

PIDP 3230

EVALUATION OF LEARNING



Author: Yuri Tricys, Date: June 19th, 2025

AUTHENTIC ASSESSMENT INSTRUMENT [AAI]

Project Introduction

Congratulations on reaching the CAPSTONE project, the culmination of your web development journey! In this project, you'll demonstrate your mastery of front-end technologies, including `HTML`, `CSS`, `JavaScript`, and `NPM packages`, and effective usage of a backend web development language, a content management system, a website builder, a website framework, or a static website generator, to create a simple yet functional one or more page website.

Working individually or in pairs, you'll design, develop, and deploy a website that showcases your skills and creativity. Your project will be published to a live production server, such as `Github Pages`, and will adhere to basic security practices to protect against common vulnerabilities.

When you've completed this project, you'll have a tangible portfolio piece that highlights your ability to craft a responsive, user-friendly, and visually appealing website. Let's get started and bring your vision to life!

Web Development Technology Usage

Though course lectures include only `HTML`, `CSS`, `vanilla JavaScript`, `Hugo`, and various `NPM libraries` – with one class dedicated to an overview of `WordPress` – you may choose any web development framework or computer programming language to complete the CAPSTONE project, such as those listed below.

Frameworks Not Taught in Class:

- Actix-web (Rust)
- Angular (JavaScript)
- ASP.NET (C#)
- Astro (JavaScript)
- Backbone.js (Node)
- Blade (Laravel)
- Bookmark (No Code)
- CodeIgniter (PHP)
- Django (Python)
- Dreamweaver (Various)
- Drupal (PHP)
- Duda (No Code)
- EJS (Node)
- Eleventy (JavaScript)
- Ember.js (Node)
- Express.js (Node)
- Flask (Python)
- Gatsby (JavaScript)
- Handlebars (Node)
- Hugo (Go)
- Jekyll (Ruby)
- Laravel (PHP)
- Mobirise (No Code)
- Next.js (Node)
- NgTemplate (Angular)
- Node (JavaScript)
- Nunjucks (Node)
- Pheonix (Elixir)
- Plug (Elixir)
- Pug (Node)
- React (JavaScript)
- Rocket (Rust)
- Ruby on Rails (Ruby)
- Shopify (Ruby/Liquid)
- Smarty (PHP)
- Spring Boot (Java)
- Squarespace (No Code)
- Strikingly (Ruby)
- Svelte (JavaScript)
- Symfony (PHP)
- Twig (PHP)
- Ucraft (No Code)
- Vue (JavaScript)
- Webflow (No Code)
- Weebly (No Code)
- Wix (ADI)
- WordPress (PHP)

Assignment Specifications

To complete the project, you are expected to design and implement a comprehensive web application that showcases your proficiency in crafting robust, scalable, and maintainable web solutions. The specifications for this project are as follows:

1. Thematic Coherence:

Your web application should adhere to a well-defined theme, such as but not limited to travel, portfolio, blog, project showcase, or company profile. This thematic coherence should be evident across all pages and features.

2. Multi-paged Structure

The application must comprise a minimum of 6 distinct pages, each serving a unique purpose within the chosen theme. These pages should include:

- A home or landing page that introduces the site's purpose and primary features.
- A dedicated terms and conditions page that outlines the legal framework governing the use of your site.
- An about section or page that provides insight into the background, mission, or identity behind the site.
- Additional pages that complement the site's theme and enhance user engagement.

3. Consistent Branding and Navigation

- Each page should feature a consistently styled logo that links back to the home page, reinforcing the site's identity.
- The inclusion of a copyright notice with the year of creation is mandatory.

4. Iconography and Visual Identity

- Implement favicons tailored for various device sizes to ensure compatibility and a professional appearance across different platforms.

5. Content Organization and Presentation

- Utilize ordered or unordered lists where appropriate to enhance content readability and structure.
- Incorporate a JavaScript-driven navigation dropdown to improve user experience and interface interactivity.
- Include a minimum of 7 images or graphics that are relevant to the site's content and theme.
- An optional location map can be integrated to provide geographical context or directions.

6. Interactive Elements

- Develop a functional website form that allows users to interact with the site, whether through contact inquiries, subscriptions, or other relevant actions.
- Ensure that the design is responsive, adapting seamlessly to different screen sizes and devices.

