# Digital Project Preservation Plan

A Guide for Preserving Digital Humanities/Scholarship Projects

Version 2.0

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## Digital Project Preservation Plan: A Guide for Preserving Digital Humanities / Scholarship Projects

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#### Summary

A Digital Project Preservation Plan is designed to help with organizing preservation efforts for digital projects. Initially drafted as a companion guide of best methods for preserving digital scholarship or digital humanities projects, it can also be applied to digital projects outside the humanities. This preservation plan will benefit those digital humanities (DH) project creators who need guidance on how to start a digital project with preservation in mind. Although the DH community has shared resources and case studies, the examples available tend to focus on DH development, and less on DH preservation. These resources are also located in disparate locations, making it difficult to synthesize best practices. The Digital Project Preservation Plan is a singular guide, focusing on DH preservation, as a starting point with references to more resources and related DH practices. This is a working document, available to practitioners in whole or part; ideally, it will be used in the early stages of project planning and consulted and revised regularly. A successful project will design and build preservation infrastructure from the beginning as a collaborative effort. As priorities, methods and technologies change, the preservation plan will need to be updated and modified accordingly.

The Digital Project Preservation Plan will be made freely available as an open educational resource (OER) on the Web as follows:

- A full plan (guide/instructions and appendices/templates) copy will be available in PDF;
- (2) The individual appendices will also be made available as separate documents for ease of access, and will be available as fillable PDFs (if downloaded).

The above contents will be available at https://jewlscholar.mtsu.edu/handle/mtsu/5761

### **Preservation Plan**

This preservation plan addresses the purpose, objectives, and expected outcomes of the digital project. This is a working document; ideally developed in the early stages of project planning, and consulted regularly, then modified throughout the development lifecycle. A successful project will design and build in the preservation infrastructure from the beginning, which is a collaborative effort. As priorities, methods, and technologies change, the preservation plan will need to be updated and modified.

#### Objectives

A Digital Project Preservation Plan is designed to help with organizing preservation efforts. The time and level of detail put in this plan depends on preservation plan users. The more the preservation plan is consulted, the more likely project owners are to have successful management of the digital project inventory and preservation. This Preservation Plan is most beneficial to those DH project creators who need more guidance on how to start a digital project with preservation in mind. Although the DH community has shared resources and case studies, the examples available tend to focus on DH development, and less on DH preservation. These resources are also located in disparate locations, making it hard to identify a holistic set of steps. The Preservation Plan instead is a singular guide, which focuses on DH preservation as a minimal starter approach with references to more resources and related DH practices.

The Digital Project Preservation Plan (DP3) is only offered as guidance for digital humanities and digital scholarship projects; it is not intended as the best method or only method. For example, project creators should keep in mind the following:

- Preservation Plan should be used in consultation with other preservation policies and frameworks standardized at institutional or industry levels.<sup>1</sup>
- Preservation Plan will need to be revised as new approaches and technologies are introduced that will help make digital projects sustainable and available for the long-term.
- Preservation Plan is merely "a" (singular) optional plan, it is not "the only" plan.
- The Digital Project Preservation Plan--Full Plan: Guide and Templates offers guidance and resources, including additional templates in the Appendix. Users of Preservation Plan can pick and choose which to apply to their digital projects.

#### Name of Project:

Initial Preservation Plan Date:

Last Modification Date:

<sup>&</sup>lt;sup>1</sup> Examples are included in the Resources section of this document. Specific categories include general resources, digital education (including methods, tools, sandboxes), project planning, organizations focusing on digital preservation, preservation practices, developing web projects and universal design, and web archiving.

### How to Use this Guide

#### Overview

This guide consists of tools for creating a Digital Project Preservation Plan including a detailed description of items to consider (a Project Charter, a Digital File Inventory, and Additional Considerations for infrastructure setup), a plan checklist (Preservation Plan-A Summary and Checklist), and usable preservation plan templates.

The appendices serve as the preservation plan templates, and include:

Project Charter Digital File Inventory Project Profile Collaborators Web Publishing Agreement Universal Design Checklist Preservation Guidance Checklist

The final section is a glossary of basic terms used throughout this Digital Project Preservation Plan guide.

#### Instructions

Use this document as a whole or make selections among its individual components. For example, if you already have produced a Project Charter, skip ahead to the Digital File Inventory. Or, if you do not need instructional guides altogether, skip ahead to the Appendices for the fillable PDF templates.

Since preservation standards can change, and storage media formats are vulnerable to risk and obsolescence, a Preservation Plan should be evaluated every 2-5 years. Make note of the date and revisions for each reevaluation.

[end of How to Use this Guide]

## Project Charter

A project charter is a set of guidelines developed at the beginning of a project. These guidelines are preferably written by the project team, but at the very least, they are drafted by the *project owner* and given to all team members for review at the beginning of the project. This gives the project team the opportunity to look at the entirety of the project. This includes the goals, objectives, limitations, timeline and deliverables, and yet other considerations. It also gives each team member a chance to review their individual responsibilities as described in the project charter. Numerous disciplines use project charters as a project management tool. Some have been specifically developed for use in libraries or cultural heritage institutions.

UCLA Library Special Collections has an extensive array of project management templates, including a Project Charter template. These templates are online as a part of the UCLA Library's Digital Project Toolkit.<sup>2</sup> A template like this one is recommended to use if a project charter would benefit your project. Alternatively, you could draft a text document, then include the sections of a traditional project charter that are most appropriate for your project. The content and design of a project charter is specific to each project. Some suggested sections could include:

#### **Project Description**

Provide a brief description of the digital project.

#### Scope / Out of Scope

List the type of materials utilized for this project. This includes primary sources, digital platforms, and locations (physical or virtual) that will be associated with this project. Describe features, services, and products, if any, that will result from this project. Please include local, regional, or national affiliations, collaborators, target audiences, and functional requirements. Below that, define the boundaries of the project and what will not be included (if any).

#### Deliverables

Define the intended end product(s) of the digital project.

For any of the deliverables, you may choose to describe any software that will be used in creating the end product(s). For example, a scholarly publication or presentation reporting the state of the project's topic; the digital method of spatial analysis could use the tool/software of QGIS, Story Maps, StorymapJS, or CartoDB; or the digital method of text analysis could use the tool/software Voyant or R. In-depth responses are not necessary; simply listing the method and software is enough.

#### Intended Platform for Delivery

With the above deliverables in mind, select which platforms you intend to use for dissemination.

#### **Project Goals**

Describe the overall goals of the project, including how it will be utilized. This could include the general public, specific group, or an academic institution, etc.

