

**Request for Proposal: Net Art Commission Management Plan for 661 Art Museum**

Info 661: Art Documentation

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## **1. Executive Summary**

With their collection of 55 and growing commissioned net artworks, 661 Art Museum now seeks to standardize their approach to organizing, maintaining, and storing both the artworks themselves and their related documentation. In order for the museum to address these goals, we have identified the following objectives: 1. Create a numbering scheme for the net artworks that aligns with the museum's existing numbering conventions, 2. Identify appropriate metadata in TMS and develop a vocabulary guide to effectively capture the net artworks, 3. Create database entries for each individual net artwork, and 4. Identify digital and physical storage necessities for the works. By ensuring that the storage and documentation of their net artworks are uniform and in line with industry standards, 661 Art Museum will be better positioned not only to onboard future commissions but also to facilitate ease of administrative access and requests for research as well.

## **2. Historical Background and Current Status of Net Art Collection**

Founded in 1930, 661 Art Museum seeks to be the defining museum of twentieth- and twenty-first-century American art. Its permanent collection spans from the late-19th century to the present and comprises more than 25,000 paintings, drawings, prints, sculptures, photographs, film, video, and artifacts of new media by more than 3,500 artists. With a long history of collecting modern and contemporary art, 661 Art Museum has for the past ten years commissioned artists and collectives to create new net art for

their website. This collection now encompasses 55 net artworks and are accessible to the public on New Media, an online gallery space for 661's collection of net art and new media art. The digital art curator identifies and manages the artist who will create each commissioned piece. The process for artworks entering the museum collection is largely standardized across 661; it involves creating object files stored in hard copy in the department's office and creating object records in the museum's collection management system. 661 uses The Museum System (TMS) as their collections management system. The documentation needed for net art largely follows the process already in place at the museum, but it does require modification to address some of the special considerations that arise for digital art on the internet. We recommend that 661 Art Museum create a task force to address the proper storage, numbering, description, and organization of their growing collection of net art materials, both physical and digital. The proposed task force will work across departments, including Curatorial, Registration, Preservation, IT, and research industry standards for net art in museums to determine best practices for their collection. Through this work, 661 Art Museum will be able to ensure that its net art objects are properly managed by the museum and available for viewing and research for many years to come.

### **3. Scope of Work**

#### **a. Project Overview**

1. Create a numbering scheme for the net artworks that aligns with the museum's existing numbering conventions.

2. Identify appropriate metadata in TMS and develop a vocabulary guide to effectively capture the net artworks.
3. Create database entries for each individual net artwork.
4. Identify digital and physical storage necessities for the works.

#### **b. Methodologies of Work**

As an established collecting institution, 661 Art Museum has many processes in place for the acquisition, documentation, and continued care of artworks. The nature of net art, however, requires some adaptations to the standard set of practices. This section describes our proposal on how best to integrate the net art collection into the existing structures and processes of description and management already in place at 661 Art Museum.

1. Create a numbering scheme for the net artworks that aligns with the museum's existing numbering conventions.

Each artwork that enters the building and collection of 661 Art Museum is given an identifying number based on the department which acquired the work or the status of the work when it entered the building. The standard identifying number will include a prefix identifying either a department and/or status of the object, the year it entered the building/collection, and a sequence number. For items entering the permanent collection, they are assigned an object number with the following formula: two letter prefix identifying the department.year accessioned.sequence number.

If an object is made of constituent parts, an additional letter suffix is added. For example, "PT.2000.1.a-d" is a painting that was accessioned in 2000 made of four panels. Through this method, each individual part of a piece can be tracked as a child record to the parent record which tracks the piece as a whole.

The net art collection will be numbered using the same convention with NM (for New Media) as the departmental prefix. For pieces with additional components like sculptural elements or emulations, additional child records will be created using the letter suffix convention. Thus, one piece of net art commissioned in 2010 will originally be assigned the number "NM.2010.1". Because this piece involved Adobe Flash, it was emulated with new code in 2020. This new emulation was given the number "NM.2010.5" as a new object record (its last number follows the sequence of the last acquired work), and links to "NM.2010.1" as a child record.

2. Identify appropriate metadata in TMS and develop a vocabulary guide to effectively capture the net artworks.

All art pieces that enter the collection of 661 Art Museum are described and inventoried in TMS and hard-copy object files. These descriptions are based on acquisition worksheets filled out when objects enter the collection by the department curator, in consultation with the appropriate conservator and registrar. The specific worksheet depends on the category of the object entering the collection. A two dimensional object will have different fields than

a performance piece. All worksheets, however, include standard fields such as artist/creator, title, medium, credit line, and department. If new information comes to light regarding the object, the curator is in charge of updating the object records digitally and in hard copy.

Relying on existing standards within the museum, we propose that individual net art records be registered based on the descriptive metadata described in the Metadata Field Crosswalk (see fig. 2). While vocabulary controls adhere to industry standards like ULAN and AAT as much as possible, given the new and constantly changing nature of net art, we recommend using terms from Wikidata as a control for the Constituent and Medium fields when needed. Wikidata is collaboratively edited, open-source, and dynamic, matching the needs of the equally contemporary and changeable features of net art. Contemporary artists not represented in ULAN can be found in Wikidata, and most importantly, terms that describe the medium of net artworks are more comprehensively represented in Wikidata than they are in the AAT. Using Wikidata's query feature, we have created constrained lists of terms to act as vocabulary controls for the three most important medium components we have identified - markup language, scripting language, and programming language. On the Metadata Field Crosswalk, standard fields required for every work of art entering the collection are highlighted in purple, while the remaining metadata fields are optional, depending on the unique metadata

needs of specific net artworks.<sup>1</sup>

3. Create database entries for each individual net artwork.

Each work will be cataloged by the cataloger and metadata specialist based on the existing accession worksheet. The Digital Media curator will review each record before it is approved for publication on the online catalog.

4. Identify digital and physical storage necessities for the works.

a. Database

The Museum uses TMS as its primary database. TMS is a relational database used by museums around the world. It is built to manage collections as well as exhibitions and other museum functions. Our work will be focusing on the Objects module. Future areas of growth might include filling out exhibitions modules for works that were included in outside exhibitions.

b. Cloud-Based Storage

In addition to relying on existing museum infrastructure to make sure the database and artworks themselves are safe and secure, we also recommend maintaining cloud-based storage as an added resource for storing, sharing, and accessing the net artworks and their related documentation. As a cloud-based, open source DAMS, ResourceSpace is a flexible and appropriate option for 661 Art Museum; its ability to

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<sup>1</sup> See Appendix Fig. 2 for the proposed Metadata Field Crosswalk. In some cases, the column “661 Internal Vocab Qualifier Options” represents some, but not all qualifiers that could be associated with an Internal Vocab Category.

customize its cataloging functions as well as store different types of files together makes it well suited for the storage of net artworks. This way, all electronic documents relating to a net artwork - whether it is the artwork itself, artist's questionnaire, exhibition information, preservation documents, additional images, and more, can all be stored together on one platform (see fig. 4). What's more, a TMS feature can be added to ResourceSpace's base code, allowing the two systems to communicate - ResourceSpace will be able to pull relevant metadata as well as any changes to metadata from TMS for their records, ensuring accuracy of the records throughout the storage systems.

c. Website for public viewing

All commissioned net artworks by 661 Art Museum are hosted on the Museum's New Media website (<https://newmedia.661.org>) (see fig. 5). A work may exist on the New Media website as well as on the artist's website. The Museum's New Media website is maintained and updated by the Museum's IT department and Web Developer, in collaboration with the Digital Media Department, who commissions and documents the works.

d. File Cabinets for Object Record

Each work will also be recorded in a physical object file with the signed contracts and other documentation. These physical object files will be stored in file cabinets in the Digital Media Department and organized based on the museum's standard sequence.

