



Assignment 3: Responsive SVG Web Map Webpage & AI2HTML

OBJECTIVES:

This *proof-of-concept* research assignment aims to enhance students' proficiency in web mapping and web development. The goal is to create a **responsive web map graphic** derived from a static scalable vector graphic (SVG) image representing an assigned area from around the world. The resulting web map will be integrated into a basic HTML webpage, meticulously designed to reflect Cartographic principles and customized to align with a student-defined thematic topic related to the assigned geographical area.

This year's assigned geographical area will be: **the Provinces of Sweden**

By completing this assignment, students will achieve the following objectives:

- ✓ **Technical Skills Development:** Utilize an SVG image and the ai2html.js script to construct a responsive SVG web map with overlaid text features.
- ✓ **Thematic Customization:** Customize web maps with an interactive theme. Choose a thematic topic and modify the code to anchor each geographic region (i.e. Province) with a hyperlink to additional resources that open in a new browser tab.
- ✓ **Organizational Competence:** Demonstrate effective file management by organizing all input, output, and code files logically within an assignment folder, removing any unused folders and unnecessary files.

LEARNING OUTCOMES:

Assignment 3 will meet a component of Learning Outcomes 5 and 6 of the course. *To successfully demonstrate and fulfill the Learning Outcomes, this evaluation must meet or exceed a passing grade of 60%. Please note that resubmissions for re-evaluation will not be accepted.*

DELIVERABLE(S):

Once completed, **zip/compress** the assignment folder, and upload it to the Assignment 3 submission folder on Brightspace.

EVALUATION:

Assignment 3 will be evaluated based on the **Assignment 3 Rubric** (attached). *Please review the rubric before submitting your final deliverable(s).*

SUBMISSION DEADLINE:

MONDAY, FEBRUARY 10TH (4:00 PM AST)

**PART A) ASSIGNMENT FOLDER & RESPONSIVE SVG WEB MAP GRAPHIC REQUIREMENTS**

1. Working from the **D:** or **My Documents** folder, create a new assignment folder named **A3_AI2HTML_YourInitials**. Organize all input, output, and code files within this folder. Add the following subfolders:

✓ ai

✓ css

✓ img

✓ js
2. In an IDE like VSC, add a new *index.html* file to the **root** of the assignment folder. To the **css** subfolder, add a new *style.css* file.
3. Download the *ai2html.js* file ([source](#)) and save it to the **js** subfolder, and again to the **Adobe Illustrator (AI) Scripts** folder on the C-Drive (C:) as directed in class.
4. Review the SVG image and the informative resource link provided on Brightspace for the [Provinces of Sweden](#). Download the [SVG image](#) provided on Brightspace and save it to the **img** subfolder. Rename the SVG as **Sweden**.
5. Open the SVG image in AI. Ensure the document's colour mode is set to the appropriate option for web use and that the artboard is resized to the artwork. Save the AI project to the **ai** subfolder as **Sweden_YourInitials**.
6. Customize the SVG image by removing the original Province labels and replacing them with new, manually created text layers using Arial or Georgia typeface. Some labels may require hyphenation to better fit their corresponding Province polygon. Cartographically place the new customized Province name labels, ensuring consistency and readability.
7. Cartographically customize each Provincial polygon to differentiate each Province while maintaining aesthetics and cohesion. Think about the chosen theme when deciding how to symbolize them.
8. Run the *ai2html* script to generate the HTML and SVG outputs. Ensure the custom script settings include *responsiveness* set to **dynamic**; *image format* set to **svg**. The remaining script settings can be left as default. Move the HTML output to the **root** of the assignment folder and the SVG-artboard output to the **img** subfolder.
9. In VSC, move all style content from the output HTML file to an appropriate location in the *style.css* file and the remaining HTML code to an appropriate location in the *index.html* file. Adjust relative paths in the *index.html* file to ensure the web map displays correctly.
10. Customize the web map with an interactive theme by anchoring each Province name with a hyperlink *that opens in a new browser tab*. The hyperlinks must navigate users to additional resources related to the chosen thematic topic and respective Province.