7. Typography and Linkage

- Employ at least two distinct font types to add visual appeal and hierarchy to the content.

8. Blogging Engine and Content Management

- Integrate a blogging engine that allows for the creation, publication, and management of blog posts.
- Develop a list page or a panel/sidebar that showcases available blog posts, facilitating easy access to content.>

9. Content Quality and Attribution

- Populate the site with meaningful content that aligns with the chosen theme.
- Properly cite references for any content that is not original, adhering to appropriate citation standards.

10. Accessibility and Best Practices

- Ensure that your web application adheres to web accessibility guidelines (WCAG 2.1) to accommodate a diverse user base.
- Follow best practices for web development, including semantic HTML, CSS methodology (e.g., BEM, OOCSS), and JavaScript coding standards.

11. Version Control and Deployment

- Manage your project using a version control system like Git, with a public repository (e.g., GitHub) for visibility and collaboration.
- Deploy your application on a suitable hosting platform, ensuring it is publicly accessible.

12. HTML Elements

At least one of each of these HTML tags must be present in the website (though any tag can be set to `display:none;`):

HTML TAGS	✓	HTML TAGS	✓	HTML TAGS	✓
<a>		<hr>		<source>	
<aside>		<i>			
<body>		<iframe>			
 				<style>	
<button>		<input>		<summary>	
<cite>		<label>		<svg>	
<details>				<table>	
<div>		<link>		<tbody>	
<doctype>		<main>		<td>	
<favicon>		<meta>		<textarea>	
<fieldset>		<nav>		<th>	
<footer>		<noscript>		<thead>	
<form>				<title>	
<h1>		<p>		<tr>	
<h2>		<picture>			
<h3>		<script>			
<head>		<section>			

In crafting your CAPSTONE project, attention to detail, adherence to the outlined specifications, and a commitment to delivering a high-quality user experience will be paramount. Your project will be evaluated based on its technical merit, design coherence, and overall functionality according to the RUBRIC below. Please note: websites achieving a score below 60% will receive a grade but will not be uploaded to the course website.

Assessment Rubric with Website Evaluation Categories

GRADED FACTORS/FEATURES	LEVEL 1 A limited mastery of knowledge and skills: below basic expectations Major problems exist	LEVEL 2 A partial mastery with limited to basic performance or expected achievement Minor problems exist	LEVEL 3 A solid consistent performance; demonstrated competency of knowledge and skills Minor issues exist	LEVEL 4 A superior, consistent performance; beyond expectations No issues exist
1. Audit: Accessibility	The website scores below 50 on the Lighthouse accessibility audit, indicating significant accessibility barriers.	The website scores between 50–69 on the Lighthouse accessibility audit, with noticeable accessibility issues, such as missing alt text or poor color contrast.	The website scores between 70–89 on the Lighthouse accessibility audit, with some minor issues related to semantic HTML, ARIA attributes, or navigation.	The website scores 90 or above on the Lighthouse accessibility audit, with proper semantic HTML, ARIA attributes, and accessible navigation.
2. Audit: Best Practices	The website scores below 50 on the Lighthouse best practices audit, indicating significant deviations from modern web development standards.	The website scores between 50–69 on the Lighthouse best practices audit, with some noticeable issues related to security, performance, or deprecated APIs.	The website scores between 70–89 on the Lighthouse best practices audit, with some minor issues related to HTTPS, security headers, or deprecated APIs.	The website scores 90 or above on the Lighthouse best practices audit, following modern web development standards and security guidelines.
3. Audit: Performance	The website scores below 50 on the Lighthouse performance audit, indicating significant performance issues.	The website scores between 50–69 on the Lighthouse performance audit, with noticeable delays in page load times and rendering.	The website scores between 70–89 on the Lighthouse performance audit, with some opportunities for improvement in page load times and rendering.	The website scores 90 or above on the Lighthouse performance audit, indicating fast page load times and efficient rendering.
4. Audit: SEO	The website scores below 50 on the Lighthouse SEO audit, indicating significant SEO issues that may	The website scores between 50–69 on the Lighthouse SEO audit, with noticeable SEO issues, such as	The website scores between 70–89 on the Lighthouse SEO audit, with some minor issues related to meta	The website scores 90 or above on the Lighthouse SEO audit, with proper meta tags,