<sup>&</sup>lt;sup>2</sup> Available at http://library.ucla.edu/special-collections/programs-projects/digital-projects-special-collections

#### Potential Risks

Several items may prevent a project from moving forward (funding, staffing, timeline, etc). List any limitations or concerns for the project, this may include collaborators, stakeholders, intellectual property concerns, and ethics or privacy issues (especially when working with students). If possible, list approaches to help mitigate these risks.

#### Success Factors

Describe how the project will be measured for success. For example: use of web analytics, alt-metrics, scholarly citations, conference presentations, or other means. See the Metrics Toolkit<sup>3</sup> for more examples.

#### Roles and Responsibilities

Describe the roles and responsibilities of each collaborator, including but not limited to the project owner, sponsor, and team members (students or professionals). This might be achieved by creating, for example, a chart.

#### **Project Timeline**

List project milestones chronologically. Describe any factors that may affect the timeline, including funding, grant mandates, student availability, resource availability, conference travel, etc.

#### **Project Requirements**

Identify what this project needs that is not already understood or in use. For example: outsourcing digitization, transcription, or website development; required team member training; tools or skills needed for project completion; item purchases or travel/fieldwork.

#### Funding

Describe any grant-funded objectives or mandate, as well as timeframes for the grant award.

#### **Collaborators Agreement**

A set of parameters or code of conduct that governs the project, with acknowledgement from the collaborators.

Note: Best practices for project management include the use of a collaborators agreement and a project charter. The above section is a sample of a limited Project Charter. For a collaborators agreement, see the Media Commons Press version of Collaborators Bill of Rights,<sup>4</sup> the UCLA HUMTECH Student Collaborator's Bill of Rights<sup>5</sup> or the UCLA Library's Collaborators Agreement.<sup>6</sup> It is critical to provide proper acknowledgement to all project participants, and a collaborators agreement can assist with this job, in addition to keeping track of individual responsibilities. Additionally, the collaborators agreement should acknowledge the right to privacy when developing public-facing scholarship, especially if the project is for course credit. Students should have

<sup>&</sup>lt;sup>3</sup> Metrics Toolkit is available at http://www.metrics-toolkit.org/

<sup>&</sup>lt;sup>4</sup> http://mcpress.media-commons.org/offthetracks/part-one-models-for-collaboration-career-paths-acquiring-

institutional-support-and-transformation-in-the-field/a-collaboration/collaborators%E2%80%99-bill-of-rights <sup>5</sup> https://humtech.ucla.edu/news/a-student-collaborators-bill-of-rights/

<sup>&</sup>lt;sup>6</sup> https://www.library.ucla.edu/sites/default/files/Template\_CollaboratorsAgreement\_1.pdf

the right to alternative assignments or identification anonymity in any published project. This is important to note for the Preservation Plan, as certain elements may be placed on public-facing platforms.

For a fillable template of a limited Project Charter with the suggested sections above, see Appendix A.

[end of Project Charter section]

## Digital File Inventory

This Digital File Inventory is perhaps best suited for use in a spreadsheet, especially if there are many files associated with the project. Keeping an inventory of files is the critical part. However a project owner chooses to proceed, keep file descriptions consistent. See Appendix B for a one-page PDF fillable template with these recommendations. There are a few different ways the Appendix on Digital File Inventory (DFI) could be used:

- 1. For use in projects with a few files. Instead of using a spreadsheet for inventory of all files associated with the digital project, fill out the DFI template for each associated file. Recommended for project with less than 20 files.
- 2. For projects with large amounts of files, the DFI template could become time consuming and tedious to document each file in the manner describe above in point (1). That is why the use of a spreadsheet for inventory is suggested for a project with many files. For these larger projects, perhaps use the DFI template for the final published version(s) of the digital project; or for only a selection of the items from the spreadsheet inventory. For example, just the final versions of a file or a single set of items to be preserved.
- 3. As a guide to what type of fields to include in the spreadsheet for your own inventory purposes.

#### **README File**

Along with an inventory of files associated with the digital project, creating a README file is also recommended. The readme file is a term taken from computer science, and it is a form of documentation for software (Wikipedia, 2018) that describes the files in a directory or information that is beneficial to understanding why the software is valuable and how it can be used. There are examples of how to write this type of traditional readme file online<sup>7</sup> that may be helpful to understanding the purpose. For DH projects, a readme file might document how each file is connected to the digital project altogether (in addition to using it for the traditional purposes if your DH project produces its own code). A DH readme file puts the development process into words, helping to ensure files are correctly interpreted by the creators today or others who may pick up the project in the future (Cornell University, n.d.). The readme file can also be used for documenting decisions made in the project, such as methods that worked and those that did not; the files are also a productive way to describe the rational behind project decisions. Rockwell (2014) describes this DH readme file as a type of "deposit package." Preserving the development process of a digital project with a readme file is primarily for internal purposes. However, certain elements may be helpful to project end-users, and as a result a selection may also be used for external purposes.

The details of a readme file depend on the type of digital project being created. The purpose is to document how all the files being preserved relate or differentiate from one another, and the processes (technical, financial or administrative) involved in the project's actualization. Although there is no set template for a DH readme file, it is recommended to review the Guide to Writing "readme" Style Metadata<sup>8</sup> and DH styled readme file examples such as the ones for Globalization and Autonomy Online Compendium<sup>9</sup> or The Poetess Archive.<sup>10</sup> The latter uses the concept of a readme file to describe the terms, database, decisions, workflow,

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<sup>&</sup>lt;sup>7</sup> https://www.wikihow.com/Write-a-Read-Me

<sup>&</sup>lt;sup>8</sup> https://data.research.cornell.edu/content/readme#introductory

<sup>&</sup>lt;sup>9</sup> https://doi.org/10.7939/R3TH8BN81

<sup>&</sup>lt;sup>10</sup> http://www.poetessarchive.org/about/index.html

and resources used in the creation of this digital archive, but instead of referring to it as a readme file, this information is listed as a narrative summary on the About page of its website. Therefore, DH projects may well be applying this readme file method without realizing it.

#### Digital File Inventory Recommendations

Regardless of the system for inventory, there are several suggested items to document that will help preserve your project and its individual components. These components will vary and the use of a category classification is recommended for organization. For example, Images-Original and Images-Edited; alternatively, if the project is grant funded, the project owner may choose to have a category specific to Grant or Travel.

A Digital File Inventory Template is available in Appendix B. Again, the use of a spreadsheet may be better for projects that contain many files. Below are suggested fields to include for each file in the inventory:

#### Title of Document

A purposeful name for the document; how you interpret it the file. For example, "Interview Notes," "Travel Arrangements," or "Final Network Analysis Visualization."

