LOD Stories

{ Learning About Art by Building Multimedia Stories

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Dr. Craig A. Knoblock, Dr. Pedro Szekely
University of Southern California, United States

Miel Vander Sande
Ghent University, Belgium

Mr. Bean (2007)

Rowan Atkinson

Mr. Bean (2007)

Unseen Bean (Video) 1995
Mr. Bean

Full Throttle (TV Movie) 1995
Sir Henry "Tim" Birkin

Mr. Bean (TV Series) 1990-1995
Mr. Bean
- The Bus Stop (1995) ... Mr. Bean

The Lion King 1994
Zazu (voice)

Show all 19 episodes

Animated StoryBook: The Lion King (Video Game) 1994
Zazu (voice)

Schmidteinander (TV 1994
Mr. Bean
- Episode #5.6 (1994) ...

The Lion King 1994
Zazu (voice)

Four Weddings and a 1994
Father Gerald - Weddi

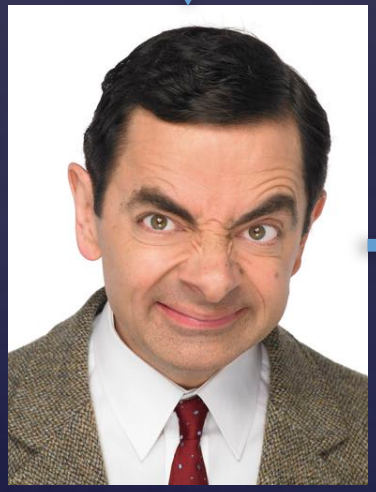
Hot Shots! Part Deux 1993
Dexter Hayman

Election 92 (TV Movie) 1992
Mr. Bean

Zazu

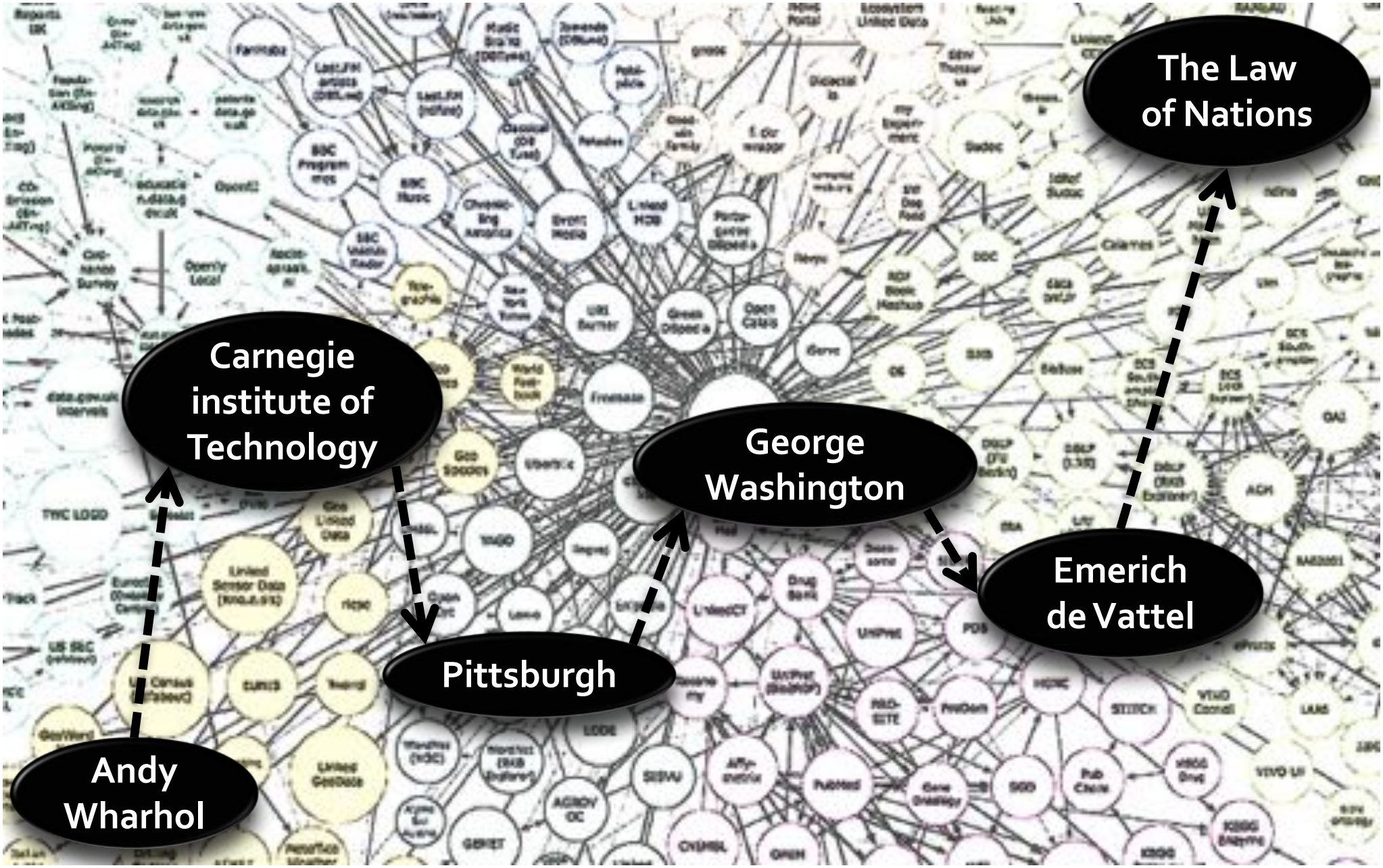
The Lion King (1994)

Main
Actor



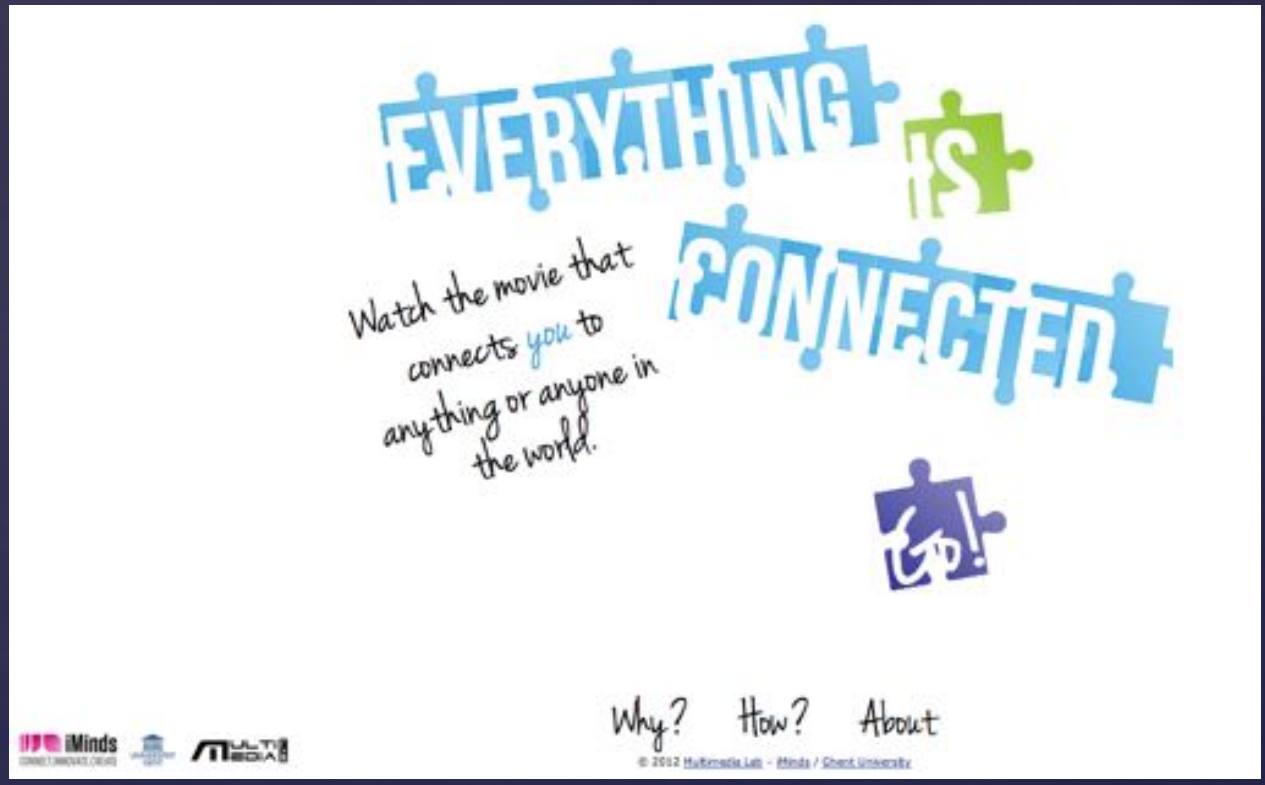
Voice

Main
Character


The Law of Nations
Carnegie institute of Technology
George Washington
Emerich de Vattel
Pittsburgh
Andy Wharhol