Accession Worksheet

Deed of Gift (In this case Commission Agreement)

Display Documentation

Exhibition Documentation

Conservation Documentation

Rights and Reproduction Documentation

#### **4. Staff and Supplies**

##### **Digital Media Department- New Hires**

- Department Manager - Full-time
  - Oversees the day-to-day operations of the department
  - Serves as a middle-man between the department and the other departments in the museum/museum board
  - Oversees the installation of works for exhibition and display on the website
  - Handles contracts, legal/rights, budget
- Cataloger/metadata specialist - Full-time
  - Maintains digital media records within TMS
  - Creates the net art records
  - Creates and maintains the numbering system, cataloging standards and file naming convention for works in the New Media collection
- New Media/Digital Preservation Specialist - Full-time
  - Aids in ingestion, storage, and preservation of the net art collection

- Defines the best practices for the artwork storage and display
- Makes sure all the appropriate documentation is present for the artwork relating to storage
- Creates the workflow between cataloger and IT
- Fellow/Intern - Part-time
  - Research
  - Data entry
  - Digitizing hard copies

### **Existing Museum Staff**

- Digital Art Curator
  - Decides artists to work with
- General IT
  - Handles moving the net art from local storage to the museum servers and offsite storage
  - Troubleshoots general tech issues
- Web Developer
  - Assist in managing the website hosting the net art
  - Expertise in digital preservation
  - Responsible for the management of metrics, communicating findings and making recommendations to decision makers
- Researcher - Part-time
  - Makes sure all documentation is present, if not reaches out to the artist

- Works with Cataloger to gather relevant information and history of the work

### **Supplies- New**

- Net Art and Object Records - Digital storage
  - Cloud storage: ResourceSpace Business Cloud
    - \$764/month (for 2.5 TB) = \$9,168/year

### **Supplies- Existing**

- Physical object records
  - File cabinets + acid-free folders and boxes for hard copies
- Hardware
  - PC computers with CD drives and USB slots
  - Scanners for digitizing hard copies
- Operating system
  - Windows
- Software
  - TMS
  - Google Analytics

## **5. Timeline for completion**

The anticipated timeline for this project is six months, with the initial phases focusing on evaluation, inventorying net art holdings, and database entry spanning the entirety of the six months, and an implementation of future phases concentrating on digital preservation and data analysis spanning the life of the project.

## **Phase 1**

### **Evaluation**

- Review industry standards and update documentation techniques
- Determine museums net art repository needs

## **Phase 2**

### **Inventory Net Art holdings**

- Implement file naming convention; create a numbering scheme
- Meta language; Identify appropriate and culturally competent metadata in TMS Collections and develop a common vocabulary guide, based on Getty

## **Phase 3**

### **Database entry**

- TMS
  - Provide reliable, long-term access to managed digital resources now and in the future
- Catalog guide
- Cloud-Based Storage
- Website for public viewing
- File Cabinets for Object Records

- Copyright, fair use, ownership, and access to protect the institution, and born-digital works

## **Project Completion**

## **Future Phases**

### **Digital preservation**

- Institutional Buy In
  - Mission and Policy development to support sustainable digital preservation: Criteria; Capture (reformatting and web crawling); ingest and migration schedules.
  - Cyberinfrastructure capable of preservation
- Compliance with Standards
  - Common vocabulary; allows interoperability; supports capture and metadata
- Proper metadata
  - Preservation metadata to ensure that essential contextual, administrative, descriptive, structural, and technical information are preserved along with the digital object.
  - XML Standard language for metadata
- Trusted Digital Repository
  - Internet Archive: free web-based digital repository
  - DSpace: free downloadable and customizable digital repository

- Copyright
  - Clear legal right and permission to preserve content

## **Data and Content Analysis**

- Strategic plan to define which Key Performance Indicators reflect institutions goals and objectives
- E-Metrics (Google Analytics)
  - Regular Analysis of KPIs using Google Analytics; Explore and collect data on the use of the museums electronic resources to quantify and better understand the impact of the net art site.
    - Reports aimed to easily present data to aid decision making
    - Museums reach: number of visits, new visits, searches involving net site name
    - Audience: Families, young, adult, local, or international
    - Social engagement: Pages per visit, time on site, repeat visitations, community size, number and quality of user generated content
    - Accessibility: Percentage of accessible content
    - Technical: Load time, number of broken links, browser compatibility



# Appendix

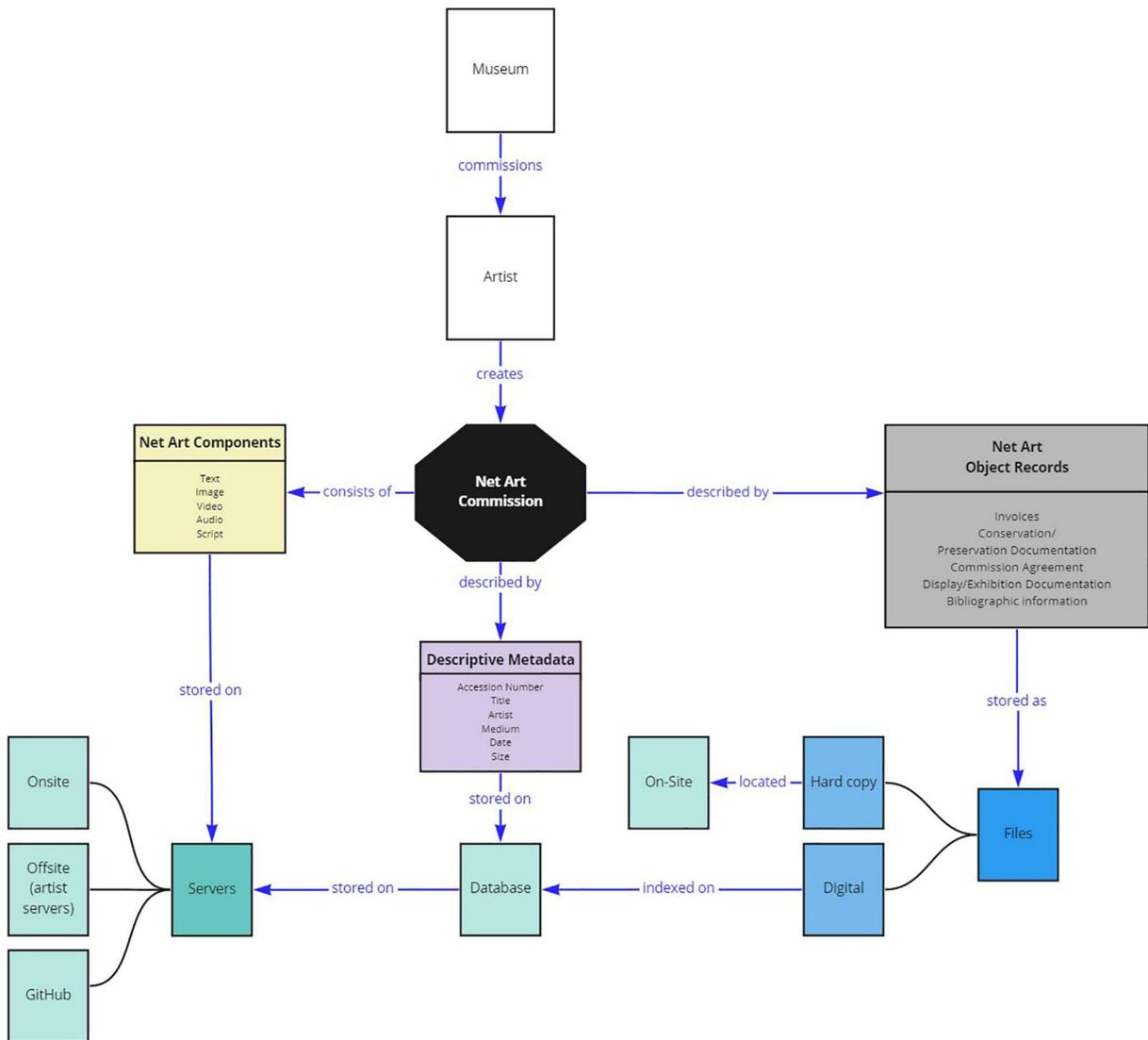


Fig. 1. Concept Map.