#### File Name with Extension (original)

The actual name of the file including the extension (.txt, .pdf, .mp4, etc) and the file location (where it is saved: include the hard drive location and file structure/directory location and/or link to cloud storage if applicable). Best practices recommend saving a file in three separate locations. For example (1) local machine, (2) external hard drive, and (3) cloud or additional off-site external hard drive. Third-party managed cloud storage is not recommended for sensitive data (such as student data).

Example: (1) InterviewNotes.txt saved on my computer>Documents>NetworkAnalysisProject>Interview Notes; (2) same file saved on external harddrive #1 located in office of Dr. Smith; (3) same file saved in institutional Dropbox account accessible at https://dropbox.com/work/forexamplepurposesonly.txt

#### Category

A classification used to group similar items together. This category could correspond to folders you create for organizing the files. For example, categories of Images, Essays, Data, Code, Travel, Administrative, and Grant. The categories will vary by project.

#### Creator

The person that drafted the file, or the first version of the file. If multiple people wrote or edited the document, that could also be indicated here.

#### Date Created

Original date the file was created.

#### Date Last Modified

Over time the file may change, with new versions, or a new name. Document the date of such changes. This is helpful in case you need to revisit drafts. For code management, use a code repository such as GitHub.<sup>11</sup>

<sup>&</sup>lt;sup>11</sup> https://github.com

#### Type or Format

The form of the data file; this may include text, numeric, audiovisual, models/computer code, etc.

#### **Preservation Copies**

The preservation copy may be different from the original file copy which is described above in the "File Name with Extension" field. It is best to preserve a file in both the original format and an alternative or open format (see note below). For instance, tabular data created in Excel should be saved in Excel, but also in an open format such as CSV. See NDSA (2013) for more information on the different levels of digital preservation. A preservation copy is like the "hybrid archiving" scenario described in the 2014 NDSA report<sup>12</sup> on the PDF/A- 3 file format. Best practices for data archiving include considerations of location (on-site, off-site), file formats, responsibility, accessibility, frequency (hourly, daily, weekly, monthly, annually), retention (months, years), confidential/sensitive data security, intellectual property concerns, and testing the archive plan. When developing the first stages of a DH project, focus on preserving what is possible in that moment.

#### Preservation Copies Saved Location(s)

Document where the preservation copies are saved. This can be in the same system as the original file or a different file altogether. This can also include archives or repositories with permanent identifiers (URLS) such as institutional repositories, subject repositories, code repositories, and internal servers. Record the *preservation copy* last saved date as preservation copies may also have different versions and modifications.

#### Association with an Approvals Plan or Sensitive Data

Make a note if the file has confidential information such as student data, intellectual property concerns, or has an agreement such as Institutional Review Board (IRB) approvals, contract agreements and Memorandum of Understanding (MOU) associated with collaborators, vendors, or third-parties. Indicate which files of your project fit into this segment and document it in the Digital File Inventory list and the internal readme file.

#### Note: Closed vs Open File Formats

Different file formats are one of the most common issues when dealing with digital preservation. Many formats are software specific and will not be easy to maintain for the long-term. For long-term preservation, it is best to keep data associated with a DH project in an uncompressed non-proprietary file that can be opened using a variety of software. If using proprietary formats, be sure to document the software package, version, vendor and/or native platform.<sup>13</sup>

For example, spreadsheets are frequently used in digital projects. Although they are particularly helpful with organization, formats change frequently; even the software packages (Excel, Sheets) are not guaranteed to last forever.<sup>14</sup> In an instance where a spreadsheet was created in Excel, save that Excel copy. Additionally, save the spreadsheet file as a Comma-Separated-Value (CSV), and make both the Excel and CSV copies part of the Preservation Plan. The CSV files are preferred for long-term preservation and are considered an open format.

<sup>&</sup>lt;sup>12</sup> Available at https://ndsa.org/documents/NDSA\_PDF\_A3\_report\_final022014.pdf

<sup>&</sup>lt;sup>13</sup> For more information on all formats, see the content categories section of the Sustainability of Digital Formats: Planning for Library of Congress Collections Last updated 3/10/2017 at https://www.loc.gov/preservation/digital/formats/index.shtml

<sup>&</sup>lt;sup>14</sup> DataONE. (n.d.). Preserve information: keep your raw data raw. https://www.dataone.org/best-practices/preserve-information-keep-your-raw-data-raw

Examples of closed or proprietary formats would be products by Microsoft (Excel), Apple (Pages), Adobe (Flash), Google (Sheets), ESRI (StoryMaps), and so forth. Whenever possible, use open, uncompressed, non-proprietary formats for production and preservation files. Examples of open formats are in the table below.

File Type	Open Format Suggestion	File Type	Open Format Suggestion
Text	ODF, PDF, TXT, HTML	Database	DBF, XML, Base
Language	HTML, XML, TEI	Tabular data	CSV
Geospatial	GML	Presentations	PDF
Images	TIFF, PNG, JPG	Video/Audio	MP4, WAV, AIFF
Containers	ZIP, TAR		

For a fillable template of a Digital File Inventory with the suggested sections above, see Appendix B. The headings in the PDF template can also be placed as fields in a spreadsheet to serve a similar inventory list purpose.

[end of Digital File Inventory section]

## Additional Considerations

In addition to the project charter and digital file inventory recommendations from the preceding sections, there are other aspects to consider for digital project preservation. The below sample were selected because of their importance for showcasing, archiving, and indexing digital projects, as well as the imperative need for educating users as updates to digital education pedagogy and research developments emerge.

#### Collaboration

Collaborating on best practices with colleagues from various disciplines and roles. Experimenting with resources and documenting experiences with case studies and use of screencasts, screenshots, interviews, and prototypes.

#### Data and Digital Literacy Education

Primarily a focus on educating students and scholars developing DH projects for the classroom. Topics could include how the Web operates, basic HTML coding, and importance of file structures, file versioning, and file storage, and final backup methods and best practices. Libraries and universities offer workshops on these topics, hoping to fill the gap on digital competencies, while larger initiatives are looking to reshape the data curriculum (Nelson, 2017). The Data Information Literacy (DIL) project is an example of a multi-university initiative on such a curriculum, which produced a DIL Guide on how to develop a data curriculum.<sup>15</sup>

#### Server Space

It is important to identify the needs of a project early in the planning stages, including where a digital project will live virtually. This means server space, domains and web hosting. It is critical that server space is addressed early and the parameters of its use are agreed upon. For example, if the project is based out of a university, request server space from the institution in advance of project production. Discuss the terms of institutional space for hosting the project including access and duration, and use a collaborators agreement to document the responsibilities of those involved. Other server space and hosting options include purchasing third-party managed web hosting,<sup>16</sup> or use of flexible hosting plans from code-based repositories such as GitHub.<sup>17</sup> Regardless of your server and hosting choice for a digital project, understand the terms for using that choice and request it early.