LOD Stories

Related Work



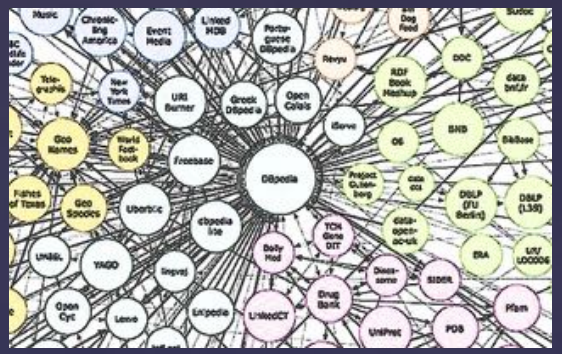
Everything is Connected

http://everthingisconnected.be

Related Work

WikiLinks

LOD Stories

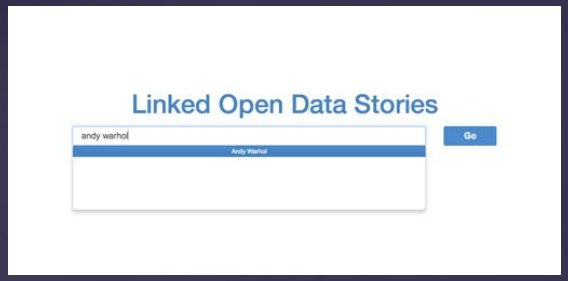


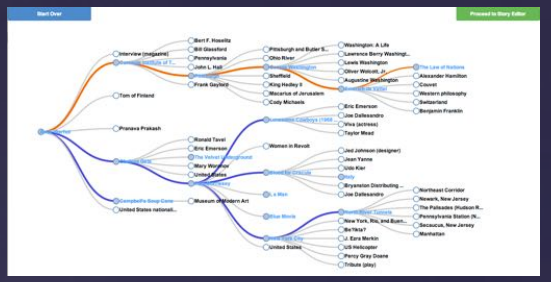
Relationship Exploration

Learning Using Multimedia

User Engagement

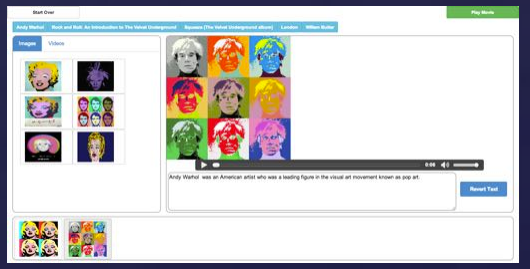
A Slide Demo…

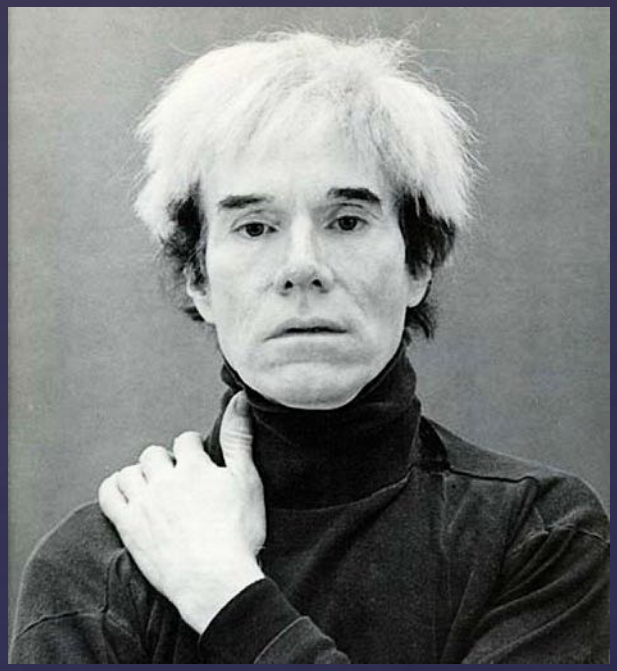

Linked Open Data Stories
andy warhol
Go
Andy Warhol


Start Over
Proceed to Story Editor

Search
Explore
Edit
Play

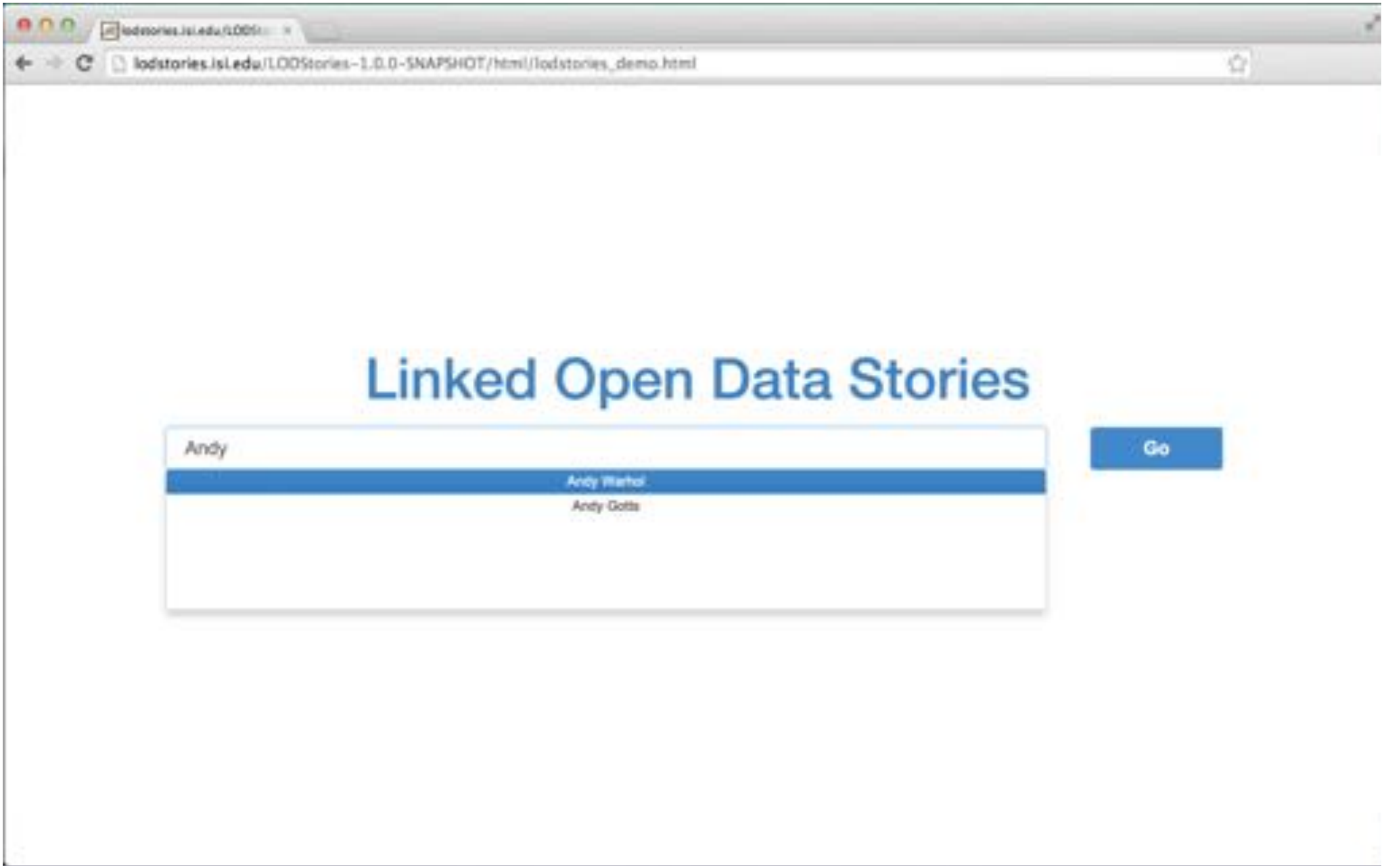
Andy Warhol Documentary Film Part 1 of 2


Start Over
Play Movie
Images
Videos
Revert Text



?