<https://drive.google.com/file/d/14dAV37A038b1LnKDDQ0R8VTwOGBLsrgg/view?usp=sharing>

661 Fields	661 Field Description	661 Internal Vocab Qualifier Options	Examples	Vocabulary Control	661 Internal Vocab Description	CDWA Field Name	CDWA Field Description	AAT Field Name	AAT Field Description
Title	A title for a work should always be recorded according to the artist's designation, unless the work is being listed. Generally, like the display title, the preferred title will be recorded on a work. If the title is not recorded, the artist's title designation should be used as the preferred title. If a title is not known, the museum may wish to create a descriptive title. If a work does not have an artist inscription or designated title, every effort should be made to consult published references, works of art, artist, inventory, or labels to ascertain a potential title. If a title is changed, a modification form needs to be completed.	Title	How Words First Collaborative Database	The exact title, including all punctuation, will be entered if it is known that the title exactly (except from the artist, gallery representative, or an entry on the work).	The Title Type "Title" is the museum's preferred title for the work. It can only be used once in the system.	1.1 Title Text	Titles, identifying phrases, or names given to a work of art, architecture, or material culture. For complete works, series, or collections, the title may refer to a discrete unit within the larger entity in part from a series, a photograph in a collection, a panel from a fresco cycle, a building when a fresco, complete or in part, identify only the larger entity (series, collection, object, etc.).	aat:title	In cataloging works of art, architecture, music, and other creative works, the titles assigned to the work by the creator or creator.
Classification	The Classification field groups works of art in the permanent collection that are similar to each other, such as Prints, Drawings, and Sculptures. The field does not represent an individual work, but relates works in the permanent collection that are similar in scope.	Classification	Digital Art Web-based Art	A single concept or a further division within that concept. (The Classification field is a controlled vocabulary and one of the terms listed in the drop-down menu must be used. For works created for and distributed and experienced on the Internet, select "Digital Art (Web-based Art" in the drop-down menu.)	The Classification field groups works of art in the permanent collection that are similar to each other. The field does not represent an individual work, but relates works in the permanent collection that are similar in scope.	1.2 Object/Work Type	The kind of object or work described.	class:work:obj	The kind of object or work described, e.g., paintings, book, etc.
Contributors	Contributors attributed to a work of art in the system must be identified according to the information in the artist's inscription. If there is no inscription, the artist's title designation should be used as the preferred title. If a title is not known, the museum may wish to create a descriptive title. If a work does not have an artist inscription or designated title, every effort should be made to consult published references, works of art, artist, inventory, or labels to ascertain a potential title. If a title is changed, a modification form needs to be completed.	Artist	Sam Leung	661 refers to ULAN as its first source for artist name control. However, given contemporary art and artists are commonly not well represented by ULAN, when an artist's name cannot be found there, the museum will rely on Wikidata.	Individuals who produce work in the arts, whether visual, performing, or time-based. An individual is assigned an "Artist" role when they are the primary agent creating the work of art. If another individual is associated with the work as a collaborator, they can be assigned an "Artist" role. (Artist source documentation: <a href="#">https://www.wikidata.org/wiki/Help:Artist</a> )	1.3 Creator Description	The name, brief biographical information, and roles (if necessary) of the named or anonymous individual or corporate bodies responsible for the design, production, manufacture, or alteration of the work, presented in a syntax suitable for display to the end user and including any necessary indicators of uncertainty, ambiguity, and nuance. If there is no known creator, make a reference to the presumed culture or nationality of the unknown creator.	creator:descriptor	Note containing the name, brief biographical information, and roles (if necessary) of the named or anonymous individual or corporate bodies responsible for the design, production, manufacture, or alteration of the work, presented in a syntax suitable for display.
		Funding source	661 Art Museum	ULAN	Contributors who donate cash donations (in a bank) towards the acquisition of a work of art.	23.5 Owner/Agent	The name of an individual or corporate body (institution, agency, or group) that owned or was in possession of the work of art or architecture, or served as an agent or intermediary in its transfer from one owner to another.	agent:owner:inst:inst:obj:acquisition	In cataloging art and cultural heritage, refer to the first known owner of the work, when the method of acquisition is unknown or not applicable.
Historical Dates	Historical dates are attached to events that occurred to the work of art on different dates. They can be used to assist in identifying related events, such as printing, conservation, restoration, and execution. Historical dates are only used when multiple events occur at a work and require explanation. Early date data attached to a work, such as a single year of completion or specific time spans, historical dates are not needed. If events and activities associated with a work are more complex, such as multiple dates, historical dates should be used to clarify on the status of the work and the date. Historical dates are included in the Display Date field using approved qualifiers.	Date Published	March 2016	"month" <day> "year"	Date the net artwork became accessible online through 661 Art Museum.	4.7 Creation Date	A concise description of the date or range of dates associated with the creation, design, production, presentation, performance, contribution, or alteration of the work or its components, presented in a syntax suitable for display to the end user and including any necessary indicators of uncertainty, ambiguity, and nuance.	creation:date:descriptor	A concise description of the date or range of dates associated with the creation, design, production, presentation, performance, contribution, or alteration of the work or its components, presented in a syntax suitable for display.
		Date Executed	January 2016	"month" <day> "year"	Date the artist completed the net artwork.				
Medium	The medium line defines the physical, material, and technological aspects of a work of art. Contrasting the Medium line will be largely on a case-by-case basis, according to the nature of each work.	Medium Language	HTML	<a href="https://en.wikipedia.org/wiki/HTML">https://en.wikipedia.org/wiki/HTML</a>	The technology used to create a net artwork.	7.1 Materials/Techniques Description	An indication of the substances or materials used in the creation of a work, as well as any requirements, production or manufacturing techniques, processes, or methods incorporated in its fabrication, presented in a syntax suitable for display to the end user and including any necessary indicators of uncertainty, ambiguity, and nuance. For works on paper, descriptions of watermark may also be included.	media:materials	Use generally for materials used by artists.
		Scripting Language	JavaScript, Perl, PHP, Python	<a href="https://en.wikipedia.org/wiki/JavaScript">https://en.wikipedia.org/wiki/JavaScript</a>					
		Programming Language	C, C++, Java, BASIC	<a href="https://en.wikipedia.org/wiki/C_(programming_language)">https://en.wikipedia.org/wiki/C_(programming_language)</a>					
Dimensions	Recording measurements for a work.	Resolution	153 x 250 pixels	"height" x "width" pixels (Data should be entered in the resolution is variable, no data entry)	Recording measurements for a work.	6.1 Dimensions Description	Information about the dimensions, size, or scale of the work, presented in a syntax suitable for display to the end user and including any necessary indicators of uncertainty, ambiguity, and nuance. It may also include the number of the parts of a complex work, series, or collection.	dimensions:descriptor	Information about the dimensions, size, or scale of the work, presented in a syntax suitable for display to the end user and including any necessary indicators of uncertainty, ambiguity, and nuance. It may also include the number of the parts of a complex work, series, or collection.
Access URL	The URL at which a net artwork can be viewed or experienced. This may include a destination hosted by the artist, as well as a destination hosted by the museum. Dates can also be associated with specific URLs if the work was only active at a certain address for a certain period of time.	Previous Access URL	Previous Access URL (active 1996-2017) <a href="http://www.henrydunant.org/">http://www.henrydunant.org/</a>	Previous Access URL (active 1996-2017) <a href="http://www.henrydunant.org/">http://www.henrydunant.org/</a>	The URL at which a net artwork can be viewed or experienced. This may include a destination hosted by the artist, as well as a destination hosted by the museum. Dates can also be associated with specific URLs if the work was only active at a certain address for a certain period of time.	21.1 Current Location	The name and geographic location of the repository that is currently responsible for the work, or, for monumental works and architecture, the geographic location of the work. If the work is not displayed, this location unknown, or the work is an anonymous private collection, indicate this. It also includes the repository number, credit line, and other administrative information about the work.	url	Unique resource locators that, in addition to identifying a resource, provide the address of the internet document according to one of a variety of protocols.
		Access URL	Access URL (active 2017) <a href="http://www.henrydunant.org/">http://www.henrydunant.org/</a>	Access URL (active 2017) <a href="http://www.henrydunant.org/">http://www.henrydunant.org/</a>					
Rights and Reproductions	The fields associated with Rights and Reproductions track data relating to general copyright and specific licensing agreements between the artist and the museum for reproduction of the work in the permanent collection. Non-exclusive licenses are used to galleries, when a work is purchased by the museum for acquisition. When a donation is made, Non-exclusive licenses are used to artists for their separate. The Rights and Reproductions department maintains their own files on licensing agreements with artists. The fields capture the following information: Cataloging and Documentation Office are responsible for recording information from documents used by the Cataloging and Documentation Office, whether in the past or present.	Copyright	Arcaid Studio	For example, if it is the artist, simply type the artist's name. If an estate or institution, type the official name of either entity.	The Copyright line indicates the name of the individual or institution that is the copyright holder to the work.	22.1 Copyright Statement	A formal statement of the copyright of a work, and/or any reservations placed on it, including licensing information.	copyright:statement	A formal statement of the copyright or licensing of a work, and/or any reservations placed on it.
Custody and Ownership	The Custody and Ownership Credit Line is a formal public statement about the ownership, transfer of ownership, acquisition, source, or sponsorship of the acquisition of a work of art or funds towards the purchase of art objects how they would be to be credited in Credit of Gift and formal documentation issued by Development.	Credit Line	Commissioned by the 661 Art Museum for its New Media website	Commissioned by the 661 Art Museum for its New Media website (The text convention above is for works that are commissioned by the museum.)	The Credit Line is a formal public statement about the ownership, transfer of ownership, acquisition, source, or sponsorship of the acquisition of a work, suitable for use in a display label or publication.	23.9 Owner's Credit Line	A formal public statement about the ownership, transfer of ownership, acquisition, source, or sponsorship of the acquisition of a work, suitable for use in a display label or publication.	credit:line	For art information, a brief statement indicating how the work came into the current or an earlier collection or how it came to be on view at the repository.
Cataloguer's Notes	The Commission Agreement dated 2006 (see object file)	Cataloguer's Notes	Free text (Cataloguers should use this field only occasionally for data that is not normally defined by other text entries. This field only should be used as minimally as possible and only for data that can be catalogued in specific fields when this should be used)	Supplementary information the catalogue users necessary to include making the object record more robust.					
Descriptive notes	Descriptive notes of the artwork contain relevant and detailed information that can not be placed in other fields.	Customized Notes	Free text (Notes entered in this field should be completed text that uses natural word order with complete sentences. If copy text, put in quotations and add source information, as access date.)	The Customized Notes field is used to catalogue historical or interpretive text for a work of art that Cataloger has written to contextualize a work of art.		18.1 Descriptive Note Text	A narrative text of prose description and discussion of the work or group of works.	descriptive:note	A textual description of the work or other entity, including a discussion of issues related to it.

