Prepping for Your Summer Research Project

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http://guides.library.upenn.edu/digital-research-methods
The Arc of a Digital Project??

Planning

Collection & Analysis

Sharing & Publication
The Arc of a Digital Project

Cycle

Planning

Collection & Analysis

Sharing & Publication
1. Planning a Digital Project
Have a Plan
Document your Expectations

1. Purpose
2. Scope
3. Partners
4. Deliverables
5. Timeline for Completion
6. Funding
7. Launch Plan
8. Ownership
9. Afterlife

- For large, complex projects, write a Memorandum of Understanding or Project Charter
  - For examples, check out [https://t.co/zg0LEc7RQe](https://t.co/zg0LEc7RQe)
  - Look at what your funder requires
  - Consider a data management plan: [http://guides.library.upenn.edu/data-management](http://guides.library.upenn.edu/data-management)

- For smaller projects, consider free project management tools
  - Trello
  - Asana (freeish)
  - Basecamp (free with a .edu email)
  - Slack
  - Google Drive
Find the Right Software for You!

1. Visit our Guide:
   
guides.library.upenn.edu/digital-research-methods

2. Research the trends in your field

3. Schedule an appointment!
What to Consider when Evaluating Software...

- What kinds of User Stories is this application really designed to serve?
- Is it Open Source or Proprietary?
- How is it supported?
  - Is it actively being developed?
- How can you get your work out of the application?
- Is the data separable from the interface?
- What kind of tutorials/trainings are available?
- How customizable is it? Is that important?
- Does it have a good Community of Support?
- Is Minimal Computing a factor?
- Does the Penn Libraries offer support?
User Stories

> Describe who & what (but not how!)
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Minimal Computing

What do you really need?
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Choose your Method of Engagement

Do It Yourself

Join a Learning Group

Bring in a Partner
# Omeka

**What Can I Do With Omeka?**

- Build a Digital Exhibit
  - Enhance a physical exhibit
- Collaborate to Tell the Story of a Collection
  - Add an Omeka project to a course
  - Use as an alternative to a final paper
- Create a Digital Archive
- Crowdsource Your Research
- Design Mobile Tours
- Build a Map Narrative

**How Do I Get It?**

- Email [sashafr@upenn.edu](mailto:sashafr@upenn.edu) to schedule a consultation for setting up a free Omeka site, hosted by the Penn Libraries

**Training & Help**

- Guide: [https://guides.library.upenn.edu/omeka](https://guides.library.upenn.edu/omeka)
- Course Integrated Workshops
- Open Library Workshops
- One-on-One Consultation
- Digital Humanities Office Hours (Fri 2-4pm, Weigle)
Omeka Examples

Simple Exhibits

Mapped Narratives

Course Projects

Digital Archives

Mobile Tours

Crowdsourcing
Omeka Examples

Simple Exhibits

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Digital Archives

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Crowdsourcing

Bonus! Enhance Your Publication!!!
Scalar

What Can I Do With Scalar?

- Author a Digital Research Paper
- Start an Online Journal
- Collaborate to Develop a Multi-Linear, Interactive Narrative
  - Embed narrative web elements like StoryMapJS, TimelineJS, Youtube, Sketchfab, and Oral History Metadata Synchronizer
- Supplement a Thesis or Dissertation

How Do I Get It?

- Email sashafir@upenn.edu to schedule a consultation for setting up a free Scalar site, hosted by the Penn Libraries

Training & Help

- Course Integrated Workshops
- Coming Soon! - Public Library Workshops
- One-on-One Consultation
- Digital Humanities Office Hours (Fri 2-4pm, Weigle)
Scalar Examples

Online Journals

Course Projects

Supplement to a Thesis or Dissertation
Tools for Mapping Narratives

TimelineJS

StoryMapJS

StoryMap by Esri

Neatline
Visualizing Spatial Data

Example: Creating a map that shows ancient trade routes, with find spots of several sunken vessels, including some historical maps and historical coastlines. Your find spot data is in Excel.

- Designed for building your own custom base maps
- Free Limited Account option
- Browser Based
- Allows you to georectify images of old maps onto basemaps
- Free
- Browser Based
- Allows you to import base maps
- Can easily upload .csv data
- Free limited account
- Browser based
Visualizing Spatial Data

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Analyzing Spatial Data

Example: Multiple geometry data collected from an archaeological survey, which you would like to use to determine where to conduct next season’s fieldwork

ArcGIS

➢ Extremely powerful software suite with extensive analysis packages
➢ Windows-Only desktop software
➢ Difficulty: Complex
➢ Available on all Library Desktop Windows PCs

QGIS

➢ Shares most of the same package library functionality with ArcGIS
➢ Works on Windows, Mac, Linux, and Android
➢ Difficulty: Complex
➢ Free to download

CARTO

➢ Fewer analysis capabilities compared with ArcGIS & QGIS, but growing everyday
➢ Web-based
➢ Great for collaboration
➢ Allows a limited amount of interactive capabilities
Library Resources for Mapping

Girmay Misgna
Mapping and Spatial Data Librarian
gmisgna@upenn.edu

• Mapping and GIS Guide: https://guides.library.upenn.edu/mapping
• Spatial Data Guide: http://guides.library.upenn.edu/data
• Dirt Directory: http://dirtdirectory.org/
AntConc

What Can I Do With AntConc?

- Look at Keywords in Context
- Identify Distinctive Words
- Explore Co-occurrence Patterns
  - Some words appear together more frequently than others
  - Different words will appear together in different documents
- Find Passages for More Careful Reading

How Do I Get It?

- Download the software from http://www.laurenceanthony.net/software/antconc/
- The Perseus Project provides a large collection of text archives for analysis.