GRADED FACTORS/FEATURES	LEVEL 1 A limited mastery of knowledge and skills: below basic expectations Major problems exist	LEVEL 2 A partial mastery with limited to basic performance or expected achievement Minor problems exist	LEVEL 3 A solid consistent performance; demonstrated competency of knowledge and skills Minor issues exist	LEVEL 4 A superior, consistent performance; beyond expectations No issues exist
	impact search engine rankings.	missing meta tags or poor content quality.	tags, header tags, or content optimization.	header tags, and descriptive content.
5. Blog	The blog feature is missing or severely underdeveloped. There is no list page or detail page for blog posts, and there is no clear way to access blog posts.	The blog feature is partially implemented, with a list page and detail page for blog posts. However, the design is not consistent with the rest of the site, and navigation to the blog is not intuitive. Administration of the blog is cumbersome.	The blog feature is fully implemented, with a list page and detail page for blog posts. The design is consistent with the rest of the site, and navigation to the blog is clear and intuitive. Administration of the blog is relatively straightforward, but could be improved with better documentation or more intuitive controls.	The blog feature is exceptionally well- designed and fully implemented, with a list page, detail page, and sidebar or panel for easy access to blog posts. The design is consistent with the rest of the site, and navigation to the blog is seamless. Administration of the blog is easy and well- documented, making it simple to post new content.

GRADED FACTORS/FEATURES	LEVEL 1 A limited mastery of knowledge and skills: below basic expectations Major problems exist	LEVEL 2 A partial mastery with limited to basic performance or expected achievement Minor problems exist	LEVEL 3 A solid consistent performance; demonstrated competency of knowledge and skills Minor issues exist	LEVEL 4 A superior, consistent performance; beyond expectations No issues exist
6. Content	The site lacks a clear purpose and theme. There are several inaccuracies in the content, and it contains more than 5 errors in spelling, punctuation, or grammar. Borrowed materials are not properly documented, and material is borrowed without permission from sites that require it.	The purpose and theme of the site are somewhat vague. Almost all the information provided is accurate, and there are 4-5 errors in spelling, punctuation, or grammar. Fair use guidelines are followed for most borrowed material, with clear citations, material may be included from sites that require permission without obtaining it.	The site has a clearly stated purpose and theme, with almost all information accurate and all requirements met. There are 1-3 errors in spelling, punctuation, or grammar. Fair use guidelines are followed for almost all borrowed material, with clear and accurate citations. Permission to use material is obtained when required. Some but not all original web pages display the "copyright symbol" followed by the copyright date.	The site has a well-stated, clear purpose and theme carried out throughout. All information is accurate, and there are no errors in spelling, punctuation, or grammar. Fair use guidelines are followed for all borrowed material, with clear, easy-to-locate, accurate citations, and permission is obtained when required. All original web pages display the "copyright symbol" followed by the copyright date.
7. CSS Styling	CSS code is not modularized, and the styling is inconsistent and disorganized. Custom CSS properties, naming conventions, and CSS reset/normalization are not used. Vendor prefixes are not handled correctly.	CSS code is somewhat modularized, but the organization can be improved. Some custom CSS properties and naming conventions are used, but inconsistently. CSS reset/normalization is attempted, but may not be thorough. Vendor prefixes are handled manually, but may be incomplete.	CSS code is modularized using SCSS, with a clear organization and structure. Custom CSS properties are used effectively, and naming conventions are consistent. CSS reset/normalization is applied correctly, and vendor prefixes are handled using a tool like Autoprefixer.	CSS code is exceptionally well-modularized, organized, and maintainable. Custom CSS properties, naming conventions, and CSS reset/normalization are used effectively. Vendor prefixes are handled correctly, and post-processing techniques like minification and compression are applied. Above-the-fold styling is inlined for performance