Fig. 2. Metadata Field Crosswalk.

<https://drive.google.com/file/d/1uAmHJugEfSeyT31nuAaCsQKY623fYoIR/view?usp=sharing>

# Project Timeline

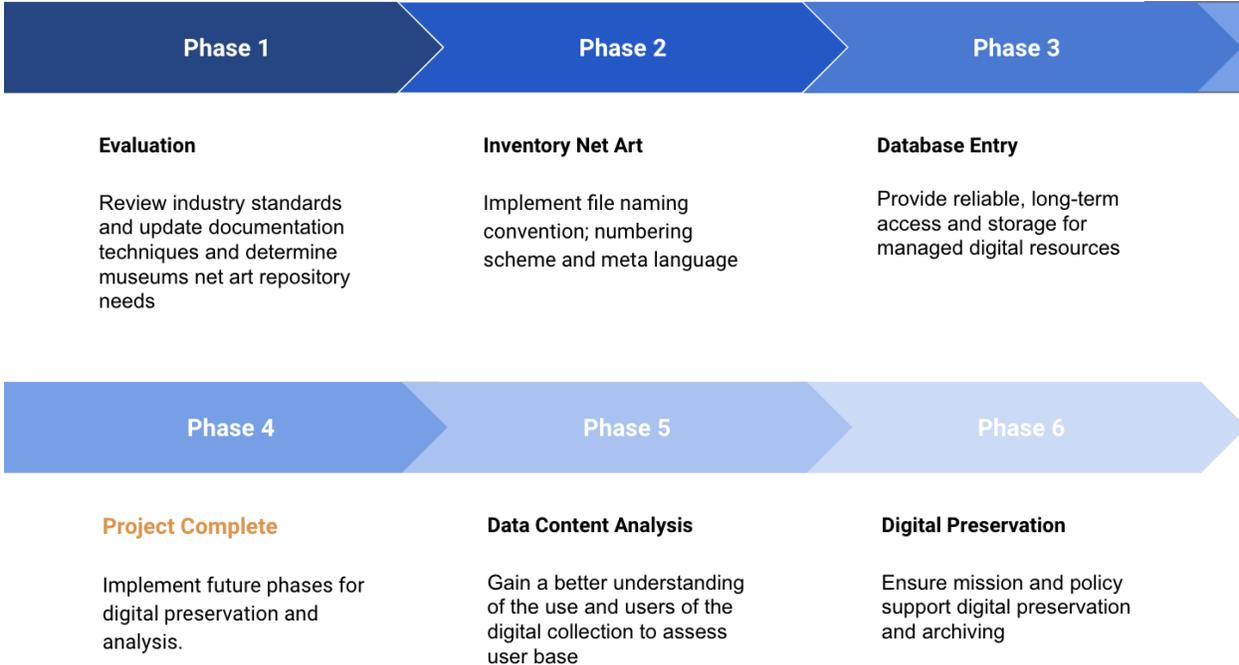


Fig. 3. Project Timeline.