#### Institutional Sandboxes

A sandbox is a common term for research and development. For DH, a sandbox is a place to access and play with technology, in both physical or virtual environments. Access to a variety of software and hardware can help in the early stages of a project, helping to alleviate software installation challenges or help determining which software best suits a project. A physical sandbox location<sup>18</sup> can serve as an interdisciplinary computing facility that maintains a variety of software and hardware, and the development space needed for digital projects. Virtual sandbox environments allow its users to create and share educational projects, including

<sup>&</sup>lt;sup>15</sup> Available at http://www.datainfolit.org

<sup>&</sup>lt;sup>16</sup> One example is Reclaim Hosting https://reclaimhosting.com

<sup>&</sup>lt;sup>17</sup> GitHub plans range from individual and team-based; and from \$0 to \$7 or more a month. https://github.com/pricing <sup>18</sup> For a physical sandbox space example, see: Institute for Digital Research and Education (IDRE) at UCLA http://idre.ucla.edu/technology-sandbox; or the Teaching and Learning Commons at West Virginia University http://tlcommons.wvu.edu/sandbox.

media-rich websites. Commons in a Box<sup>19</sup> and Academic Computing Environments<sup>20</sup> are examples of digital sandboxes in use at CUNY and Fordham University (respectively) that enable users to experiment with university provided or open-source software such as Wordpress, Omeka, and more. Similarly, some institutions provide Web space and domains upon request, giving practitioners the ability to manager their own institutional Web space for projects.<sup>21</sup> If electing to use an institutional Web space, keep in mind the terms of using that space (access to it for the long-term).

#### Repository Options for Archiving

A repository provides digital preservation through documentation of the digital files collected by technical and administrative metadata on the file types, sizes, dates of file additions and the name of the person depositing the data. Common repository options include institutional repository, subject repositories, open data repositories, or other forms of free or fee-based repositories such as GitHub (public repositories are free; limited free private repositories; fee-based options), Dropbox, and Google Drive. Repositories (and certain websites) use persistent identifiers (URL, URI, or handle) that allow for access to and discovery of a project. Metadata is important in a repository as it is data describing the file deposited. This in turn helps the file to get index and discovered. Some code repositories, such as Github, do no use clear metadata for author or affiliation identifiers. In this case, consider using CodeMeta, a new standard format for software metadata. By including the corresponding JSON file in the Github page, the CodeMeta will help cite the file with the author, keyword, and other metadata associated with the project profile.

#### Archiving Dynamic Objects and Executables

A 2016 NSDA survey on web archiving practices in the United States<sup>25</sup> reported several external service providers that carry out Web archiving: Heritrix, HTTrack, Webrecorder, Web Curator Tool, and Wget, among others. Although some of these providers are able to capture dynamic content, such as Webrecorder, it only captures the web pages you visit, it does not automatically obtain non-visited pages of a website nor any content from links on those pages.<sup>26</sup> With an online game or tutorial (dynamic content) based on user choices, this means it is possible not all pages are captured; and it is also time consuming to go through all possible combinations of paths a user may choose in a game. Additionally, whether archiving static or dynamic content, built upon previously established standards and practices by leading organizations. For example, the National Digital Stewardship Alliance (NDSA) created the Levels of Digital Preservation, a rubric to help organizations manage preservation risks of digital materials (NDSA, 2013). Beyond websites and data visualizations, dynamic objects also include 3D objects, photogrammetry, and augmented, and virtual reality experiences, which should share a common agenda of digital curation (CLIR, 2019).

25 https://codemeta.org/github.io

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<sup>&</sup>lt;sup>19</sup> https://commonsinabox.org

 <sup>&</sup>lt;sup>20</sup> https://www.fordham.edu/info/25009/faculty\_technology\_services/1426/academic\_computing\_environment\_ace/1
 <sup>21</sup> See example at the University of Minnesota http://dash.um.edu/dash-domains or Humtech at UCLA http://humtech.ucla.edu/support.

<sup>&</sup>lt;sup>22</sup> Unique to each institution such as a university by preserving the scholarship produced at the institutions. See one example, https://jewlscholar.mtsu.edu

<sup>&</sup>lt;sup>23</sup> See the "Using Other Repositories" section at http://www.lib.berkeley.edu/scholarlycommunication/publishing/open-access-publishing/deposit-preserve

<sup>&</sup>lt;sup>24</sup> See http://oad.simmons.edu/oadwiki/Data\_repositories or http://www.share-research.org/

<sup>&</sup>lt;sup>26</sup> NSDA Web Archiving Survey Working Group. (2017). Web Archiving in the United States: A 2016 Survey. Report available at https://ndsa.org/documents/WebArchivingintheUnitedStates\_A2016Survey.pdf

<sup>&</sup>lt;sup>27</sup> https://guide.webrecorder.io/

#### Project Profile

A project profile is a descriptive summary of the project once it is complete and made available to the public. Components of the project profile may include the project title, staff, keywords, suggested citation, and software used. As oppose to the project charter, which is used in the planning stages of a project, the project profile is used to help highlight and index the project in its final form (such as dissemination in a publication<sup>27</sup> or on a website). Some projects list the Project Profile elements in an "About" page on a website. An example of a good "About" page is featured by Northeastern University Libraries' *Our Marathon* project.<sup>28</sup> The Project Profile can also include post-project development items, including references of the project in the media, scholarship produced with the project (peer reviewed articles, case studies, use in the classroom, etc.), team reflections (blog post or anecdotal feedback from collaborators who worked on the project), and additional/related projects. Project Profiles also provide a medium for announcing credit and reuse rights such as Creative Commons or other licensing. A Project Profile is a way to catalog key elements of the project that will result in better indexing (with tags or metadata) and discoverability in search engines.<sup>29</sup> See Appendix C for a fillable PDF template.

#### Collaborators Web Publishing Agreement

The Collaborators Web Publishing Agreement allows each project collaborator to grant or deny permission to have their name affiliated with the published project online, as described in the Project Profile. The agreement signals name-project affiliation in public-facing dissemination venues, including but not limited to the project website, press releases, news articles, or publications. *Note: this is different from a collaborators agreement used in project planning*. See Appendix D for a fillable PDF template.