GRADED FACTORS/FEATURES	LEVEL 1 A limited mastery of knowledge and skills: below basic expectations Major problems exist	LEVEL 2 A partial mastery with limited to basic performance or expected achievement Minor problems exist	LEVEL 3 A solid consistent performance; demonstrated competency of knowledge and skills Minor issues exist	LEVEL 4 A superior, consistent performance; beyond expectations No issues exist
				optimization. If a CSS framework is used, it is customized to fit the project's needs, and its default styles are overridden judiciously.
8. Fonts	A wide variety of fonts, styles and point sizes was used.	The fonts are consistent and point size varies appropriately for headings and text.	The fonts are consistent, easy to read and point size varies appropriately for headings and text.	The fonts are consistent, easy to read and point size varies appropriately for headings and text. Use of font styles (italic, bold, underline) is used consistently and improves readability.
9. Form Design	The form is cluttered and confusing, with unclear or missing labels. The layout is disorganized, and validation is either missing or unhelpful. The form is not accessible and may not work properly across different devices or browsers.	The form is functional but could be improved with clearer labels and better organization. Some fields are grouped together, and basic validation is provided, but it may not be real-time or particularly helpful. The form is generally accessible but may have some issues on certain devices or browsers.	The form is well-organized, with clear and descriptive labels. Related fields are grouped together, and proper input types are used. Real-time validation provides helpful feedback, and the form is generally accessible. It works properly across most devices and browsers.	The form is exceptionally well-designed, with a clear and concise layout that makes it easy to complete. Labels are clear and descriptive, and related fields are logically grouped together. Proper input types are used, and real-time validation provides accurate and actionable feedback. The form is fully accessible, with proper use of ARIA attributes, and works seamlessly across a wide range of devices and browsers.
10. Graphics/Images Accessibility	The needs of visually impaired Internet users are ignored.	Most images used for navigation have an ALT tag that describes the image and where it links to so people	All images used for navigation have an ALT tag that describes the image and where it links to so people	All images, especially those that are used for navigation, have an ALT tag that describes the image and its link

GRADED FACTORS/FEATURES	LEVEL 1 A limited mastery of knowledge and skills: below basic expectations Major problems exist	LEVEL 2 A partial mastery with limited to basic performance or expected achievement Minor problems exist	LEVEL 3 A solid consistent performance; demonstrated competency of knowledge and skills Minor issues exist	LEVEL 4 A superior, consistent performance; beyond expectations No issues exist
		who are visually impaired can use the Web site well.	who are visually impaired can use the Web site well.	so people who are visually impaired can use the Web site well.
11. Graphics/Images Optimization	Images are not optimized, are too large, and/or cause page load delays. No attempt is made to use modern image formats or responsive image techniques.	Some images are optimized, but others are not. Basic responsive image techniques are used, such as image compression. Some modern image formats are used (e.g., WebP).	Most images are optimized using responsive image compression. Modern image formats are used where appropriate. <source> and/or <picture> tags are used to provide multiple image formats or resolutions.	All images, with descriptive file names like "responsive-web-design-example.webp" and "image-optimization-techniques-avif.jpg", are thoroughly optimized using responsive image compression, modern image formats (e.g., WebP, AVIF), and <source> and/or <picture> tags to provide multiple image formats or resolutions. For appropriate graphics, <figure> tags are used with captions where necessary.
12. Graphics/Images Quality	Graphics seem randomly chosen, are of low quality, OR distract the reader.	Graphics are related to the theme/purpose of the site, and are of good quality.	Graphics are related to the theme/purpose of the site, are of good quality and enhance reader interest or understanding.	Graphics are related to the theme/purpose of the site, are thoughtfully cropped, are of high quality and enhance reader interest or understanding.
13. HTML Usage	The HTML is not valid, with multiple syntax errors and a lack of semantic HTML. The doctype is not declared or is incorrect. Character encoding is not	The HTML is mostly valid but has some syntax errors. Semantic HTML is used inconsistently. The doctype is declared but may not be the modern HTML5	The HTML is valid,3">The HTML is valid, with a modern HTML5 doctype declaration. Character encoding is set to UTF-8. Semantic HTML is used	The HTML is minified, thoroughly valid and follows best practices, with a modern HTML5 doctype declaration and UTF-8 character encoding. Semantic HTML is used

