WEB TECH - Project 4 Specification Document

Project Title:

Version Control Fundamentals with Git & GitHub and Enhanced Index Customization

Project Number: 4
Weight: 12.5%

Due Date: April 18th at 4:00 PM

Project Overview:

This project introduces students to the basics of version control using Git and GitHub integrated with Visual Studio Code. In addition to mastering version control commands (clone, commit, push), students will customize a starter website's index page to meet modern SEO and accessibility standards. Students will learn to:

- Set up Git, GitHub, and Visual Studio Code.
- Clone a provided repository containing starter website files.
- Utilize terminal commands to manage code versions.
- Customize the index page by adding:
 - SEO meta tags: a proper <title>, <meta name="description">, and <meta name="author">
 - A minimum of three images (each 250x250 pixels, not skewed/distorted)
 with appropriate alt attributes.
 - Colour contrast verification (using the WebAIM Contrast Checker).
 - CSS transitions applied to main navigation links that point to an external source (based on your chosen topic).
 - A structured content layout including:
 - One H1 heading
 - At least two H2 subheadings
 - The three images mentioned above
 - A minimum of four paragraphs
 - Either a list or a table

Objectives:

Setup & Installation:

- o Create/verify a GitHub account.
- Install Git and Visual Studio Code.

Repository Management:

- o Clone the provided repository containing starter website files.
- Integrate Git with Visual Studio Code.

Website Development & Index Customization:

- Edit and update HTML and CSS files.
- Implement SEO best practices on the index page by adding proper meta tags.
- Incorporate at least three images (each 250x250 pixels) with descriptive ALT text.
- Ensure the index page meets layout requirements (1 H1, ≥2 H2, ≥4 paragraphs, and either a list or a table).
- o Verify colour contrast using the WebAIM Contrast Checker.
- Add CSS transitions to the main navigation links that direct to an external website (your chosen topic).

Version Control Operations:

- Use terminal commands to add, commit, and push changes.
- Maintain clear commit messages and incremental updates.

Deliverables:

- A GitHub repository containing:
 - o The final version of the website (updated index.html, styles.css, and script.js).
 - o A well-documented README file.
 - o A commit history reflecting at least five meaningful updates.
- (Optional) A short written reflection on the version control process and your learning experience.

Submission Guidelines:

- Ensure your final commit is pushed to GitHub by the deadline.
- Submit the GitHub repository link via the course portal.
- Late submissions may incur penalties as per course policy.

Updated Evaluation Rubric

Criteria	Excellent (A)	Good (B)	Satisfactory (C)	Needs	
				Improvement	%
				(D/F)	
Setup &	Complete, error-	Minor issues in	Basic setup	Incomplete or	30%
Configuration	free setup of Git,	setup/integration;	completed;	incorrect setup;	
	GitHub, and VS	repository cloned	some errors or	major issues with	
	Code. Repository	and mostly	omissions are	cloning or	
	cloned	functional.	present.	integration.	
	successfully with				
	all integrations				
	working				
	seamlessly.	_			
Version	Regular,	Commits are	Inconsistent	Few or unclear	40%
Control	incremental	made regularly,	commit	commits; misuse	
Process	commits with	though some	frequency;	or omission of	
	clear, descriptive	messages lack	some commit	essential 	
	messages;	detail; terminal	messages are	terminal	
	flawless use of	commands are	vague;	commands.	
	terminal	mostly correct.	occasional		
	commands (git		terminal		
	clone, git add, git commit, git push).		command errors.		
Mahaita	Website is fully	Website works	Website is	Website does not	200/
Website	functional and	with minor issues;	basic and	work as intended;	30%
Functionality,	responsive; code	code quality is	functional;	code is poorly	
Code Quality	is clean, well-	good with minor	code quality	organized or	
& Index Page	organized, and	lapses; most	and	lacks	
Customization	documented. The	index page	documentation	documentation;	
	index page meets	customization	need	index page	
	all customization	requirements are	improvement;	customization is	
	requirements	met.	index page	incomplete or	
	(SEO meta tags,		customization	missing key	
	three images at		partially	elements.	
	250x250 with alt		implemented.		
	text, proper		·		
	content structure,				
	colour contrast				
	compliance				
	using WebAIM				
	Contrast Checker,				
	and CSS				
	transitions on nav				
	links linking				
	externally).				