTIC DATA**

**PROJECT GENERATOR**

**GLOBAL TIMESTAMPS**

**RECORER**

**ANNOTATOR**
Procedural Model

“Categorical Documentary”
- Sequences of topics about central category

Gap-Toothed Women
1. Introduction of a few gap-toothed women
2. Genetic and Cultural Explanations for gaps
3. American Stigma
4. Careers and Creativity
5. Epilogue
6. Credits

(Bordwell & Thompson, 2004)
Procedural Model: One Level Deeper

Introduction → Explanations → Stigma → Careers → Epilogue

INTERVIEW

EXHIBIT

NARRATION
Procedural Model

- Interview

- Establishes personas

Gap-Toothed Women
Procedural Model

- Exhibit

- Illustrates words

*Gap-Toothed Women*
Procedural Model

- Narration (Optional)
- Introduces Sections

Hearts of Darkness
Walkthrough: Dog Documentarian

- Mariam
  - Documentarian about dogs in the park

- Andy
  - Cameraman
Walkthrough: Dog Documentarian

- Launch App
Walkthrough: Dog Documentarian

- Create New Project
Walkthrough: Dog Documentarian

- Create New Project
Walkthrough: Dog Documentarian

- Create New Project
Walkthrough: Dog Documentarian

- Create New Project
Walkthrough: Dog Documentarian

- Create New Project
Walkthrough: Dog Documentarian

- Plan Interviews
Walkthrough: Dog Documentarian

- Plan Interviews
Walkthrough: Dog Documentarian

☐ Plan Interviews
Walkthrough: Dog Documentarian

- Arrange Sections

[Image of a mobile app interface showing sections such as Introduction, Breeding, Their Relationship, Cuteness, Dog Length, Abilities, Interview 0, Narration 0, Exhibit 0]
Walkthrough: Dog Documentarian

- Arrange Sections
Walkthrough: Dog Documentarian

- Arrange Sections
Walkthrough: Dog Documentarian

- Arrange Sections
Walkthrough: Dog Documentarian

- Delete Sections
Walkthrough: Dog Documentarian

- Delete Sections
Walkthrough: Dog Documentarian

- During Interview
Walkthrough: Dog Documentarian

- During Interview
Walkthrough: Dog Documentarian

- During Interview
Walkthrough: Dog Documentarian

- During Interview
Walkthrough: Dog Documentarian

- During Interview
Walkthrough: Dog Documentarian

☐ During Interview
Walkthrough: Dog Documentarian

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Walkthrough: Dog Documentarian

- During Interview

[Image of a mobile application interface with options for interview, exhibit, and narration. The current tab is on interview with a dropdown menu labeled Henry and Spot and options for fur color, dog length, abilities, and ending.]
Walkthrough: Dog Documentarian

- Collect Exhibits
Walkthrough: Dog Documentarian

- Narration
Walkthrough: Dog Documentarian

- Exhibit for Narration

![Image of a group of people walking on a paved path with trees and a sign in the background.]

![Diagram of a digital media interface with sections for Interview, Exhibit, and Narration. The interface includes a recording section titled "Introduction" and options for linking to person and narration.]

[Click to view the full page or available as a PDF resource.]
Walkthrough: Dog Documentarian

- Collect Files
Walkthrough: Dog Documentarian

- Copy Project Folder
Walkthrough: Dog Documentarian

- File System
Walkthrough: Dog Documentarian

- File System

**ANDROID_DEVICE/**
  Documatic/
    • Readme.txt
  PROJECT_A/
    • projectmanifest__PROJECT_A.xml
    • Generate_Project.jar
  video/
    RAWVIDEOFILE_536.MOV
    RAWVIDEOFILE_486.MOV
Walkthrough: Dog Documentarian

- Copy Project Folder
Walkthrough: Dog Documentarian

- Copy Video Files
Walkthrough: Dog Documentarian

- Run Project Generator
Walkthrough: Dog Documentarian

- Drag to Adobe Premiere
Walkthrough: Dog Documentarian

- Refine Editing
Walkthrough: Dog Documentarian

Henry and Spot
Long-Dog Enthusiasts

<clip start="1299274271376" type="interview" person="Henry and Spot" end="1299274278074" duration="698" title="Long..."
Walkthrough: Dog Documentarian

- Merging

![Image of file structure and Documatic Project Compiler window]
Use Case Analysis

- Long Dogs
- Cinematographer
- Chattahoochee Showdown
User Interface Evolution

Main Page

Edit Sections

Add Footage

Narration

Interview

Exhibit

ADD FOOTAGE

EDIT SECTIONS

TEXT

NARRATION

INTERVIEW
User Interface Evolution

**Main Page**
- Edit Project
- Add Footage
- Sync Projects
- Help
- Tutorial Mode

**Add Footage**

**Edit Sections**

**Interview**
- Select Person
- Choose Section
- Breeding
- Their Definition
- Cuteness
- Dog Color

**Narration**
- Redo Take
- Introduction
- Their Relationship
- Breeding
- Their Definition
- Cuteness
- Dog Color

**Exhibit**
- Long Dogs
- Record narration
- Introduction
- Their Relationship
- Breeding
- Their Definition
- Cuteness
- Dog Color
User Interface Evolution

Main Page/Project Editor

Add Footage
Future Additions

☐ Credits Page

Special thanks to Brad (Writer/Director) for providing the music and score for the film. Thanks to his interest and support, the film was able to be completed. Special thanks to Andrew Quitmeyer for being a constant source of inspiration and encouragement. Thanks to the cast and crew for their hard work and dedication. Thanks to all the friends and family who supported and believed in the project. Finally, thanks to all the people who made this film possible. This film is a work of art and should be enjoyed as such. Enjoy!
Possible Extensions

- Indirect Connection
  - Time
  - Location

<clip start="1299274271376" location="33.782879,-84.37216" type="interv..."
Possible Extensions

- Multi-Camera
  - Single Annotator

- Multi-Camera
  - Multi-Annotator
Possible Extensions

- More Procedural Models
  - Sitcoms
  - Thrillers
  - Dramas

- Model Creation System
Deliverables

- Artifact
  - Documatic Android App
  - Android Market
- Design Document
- Prototype Documentary
- Website
- Instructable
- Video Documentation
QUESTIONS?

Participatory, Android-based, Mobile Shooting Assistant, Pre-editor, and Video Planner

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Digital Media Master’s Student

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www.andrewquitmeyer.com

http://www.semiautomaticfilmmaking.org/
War Chest

Responses to Potential Questions
Timeline

*Oct. 4  
Thesis Proposal

Oct. 15  
Completed Request for Approval

October  
Documentary background research

October  
Android Labs: Phone Sync+Camera Access

November  
Design Interface/Workflow

November  
Android Labs: Structural Design

*November 17  
User Interaction Wireframed

*November 30  
Code structure fully outlined

December  
Design Interface/Workflow

*December 5  
Final Cut/Premiere XML Foundation

*December 15  
Real-time phone inter-communication

January  
Android Coding

*January 16  
Generates correct XML

*February 28  
Functional code

March 1-5  
Interface design iterations

*March 5  
Qualitative Testing

*March 11  
Design Document Draft/Preview

April  
Finalize Design Documentation

April 1-6  
Qualitative testing II

*April 11  
Defense

April 29  
Signed Project Approval Forms
Known Buglist

- Final Cut Pro Compatibility
- Small, Misplaced Titles