

CORE

Lab 5: Ethical Provenance and Privacy Packet

Document lineage, attribution, bias, privacy, and disclosure before publication

Chapter Chapter 5	Level Beginner	Time ~90-120 min
Mode Individual or pair	Technology Any course-approved LLM	Deliverable Setup notes

Why This Lab Matters

Chapter 5 treats ethics as craft hygiene: ordinary habits that keep elegant maps from becoming careless or harmful. Your goal is not to make a finished map. Your goal is to decide what evidence, attribution, restraint, and disclosure a map would need before it deserves to be public.

Essential question

What cartographic decision should you be able to defend by the end of this lab?

Learning Objectives

- Explain provenance as a chain of custody across data, prompts, models, design decisions, and publication.
- Create prompt metadata that supports reproducibility and later critique.
- Write attribution and style lineage notes that build trust.
- Use an LLM to surface bias, fairness, and explainable style concerns.
- Screen a map concept for privacy and representation risks.

At a glance

Inputs: Lab scenario, prompts, data notes, or map concept supplied in the activity.

Outputs: Setup notes; 10-item provenance record; Prompt metadata template with honest unknowns.

Evaluation: Clear purpose, defensible cartographic judgment, concise prompting, and evidence of human verification where needed.

LAB WORK

Setup: Choose an Ethically Interesting Map ~7 min

Choose a map idea that could help people but could also mislead, expose, stereotype, or overstate if handled carelessly.

- Crime or calls for service near neighborhoods
- Evictions, housing code complaints, or homelessness services
- Public health, disease incidence, or clinic access
- Wildlife poaching, invasive species, or sensitive habitat
- School performance, transit access, traffic safety, or environmental burden

Map idea:
Audience:
Purpose:
Potential benefit:
Potential harm if handled badly:
One dataset or data type I imagine using:
One design style or inspiration I might be tempted to borrow:

PROCEDURE

Part 1 — Build the Chain of Custody ~18 min

Provenance in prompt cartography extends beyond dataset origin. It includes model use, prompt history, design choices, and publication decisions.

Act as a provenance reviewer for an LLM-assisted web map. Using the map idea below, create a chain-of-custody checklist with these columns:

- item to document
- why it matters
- evidence I should preserve
- risk if missing

Include dataset origin, license, last update, transformations, model name, prompt archive, classification method, style influences, human review, and publication date.

Map idea:
[PASTE SETUP NOTES]

Mini-deliverable

Revise the checklist into a 10-item provenance record you could actually keep in a project folder.

PROCEDURE

Part 2 — Draft Prompt Metadata ~15 min

Prompt metadata makes a map reproducible enough to critique later. It also makes your directorial decisions visible.

Create a prompt metadata template for my map project. Use plain JSON-like fields, but keep it readable for a human reviewer. Include:

- project title
- human cartographer
- date created
- model or models used
- prompt archive location
- data sources
- transformations
- classification method
- style influences
- privacy protections
- human review notes
- publication disclosure text

Fill in as many fields as you honestly can. Mark unknowns as unknown rather than inventing details.

PROCEDURE

Part 3 — Attribution and Style Lineage ~15 min

Chapter 5 distinguishes legality from ethics. If your map borrows a visual lineage, name it clearly instead of hiding it inside adjectives.

Review this map concept for attribution and style lineage. Identify:

1. dataset credits I should show
2. licenses or update dates I should verify
3. basemap or tile credits that might be required
4. style influences I should acknowledge
5. places where an LLM might invent or omit attribution

Then draft a concise Data Sources and Credits section.

Reminder

Over-attribution is usually safer than under-attribution. Transparency builds trust because readers can inspect the lineage of the argument.

PROCEDURE

Part 4 — Bias and Explainable Style Check ~20 min

In prompt cartography, bias can hide in adjectives, labels, classification choices, and the implied audience. Ask the model to explain its design logic before you accept it.

Act as a skeptical cartographic ethics reviewer. Audit my map concept for explicit and implicit bias. Pay special attention to:

- adjectives or labels that frame people or places unfairly
- classification choices that could exaggerate or hide patterns
- color palettes that imply blame, danger, safety, or moral judgment
- missing perspectives or affected communities
- claims the map might imply without evidence

Then propose one alternative framing and explain what it changes ethically.

Mini-deliverable

Write a 5-7 sentence explainable style note: why these visual choices are appropriate, what they avoid, and whose perspective they privilege.

PROCEDURE

Part 5 — Privacy and Sensitivity Screen ~20 min

Privacy is not only about whether a dataset is public. It is about whether your map makes people, routines, protected categories, or vulnerable places easier to target.

Screen this map concept for privacy and representation risk. Classify each risk as low, medium, or high. Include risks related to:

- individual addresses or precise points
- small counts or rare categories
- sensitive populations or protected classes
- stigmatizing place labels
- zoom levels that reveal too much detail
- popups, labels, or downloadable data

For each medium or high risk, recommend a mitigation such as aggregation, masking, coarser zoom, removing labels, changing tone, or adding uncertainty language.

Mini-deliverable

Create a publish / revise / do not publish decision, with one sentence naming the strongest privacy reason.

PROCEDURE

Part 6 — Public Disclosure and Archive Plan ~15 min

Disclosure is a design choice. It tells readers that AI assistance did not erase human responsibility.

Draft a short public disclosure for this map. It should say:

- that the map was AI-assisted through natural-language prompts
- that a human reviewed the output
- what datasets or source types were used
- where credits and limitations can be found
- what privacy protections were applied

Keep it under 90 words and avoid defensive legal language.

Then write an archive note naming what you would save: prompts, outputs, model name, data sources, transformations, screenshots, credits, review notes, and final disclosure.

DELIVERABLE

Submission ~15 min

Submit or save the following:

- Setup notes
- 10-item provenance record
- Prompt metadata template with honest unknowns
- Data Sources and Credits draft
- Bias and explainable style note
- Privacy screen and publish / revise / do not publish decision
- Public disclosure and archive plan
- A 300-500 word reflection on how ethics changed the map before design or code began