Andy Warhol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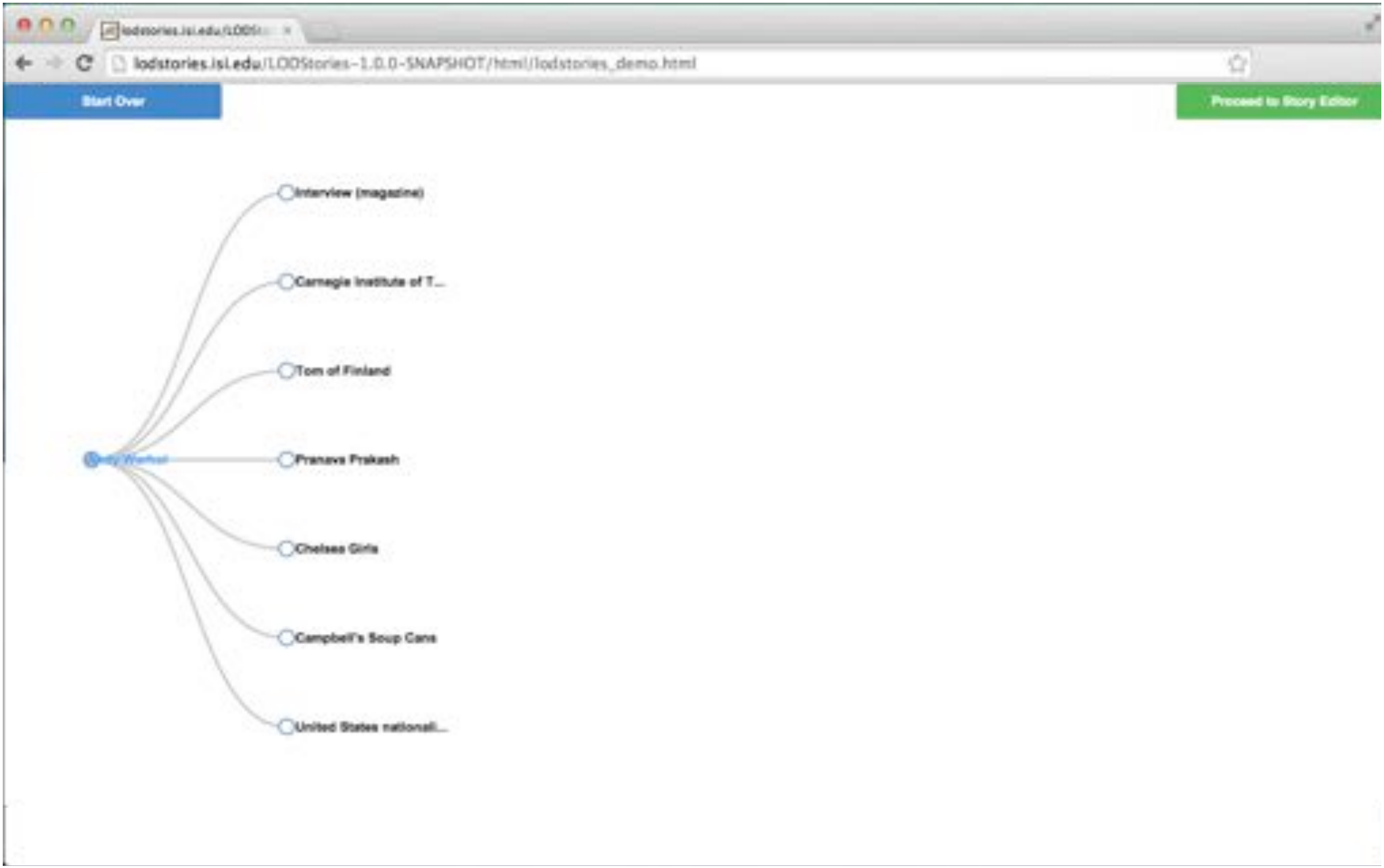
Linked Open Data Stories
Andy
Andy Warhol
Andy Gotts
Go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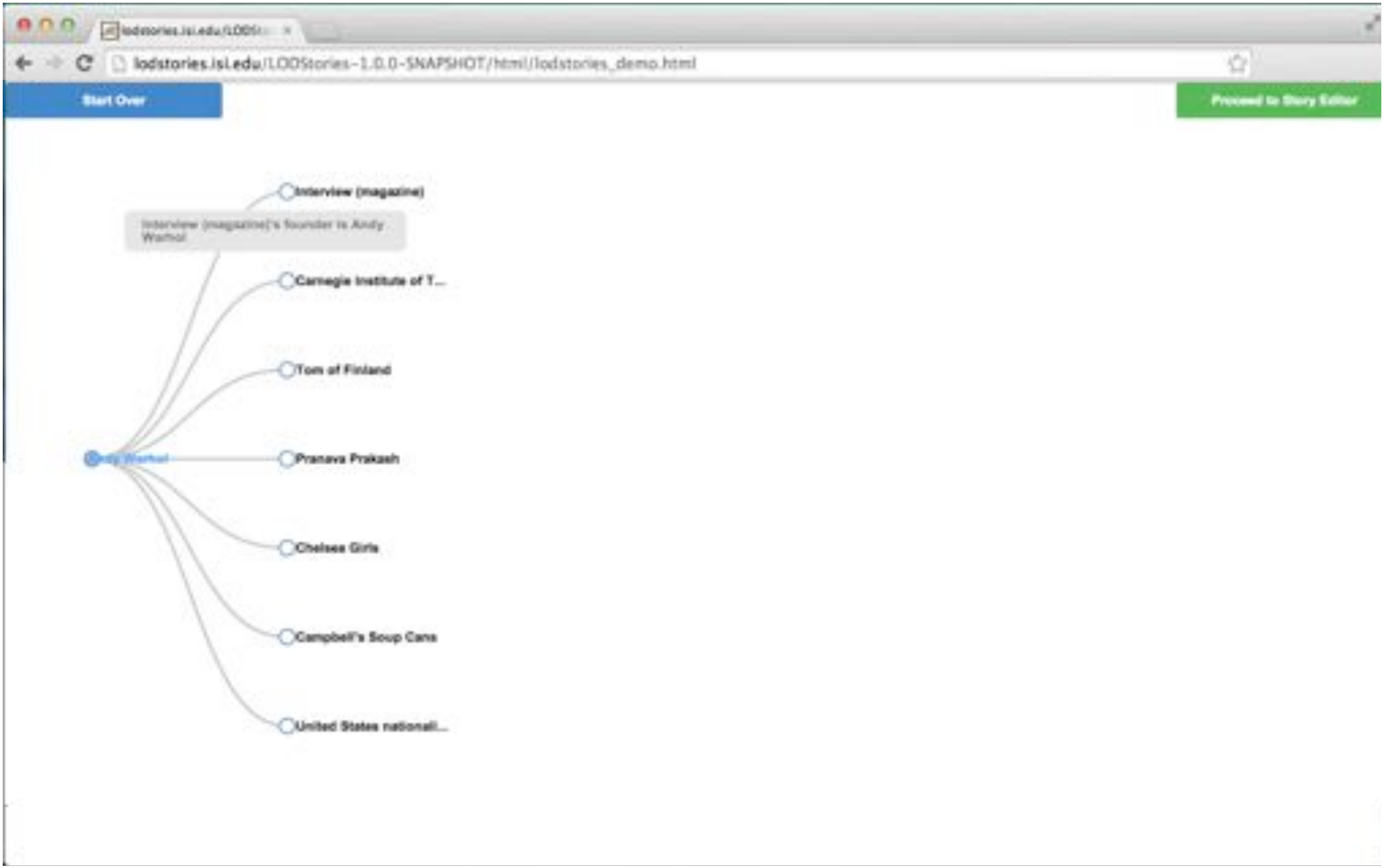
Start Over
Proceed to Story Editor
Interview (magazine)
Carnegie Institute of T...
Tom of Finland
Pranava Prakash
Chelsea Girls
Campbell's Soup Cans
United States nationali...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Start Over
Proceed to Story Editor
Interview (magazine)
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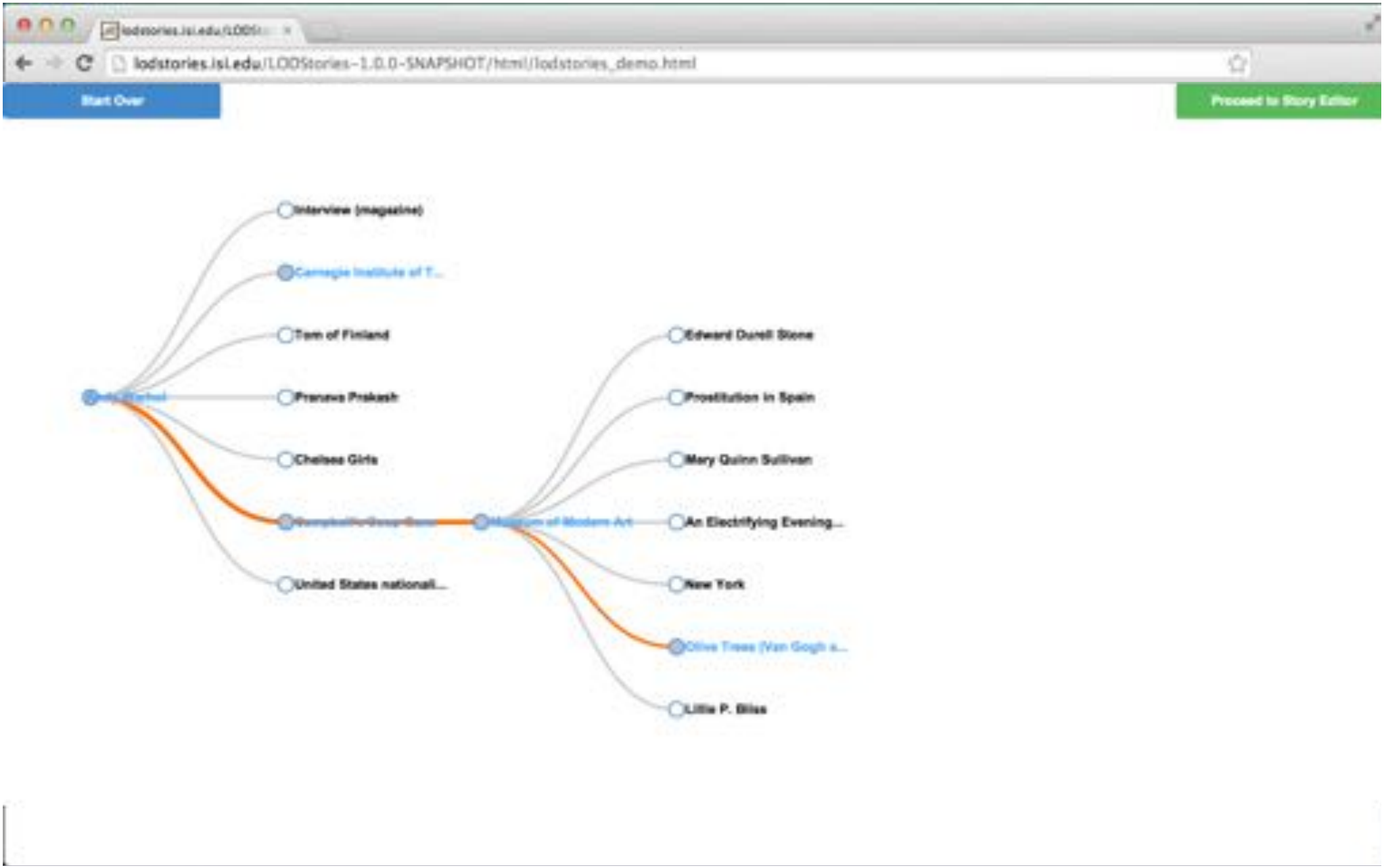
Carnegie Institute of T...
Tom of Finland
Pranava Prakash
Chelsea Girls
Campbell's Soup Cans
United States nationali...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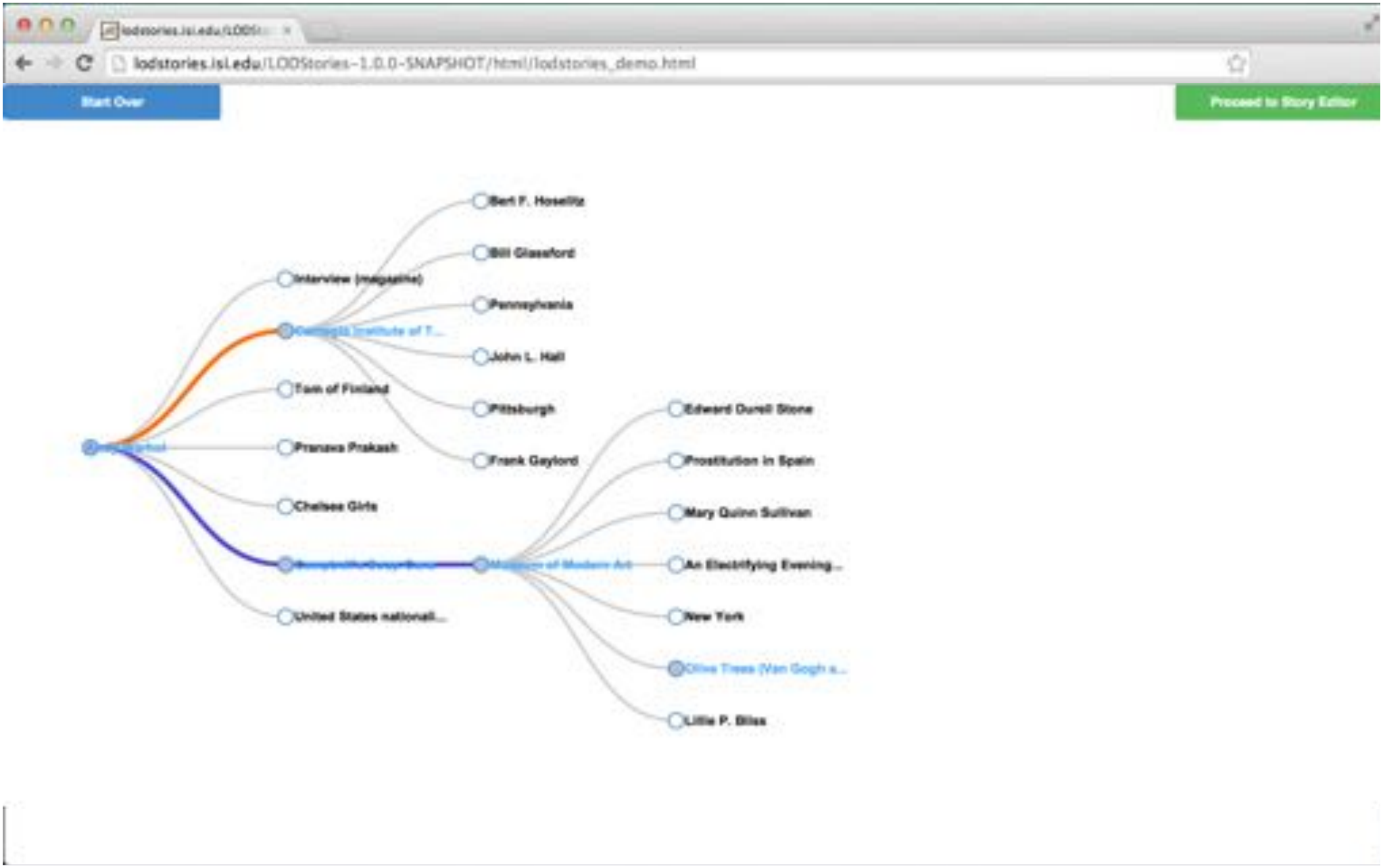
Start Over
Proceed to Story Editor
Interview (magazine)
Carnegie Institute of T...
Tom of Finland
Pranava Prakash
Chelsea Girls
United States nationali...
Museum of Modern Art
Edward Durell Stone
Prostitution in Spain
Mary Quinn Sullivan
An Electrifying Evening...
New York
Olive Trees (Van Gogh a...
Lillie P. Bliss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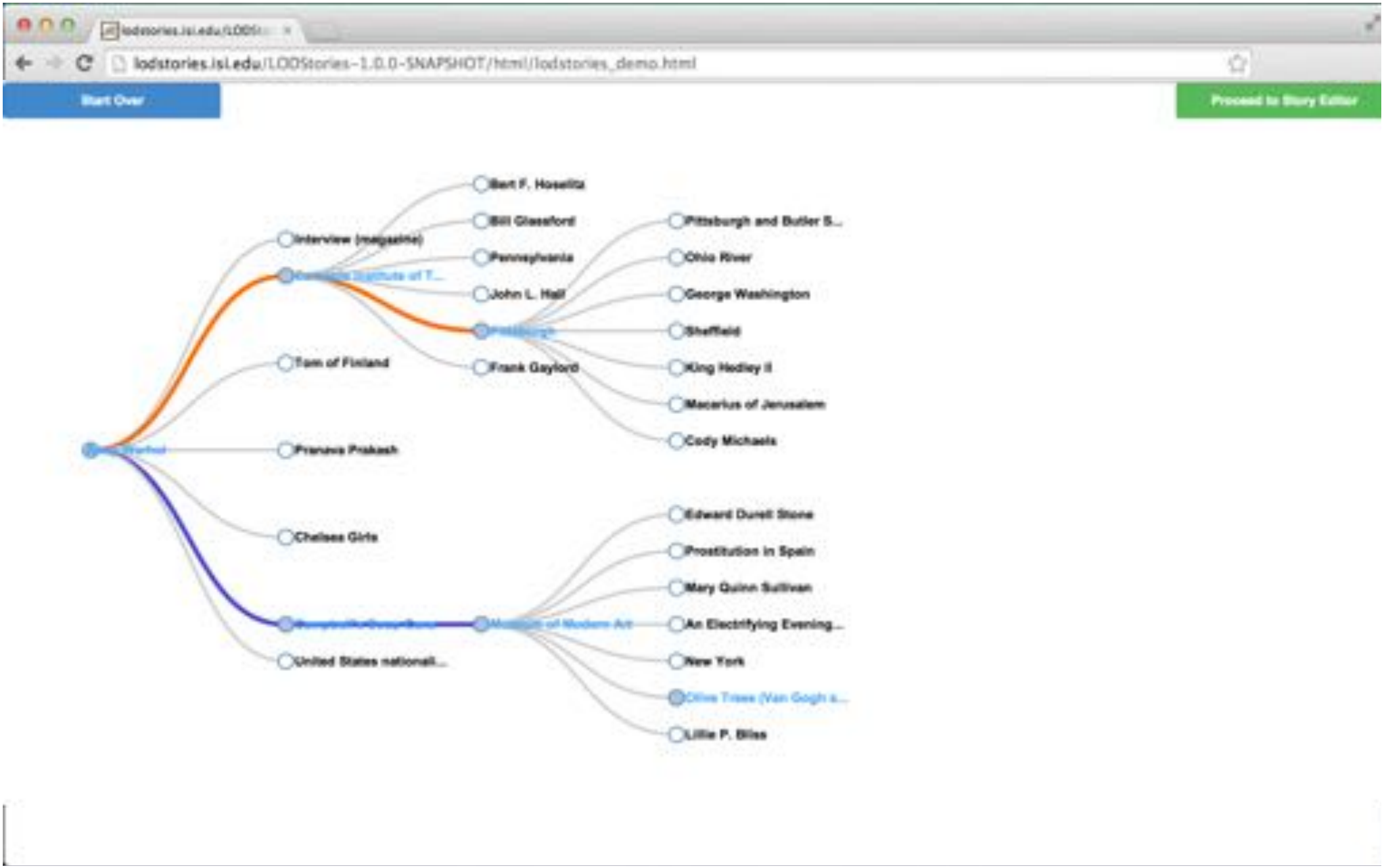
Pennsylvania
John L. Hall
Tom of Finland
Pittsburgh
Pranava Prakash
Frank Gaylord
Edward Durell Stone
Prostitution in Spain
Chelsea Girls
Mary Quinn Sullivan
An Electrifying Evening...
New York
Olive Trees (Van Gogh s...
United States nationali...