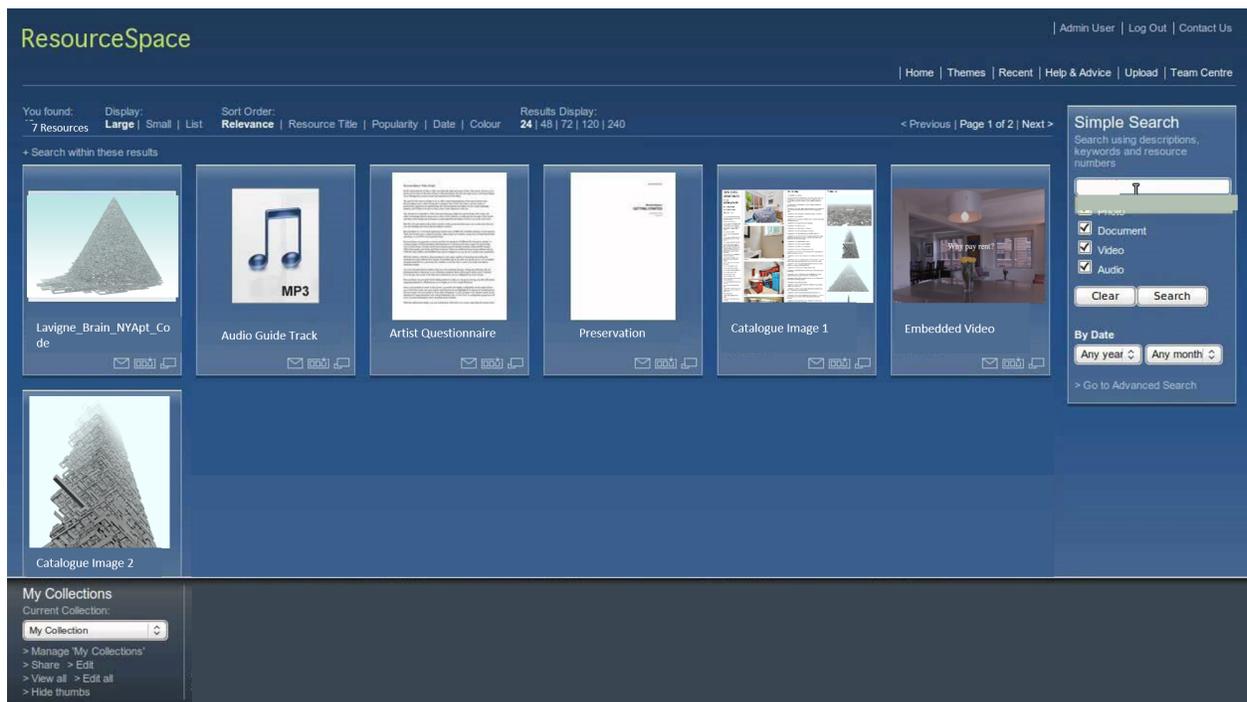


Fig. 4. Mock-up screenshot of ResourceSpace.

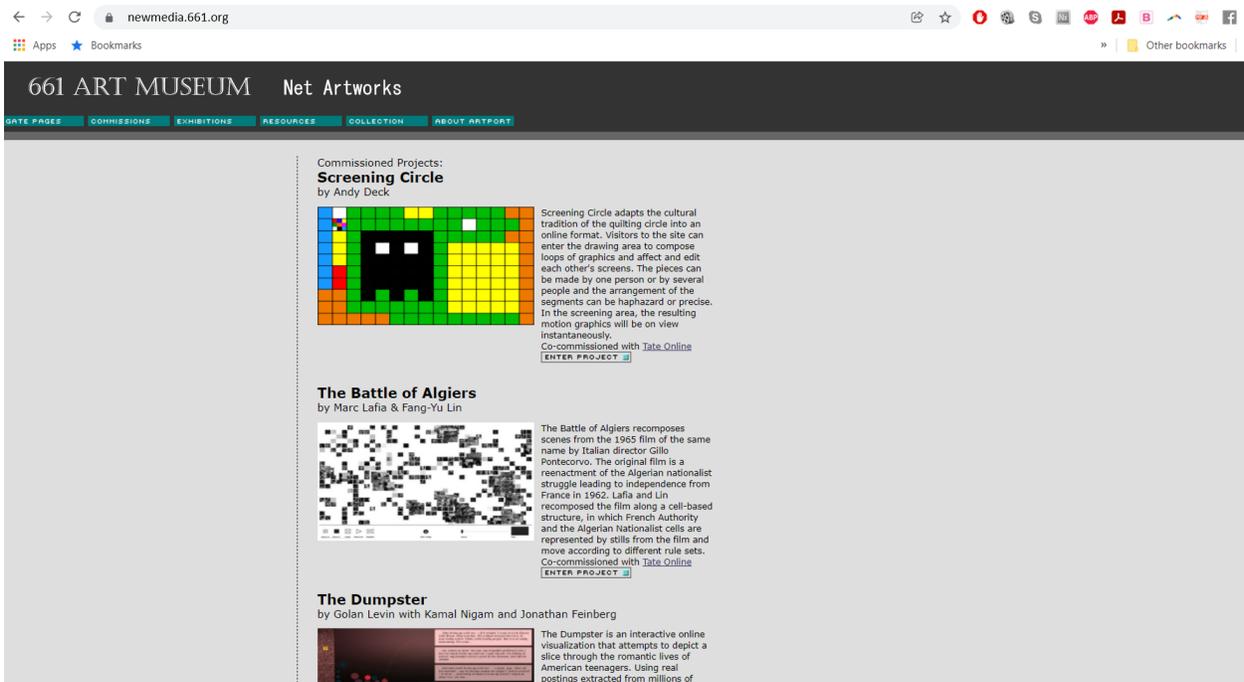


Fig. 5. Mock-up screenshot of <https://newmedia.661.org>.