GRADED FACTORS/FEATURES	LEVEL 1 A limited mastery of knowledge and skills: below basic expectations Major problems exist	LEVEL 2 A partial mastery with limited to basic performance or expected achievement Minor problems exist	LEVEL 3 A solid consistent performance; demonstrated competency of knowledge and skills Minor issues exist	LEVEL 4 A superior, consistent performance; beyond expectations No issues exist
	specified or is incorrect. Attributes are often misused or missing. Inline styling is excessive. Required tags from the capstone project technical specifications are missing.	doctype. Character encoding is specified but may not be UTF-8. Some attributes are misused or missing. Inline styling is used occasionally but could be improved. Most required tags from the capstone project technical specifications are present.	consistently, and attributes are generally used correctly. Inline styling is minimal and used only when necessary. All required tags listed in the technical specifications are present and correctly implemented.	effectively throughout, and attributes are used correctly and consistently. Inline styling is avoided or used only where necessary or justified. All required tags listed in the technical specifications are present, correctly implemented, and contribute to a well-structured and accessible web page.
14. JavaScript	JavaScript is not modularized, has syntax errors, has no comments or documentation. There are no external calls.	JavaScript is not modularized, still has some syntax issues and lacks proper comments or documentation. External calls are handled using XMLHttpRequest.	JavaScript namespace is uncluttered, possibly using iife statements, but not modularized using ES6 modules. The syntax is correct. JavaScript is documented with comments or documentation. External libraries are loaded intelligently using async or defer. External calls are handled using fetch with promises.	JavaScript is modularized using ES6 modules, exceptionally and concisely documented in external documentation or comments, and compressed and fingerprinted for production. External calls are handled using =async/await= for better readability and maintainability. Loading is optimized using async, defer, or inline JS where necessary.
15. Links	Links lack descriptive text, have inconsistent styling, and are not accessible via keyboard navigation. Most links are broken	Some links have descriptive text and point to relevant, high-quality sites. Styling is somewhat consistent, and keyboard navigation is	Most links have clear, descriptive text, point to high-quality, relevant sites, and are accessible via keyboard navigation. Link text is generally	All links have clear, descriptive text, point to high-quality, up-to-date, and credible sites, and are fully accessible via keyboard navigation.

GRADED FACTORS/FEATURES	LEVEL 1 A limited mastery of knowledge and skills: below basic expectations Major problems exist	LEVEL 2 A partial mastery with limited to basic performance or expected achievement Minor problems exist	LEVEL 3 A solid consistent performance; demonstrated competency of knowledge and skills Minor issues exist	LEVEL 4 A superior, consistent performance; beyond expectations No issues exist
	or point to low-quality, outdated sites. Link text is repetitive and non-descriptive. Internal linking is absent or confusing.	mostly functional. Link text is occasionally varied, but often repetitive. Internal linking is present but could be improved.	varied and descriptive. Internal linking is used effectively to facilitate navigation within the site.	Link text is consistently varied and descriptive. Internal linking is used effectively and intuitively to enhance user experience and facilitate navigation within the site. All links are checked for functionality. Attributes like title and aria-label are used judiciously to enhance accessibility.
16. Navigation	Navigation is severely impaired, with broken links, unclear labels, and a lack of essential features such as like JavaScript-powered dropdowns on mobile, breadcrumbs, and sticky navigation.	Navigation is somewhat functional but has significant issues, including occasional broken links, unclear labels, and a lack of features like JavaScript-powered dropdowns on mobile, breadcrumbs, and sticky navigation.	Navigation is generally functional, with clear labels and a simple structure. However, some features like JavaScript-powered dropdowns on mobile could be improved, and breadcrumbs and sticky navigation are present but could be more polished.	Navigation is seamless, intuitive, and well-designed, featuring clear labels, responsive design with JavaScript-powered dropdowns on mobile, breadcrumbs, and sticky navigation, all of which minimize cognitive load and enhance user experience.
17. Publication	The website is not deployed or is not accessible. The URL is incorrect or missing.	The website is deployed, but there are issues with the configuration (e.g., HTTPS not enabled, incorrect DNS settings). The URL is correct, but the site may not be fully functional.	The website is deployed and accessible, with a correct URL and basic configuration (e.g., HTTPS enabled). However, some advanced configurations (e.g., caching, compression) may be missing.	The website is successfully deployed, accessible, and fully functional, with a correct URL, HTTPS enabled, and optimal configuration (e.g., caching, compression). The site is also properly managed with version control, and the