Lillie P. Bliss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Interview (magazine)
Pennsylvania
John L. Hall
Pittsburgh and Butler S...
Ohio River
George Washington
Sheffield
King Hedley II
Macarius of Jerusalem
Cody Michaels
Frank Gaylord
Farm of Finland
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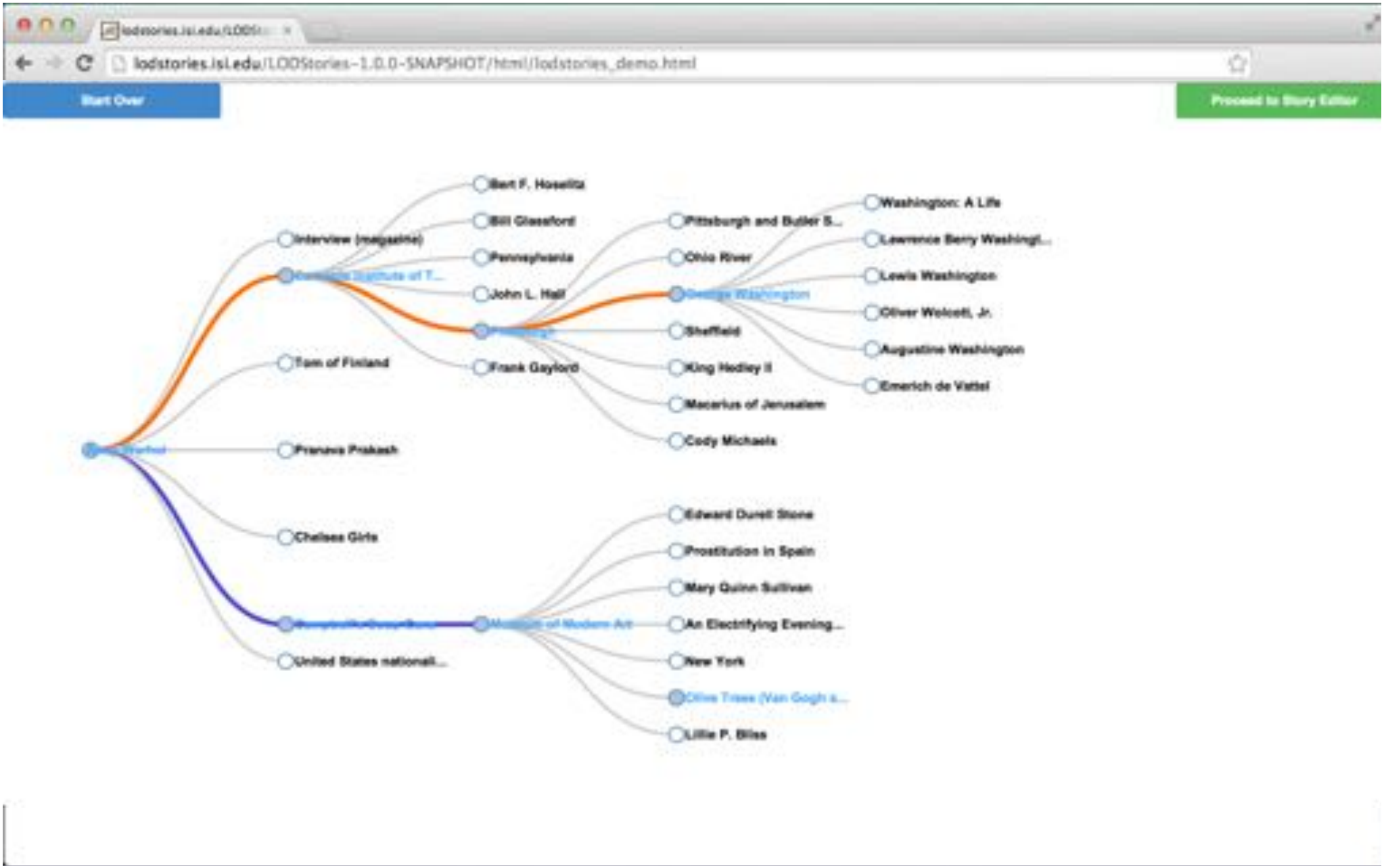
Chelsea Girls
Edward Durell Stone
Prostitution in Spain
Mary Quinn Sullivan
An Electrifying Evening...
New York
Lillie P. Bliss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Bill Glassford
Interview (magazine)
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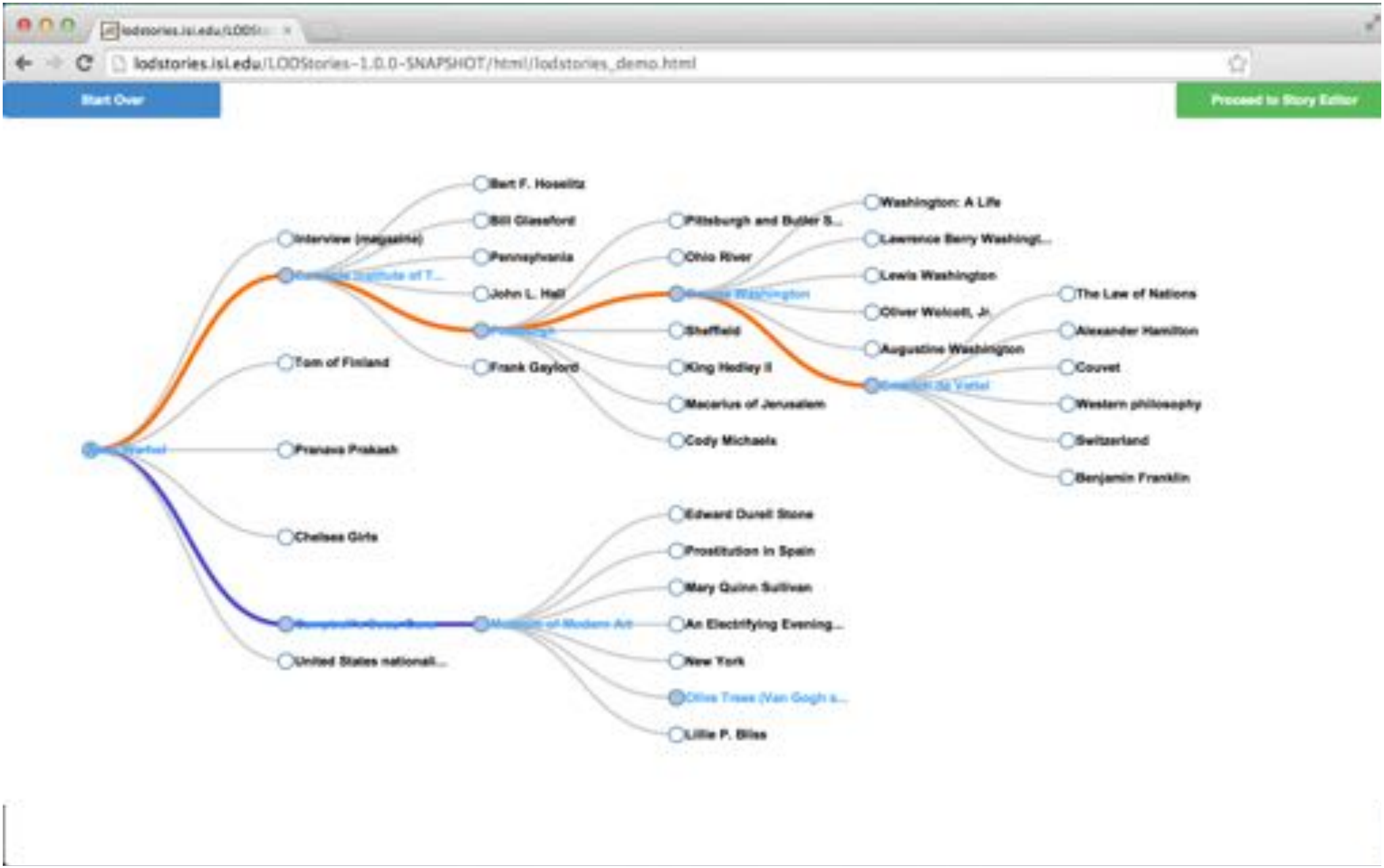
John L. Hall
Frank Gaylord
Pittsburgh and Butler S...
Ohio River
Sheffield
King Hedley II
Macarius of Jerusalem
Cody Michaels
Washington: A Life
Lawrence Berry Washingt...
Lewis Washington
Oliver Wolcott, Jr.
Augustine Washington
Emerich de Vattel
Tom of Finland
Pranava Prakash
Chelsea Girls
United States nationalit...
Edward Durell Stone
Prostitution in Spain
Mary Quinn Sullivan
An Electrifying Evening...
New York
Lillie P. Bliss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Interview (magazine)
Tom of Finland
Pranava Prakash
Chelsea Girls
United States nationalit...
Pittsburgh and Butler S...
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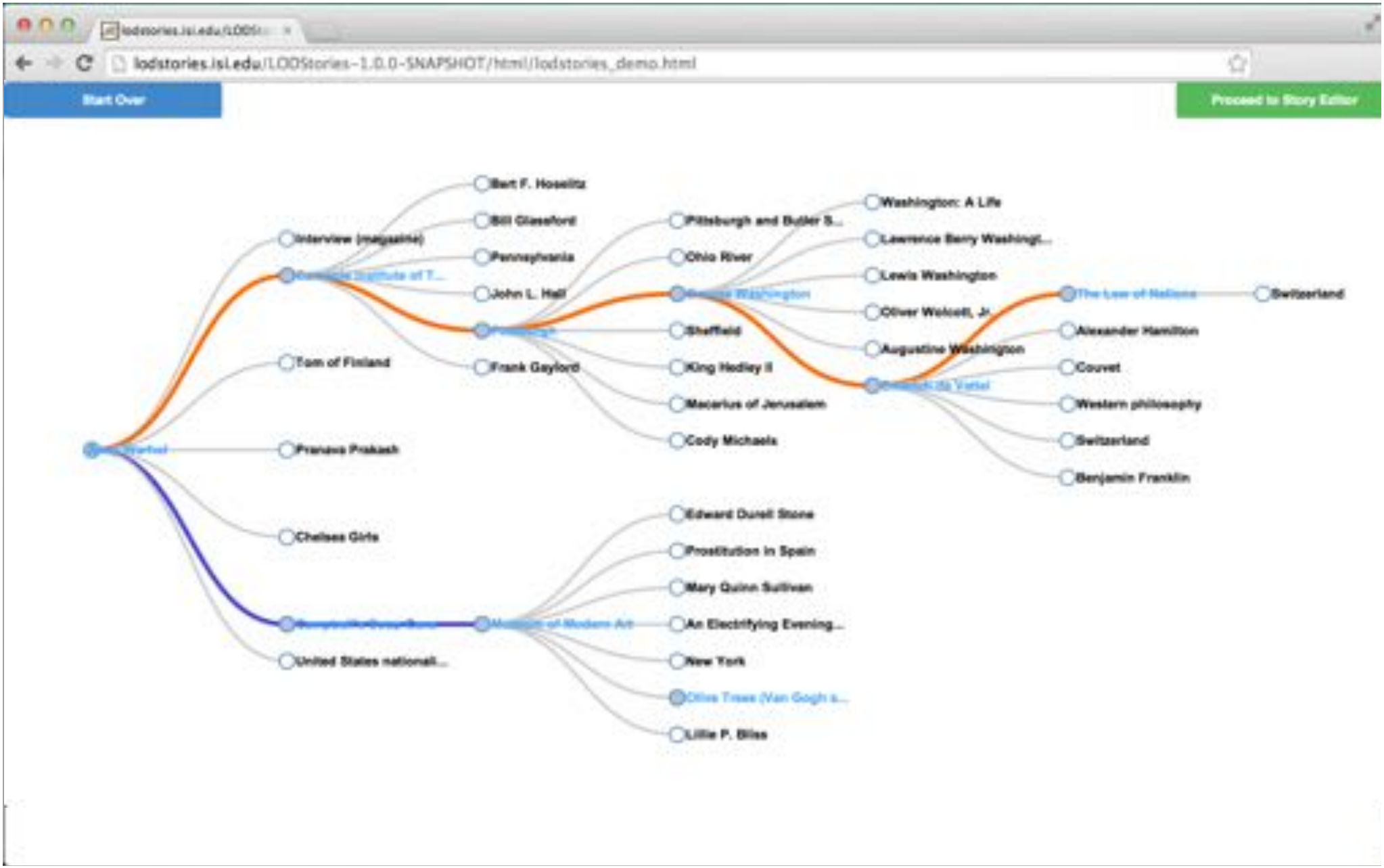
Sheffield
King Hedley II
Macarius of Jerusalem
Cody Michaels
Washington: A Life
Lawrence Berry Washingt...
Lewis Washington
Oliver Wolcott, Jr.