Meaningful Customizations

Be creative in the thematic choices and consider aligning the chosen theme with the unique characteristics of each Province. This thoughtful alignment ensures the web map is visually engaging and provides users with a more immersive and informative experience.

PART B) WEB MAP WEBPAGE REQUIREMENTS

1. Create a basic webpage layout that meets the following requirements:
 - ✓ Properly link the external stylesheet.
 - ✓ Include thematic aspects that complement the customized web map and the chosen thematic topic.
 - ✓ Purposeful layout and balance maintain a logical hierarchy of importance both in text and graphics.
 - ✓ Follow meaningful Family Tree Principles (ancestry indentation, nesting, semantics).
 - ✓ Incorporate concise documentation (comments) throughout all code files where appropriate. This includes updated header comments, differentiating major structural components, and providing specifics helpful for the end-user.
2. Embed the responsive SVG web map into an appropriate location (semantic element) on the webpage, ensuring responsiveness when the browser size collapses/expands, as expected.
3. Include the following additional webpage content/components:
 - ✓ Creative title (and subtitle, optional) relevant to the geographical area and chosen theme.
 - ✓ Credit/attribution.
 - ✓ Demonstrate your understanding and skills by expanding on the below narrative points. Utilize HTML elements like headings, paragraphs, ordered/unordered lists, and text formatting to help structure and organize the narrative in the webpage layout:
 - Assignment objectives, *in your own words*
 - Geographical area being mapped
 - Chosen thematic topic
 - Detailed description of the process used to create the responsive web map and interactive text, covering details like software, tools, techniques, input and output files, file management, etc.
 - ✓ Student disclaimer statement and Copyright NSCC COGS.
 - ✓ COGS logo sized and suitable for the overall webpage design. Save the logo image to the **img** subfolder.
 - ✓ In-text citations and a reference list formatted using APA 7th edition citation style for the **ai2html script**, **all graphics**, and **all relevant research material** used to supplement the webpage content. Anchor the hyperlink for easy navigation.

Province names with anchored hyperlinks do not need to be cited in the reference list as they directly navigate the user to their respective resource and therefore do not require a reference.

Note: An automatic grade of 0 will be applied for submissions lacking full or in-text citations.
4. Proofread all content for clarity and functionality. Debug the code to ensure an error-free webpage and code files.

A3: Responsive SVG Web Map Webpage (AI2HTML)

Course: CRTY1033/3915/Web Mapping(B)/Ejdrygiewicz,Jill

| Part A: Responsive SVG Web Map Graphic | Exceptional | Satisfactory | Unsatisfactory | Criterion Score |
|--|---|--|---|-----------------|
| Technical Skills Development | 15 points Proficient in utilizing SVG and AI2HTML, creating a responsive web map with overlaid text features showcasing the Provinces of Sweden. | 12 points Competent in utilizing SVG and AI2HTML, creating a responsive web map with some overlaid text features showcasing Provinces of Sweden. Could be improved/refined with minor revisions/reconsiderations. | 0 points Limited proficiency in utilizing SVG and AI2HTML, resulting in a basic web map with minimal text features. Attention is required. | / 15 |
| Thematic Customization | 15 points Demonstrates creativity in choosing and implementing a thematic topic related to the Provinces of Sweden, with appropriate hyperlinks that navigate the user to supplementary resources for each Province. | 12 points Adequately customizes the web map with a thematic topic that somewhat relates to the Provinces of Sweden, with hyperlinks that mostly align with the chosen theme. Could be improved/refined with minor revisions/reconsiderations. | 0 points Limited customization with a thematic topic and hyperlinks, lacking alignment with the chosen theme. Attention is required. | / 15 |
| Organizational Competence | 5 points Effectively organizes all input, output, and code files within the assignment folder, demonstrating strong organizational competence. | 3 points Organizes input, output, and code files reasonably well within the assignment folder, demonstrating satisfactory organizational skills. Could be improved/refined with minor revisions/reconsiderations. | 0 points Organizational skills are limited; files may lack clarity and adherence to best practices. Attention is required. | / 5 |