GRADED FACTORS/FEATURES	LEVEL 1 A limited mastery of knowledge and skills: below basic expectations Major problems exist	LEVEL 2 A partial mastery with limited to basic performance or expected achievement Minor problems exist	LEVEL 3 A solid consistent performance; demonstrated competency of knowledge and skills Minor issues exist	LEVEL 4 A superior, consistent performance; beyond expectations No issues exist
				commit history is reasonable.
18. Responsiveness	The website does not adapt to different screen sizes, resulting in a poor user experience on various devices. Layout, images, and typography are not responsive.	The website attempts to be responsive, but the layout is not fluid, and images or media may not scale properly. Media queries are used, but the breakpoint strategy is not clear or device-agnostic.	The website is generally responsive, using fluid grids and flexible images. Media queries are used to apply different styles based on screen size, and typography is somewhat fluid. However, some elements may not be fully optimized for all screen sizes or devices.	The website is thoroughly responsive, rendering optimally across a wide range of screen sizes and devices. Fluid grids, flexible images, and media queries are used effectively, with a clear and device-agnostic breakpoint strategy. Typography is fluid, using techniques like CSS clamp(), container queries or viewport units, and is readable across all screen sizes. Thorough testing has validated the website's responsiveness.
19. SEO	The website lacks essential SEO elements, including a valid robots.txt, sitemap.xml, and RSS/Atom feed. Meta tags are missing or poorly optimized, and content is not organized with semantic HTML.	The website is missing some key SEO components, such as a sitemap.xml or RSS/Atom feed. Meta tags are present but could be improved, and content organization is inconsistent.	The website has most SEO elements in place, including a robots.txt, sitemap.xml, and meta tags. Content is generally well-organized with semantic HTML, but some improvements are possible.	The website is fully optimized for SEO, with a valid robots.txt, sitemap.xml, RSS/Atom feed, and well-crafted meta tags. Content is organized correctly with semantic HTML, and relevant keywords are used effectively. An inline JavaScript in the head tag contains JSON-LD schema using appropriate structure and vocabulary according

GRADED FACTORS/FEATURES	LEVEL 1 A limited mastery of knowledge and skills: below basic expectations Major problems exist	LEVEL 2 A partial mastery with limited to basic performance or expected achievement Minor problems exist	LEVEL 3 A solid consistent performance; demonstrated competency of knowledge and skills Minor issues exist	LEVEL 4 A superior, consistent performance; beyond expectations No issues exist
				to schema.org recommendations.
20. Video/Audio	Videos were seemingly used randomly OR typically detracted from the overall site.	Videos are used, but 1 or 2 detracted from the overall site or were not well-integrated.	Videos are used to enhance understanding of the content and are generally well- integrated into the site.	Videos are thoughtfully edited and used to significantly enhance reader understanding of the content or to make the site more accessible.

GRADED FACTORS/FEATURES	LEVEL 1 A limited mastery of knowledge and skills: below basic expectations Major problems exist	LEVEL 2 A partial mastery with limited to basic performance or expected achievement Minor problems exist	LEVEL 3 A solid consistent performance; demonstrated competency of knowledge and skills Minor issues exist	LEVEL 4 A superior, consistent performance; beyond expectations No issues exist
21. Website Design	<p>The website's design is cluttered and confusing, with a background that detracts from readability and a poor color palette that makes content hard to read. The layout disregards fundamental website design principles (e.g., balance, contrast, alignment) and user experience principles (e.g., intuitive navigation, clear information architecture). It is often difficult to locate important elements, and the favicon is either missing or poorly designed.</p>	<p>The website's design is functional but has some issues. The background is consistent across pages and does not detract from readability, and the color palette is basic but usable. The layout attempts to apply some website design principles, but may appear busy or boring. The user experience is functional but could be improved with more intuitive navigation and clear information architecture. It is easy to locate most of the important elements, and the favicon is present but basic.</p>	<p>The website's design is attractive and usable, with a background that adds to the theme or purpose of the site and a consistent color palette that does not detract from the content. The layout effectively applies website design principles (e.g., balance, contrast, alignment), and the user experience is generally good, with intuitive navigation and clear information architecture. It is easy to locate all important elements, and the favicon is well-designed.</p>	<p>The website's design is exceptionally attractive and usable, with a background that enhances the theme or purpose of the site and a pleasing color palette that is consistent across pages. The layout masterfully applies website design principles (e.g., balance, contrast, alignment) and user experience principles (e.g., intuitive navigation, clear information architecture, responsive design), creating a seamless and engaging user experience. White space, graphic elements, and/or alignment are used effectively to organize material, and the favicon is distinctive and professional.</p>
22. Website Security	<p>The website lacks essential security features, including a Content Security Policy (CSP). External links may not use rel="noopener". For CMS like WordPress, a security plugin is not</p>	<p>The website has some security features, but they are incomplete or not fully effective. CSP is partially implemented, external links may occasionally lack rel="noopener", and security plugins</p>	<p>The website has a robust security setup, with a well-implemented CSP that significantly restricts allowed sources. External links generally use rel="noopener". A reputable security</p>	<p>The website is exceptionally secure, featuring a CSP that correctly implements level 1, effectively restricting allowed sources. All external links use rel="noopener". For CMS like WordPress, a</p>