Augustine Washington
The Law of Nations
Alexander Hamilton
Couvet
Western philosophy
Switzerland
Benjamin Franklin
Edward Durell Stone
Prostitution in Spain
Mary Quinn Sullivan
An Electrifying Evening...
New York
Lillie P. Bliss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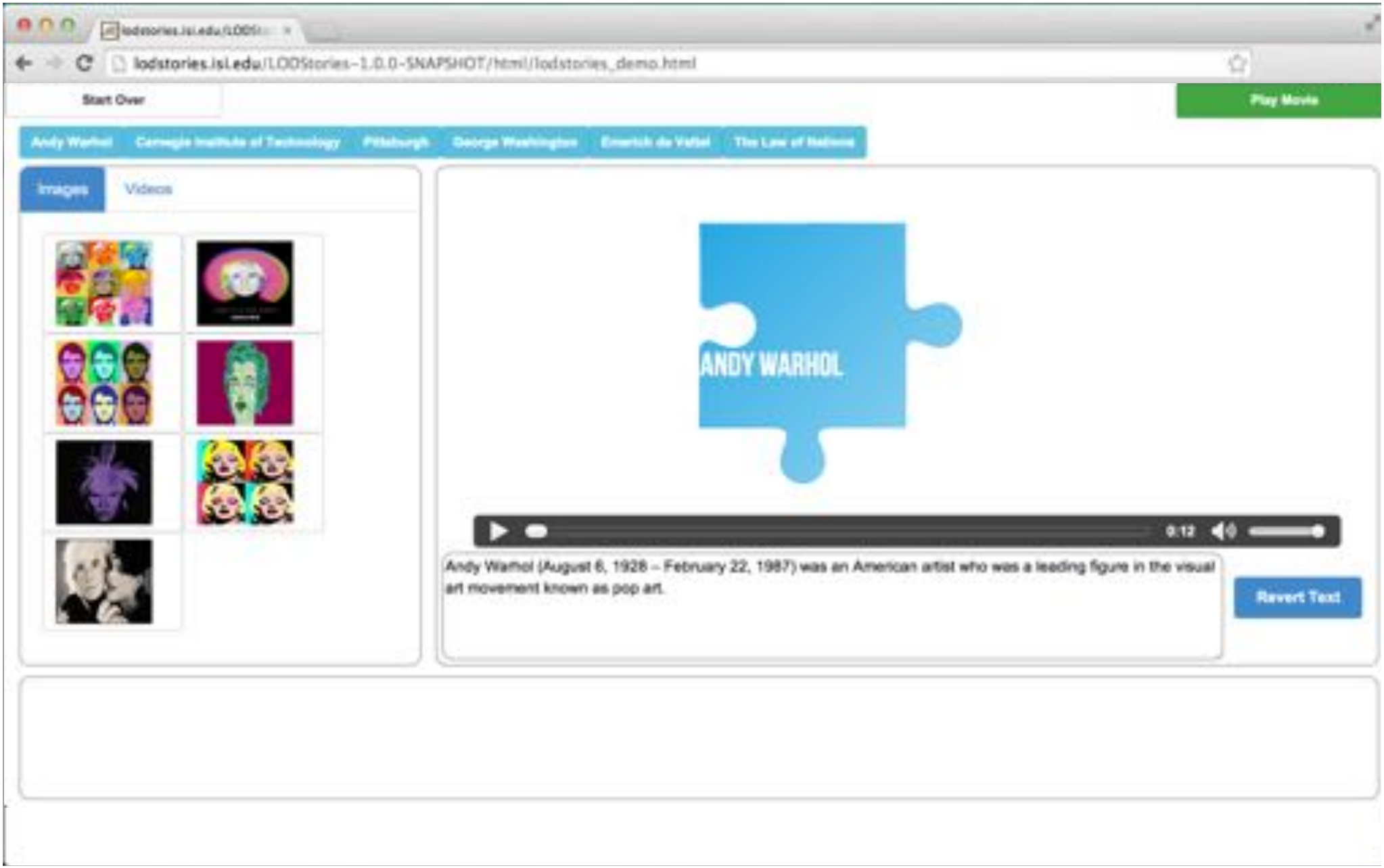
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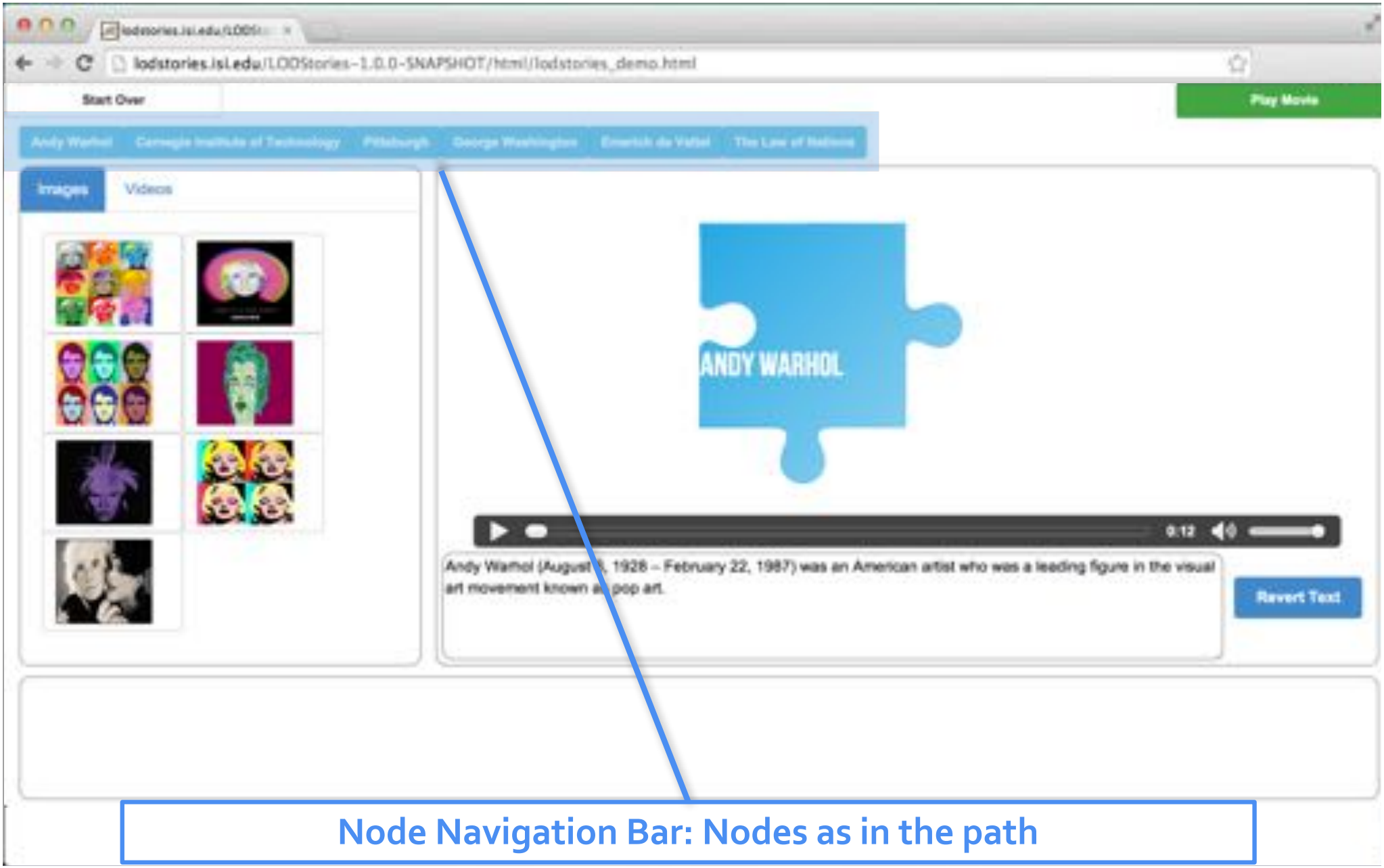
Start Over
Play Movie
Andy Warhol
Carnegie Institute of Technology
Pittsburgh
George Washington
Emerich de Vattel
The Law of Nations
Images
Videos
ANDY WARHOL
0:12
Andy Warhol (August 6, 1928 – February 22, 1987) was an American artist who was a leading figure in the visual art movement known as pop art.
Revert Text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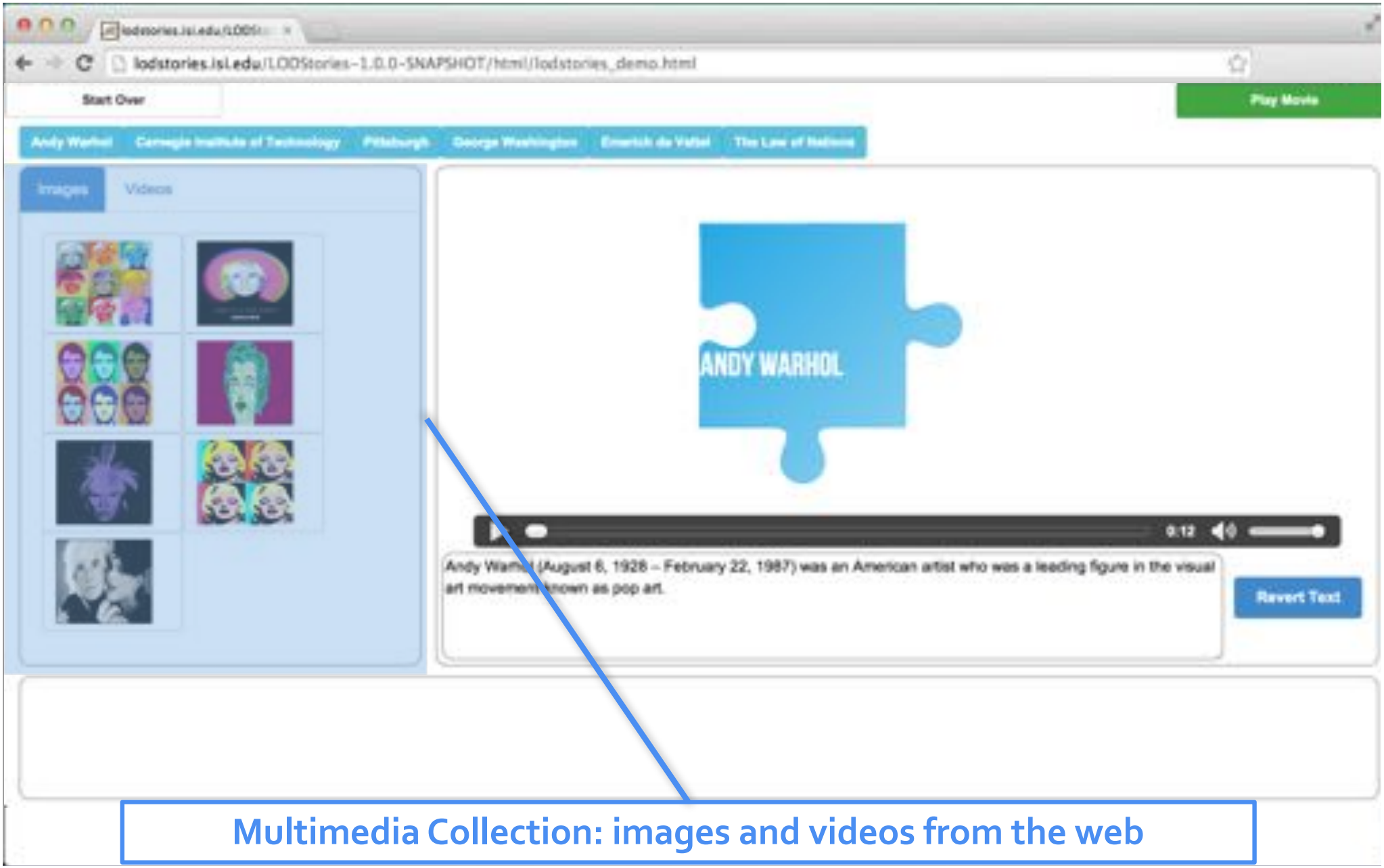
Start Over
Play Movie
Images
Videos
ANDY WARHOL
0:12
Revert Text
Node Navigation Bar: Nodes as in the path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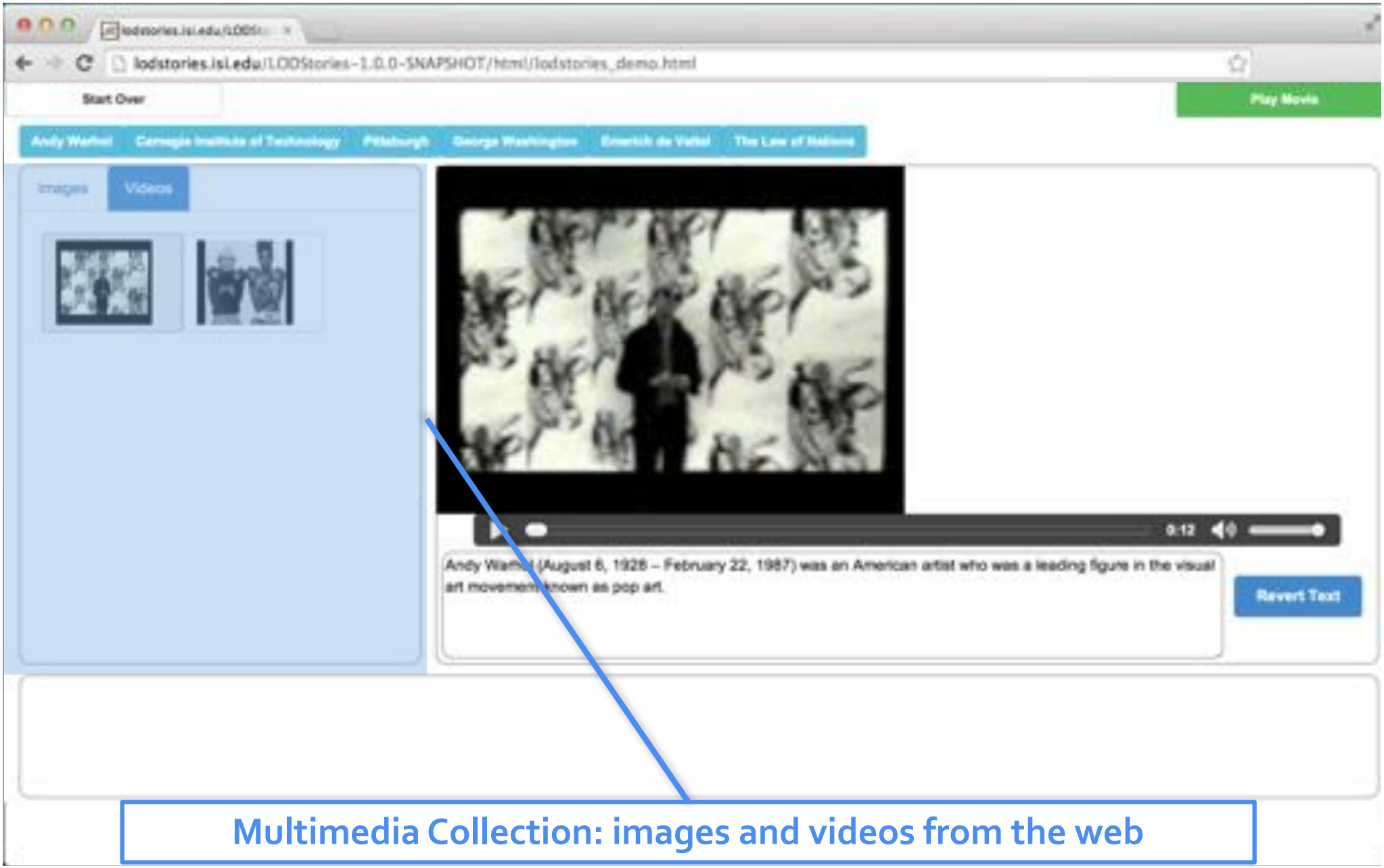
Start Over
Play Movie
Andy Warhol
Carnegie Institute of Technology
Pittsburgh
George Washington
Emerich de Vattel
The Law of Nations
Images
Videos
ANDY WARHOL
0:12
Andy Warhol (August 6, 1928 – February 22, 1987) was an American artist who was a leading figure in the visual art movement known as pop art.
Revert Text
Multimedia Collection: images and videos from the web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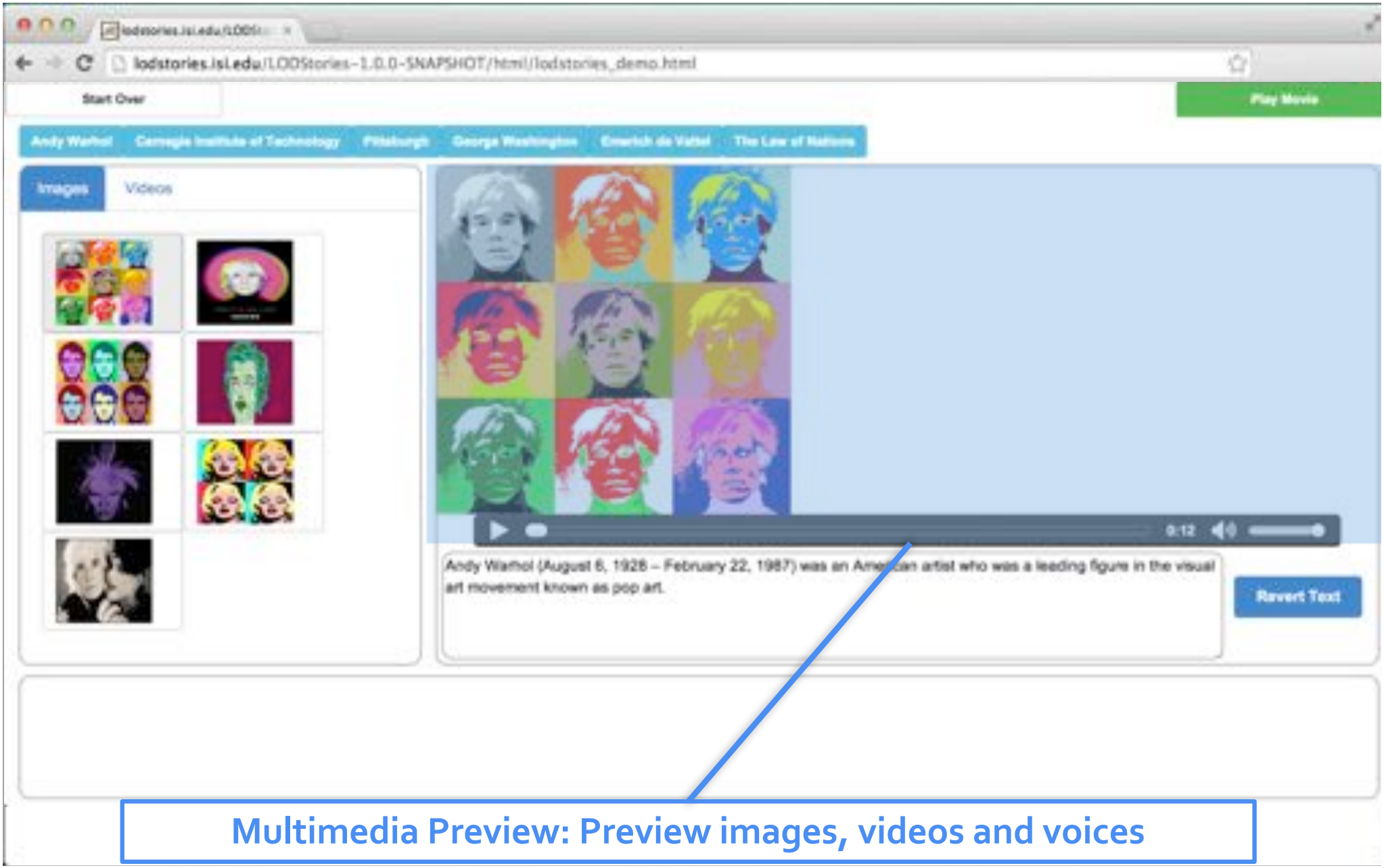
Start Over