#### Accessibility and Universal Design

Ng (2017) explains how universal design (UD) benefits everyone, not just those with disabilities. In her practical guide, Ng covers writing for the web, proper usage of links, audio and visual content including embedding third-party content, and several other helpful design considerations. Accessibility and universal design application for digital products, including documents, presentations, spreadsheets, video, audio, software and websites will help enable the preservation and wider use of such products for the long-term<sup>30</sup>.

DH projects often use images as part of their design and dissemination on websites. These images should include captions and alternative tags (abbreviated "alt" tags). These alt tags describe the image and its functions (W3C, 2017); and tutorials<sup>31</sup> for creating alt tags for different types of images are available online to help demonstrate the process by which to provide appropriate descriptions based on image type. Additional considerations should include the accessibility of non-HTML content such as embedded or downloadable PDF or text documents, spreadsheets, charts, graphs, and presentations; this includes the use of captions and transcripts for videos or audio (ARL, 2013) used in digital projects online. Other universal design considerations should encompass visual design with adequate spacing, mobile platform compatibility, use of headings, contrast with colors for text, and ease in locating and navigation. The objective is to prioritize simple design over complex. See Appendix E: Universal Design Checklist for a fillable PDF template.

<sup>&</sup>lt;sup>27</sup> Publications, such as book, include this profile information in the publication notes section, which is typically after the title page. See *page i* of this Digital Project Preservation Plan as an example.

<sup>&</sup>lt;sup>28</sup> https://marathon.library.northeastern.edu/home/about

<sup>&</sup>lt;sup>29</sup> See the project profiles of the DH Lab at Yale University http://dhlab.yale.edu/projects.html

<sup>&</sup>lt;sup>30</sup> See Section 508 to learn how to create and test for accessible digital products http://www.section508.gov/create <sup>31</sup> https://www.w3.org/WAI/tutorials/images/

#### DH Preservation Consortium

A key to preservation is understanding that failure is part of the preservation process. Discussing, analyzing and publishing on failures, data loss, or errors will benefit DH practitioners and the field at large (Dearborn & Meister, 2017). These discussions take place at local and national levels<sup>32</sup> but a preservation-centric subject repository for DH projects has yet to be developed although some strides in this area have been made.

#### Monitoring Developments

The Socio-Technical Sustainability Roadmap, an NEH (2016-2018) funded curriculum, is starting to see results from the project's workshop participants. Although this project was initially created to address sustainability of Medieval Art, the curriculum is transferable to other digital projects.

IIPC (2018) curated a list of widely-used web archiving tools and software, indicating which are stable, in development or deprecated. Experiments sometimes fail. Even organizations whose membership or missions change can also sunset due to preservation challenges. As of 2018, the Digital Preservation Network (DPN) decided to close operations due to insufficient participation and membership, which was essential to the community-based preservation model it practiced (DPN, 2019). Although DPN will cease to exist after March 2019, the resources it has developed in its tenure will remain accessible by preserving its web content in the Wayback Machine.<sup>33</sup> Organizations like the IIPC, NSDA, CNI, DLF, DCC, Educopia, LOC, and universities<sup>34</sup> that experiment with software and dynamic object archiving are entities to look to for future trends and developments in digital preservation needs (Rieger, 2018). The survey participants, 21 leaders with digital preservation leadership roles, indicated the state of confusion of preservation services and strategies as a major challenge. Ambiguity of responsibilities within organizations, storage costs, vulnerability of content, and insufficient tools for analysis and assessment of digital preservation are other challenges (Rieger, 2018). These challenges exist in addition to the unresolved solutions for dynamic object preservation which remains in a state of flux.

Emulation-as-a-Service (EaaS) model is currently being developed (2018-2021) by the Scaling Emulation and Software Preservation Infrastructure (EaaSI) program led by Yale University. The program is focusing on how technology and services can enable broader access to preserved software and digital objects, emulating software across a broach range of disciplines (Software Preservation Network, n.d. a). Other digital preservation research in-progress (2017-2020) is a project geared toward libraries, historical societies, and museums: Fostering Community of Practice: Software Preservation and Emulation Experts in Libraries and Archives (FCoP). FCoP is led by CalPoly University, with the goal of broadening participation in long-term preservation practices by establishing a community of practice and experimenting with web-based emulation sandboxes (Software Preservation Network, n.d. b).

[end of Additional Considerations section]

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 <sup>&</sup>lt;sup>32</sup> Examples include Humanities Commons (HCommons) https://hcommons.org and HASTAC https://www.hastac.org
 <sup>33</sup> Accessible at https://web.archive.org/web/\*/dpn.org

<sup>&</sup>lt;sup>34</sup> Universities are among the organizations experimenting with web archiving initiatives https://en.wikipedia.org/wiki/List\_of\_Web\_archiving\_initiatives

## Preservation Plan- A Summary and Checklist

DH practitioners and their institutions may have varying levels of infrastructure (human, technical, or financial). To help facilitate a checklist methodology, the guidance suggested in the preceding sections of this plan have been broken down into two levels of infrastructure: Minimal and Expanded. The following checklists offer suggestions, serving as a guide no matter your existing level of DH or preservation infrastructure. It is suggested that you choose which are applicable to your specific project, not necessarily to comply with each goal. See Appendix F for a fillable PDF version of the two checklists.

#### Minimal Infrastructure (or Short-term) Preservation Goals

- Build a list of collaborators of varying backgrounds, skills, and strengths.
- Use a Project Profile (description including human, financial and technical components of the project on the website and/or repository).
- Whenever possible, use open standards and formats in developing DH projects.
- Develop a Digital File Inventory (spreadsheet or other organized system of all files associated with the project).
- Document and deposit the process, decisions, and code (if applicable) in a readme file or narrative summary for **internal** purposes, preserving the project's reproducibility.
- Determine which elements (from point above) should be preserved and available for **external** purposes or public audiences, and place on the project's website and/or archival repository.
- Collect a Web Publishing Agreement from each collaborator.
- Use a web-archiving tool or repository to preserve a project's current static and dynamic functionality and project documentation (external).
- Use rights statements and/or licensing for attributing credit or reuse permissions for projects, research, code, and metadata developed. This is one way for a project to have a longer life, by giving permission for its use, including attribution and/or remixing allowances.
- Create suggested citations of the intellectual property for discovery, crediting and sustaining use. This can help encourage citation and lessen confusion on how to cite/attribute credit.
- Export and save versions (servers, code, development notes, and native file formats) in a structured organization system; and save copies in different locations.
- Encourage data and digital literacy education.

The following checklist offers suggestions for projects with an expanded infrastructure:

#### Expanded Infrastructure (or Long-term) Preservation Goals

- All the above minimal infrastructure goals above.
- Consider current migration, emulation, or other preservation capturing methods for archiving dynamic objects and executables.
- Reflect on the intended use of the project from the user's perspective and address user experience design questions and methods.

