

CORE

Lab 11: The Typographic Voice System

Specify map typography for tone, hierarchy, legibility, and resilient web delivery

Chapter Chapter 11	Level Intermediate	Time ~2.5-3 hr
Mode Individual or pair	Technology Any course-approved LLM	Deliverable Map scenario brief

Why This Lab Matters

Chapter 11 treats typography as the voice of the map. This lab teaches you to direct that voice through tone, hierarchy, legibility, label placement, fallback stacks, density rules, and critique.

Essential question

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

Learning Objectives

- State the cartographic purpose, audience, evidence, and constraints.
- Use an LLM or assistant as a collaborator while preserving human judgment.
- Revise the artifact or prompt based on explicit critique.

At a glance

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

Outputs: Map scenario brief; Typographic Intent Brief; Font system and fallback stacks.

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

LAB WORK

Setup: Choose a Text-Heavy Map ~15 min

Choose a map that needs labels to carry meaning. Use one scenario throughout the lab.

- Disaster response map with shelters, roads, hazards, and alerts
- Historic walking tour with landmarks, neighborhoods, and routes
- Regional reference map with cities, counties, rivers, and parks
- Transit access map with stops, stations, routes, and service zones
- Environmental justice map with facilities, neighborhoods, and statistics

Map scenario

Topic:

Place:

Audience:

Use context: classroom / public meeting / field use / dashboard / mobile

Tone needed: authoritative / friendly / archival / urgent / calm / technical

Label categories:

Most important label category:

Labels that should recede:

Likely mobile constraints:

What type must not imply:

PROCEDURE

Part 1 - Build a Typographic Intent Brief ~25 min

Create a Typographic Intent Brief for this map. Explain the map's desired voice, audience, and trust posture. Then translate the tone into typographic properties: font category, weight, size hierarchy, case, spacing, contrast, and number of font families. Do not name final fonts yet; describe the typographic behavior first.

Map scenario:

[PASTE]

Design role	Typographic behavior	Reason	Risk if wrong
Title	Example: Short note	Example: Matches the data logic	Example: Could overstate certainty
Major labels	Example: Short note	Example: Matches the data logic	Example: Could overstate certainty

Starter examples only; expand this in your own notes or submission document.

PROCEDURE

Part 2 - Design the Font System and Fallback Stack ~30 min

Recommend a robust web typography system for this map. Use no more than two font families. Include primary fonts, fallback stacks, and system fallbacks. Explain how each fallback preserves x-height, width, weight, tone, and legibility. Include a warning about what would change if the preferred font fails.

Typographic Intent Brief:
[PASTE]

Mini-deliverable

Write two font stacks: one for titles/interface text and one for map labels. Include why each fallback is acceptable.

PROCEDURE

Part 3 - Specify Label Hierarchy ~30 min

Create a label hierarchy for my map. Include at least three label categories. Specify relative size, weight, case, opacity, color/contrast behavior, placement priority, and what should happen when labels compete. Use functional descriptions rather than only font names.

Map scenario and font system:
[PASTE]

Label category	Priority	Size/weight/case	Placement rule	Collision rule
Example: Short note	1	Example: Short note	Example: Short note	Example: Short note
Example: Short note	2	Example: Short note	Example: Short note	Example: Short note
Example: Short note	3	Example: Short note	Example: Short note	Example: Short note

Starter examples only; expand this in your own notes or submission document.

PROCEDURE

Part 4 - Encode Placement Rules by Geometry ~25 min

Write label placement rules for point, line, and area features in this map. Include point offsets, line-label behavior on curves, area-label spacing, avoidance of tight bends, label masks or halos if needed, and rules for labels that should disappear at smaller scales.

Label categories:
[PASTE]

Design test

Good label placement should feel invisible. If users notice typography first, it is often because the rules failed.

PROCEDURE

Part 5 - Set Density and Collision Rules ~30 min

Create density and collision rules for this map. Explain which labels are essential at the opening extent, which appear only after zooming, which can be hidden, and how overlap should be resolved. Include mobile-specific rules and a maximum cognitive load statement for label density.

Ask the LLM to identify one place where your rules might still produce clutter, then revise.

Critique these density and collision rules. Identify the most likely clutter failure, accessibility failure, or mobile failure. Recommend a minimal revision that preserves the typographic voice.

PROCEDURE

Part 6 - Create a Typography Specification ~30 min

Compile my decisions into a production-ready Typography Specification. Include:

1. map voice and audience
2. font family roles and fallback stacks
3. title, interface, and label hierarchy
4. point, line, and area label placement rules
5. density and collision rules
6. zoom-dependent visibility
7. contrast and accessibility requirements
8. mobile behavior
9. typographic defaults to avoid
10. a self-check asking the assistant to justify typographic choices before implementing them

Write this as a concise professional specification.

PROCEDURE

Part 7 - Test Against Tone Drift ~20 min

Generate two typography alternatives for the same map: one that is too casual and one that is too formal. Compare both against my Typography Specification. Explain how tone drift would change user trust, perceived authority, and legibility.

Mini-deliverable

Write a 100-word tone-drift warning explaining what the map would accidentally say if the typography went wrong.

DELIVERABLE

Submission ~20 min

- Map scenario brief
- Typographic Intent Brief
- Font system and fallback stacks
- Label hierarchy table
- Placement rules by geometry
- Density and collision rules
- Final Typography Specification
- Tone-drift comparison

- 400-600 word reflection on typography as map voice