**Assignment 2: Website Analysis**

**Due Date**: check D2L

**Objective**: To analyze the application of HTML/CSS in modern web design.

**Instructions**:

* Select a webpage template that you find visually appealing and functionally effective from <https://www.w3schools.com/w3css/w3css_templates.asp>.
* In a 20 to 30 slides report (PowerPoint), analyze and discuss the use of HTML and CSS in the chosen template. You should look at its source code (both HTML and CSS) as well as the actual display in a browser.
* Analyze and critique aspects such as HTML5 tag use, semantics, code organization, CSS selector use, special effects, layout design, etc.
* Focus on 2 or 3 main aspects and do some in-depth analysis.
* Also summarize your major learning from study of the code.

**There is an on-time due date of October 5, 2025. Any submission after the on-time due date will be subject to a late penalty until the assignment link expires.**

**Assignment 2 — Website Analysis (20–30 slides)**

**0. Cover (1 slide)**

* **Title:** “Analysis of W3.CSS Template: *[Template Name]*”
* **Course/Name/Date**
* **Template link:** short URL
* **Hero screenshot** of homepage above the fold

**1. Agenda (1 slide)**

* What you reviewed
* Deep-dive areas
* Key findings & takeaways

**2. Template Selection & Rationale (1 slide)**

* Why this template? (visual appeal, clarity, responsiveness)
* Intended audience/use case (portfolio, cafe, landing page, etc.)
* How you evaluated (source code + live display)

**3. Method & Tools (1 slide)**

* **Tools:** Chrome/Edge DevTools, “View Source,” open linked CSS files
* What you inspected: HTML structure, CSS files, media queries, computed styles
* How you tested responsiveness (device toolbar)

**High-level Overview (Set the stage)**

**4. Page Map / Information Architecture (1 slide)**

* Sketch or bullets of main sections (nav, hero, features, gallery, footer)
* **Screenshot callouts** labeling sections

**5. W3.CSS in 30 seconds (1 slide)**

* What W3.CSS provides (utility classes, grid, spacing, colors)
* How the template uses it (e.g., w3-container, w3-row, w3-col)

**Deep Dive #1 — HTML5 Semantics & Accessibility (6–8 slides)**

**6. Document Skeleton (1 slide)**

* Presence of <!DOCTYPE html>, lang, <head> meta basics
* **Callout:** correct charset/viewport?

**7. Landmark & Sectioning Elements (1–2 slides)**

* How <header>, <nav>, <main>, <section>, <article>, <footer> are used
* Are there unnecessary <div>s where semantics fit better?
* **Screenshot:** Elements panel highlighting landmarks

**8. Heading Hierarchy (1 slide)**

* Is there a single <h1>? Are <h2>/<h3> nested logically?
* Why this matters for screen readers & SEO

**9. Links, Buttons, and Alt Text (1 slide)**

* Are interactive items true <button>/<a>?
* Alt text quality for images

**10. Forms/Controls (if present) (1 slide)**

* Labels, placeholders, input types
* Any ARIA use?

**11. Quick Accessibility Scorecard (1 slide)**

* **Color contrast:** pass/fail examples
* **Keyboard focus:** visible? logical tab order?
* 2–3 fix ideas you would apply

**Deep Dive #2 — Responsive Layout & CSS (6–8 slides)**

**12. Layout System Overview (1 slide)**

* Flexbox/Grid vs. W3.CSS row/column utilities
* How columns stack on small screens

**13. Breakpoints & Media Queries (1–2 slides)**

* Show snippet(s) of @media queries you found
* What changes at each breakpoint (nav, grid, typography)?

**14. Spacing & Sizing Scale (1 slide)**

* Padding/margins (utility classes like w3-padding-64 etc.)
* Consistency of rhythm and whitespace

**15. Typography System (1 slide)**

* Font family, sizes, line-height hierarchy
* Heading vs body contrast; readability notes

**16. Color System & States (1 slide)**

* Palette usage (brand/accent/neutral)
* Hover/focus/active states—consistent?