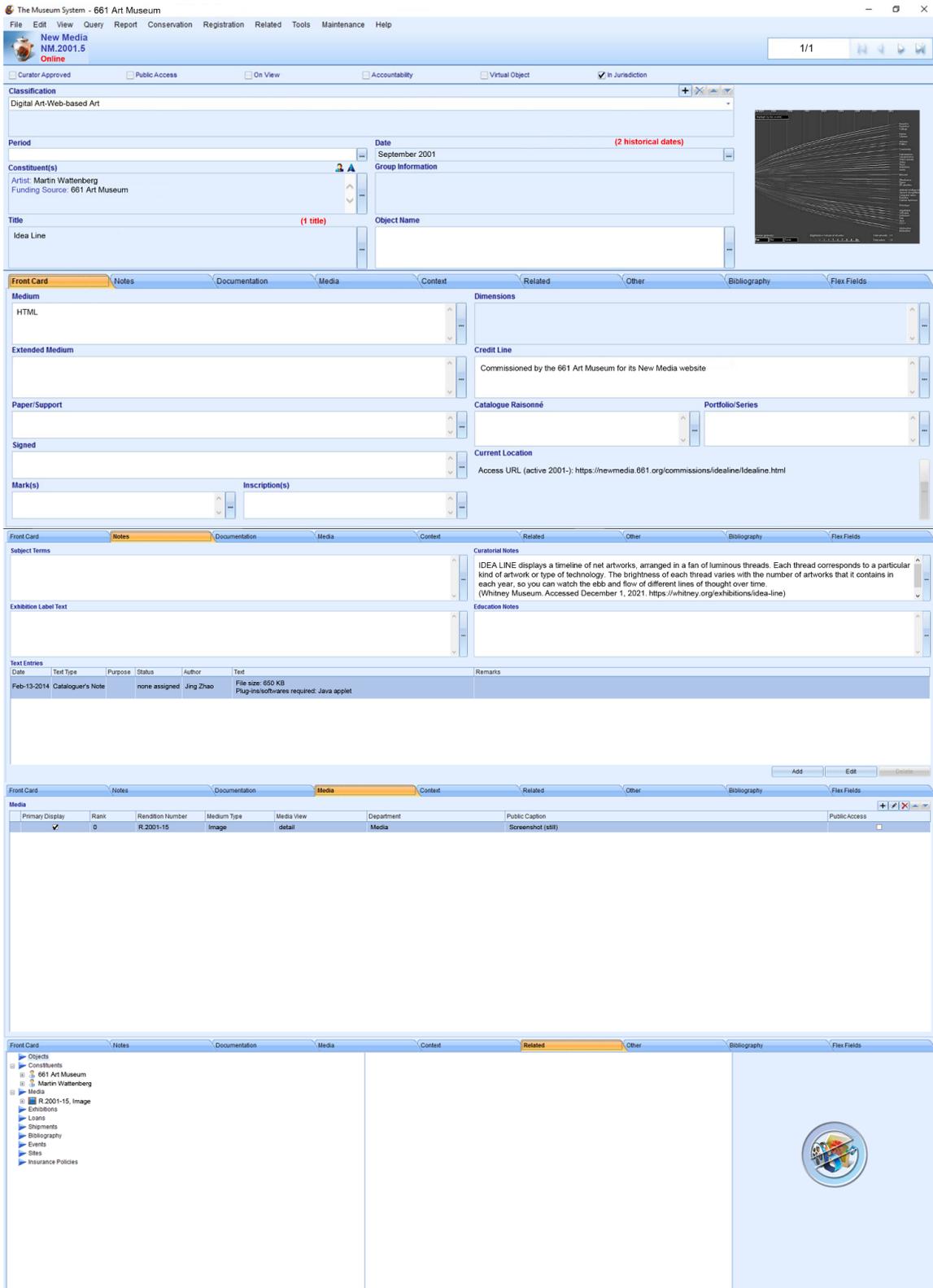


Fig. 6. Jing Zhao. Mock-up Screenshots of TMS.

<https://drive.google.com/file/d/1Mv5rieQxej8TzYbhKYaRocVRdlu8pcho/view?usp=sharing>

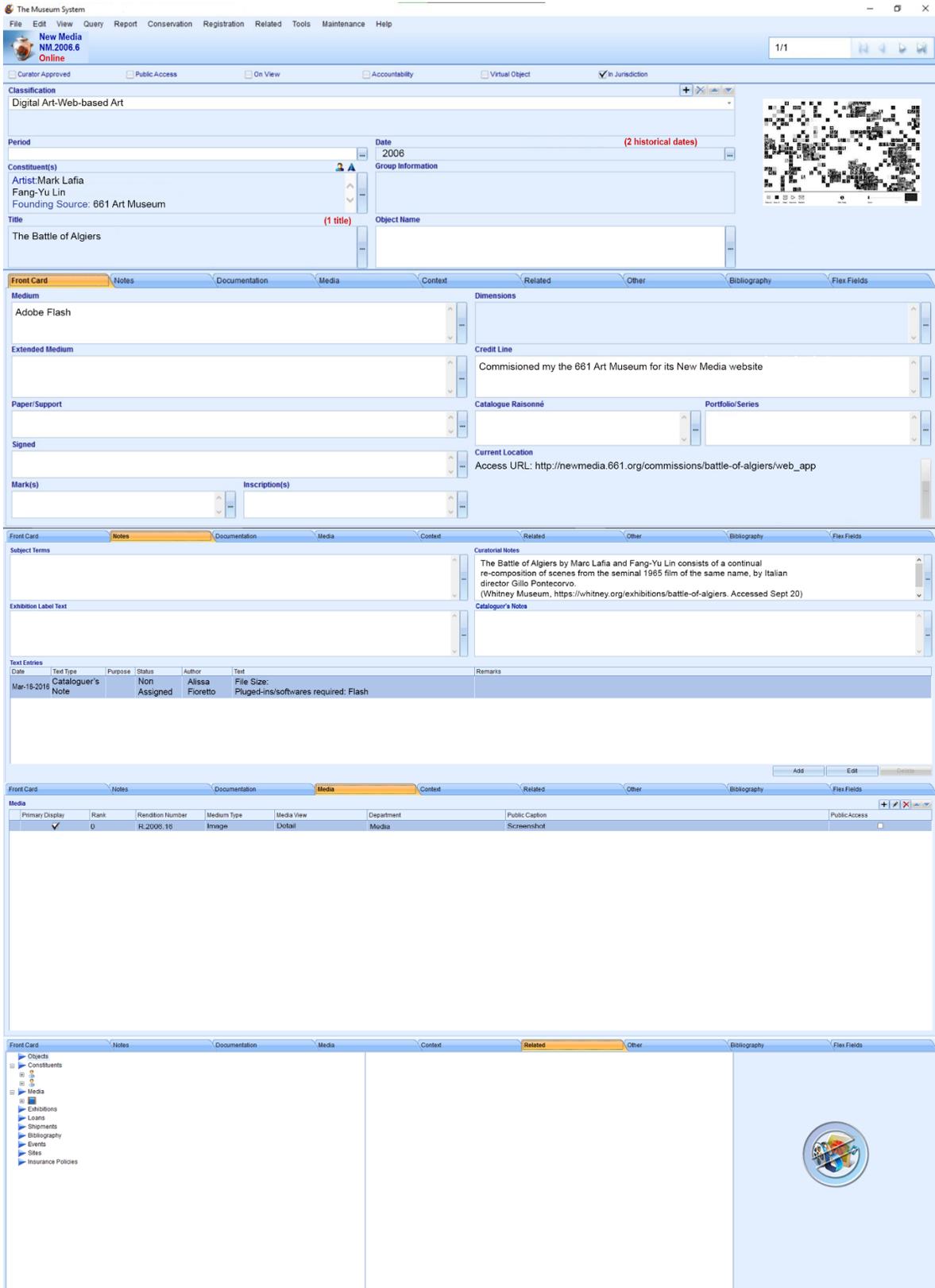


Fig. 7. Alissa Fioretto. Mock-up Screenshots of TMS.