GRADED FACTORS/FEATURES	LEVEL 1 A limited mastery of knowledge and skills: below basic expectations Major problems exist	LEVEL 2 A partial mastery with limited to basic performance or expected achievement Minor problems exist	LEVEL 3 A solid consistent performance; demonstrated competency of knowledge and skills Minor issues exist	LEVEL 4 A superior, consistent performance; beyond expectations No issues exist
	used or is poorly configured.	for CMS are used but not fully configured.	plugin is used for CMS like WordPress.	reputable security plugin is properly configured and kept up-to-date.

Scoring Guide

The instructor will use the following scoring guide to assign you a letter grade for each section of the rubric, and to total your scores into one final letter grade. The CAPSTONE project is worth 30% of your final grade. Plan accordingly.

Feature Index	LEVEL 1 A limited mastery of knowledge and skills: below basic expectations Major problems exist		LEVEL 2 A partial mastery with limited to basic performance or expected achievement Minor problems exist								LEVEL 3 A solid consistent performance; demonstrated competency of knowledge and skills Minor issues exist						LEVEL 4 A superior, consistent performance; beyond expectations No issues exist					
Letter Grade	F		D	C-		C		C+		B-		B		B+	A-		A		A+			
Percentage	0-49		50-55	56-60		61-65		66-70		71-75		76-80		81-85	86-90		91-95		96-100			
1. Aud. Accessibility	0	9.8	10	11	11.2	12	12.2	13	13.2	14	14.2	15	15.2	16	16.2	17	17.2	18	18.2	19	19.2	20
2. Aud. Practices	0	9.8	10	11	11.2	12	12.2	13	13.2	14	14.2	15	15.2	16	16.2	17	17.2	18	18.2	19	19.2	20
3. Aud. Performance	0	9.8	10	11	11.2	12	12.2	13	13.2	14	14.2	15	15.2	16	16.2	17	17.2	18	18.2	19	19.2	20
4. Aud. SEO	0	9.8	10	11	11.2	12	12.2	13	13.2	14	14.2	15	15.2	16	16.2	17	17.2	18	18.2	19	19.2	20
5. Blog	0	4.9	5	5.5	5.6	6	6.1	6.5	6.6	7.0	7.1	7.5	7.6	8	8.1	8.5	8.6	9	9.1	9.5	9.6	10
6. Content	0	4.9	5	5.5	5.6	6	6.1	6.5	6.6	7.0	7.1	7.5	7.6	8	8.1	8.5	8.6	9	9.1	9.5	9.6	10
7. CSS	0	9.8	10	11	11.2	12	12.2	13	13.2	14	14.2	15	15.2	16	16.2	17	17.2	18	18.2	19	19.2	20
8. Fonts	0	2.45	2.5	2.75	2.8	3	3.05	3.25	3.3	3.5	3.55	3.75	3.8	4	4.05	4.25	4.3	4.5	4.55	4.75	4.8	5