Play Movie
Images
Videos
0:12
Revert Text
Multimedia Collection: images and videos from the web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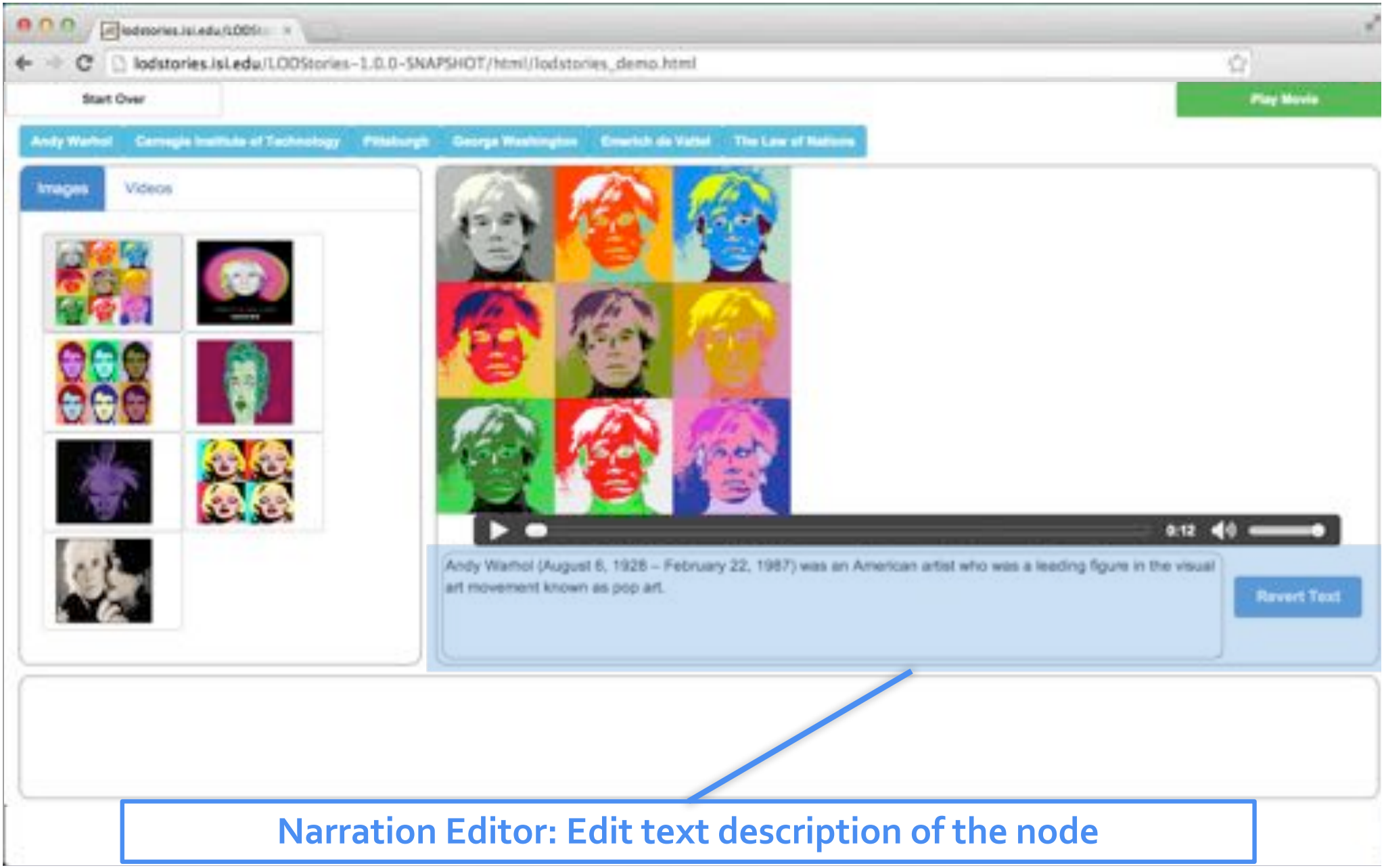
Start Over
Play Movie
Andy Warhol
Carnegie Institute of Technology
Pittsburgh
George Washington
Emerich de Vattel
The Law of Nations
Images
Videos
0:12
Andy Warhol (August 6, 1928 – February 22, 1987) was an American artist who was a leading figure in the visual art movement known as pop art.
Revert Text
Multimedia Preview: Preview images, videos and voices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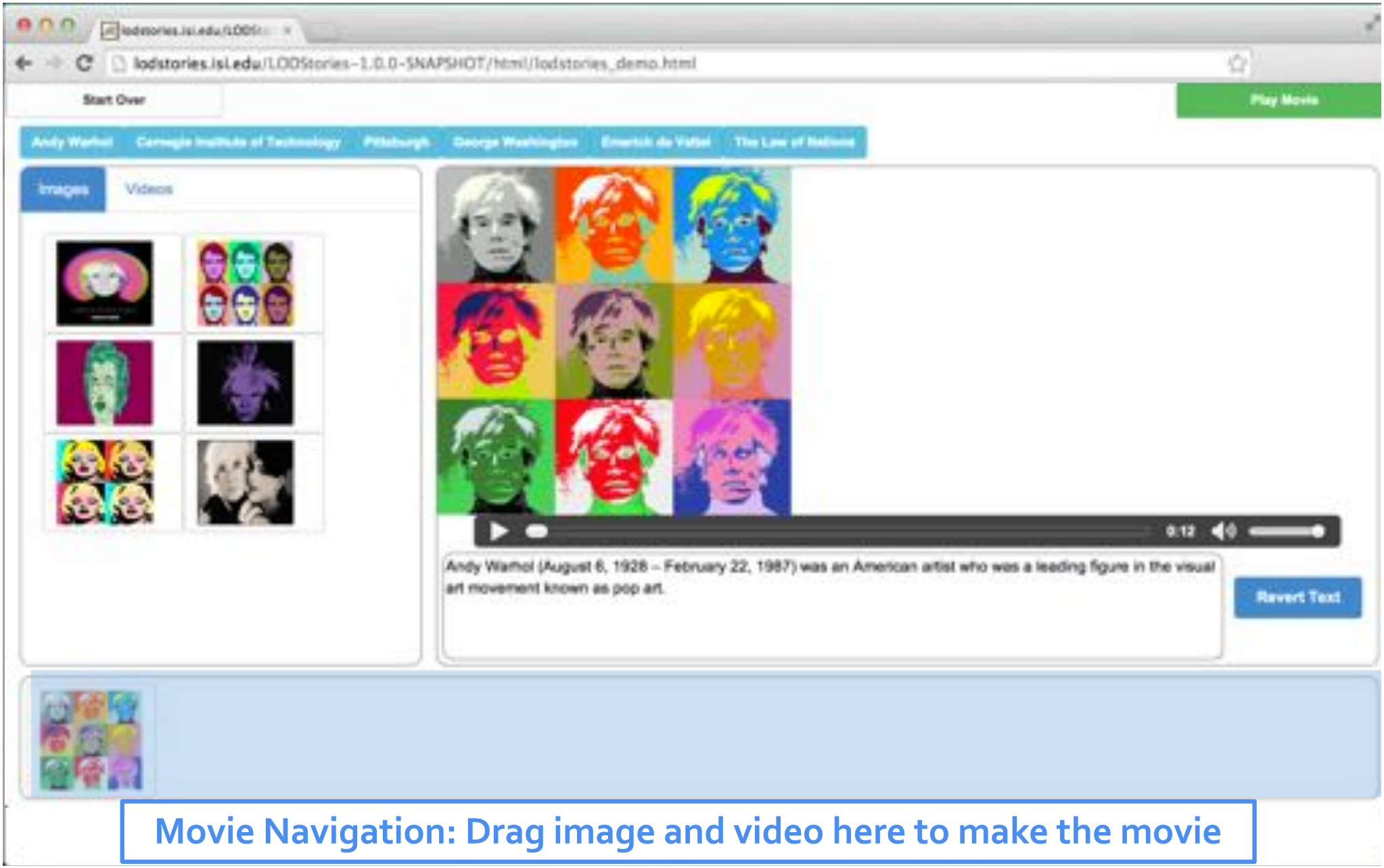
Start Over
Play Movie
Andy Warhol
Carnegie Institute of Technology
Pittsburgh
George Washington
Emerich de Vattel
The Law of Nations
Images
Videos
0:12
Andy Warhol (August 6, 1928 – February 22, 1987) was an American artist who was a leading figure in the visual art movement known as pop art.
Revert Text
Narration Editor: Edit text description of the node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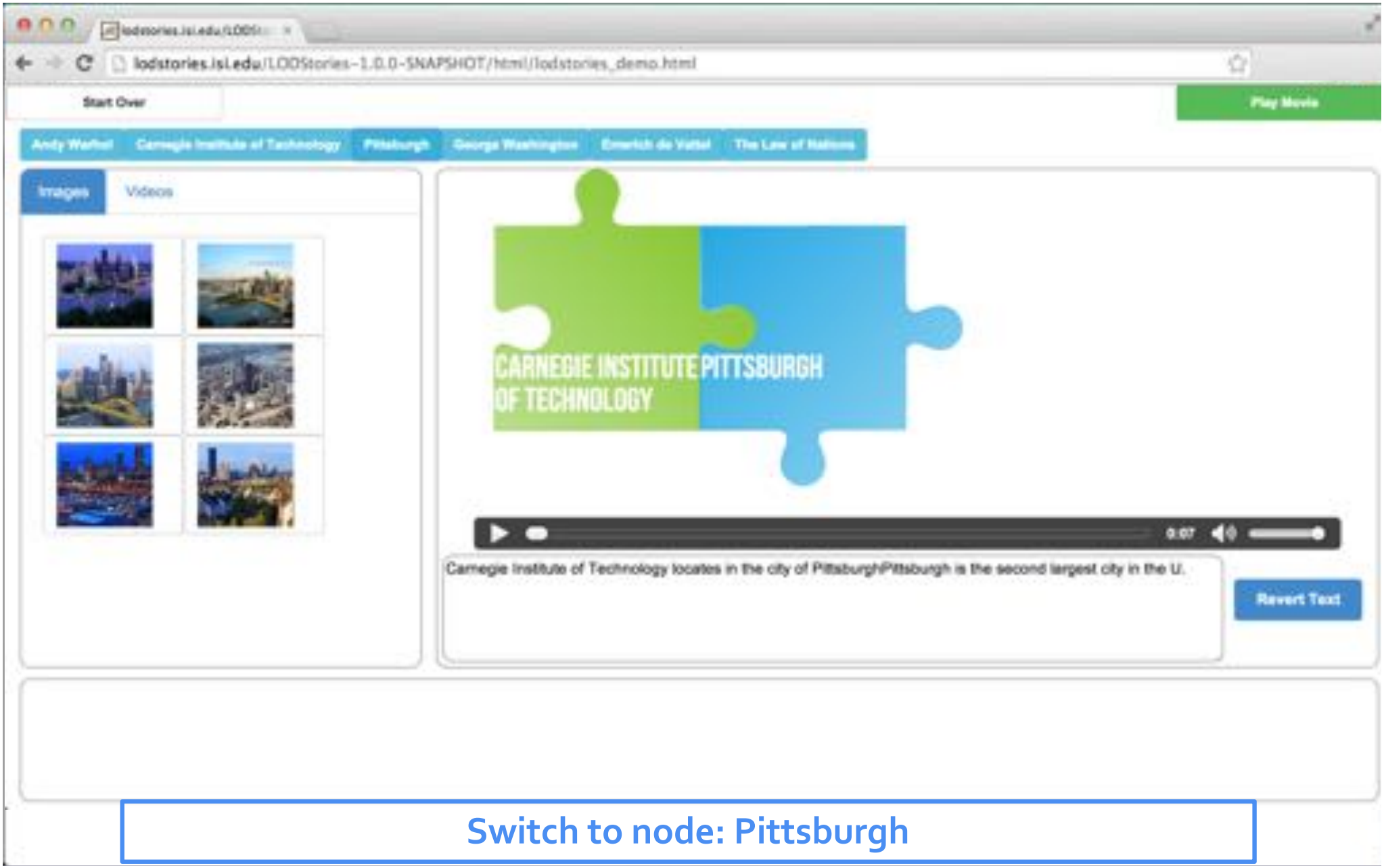
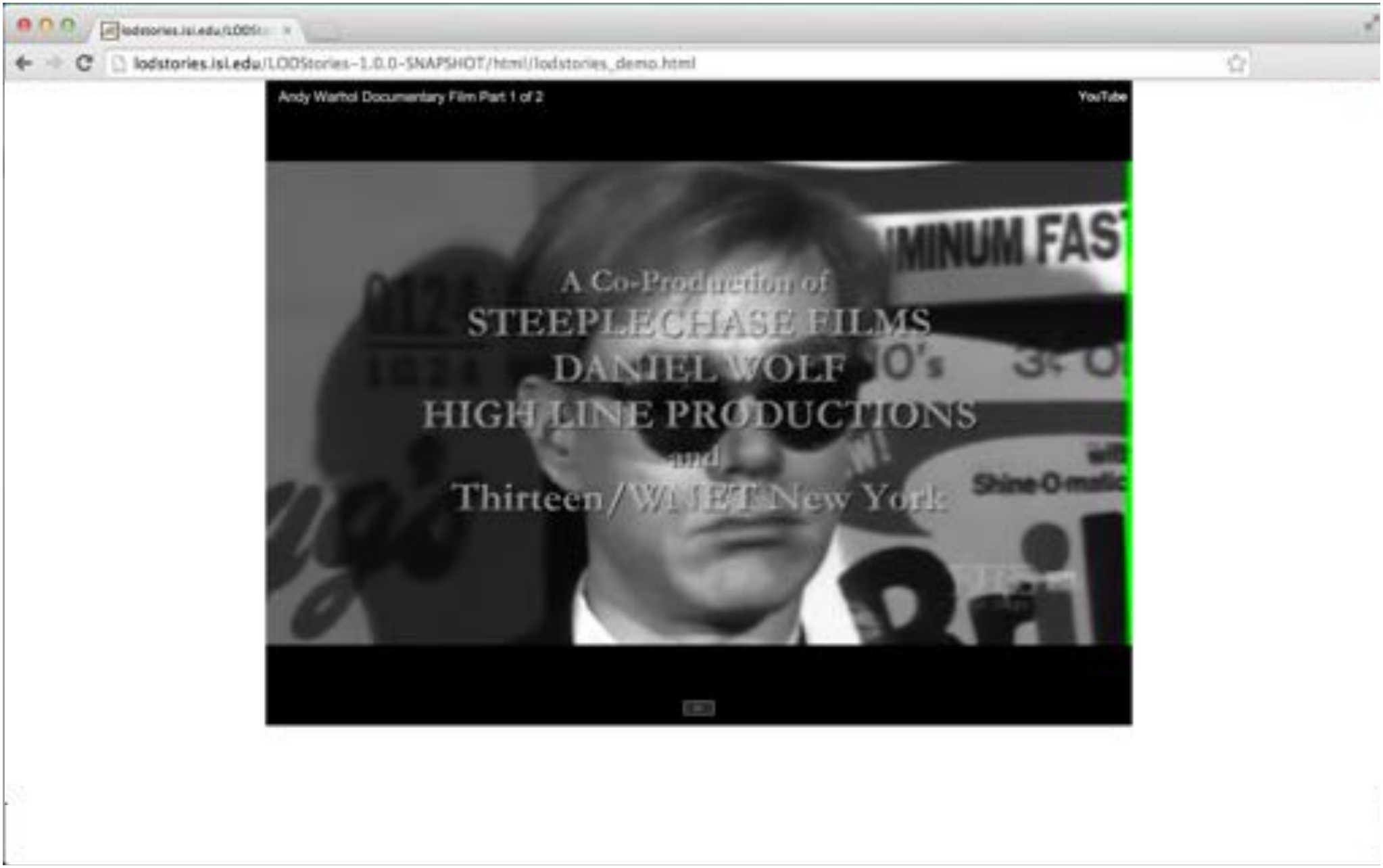
Start Over
Play Movie
Andy Warhol
Carnegie Institute of Technology
Pittsburgh
George Washington
Emerich de Vattel
The Law of Nations
Images
Videos
0:12
Andy Warhol (August 6, 1928 – February 22, 1987) was an American artist who was a leading figure in the visual art movement known as pop art.
Revert Text
Movie Navigation: Drag image and video here to make the movie