- Creation of an institutional space for student and faculty project development for both testing and production. The servers used for the sandbox environment should be backed up just as would a digital file.
- Employ accessibility standards for text, images, and multimedia elements in projects including but not limited to transcriptions, closed captioning, alt tags, site maps, and browse and search options.
- Use existing digitization standards, metadata schemas, encoding practices, and code/version management.
- Monitor research and development in preservation practices in various disciplines and create a preservation practices rubric to follow for consistency among projects.
- Collaborate with other campus or community units and experts on best practices and experiment with available resources.
- Develop a consortium of like-minded collaborators across departments and/or institutions for potential development of a DH preservation repository/database.

[end of Preservation Plan-A Summary and Checklist section]

### References / Plan Resources

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Programming Historian. https://programminghistorian.org

Scalar. (n.d.). Alliance for Networking Visual Culture. http://scalar.me/anvc/scalar

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#### Organizations Focusing on Digital Preservation

centerNet. http://dhcenternet.org

Coalition for Networked Information (CNI). https://www.cni.org

Council on Library and Information Resources (CLIR). https://www.clir.org

Digital Curation Centre (DCC). http://www.dcc.ac.uk

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- Webrecorder. (n.d.). Rhizome. Available at https://webrecorder.io

#### **Preservation Practices and Polices**

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- Dartmouth College. (2011). A Report from the Digital Projects and Infrastructure Group. Dartmouth Digital Library Program. https://www.dartmouth.edu/~library/digital/about/report.html
- Dearborn, Carly, and Sam Meister. (2017). Failure as Process: Interrogating Disaster, Loss, and Recovery in Digital Preservation. Educopia Institute. Available at https://educopia.org/wp-content/uploads/2018/04/dearborn\_meister\_failureasprocess.pdf

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## Appendices

#### Overview

There are six appendices identified as A-F. The appendices are included here, part of the Digital Project Preservation Plan as complete document. However, the appendices are also available individually, as separate PDF downloads.

It may be more helpful to select which appendices are applicable to a project and only use the necessary parts of this plan. The individual PDF downloads are fillable versions and can be accessed at https://jewlscholar.mtsu.edu/handle/mtsu/5761.

## Appendix A: Project Charter (Limited)

Project Description Provide a brief description of the digital project.

#### Scope / Out of Scope

List the type of materials utilized for this project. This includes primary sources, digital platforms, and locations (physical or virtual) that will be associated with this project. Describe features, services, and products, if any, that will be an outcome of this project. Please include local, regional, or national affiliations, collaborators, target audiences, and functional requirements. Below that, define the boundaries of the project, what specifically, will not be included (if any).

#### Deliverables

Define the intended end product(s) of the digital project (check all that apply):

White paper
Scholarly research publication
Digital collection and/or exhibit
Multimodal or interactive active narratives (ie: digital storytelling, digital games)
Immersive media applications (ie: AR, VR)
Digital objects (ie: 3D objects, images, audio, video, data visualizations)
Documentation (ie: internal use, user guides, workflows, procedures, outreach materials)
Other

For any of the deliverables above, please describe any software that will be used in creating the end product(s). For example, the digital method of spatial analysis could use tool/software of QGIS, Story Maps, StorymapJS, or CartoDB. The digital method of text analysis could use the tool/software Voyant or R. In depth, responses are not necessary; simply listing the method and software is enough.

#### Intended Platform for Delivery

With the above deliverables in mind, select which platforms you intend to use for dissemination (check all that apply):

Institutional Repository Open Access Journal Other scholarly journal CONTENTdm Website Other locally hosted software installations (Omeka, Curatescape, OMP, etc) Other externally hosted software installations (Scalar, Omeka, PressBooks, etc) Other

For any selections with "other," briefly describe:

#### **Project Goals**

Describe the overall goals of the project, including how it will be utilized. This could include the general public, specific group, or an academic institution, etc.

#### Potential Risks

A number of items may prevent a project from moving forward (funding, staffing, timeline, etc). List any limitations or concerns for the project, which may include collaborators, stakeholders, intellectual property concerns, and ethics or privacy issues (especially if working with students). If possible, list approaches to help mitigate these risks.

Success Factors Describe how the project will be measured for success.

Roles and Responsibilities TEAM MEMBER NAME Project Owner	DEFINE ROLE AND RESPONSIBILITIES	PERCENTAGE OF TIME
Project Sponsor (if any)		
Team Member 1		
Team Member 2		
Team Member 3		
Team Member 4		
Team Member 5		

#### Project Timeline

Describe any factors that may affect the timeline, including funding, grant mandates, student availability, resource availability, conference travel, etc.

#### Project Requirements

Identify what this project needs that is not already understood or in use. For example: outsourcing digitization, transcription, or website development; team members requiring training; tools or skills needed for project completion; item purchases or travel/fieldwork.

#### Funding

Describe any grant-funded objectives or mandate, and the timeframe for the grant award.

## Appendix B: Digital File Inventory Item

#### **Title of Document**

#### **File Name with Extension**

Saved Location (For best practices, save in three separate locations. For example (1) local machine, (2) external hard drive, and (3) cloud or additional off-site external hard drive. Cloud storage is not recommended for sensitive data because *it is third-party storage)* 

(1)	
(2)	
(3)	

#### Creator(s)

Date Created:

**Date Last Modified:** Type/Format: Text Numeric Image Audiovisual 3D/AR/VR Code Other

#### Preservation Copies (alternate/open format)

(For best practices, preserve the original format and open format (if not original). For example tabular data created in Excel, should be saved in Excel (above in Saved Location), but also in an open format such as CSV. Include the file name and location saved such as a hard drive, and/or archives or repositories with permanent identifiers)

Copy (1) File Name:

Location Saved:

*If applicable:* 

Copy (2) File Name:

Location Saved:

#### Preservation Copies Date Last Saved [yyyy:mm:dd]

#### Associated with an Approvals Plan (ie: IRB, MOU, Agreement) or Sensitive Data:

Yes (indicate Title of Document below and include it in the Digital File Inventory list) No

Document described in the readme file? Yes (indicate page number or section) No

## Appendix C: Project Profile

*External / Public-facing scholarship description of a digital project after completion:* 

Title of Project

**Brief Description** 

**Creator(s) of Project** 

**Date of Project** 

**Publication Date** 

**Grant or Sponsor Information (if applicable)** 

**Keywords** 

Identifier (URL, DOI, Handle) of Project

Affiliation and/or Related Links (if applicable)

**Recommended Citation** 

INTERNAL USE ONLY:

Collect the **Collaborators Web Publishing Agreement** from each of the Creators, signally permission to have their name affiliated with the published project online, as described in the Project Profile.