**17. Special Effects (1 slide)**

* Parallax, shadows, transitions/animations (CSS only vs JS aided)
* Performance implications (paint/composite)

**Deep Dive #3 — CSS Architecture & Maintainability (3–4 slides)**

**18. Class Strategy & Specificity (1 slide)**

* Utility classes (W3.CSS) vs template-specific custom classes
* Any inline styles? Any !important debt?

**19. File Organization (1 slide)**

* How many CSS files; external vs inline
* Where overrides live; comments/documentation

**20. Reusability & Modularity (1 slide)**

* Are sections component-like?
* What would you refactor for long-term maintenance?

**Critique, Improvements, and Learning (5–7 slides)**

**21. Strengths (1 slide)**

* 3–5 bullets (e.g., clean responsiveness, semantic headers, compact CSS)

**22. Weaknesses (1 slide)**

* 3–5 bullets (e.g., heading misuse, weak contrast, excessive nesting)

**23. Improvement Proposals (2 slides)**

* **Proposal A (Semantics/Accessibility):** what you’d change & why (before/after screenshots or short HTML outline)
* **Proposal B (Layout/Responsiveness):** breakpoint tweak, grid/flex refactor, or spacing standardization

**24. Performance Quick Checks (1 slide)**

* Image optimization (dimensions, formats)
* Render-blocking CSS? Inline critical CSS (concept)
* Lightweight wins you’d implement

**25. Maintainability Checklist (1 slide)**

* Naming consistency, comments, component extraction, remove duplicates
* Small policy: “utilities first; components second; overrides last”

**26. Major Learnings (1 slide)**

* 4–6 bullets: what you learned about HTML semantics, CSS utilities, responsive thinking

**27. Limitations & Future Work (1 slide)**

* What you didn’t cover and would explore next (ARIA patterns, JS behaviors)

**28. References (1 slide)**

* W3.CSS docs, MDN articles (HTML landmarks, media queries, contrast), any other sources

**29–30. Appendix (optional, 1–2 slides)**

* Extra code snippets (cropped screenshots)
* Full page screenshots (desktop/tablet/phone)

**How to Execute (quick workflow you can follow)**

1. **Pick a template** on the W3.CSS page (portfolio, parallax, cafe, architect, etc.).
2. **Open DevTools** → Elements: outline the landmarks and headings.
3. **Open linked CSS** files: note utilities, breakpoints, and overrides.
4. **Test responsiveness** with device toolbar; capture 3 screenshots (desktop/tablet/phone).
5. **Fill slides 4–17** (overview + deep dives 1 & 2).
6. **Scan for maintainability** (slides 18–20).
7. **Write critique & improvements** with 2 concrete proposals (slides 21–25).
8. **Summarize learnings, references** (slides 26–28).
9. **Polish**: consistent visuals, readable code screenshots, short captions.

**Slide Count Sanity Check (example = 24–28 slides)**

* Intro (3) + Overview (2) = **5**
* Deep Dive #1 (6–8) = **11–13**
* Deep Dive #2 (6–8) = **17–21**
* Deep Dive #3 (3–4) = **20–25**
* Critique/Learnings/Refs (4–5) = **24–30**
* Appendix (0–2) = **24–32** (optional trim to stay ≤30)

**Grading-friendly checklist (put in your notes pane)**

* Named the template and linked it
* Showed both **code & display** (screenshots + code views)
* Focused on **2–3** areas in depth
* Addressed **HTML5 semantics** (landmarks, headings)
* Addressed **CSS** (selectors, utilities, layout, media queries)
* Included **critique + improvement proposals**
* Clear **major learnings** summary
* **References** cited
* Submitted by **Oct 5, 2025** (D2L on-time window)

if you want, tell me which template you’re leaning toward (e.g., **Parallax**, **Portfolio**, **Architect**, **Cafe**) and your 2–3 focus areas. I’ll tailor this outline to that exact template and give you slide captions you can paste in.