lodstories.isi.edu/LODStories-1.0.0-SNAPSHOT/html/lodstories_demo.html
Start Over
Play Movie
Andy Warhol
Carnegie Institute of Technology
Pittsburgh
George Washington
Emerich de Vattel
The Law of Nations
Images
Videos
CARNEGIE INSTITUTE OF TECHNOLOGY
PITTSBURGH
0:07
Carnegie Institute of Technology locates in the city of PittsburghPittsburgh is the second largest city in the U.
Revert Text
Switch to node: Pittsburgh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Andy Warhol Documentary Film Part 1 of 2
YouTube
A Co-Production of
STEEPLECHASE FILMS
DANIEL WOLF
HIGH LINE PRODUCTIONS
and
Thirteen / WNET New York

lodstories.isi.edu/LODStories-1.0.0-SNAPSHOT/html/lodstories_demo.html

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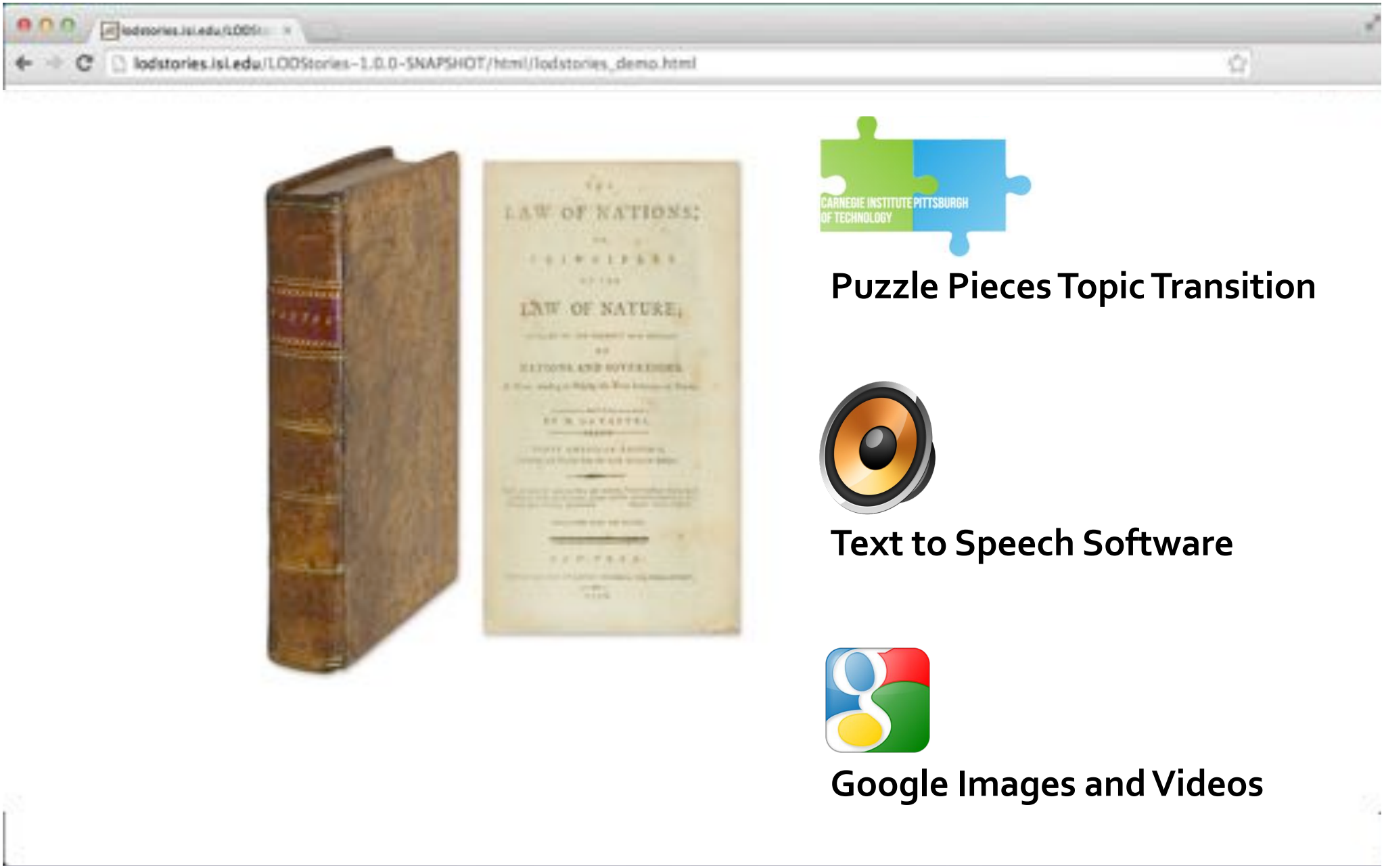
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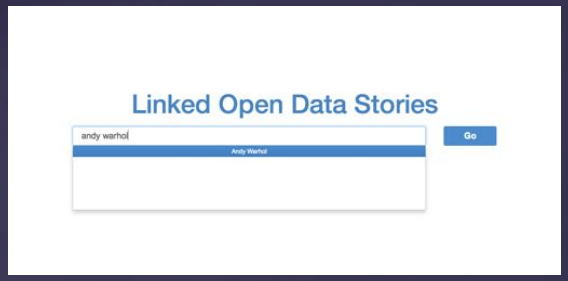
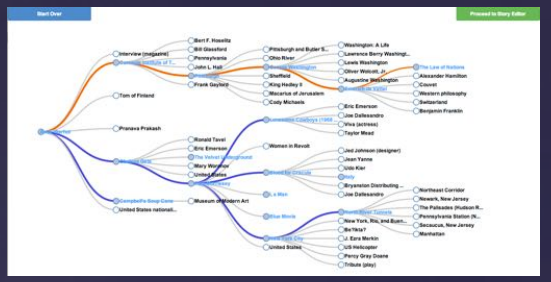
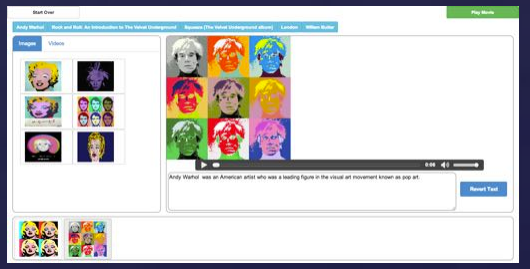
LAW OF NATIONS;
LAW OF NATURE;
Puzzle Pieces Topic Transition
Text to Speech Software
Google Images and Videos


Linked Open Data Stories
andy warhol
Go
Andy Warhol

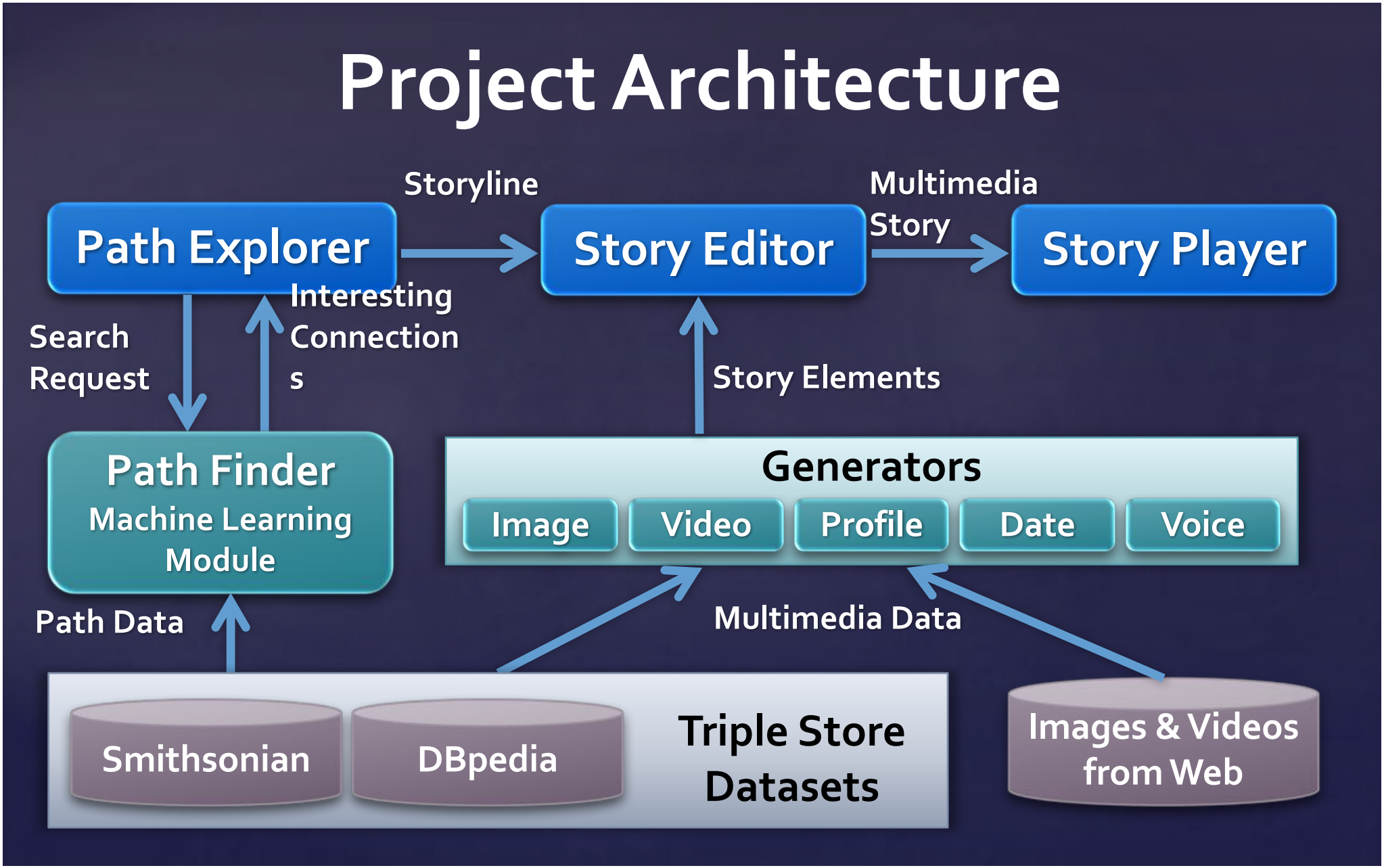

Start Over
Proceed to Story Editor

Search
Explore
Edit
Play

Andy Warhol Documentary Film Part 1 of 2


Start Over
Play Movie
Images
Videos
Revert Text

How it works…

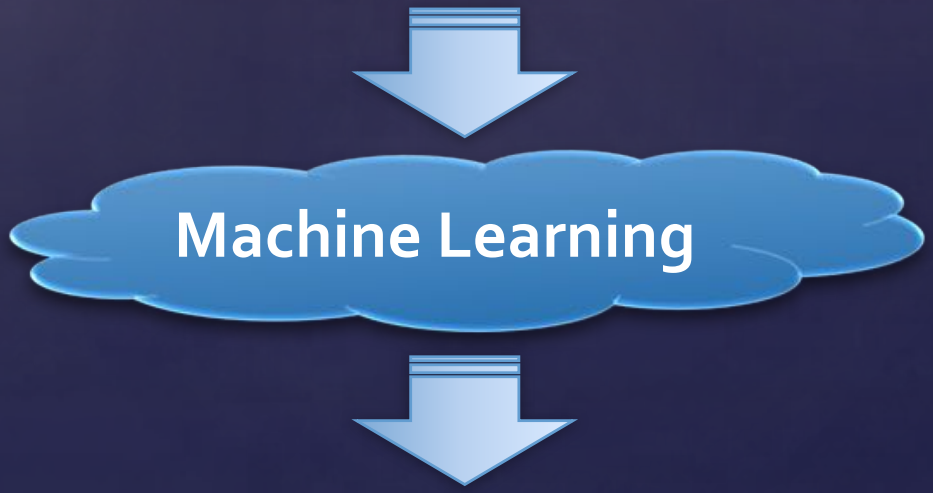

Project Architecture
Storyline
Multimedia Story
Path Explorer
Story Editor
Story Player
Search Request
Interesting Connections
Story Elements
Path Finder
Machine Learning Module
Generators
Image
Video
Profile
Date
Voice
Path Data
Multimedia Data
Smithsonian
DBpedia
Triple Store Datasets
Images & Videos from Web

Path Finder

Machine Learning

Training Datasets

	Feature 1	Feature 2	Feature 3	Feature 4	…	Interestingness
Triple 1	0.95	0.45	0.13	0.87	…	4
…	…	…	…	…	…	…