## Appendix D: Collaborators Web Publishing Agreement

The purpose of the Collaborators Web Publishing Agreement is to acknowledge the final outcome of a digital project; and recognize collaborators listed in the Project Profile. The final outcome of the project may include scholarly essays, a website, data visualizations, screencasts, computer code, multimedia components, and/or a final report, among others. *Note: this is different from a collaborators agreement used in project planning.* 

If this final outcome (or related components) includes publishing on the Web, permission is sought from each team member (creator) associated with the production of the project. The project owner is responsible for filling in the first half and distributing to each collaborator. Each collaborator fills in the second half (shaded sections) indicating permission status.

#### **Final Project Title:**

The above project is produced by \_\_\_\_\_

#### The above project will be placed on the website \_\_\_\_

and as a result may appear in other forms of dissemination including but not limited to press releases, news articles, or as a citation in other scholarly works, digital projects, or websites.

#### Collaborator:

Do you grant permission for your name to be listed as a creator or contributor to the above project?

No, I do not want my name affiliated with this project. I understand the project will be made available online, without identifying me as a collaborator.

Yes, I want my name listed as a collaborator

Name:

Date:

*If you later change your mind, contact the project owner to update the Project Profile and this agreement.* 

-----

#### **Optional**:

\*Permission must be attained from students whose independently created scholarly subcomponent(s) may have been submitted for a grade. Permission to use a version of this work must also be included. Use "Sub-Component Title" on this form to give consent to place a copy of the scholarly contribution on the project website. Fill out this form and the Digital File Inventory of the scholarly contribution and give both to your professor. These forms, along with a copy of the original file and open/preservation copy should be given to your professor for placement on the project website. **ENTER SUB-COMPONENT TITLE BELOW:** 

## Appendix E: Universal Design Checklist

#### Purpose

Digital projects often use a variety of elements on their webpages; this includes, images, charts, data visualizations, videos, audio, 3D objects, interactive or dynamic objects, and text in many forms such as PDF, word processing document, and schemas such as XML, HTML, or TEI. As part of digital project design and dissemination of projects on websites, it is paramount that steps be taken to assure these elements, both holistically and individually, are accessible and designed with universality in mind.

Universal design (UD) benefits everyone, not just those with disabilities.<sup>36</sup> In her practical guide, Ng covers writing for the web, proper usage of links, audio and visual content including embedding third-party content, among other helpful design considerations. Accessibility and universal design considerations for digital products help to enable the preservation and wider use of such products for the long-term. The objectives of this document is to present a basic, consolidated resource. It is not meant to be a definitive representation of all UD aspects.

#### Objectives

- To aid in the fulfillment of making a good faith effort at addressing accessibility and universal design considerations for digital products;
- Provide guidance on understanding and developing products with the user experience in mind;
- Continue the re-evaluation of workflow procedures as part of the continuous cycle of development for digital projects;
- Use the UD Checklist as a guiding practice until a professional Web Developer and/or Accessibility Specialist is hired or joins your project team;

#### Instructions

Apply the UD Checklist to your finished digital project, the final version that will be published on the Web. As the UD Checklist tasks are completed, mark the corresponding box with a check mark and indicate the date of completion. Resources of the various tasks on the UD Checklist are available at the References/Plan Resources section of Digital Project Preservation Plan (Full Plan Version 2).

Additional considerations should include the accessibility of non-HTML content such as embedded or downloadable PDF or text documents, spreadsheets, charts, graphs, and presentations placed online; and the use of captions and transcripts for videos or audio (ARL, 2013) used in digital projects. Other universal design considerations should include visual design with adequate spacing, mobile platform compatibility, use of headings, contrast with colors for text, and a focus that allows users to find and navigate the page with ease.

<sup>&</sup>lt;sup>36</sup> Ng, C. (2017). A Practical Guide to Improving Web Accessibility. Weave: Journal of Library User Experience, 1(7). https://quod.lib.umich.edu/w/weave/12535642.0001.701?view=text;rgn=main

<sup>&</sup>lt;sup>37</sup> Association of Research Libraries (ARL). (2013). Web Accessibility Toolkit. http://accessibility.arl.org

		Digital Proj	ject Preserva	ion Plan   Full Plan:	: Guide and Templates
		Project Own	er:		
Produ From t	ict Designation he list below, se	n lect which product typ	e this checklist	is based on:	
	Website	Document	Image	Audio/Video	3D Object
	AR/VR	Other			
Product Name [indicate the title of the associated project or file]					
Organ	ization Heading and si	ubheading elements ar	re used through	out and in proper sequ	iencing
	Correct placen	nent and use of project	t branding, inclu	ude logos, fonts and pla	acement

Consistent colors and font sizes. Use easy to read fonts such as Arial, Calibri

Sufficient color contrast in both text and graphics

Date for completed tasks above: \_\_\_\_\_\_

#### Documents

Created in an accessible form. See best practices #8 in the OER Accessibility Toolkit

Date for completed tasks above: \_\_\_\_\_

#### Images

Note: images can include photos, drawings, charts, graphs, and maps

Use of Alternative Text (alt-text) to describe the image function (skip if image is purely decorative and does not convey contextual information)

If image is placed on the webpage directly, make sure the HTML image source is responsive

Date for completed tasks above: \_\_\_\_\_

#### Links

Link name is contextual information, not generic

Link opens in the same window or tab; Or the new window or tab is mentioned in the link information

Confirm there are no dead links; all links open as intended

Date for completed tasks above: \_\_\_\_\_\_

#### Audio

If audio files are used (without video or images), create an accessible transcript to accompany the audio files

Date for completed tasks above: \_\_\_\_\_

#### Video

Create closed captions for video and a transcript of the complete narration. The closed captions should be embedded in the video and the transcript should accompany the video file.

Date for completed tasks above: \_\_\_\_\_\_

#### Testing

Use the appropriate technology to test the digital product (for example, WAVE for websites; Screenreader device for websites and documents; Accessibility checkers for document creation)

Use of small group of beta testers on digital product. Select a variety of users include student, faculty, and users with varying levels of visual, hearing, motor and cognitive abilities.

Confirm any sensitive data is removed before publishing on the Web.