Training & Help

- Course Integrated Workshops
- Coming Soon! - Public Library Workshops
- One-on-One Consultation
- Digital Humanities Office Hours (Fri 2-4pm, Weigle)
Topic Modeling Tool

What Can I Do With the Topic Modeling Tool?

- Identify Broad Patterns in Vocabulary Usage
- Examine Correlations Between Topics and Existing Metadata
  - Requires you to collect metadata about authors, publication dates, and so on.
  - Topics will often rise and fall in popularity over time, or be discussed more or less frequently in different regions.

How Do I Get It?

- Follow the Quickstart Guide at https://senderle.github.io/topic-modeling-tool/documentation/2017/01/06/quickstart.html

Training & Help

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- Coming Soon! - Public Library Workshops
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- Digital Humanities Office Hours (Fri 2-4pm, Weigle)
Library Resources for Text Analysis

Scott Enderle
Digital Humanities Specialist
enderlej@upenn.edu

- Text Mining Guide: https://guides.library.upenn.edu/penntdm
- Dirt Directory: http://dirtdirectory.org/
Cleaning up Data with OpenRefine

- Formerly Google Refine - Free desktop software, Mac/Linux/Windows Compatible
- You can download the software at: [http://openrefine.org/download.html](http://openrefine.org/download.html)
- Installing OpenRefine can sometimes be frustrating, but I’m here to help!
- To open:
  - On Windows, double click openrefine.exe
  - On Macs, double click icon
- To close:
  - On Windows, switch to that Command window, and press Ctrl-C. Wait until there's a message that says the shutdown is complete. That window might close automatically, or you can close it yourself. If you get asked, "Terminate all batch processes? Y/N", just press Y.
  - On Macs, switch to the OpenRefine app (clicking on its icon in the dock) and invoke its Quit command.
Getting Started with Data Viz and Tableau Public

- For publishing interactive data to the web
- Free desktop software, but all data is stored publicly on Tableau’s cloud
- Students and instructors can get a free, full desktop version; there is also a paid full version
- Mac & Windows friendly
- Download at [https://public.tableau.com](https://public.tableau.com)
  - Free student version at: [https://www.tableau.com/academic/students](https://www.tableau.com/academic/students)
Advanced Data Viz with D3 and RAW

- Simple tool for creating complex visualizations using the D3 library
- Completely Web Based!
- Good way to explore whether D3 might be right for you!
- [http://rawgraphs.io/](http://rawgraphs.io/)
Making Information Beautiful

- [https://informationisbeautiful.net/](https://informationisbeautiful.net/)
- Consider accessibility!
- Stay true to the data
- Communicate by design - Control where the eye goes
- Customize your colors to have meaning
  - Look to nature for ideas! - Use “relaxing” colors as backgrounds, use contrast to draw attention
  - Don't use the full rainbow
- Stay consistent! If you are showing two diagrams, make sure colors match
- Check out Makeover Monday: [http://www.makeovermonday.co.uk/](http://www.makeovermonday.co.uk/)
Library Resources for Data

Data Curation Librarian
Margaret Janz
mjanz@upenn.edu

- Data Management Guide: http://guides.library.upenn.edu/data-management
- Spatial Data/ArcGIS Guide: https://guides.library.upenn.edu/data
- Dirt Directory: http://dirtdirectory.org/
2. Collection & Analysis
Document Everything You Do

Why Do I Care?!

- Outcomes of a digital research project are **multimodal**
- Documentation makes your digital research **replicable**
- Give back to the scholarly community by allowing the **reuse** of your research
- **Funder Are Catching On!**
Document Everything You Do

How Do I Document Everything?!

- Investigate the standards in your field
- Create a Code Book, include:
  - File Naming Conventions
  - File Structures
  - File Formats
  - Where everything will be stored
    - Remember 3, 2, 1!
  - Security & Back-Up
  - Methodology of Research Collection & Analysis
  - Controlled Vocabularies (use linked data if you can!)
  - Define abbreviations, “code”, and metadata
  - Include sample formatting
- Consider versioning software!
Communicate with Your Team

Tools:

- Trello
- Asana (freeish)
- Basecamp (free with a .edu email)
- Slack
- Github
Give Your Project an “Agile” Boost

Agile programming encourages goals & deliverables be broken down into sprints.
3. Publication & Sharing
Open Access & Publishing

- Deposit Materials in Scholarly Commons
- Open Access
- Open Access Publication Fund

http://repository.upenn.edu/
Scholarly Commons

- Permanently store your published and unpublished research in a free and open repository
- Track access to your uploaded materials
- Share a wide variety of file types, including images, videos, 3D models, and static data sets

http://repository.upenn.edu/
Data Repositories

- Open Science Framework
- FigShare
- Scholarly Commons
- Github
Linked Open Data - Creating a Network of Context
digital humanities
OFFICE HOURS
2:00PM-4:00PM
WIC SEMINAR ROOM, 1ST FLOOR

ARE YOU CURIOUS ABOUT WHAT DH COULD MEAN FOR YOUR WORK?

DO YOU HAVE AN IDEA FOR A DH PROJECT, BUT DON'T KNOW WHERE TO START?

ARE YOU INTERESTED IN LEARNING ABOUT & EMPLOYING NEW RESEARCH TOOLS?

ARE YOU A STUDENT WITH A QUESTION ABOUT A DIGITAL CLASS ASSIGNMENT?

STOP BY AND LET DH SPECIALISTS HELP YOU GET STARTED!

*open to Penn students, faculty and staff
Thank You!

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http://guides.library.upenn.edu/digital-research-methods

Come visit me at the Museum Library!

https://xkcd.com/365/