Formula for Interesting Relationships

Path Finder

Subject Degree

Object Degree

Subject Extension Rarity

Object Extension Rarity

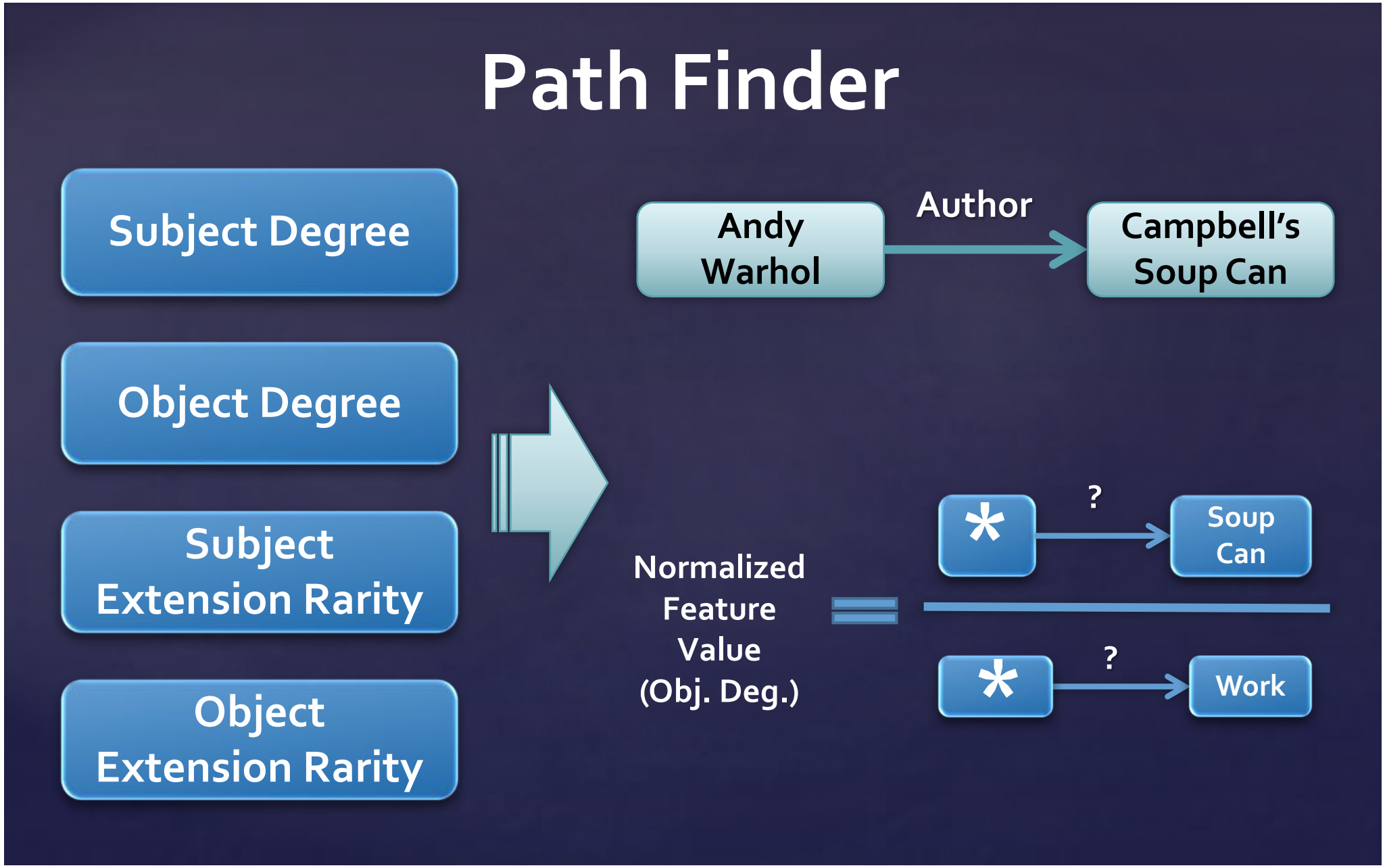
Andy Warhol —Author→ Campbell's Soup Can

Normalized Feature Value (Subj. Deg.) =

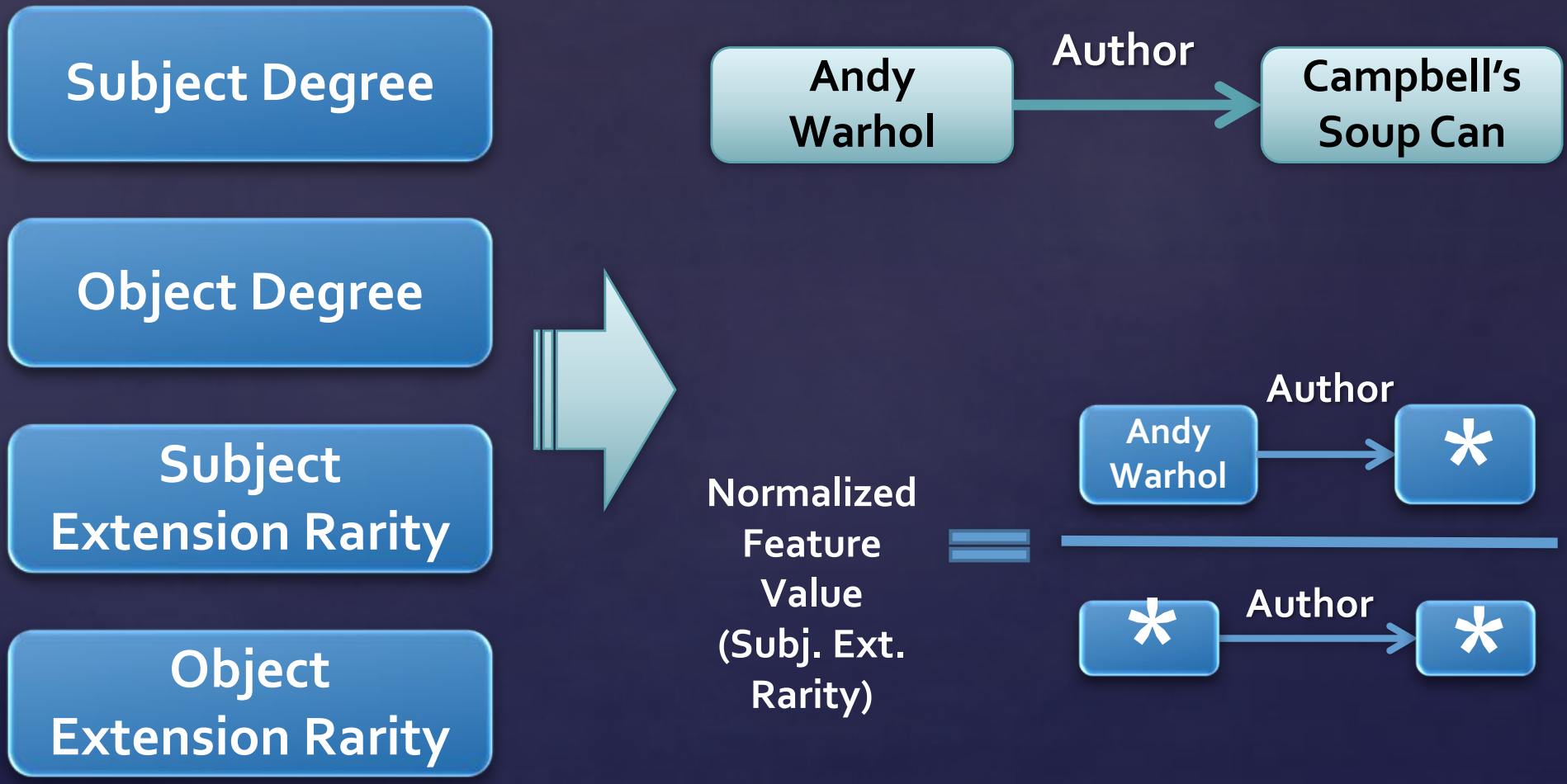
Andy Warhol —?→ *

Person —?→ *

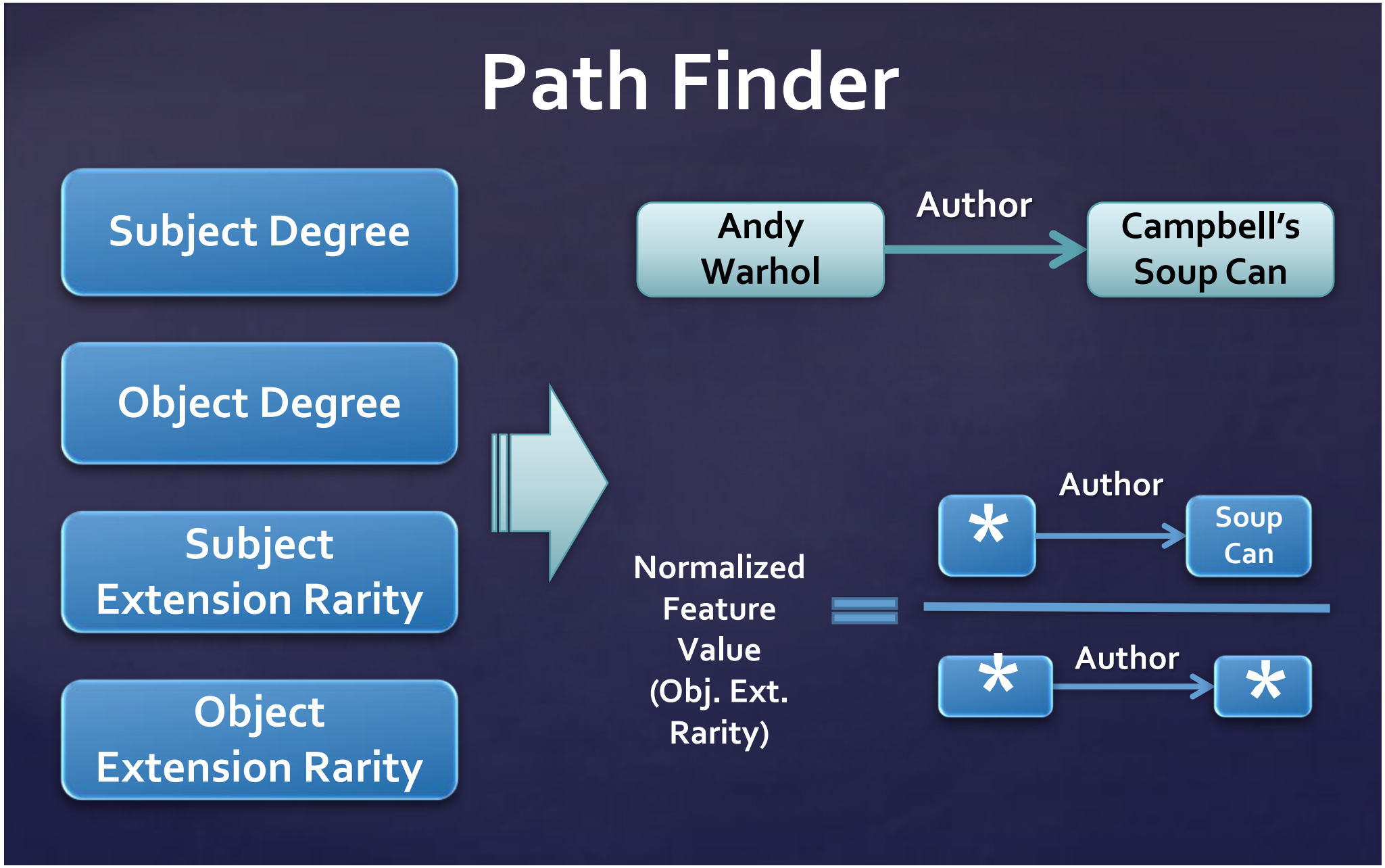
Path Finder


Subject Degree
Object Degree
Subject Extension Rarity
Object Extension Rarity
Andy Warhol
Author
Campbell's Soup Can
Normalized Feature Value (Obj. Deg.)
*
?
Soup Can
*
?
Work

Path Finder

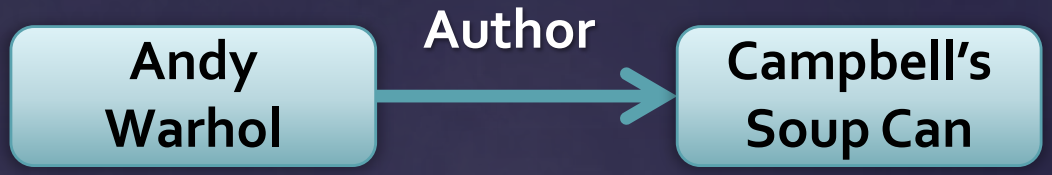

Subject Degree
Object Degree
Subject Extension Rarity
Object Extension Rarity
Andy Warhol
Author
Campbell's Soup Can
Normalized Feature Value (Subj. Ext. Rarity)
Andy Warhol
Author
*
*
Author
*

Path Finder


Subject Degree
Object Degree
Subject Extension Rarity
Object Extension Rarity
Andy Warhol
Author
Campbell's Soup Can
Normalized Feature Value (Obj. Ext. Rarity)
*
Author
Soup Can
*
Author
*

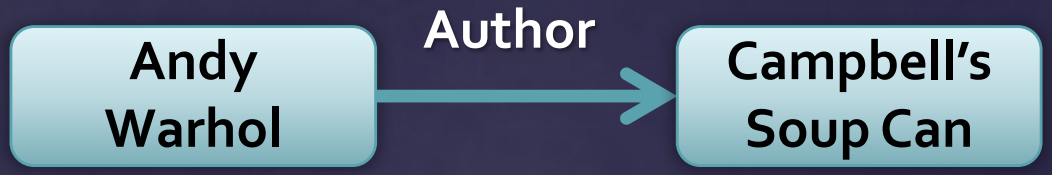
Path Finder

- Subject Degree
- Object Degree
- Subject Extension Rarity
- Object Extension Rarity



Rank = 3.9595 * Subj. Extension Rarity
+ 0.8631 * Obj. Extension Rarity
- 0.1643 * Subj. Degree
+ 0.0014 * Obj. Degree
+ 1.2353

Path Finder



Subj. Ext. Rarity	Obj. Ext. Rarity	Subj. Degree	Obj. Degree	Interestingness
1.46E-05	1.60E-04	5.62E-05	4.65E-05	4

Path Finder

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What do you think make the story interesting?

The whole story? The Beatles Liverpool the relationship?

Submit and play next

Discussion

Project Features

Path Recommendation Mechanism

Multimedia Elements Mash-up

Flexible Editing

Future Work

Improve Machine Learning Model

Enrich Path Explorer and Story Editor Functionalities

Fully Integrate with Smithsonian Museum Datasets

Thanks!

http://lodstories.isi.edu