9. Form Design	0	2.45	2.5	2.75	2.8	3	3.05	3.25	3.3	3.5	3.55	3.75	3.8	4	4.05	4.25	4.3	4.5	4.55	4.75	4.8	5
10. Img Accessibility	0	2.45	2.5	2.75	2.8	3	3.05	3.25	3.3	3.5	3.55	3.75	3.8	4	4.05	4.25	4.3	4.5	4.55	4.75	4.8	5
11. Img Optimization	0	2.45	2.5	2.75	2.8	3	3.05	3.25	3.3	3.5	3.55	3.75	3.8	4	4.05	4.25	4.3	4.5	4.55	4.75	4.8	5
12. Img Quality	0	2.45	2.5	2.75	2.8	3	3.05	3.25	3.3	3.5	3.55	3.75	3.8	4	4.05	4.25	4.3	4.5	4.55	4.75	4.8	5
13. HTML	0	4.9	5	5.5	5.6	6	6.1	6.5	6.6	7.0	7.1	7.5	7.6	8	8.1	8.5	8.6	9	9.1	9.5	9.6	10
14. JavaScript	0	9.8	10	11	11.2	12	12.2	13	13.2	14	14.2	15	15.2	16	16.2	17	17.2	18	18.2	19	19.2	20
15. Links	0	2.45	2.5	2.75	2.8	3	3.05	3.25	3.3	3.5	3.55	3.75	3.8	4	4.05	4.25	4.3	4.5	4.55	4.75	4.8	5
16. Navigation	0	2.45	2.5	2.75	2.8	3	3.05	3.25	3.3	3.5	3.55	3.75	3.8	4	4.05	4.25	4.3	4.5	4.55	4.75	4.8	5
17. Publish	0	2.45	2.5	2.75	2.8	3	3.05	3.25	3.3	3.5	3.55	3.75	3.8	4	4.05	4.25	4.3	4.5	4.55	4.75	4.8	5
18. Responsiveness	0	4.9	5	5.5	5.6	6	6.1	6.5	6.6	7.0	7.1	7.5	7.6	8	8.1	8.5	8.6	9	9.1	9.5	9.6	10
19. SEO	0	9.8	10	11	11.2	12	12.2	13	13.2	14	14.2	15	15.2	16	16.2	17	17.2	18	18.2	19	19.2	20
20. Vidio/Audio	0	2.45	2.5	2.75	2.8	3	3.05	3.25	3.3	3.5	3.55	3.75	3.8	4	4.05	4.25	4.3	4.5	4.55	4.75	4.8	5
21. Web Design	0	9.8	10	11	11.2	12	12.2	13	13.2	14	14.2	15	15.2	16	16.2	17	17.2	18	18.2	19	19.2	20
22. Web Security	0	2.45	2.5	2.75	2.8	3	3.05	3.25	3.3	3.5	3.55	3.75	3.8	4	4.05	4.25	4.3	4.5	4.55	4.75	4.8	5
Total																						250

Comments

This section is intended for the instructor to provide specific feedback on the student’s work. Feedback should be qualitative, highlighting strengths and weaknesses, and offering observations and critiques. The student should review the comments, think about them and apply them to learn and grow from their experience with the CAPSTONE project.

Enter comments here...

Recommendations

This section is intended for the instructor to provide specific recommendations for the student's next steps. Recommendations should be actionable, highlighting areas for improvement and suggesting potential avenues for further development. The student should review the recommendations, think about them, and apply them to learn and grow from their experience with the CAPSTONE project.

Enter recommendations here...

Conclusion

In conclusion, the CAPSTONE project is a comprehensive assessment of your web development skills. You are expected to design, develop, and deploy a fully functional website that showcases your mastery of front-end technologies and understanding or application of back-end technologies.

The project specifications and grading rubric provided in this document outline the requirements and expectations for the project. By following the guidelines and best practices outlined, and paying close attention to the course material and exercises, you will be able to create a high-quality website that demonstrates your skills and knowledge in web development.

I encourage you to be creative and take ownership of your project, and I'm confident you will produce outstanding work.

AI Models Used in Report

The ideas, structure, writing, and editing in this paper were performed by the author. Various AI models were used in collecting data, verifying data, and formatting various arguments.

- Meta Llama 4 Maverick
- LEO Qwen 14B
- LEO Llama 3.1 8B
- LEO Mixtral 8x7B
- GPT 4.1 Mini
- GPT 4.1
- Mistral Small 3.1 24b Instruct