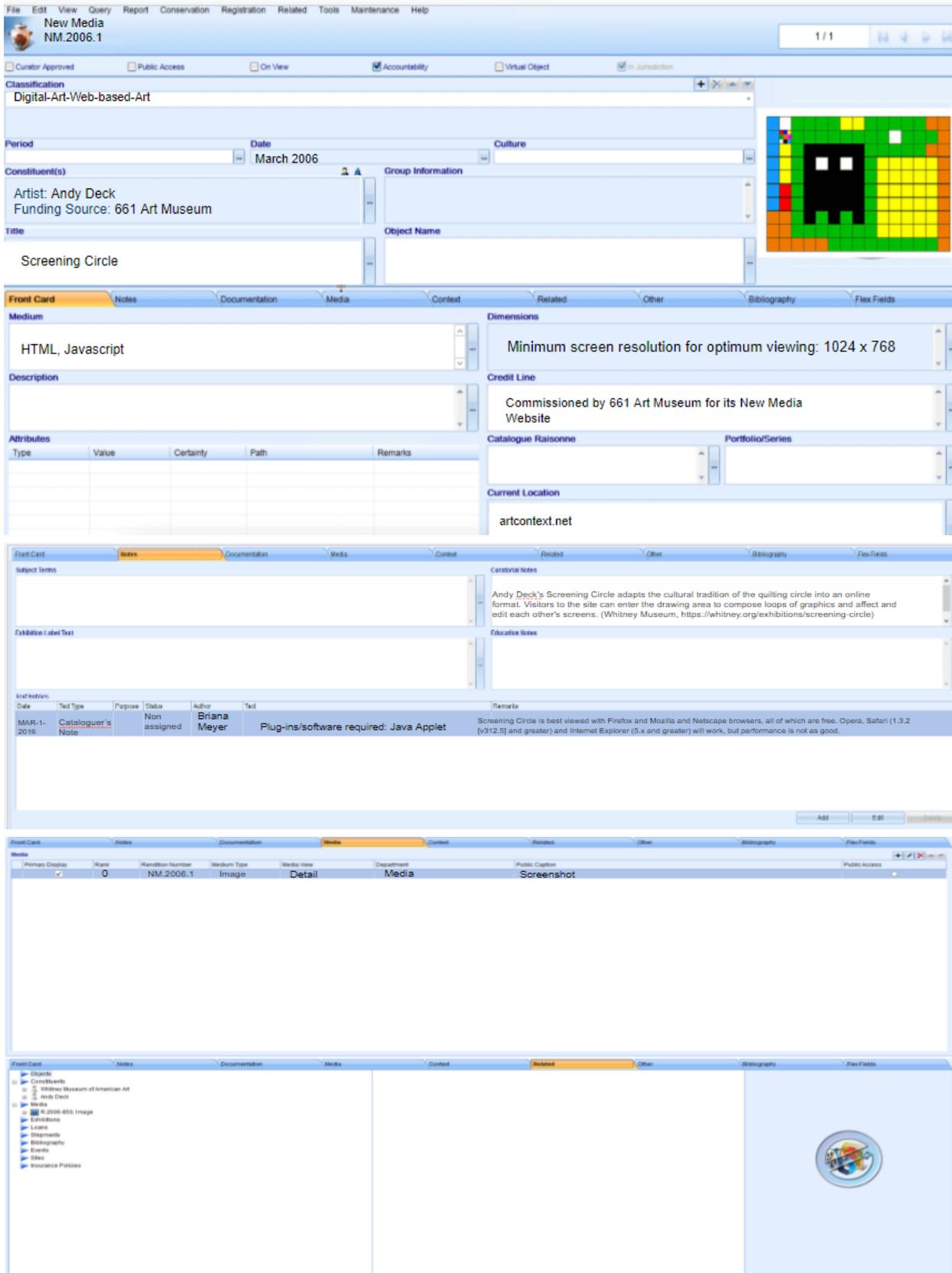


Fig. 8. Briana Meyer. Mock-up Screenshots of TMS.

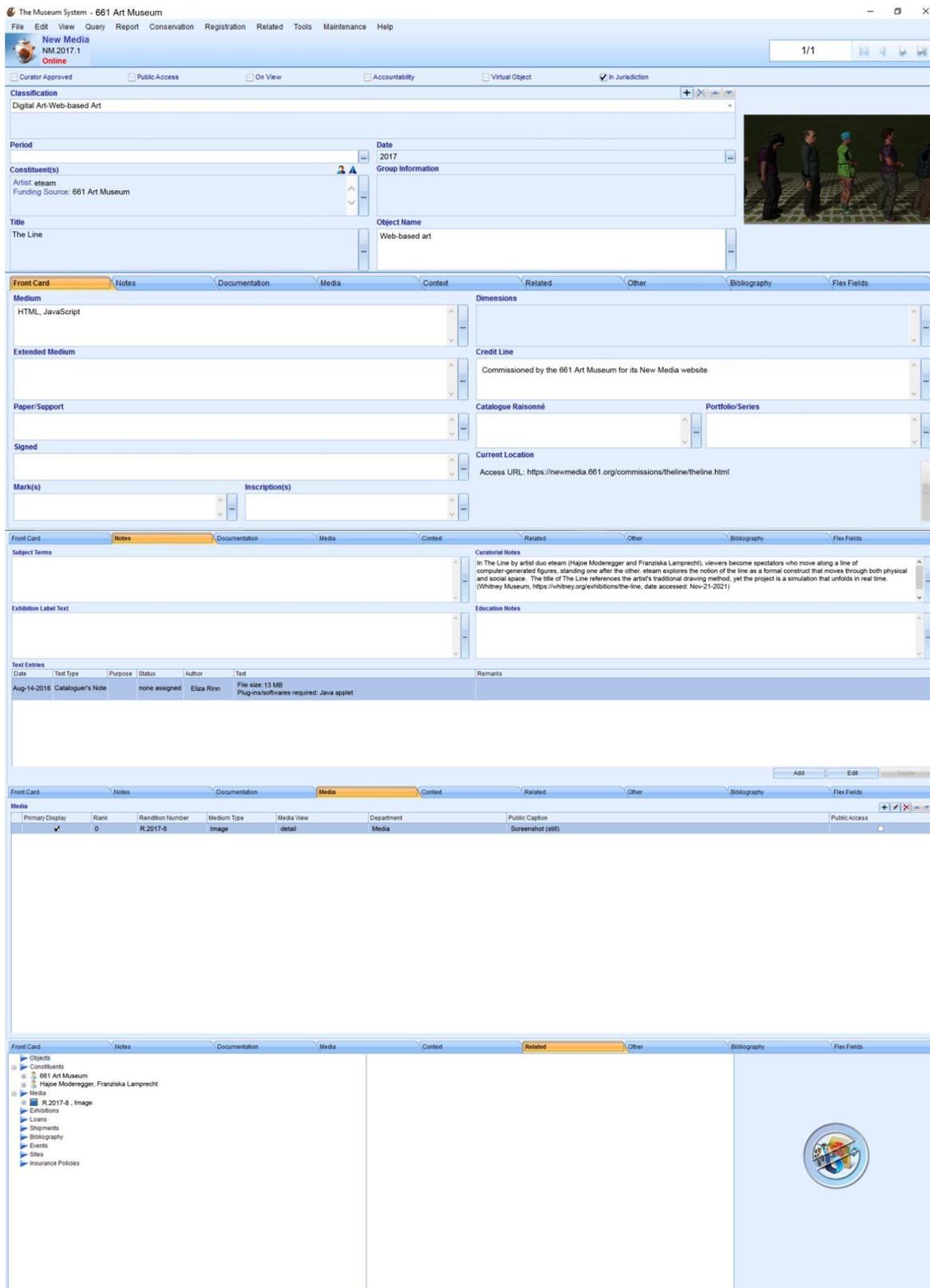


Fig. 9. Eliza Rinn. Mock-up Screenshots of TMS.