| Part B: Web Map Webpage | Exceptional | Satisfactory | Unsatisfactory | Criterion Score |
|---------------------------------|--|---|---|-----------------|
| HTML Code Quality | 10 points HTML code is well-structured, follows best practices in all cases, incorporates and fully utilizes the external css stylesheets, and maintains meaningful Family Tree Principles. | 6 points HTML code is structured, follows good practices in most cases, includes and utilizes external css stylesheets, and maintains reasonable adherence to the Family Tree Principles. Could be improved/refined with minor revisions/reconsiderations. | 0 points HTML code lacks structure, may deviate from best practices in multiple cases, and has limited adherence to the Family Tree Principles. Attention is required. | / 10 |
| Content Relevance & Integration | 10 points Webpage content effectively complements the web map, maintaining a logical hierarchy with purposeful balance and layout. Thematic elements are integrated seamlessly into the overall design. | 6 points Content complements the web map and thematic topic, with a reasonably logical hierarchy with some degree of balance and layout. Some integration issues may be present. Could be improved/refined with minor revisions/reconsiderations. | 0 points Limited thematic integration; content and style may lack alignment with the theme, and display evident issues in logical hierarchy, and disproportionate balance and layout. Attention is required. | / 10 |

| Part B: Web Map Webpage | Exceptional | Satisfactory | Unsatisfactory | Criterion Score |
|--|---|---|---|-----------------|
| SVG Embedded & Responsive | 10 points SVG is properly embedded into the webpage and functions as expected and intended, displaying responsive capabilities across different devices. | 6 points SVG is embedded into the webpage and functions reasonably well. Minor issues may exist with full-size display or responsiveness on some devices. Could be improved/refined with minor revisions/reconsiderations. | 0 points SVG embedding is flawed or incomplete, leading to significant issues with responsiveness on various devices. Attention is required. | / 10 |
| Documentation (Comments) | 5 points Concise documentation (comments) is present throughout code files, providing clarity and insight into the code structure and functionality. | 3 points Adequate documentation (comments); some areas may be unclear or lack precision. Could be improved/refined with minor revisions/reconsiderations. | 0 points Limited documentation (comments); unclear or missing in some areas. Code structure and functionality may be challenging to understand. Attention is required. | / 5 |
| Additional Webpage Components | 5 points Includes all required additional components (creative title, credit/attribution, disclaimer, COGS logo). | 3 points Includes most required additional components, with some being incomplete or could be improved/refined with minor revisions/reconsiderations. | 0 points Missing or significantly incomplete additional components. Attention is required. | / 5 |
| Narrative Points | 10 points Detailed narrative demonstrates the learner's understanding and skills related to the assignment, allowing the reader to understand the tools and techniques used to create the web map webpage. | 6 points Narrative provides an overview of the learner's understanding and skills related to the assignment. Some details about tools and techniques may be lacking. Could be improved/refined with minor revisions/reconsiderations. | 0 points Narrative is limited and lacks detail, making it challenging for the reader to fully grasp the learner's understanding and skills related to the assignment. Attention is required. | / 10 |
| In-Text Citations & Reference List (APA 7th) | 10 points In-text citations (where appropriate) and reference list adhere to APA 7th edition citation style. Sources are properly cited in both in-text citations and the reference list. | 6 points Adequate in-text citations and reference list; some areas may be unclear or lack precision in citation style. Could be improved/refined with minor revisions/reconsiderations. | 0 points Limited in-text citations and reference list; unclear or missing in some areas. Citations largely deviate from APA 7th edition style. Attention is required. | / 10 |
| Writing Mechanics | 5 points Writing is clear, concise, and free of grammatical, spelling, and punctuation errors. Language is appropriate for a professional audience. | 3 points Writing is generally clear and concise, with minimal grammatical, spelling, and punctuation errors. Language is mostly appropriate for a professional audience. May have minor issues with proofreading/debugging. Could be improved/refined with minor revisions/reconsiderations. | 0 points Writing lacks clarity and conciseness, with noticeable grammatical, spelling, and punctuation errors. Language may not be consistently appropriate for a professional audience. May have significant issues with proofreading/debugging. Attention is required. | / 5 |

Total

/ 100

Overall Score

Exceptional
90 points minimum

Strong Effort
80 points minimum

Fair Effort
60 points minimum

Unsatisfactory
0 points minimum