Date for completed tasks above: \_\_\_\_\_

#### Archival Copy

Save original format file in three different locations: 1) local machine; 2) external hard drive and 3) off-site external hard drive or cloud [indicate file name/location saved] :

If original format is proprietary or closed, save an additional copy in an open format [indicate file name/location saved]:

If published online, use of Web archiving tool for digital product (such as Wayback, Webrecorder) [indicate web archive location, if applicable]:

Date for completed tasks above: \_\_\_\_\_\_

## Appendix F: Preservation Guidance Checklist

The preservation goals for minimal and expanded infrastructures will vary by project. It may not be necessary or possible to comply with each goal on the checklist. Use as a starting point and modify.

#### Minimal Infrastructure (or Short-term) Preservation Goals

Check	Date	Goal		
		Use open standards and open, uncompressed, non-proprietary formats (if possible)		
		Build a list of collaborators of varying backgrounds, skills, and strengths		
		Collect a Web Publishing Agreement from each collaborator		
		Use a web-archiving tool to preserve the project's static functionality		
		Use a Project Profile (on the website and/or repository)		
		Document the process/decisions in a readme file or summary for internal purposes		
		Determine what should be preserved and available for external purposes		
		Use rights statements and/or licensing for attributing credit or reuse permissions for projects, research, code, and metadata developed		
		Create suggested citations of the intellectual property		
		Export and save versions (documents, code, development notes, and native		
		file formats) in a structured organization or inventory system		
		Save copies in three different locations		
		Data and digital literacy education		
Expan	ded Infrastruc	ture (or Long-term) Preservation Goals		
Check	Date	Goal		
		All the above minimal infrastructure goals above		
		Consider migration, emulation, or other new preservation capturing method		
		Reflect the user's perspective; address user experience design methods		
		Creation of an institutional space for student and faculty project development		
		Employ accessibility and universal design standards		
		Use standards for digitization, metadata schemas, encoding, code management		
		Monitor research and development in preservation practices in various disciplines and create a preservation practices rubric to follow for consistency among projects		
		Collaborate with other onsite units and experiment with available resources		
		Develop a consortium of like-minded collaborators across departments and/or		

institutions for potential development of a DH preservation repository/database

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## Glossary

A selection of basic definitions for terms used in the Digital Project Preservation Plan

**Accessibility:** The qualities of a product, service or website that allow ease of use by all persons, regardless of the varying levels of abilities.

**Capture:** The process acquiring or collecting digital objects or web pages, including its content, elements, and features (HTML, CSS, Javascript, interactive features or embedded media).

**CSV** (Comma Separated Values): File type for formatted data exported from a table or spreadsheet and separated by commas.

**Data Curation:** The practice of collecting data with a standardized approach that aids in the preservation, discovery and maintenance of data sets.

**Deliverable:** A planned ending, product or output of a digital project.

Digital File Inventory: An organized list of all files (image, text, code, video, etc) associated with a project.

**Digital Humanities (DH):** An interdisciplinary area of study that emphasizes the approach, experimentation, and design of using interactive technologies to expand the participation, the modes of access, and the dissemination of scholarship in the humanities disciplines; a subset of Digital Scholarship.

**Digital Literacy:** One's ability to recognize and use components of digital information in various platforms and applications, including how information is created and used in digital environments.

**Digital Object:** A piece of information (image, word processing file, audio file, etc.) in digital form. Several digital objects can make up a digital project.

**Digital Project:** A broad term encompassing varying levels (planning, preparation, production) and types of interrelated tasks and materials that collectively transform digital objects into a complete work.

**Digital Preservation:** A set of actions required to maintain access to digital objects or projects for long-term use; this includes advancing beyond the lifespan of technologies used in the original content's creation.

**Digital Scholarship (DS):** Part of the scholarly communication process, where scholarship is enhanced by the design of digital projects, incorporation of digital tools, collaboration among digital partners, and dissemination through digital platforms.

**Dynamic Object or Resource:** Digital object that requires interaction to function such as online games, interactive data visualizations, hyperlinked media, and executable software programs.

**Emulation:** The preservation of both the functionality of the software and the actual hardware used to run the software.

**File Format:** A standard way to encode a file so a computer can read, display, print and save the information of the file; this includes formats and naming conventions. An open format is made freely available to anyone. A closed or proprietary format is controlled by a company that decides how and if the file format can be used. See page 11 for more information on open and closed file formats.

**Metadata:** Data about data; this can include descriptive information for individual digital objects. Useful in cataloging digital objects to assist in indexing, retrieval, and preservation.

**Migration:** The transfer of digital information from an older hardware/software configuration to a newer one.

**PDF** (Portable Document Format): A standardized open format for presenting documents.

**Persistent Identifier:** An actionable/linkable (via a browser), public and unique identifier or location that lasts over time. Examples include:

**DOI** (Digital Object Identifier), popular with journal publishing, embedded in a URL as http://dx.doi.org

Handle an identifier managed through an API or user interface, embedded in a URL as http://handle.net

URL (Uniform Resource Locator) typical address for web content, beginning with "http://"

Plugin: An additional software needed to run a program.

**Preservation Copy:** A copy of the digital file that is better suited for long-term preservation with less chances of degradation or access to original file format (if proprietary or closed); serves as an alternative or open format of the original file.

**Project Charter:** A set of guidelines that govern a project including the goals, objectives, limitations, timeline, deliverables, team member responsibilities, etc.

**Project Profile:** Descriptions (metadata) of key elements for a project that help explain its purpose and aid in its discovery. Descriptors may include the title, creators, keywords, publisher, suggested citation, copyright, and Web links.

**Project Owner:** A creator, originator, or designated person with the highest or overall responsibility of a project.

**Readme File:** In general, a form of documentation describing the technical specifications needed to run software. For DH purposes, serves as a narrative summary of how each file is connected to the digital project. A DH readme file puts the development process into words; it can describe how different elements of a project fit together, including the process, workflow, and decisions made along the way. Variations can be created that prove useful for archiving a project's methodology internally or explaining a project's purpose to an outside audience.

**Repository** (Digital, Institutional, Subject): A place or location that stores data with a dedicated technical infrastructure responsible for ingesting, maintaining and preserving digital objects deposited by users. Deposits are described with metadata, given permanent identifiers (URI, URL, Handle) and made accessible and discoverable in search engines and databases because its contents are indexed.

**Server:** A physical or virtual combination of hardware and software that carries out services for programs in a network (a location that hosts the digital files that make up a project).

**Web Archive:** A location that allows future access to captured content from Web archiving, which is the process of collecting digital objects from the Web with the intent to manage and preserve them for long-term storage and usability.

**Universal Design:** An approach to the design of products or services that accounts for the needs of all types of potential users.



### **Digital Project Preservation Plan**

A Guide for Preserving Digital Humanities / Scholarship Projects https://jewlscholar.mtsu.edu/handle/mtsu/5761