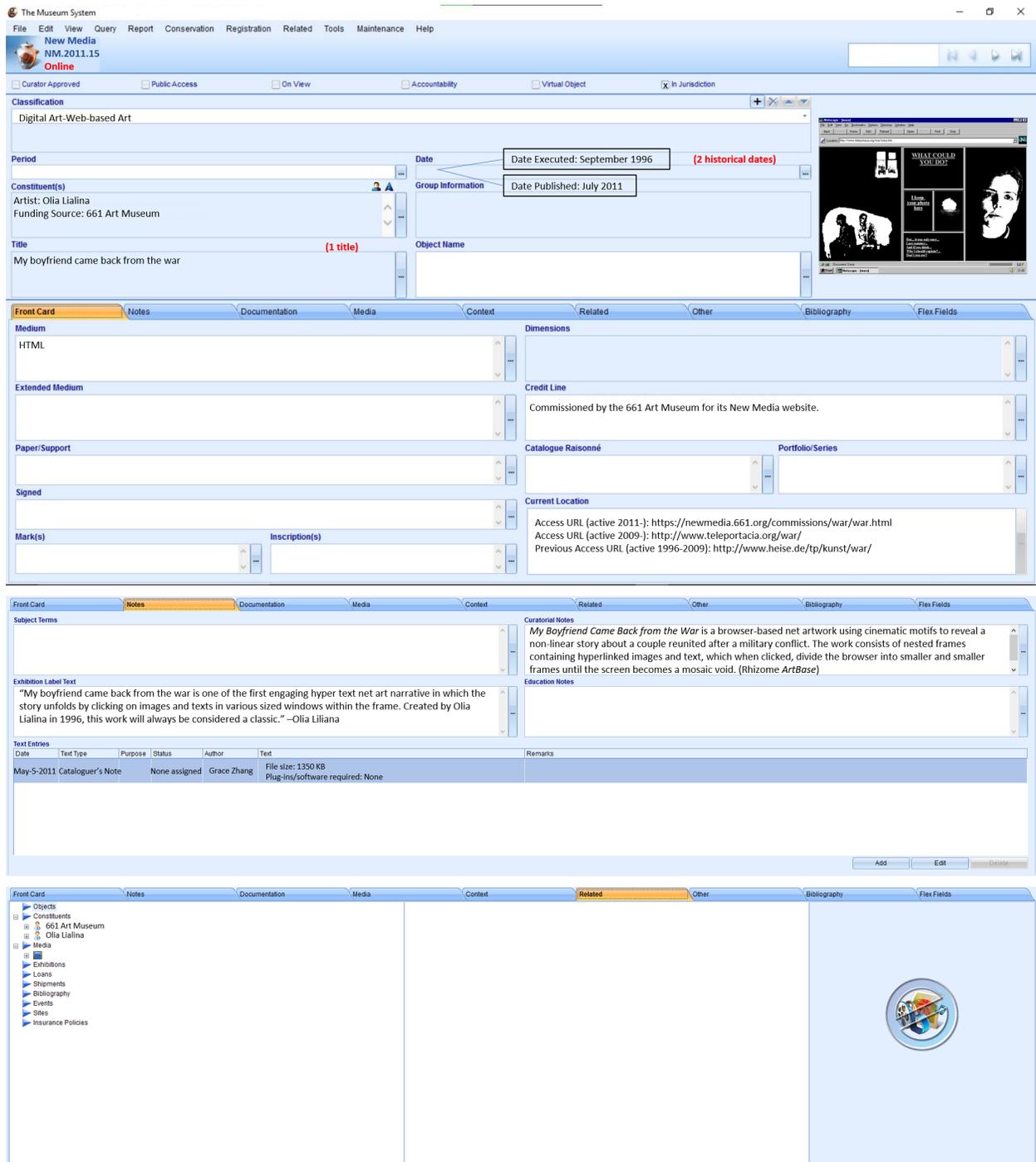


Fig. 10. Grace Zhang. Mock-up Screenshots of TMS.

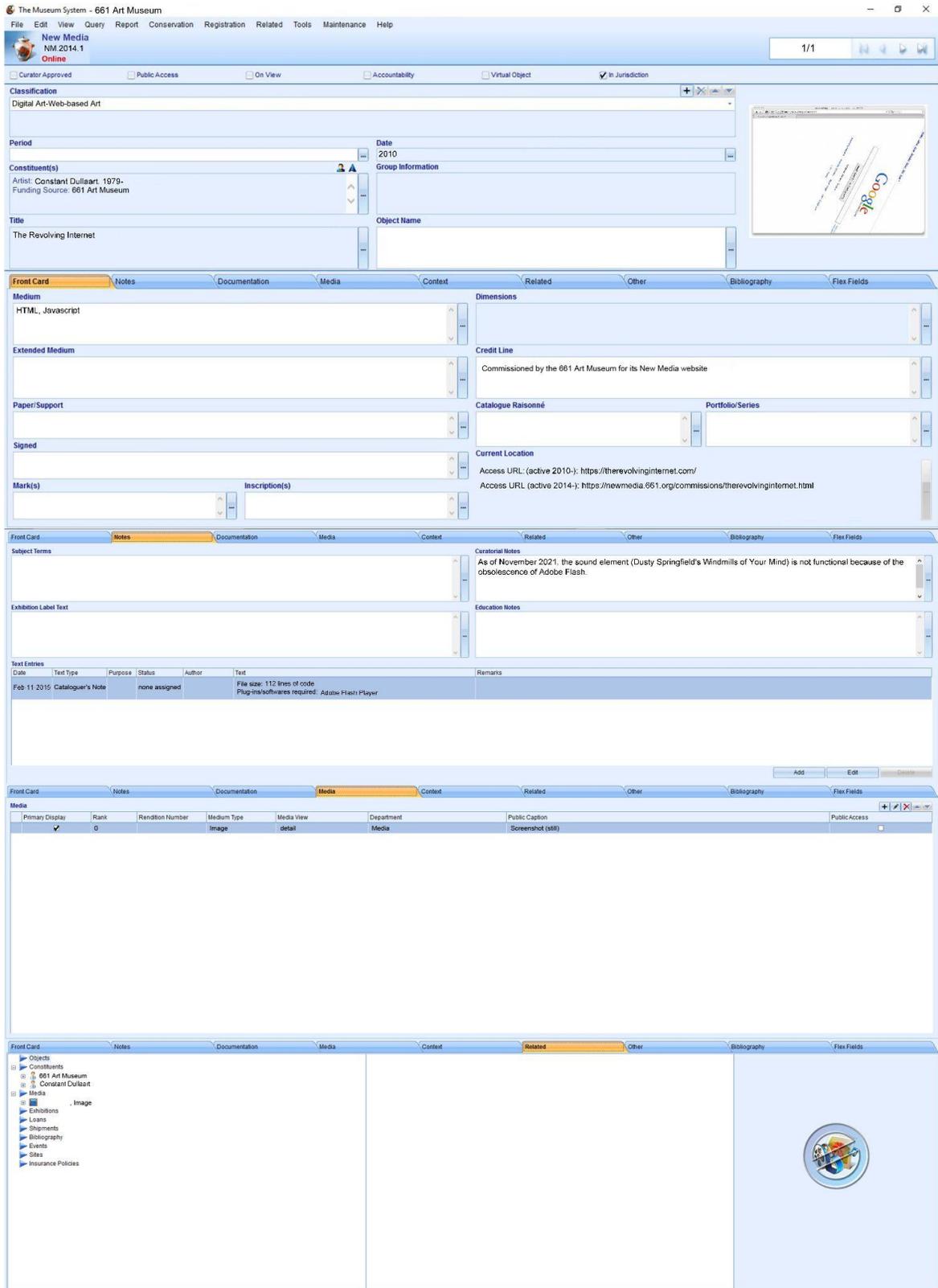


Fig. 11. Hepzi Rapoport. Mock-up Screenshots of TMS.