

CS1031 Web Development

Assignment 4 - 2024

Overview

In this individual assignment, you are tasked with developing a website that functions as both a personal and professional portfolio and includes a chat application. Familiarize yourself with the University's policies on [plagiarism](#) and late submissions as they apply to this project.

Key Points:

- **Backup Your Work:** Use a private GitHub repo to regularly push commits from Codio or your device.
- **Work Environment:** Use Codio, or ensure your work on your device is regularly updated in Codio.
- **Valid Code:** Pages must be written in valid HTML5 and styled with valid CSS.
- **Chat Application:** Your site must feature a functioning chat application.

Assignment Requirements and Marking Guidelines

1) Web Structure [25 marks]

- Home, About, and Chat Application pages with semantically structured, valid HTML5.
- Navigation that allows easy movement between pages.
- Additional features that enhance user experience will be rewarded.

2) Styling and Design [25 marks]

- Use of CSS and potentially Bootstrap to create a visually appealing and responsive design.
- Custom styles must be documented and differentiated from default Bootstrap styles.

3) Chat Application [20 marks]

- Notifications for user events within the chat (joining, leaving, typing).
- Display of currently active users.

4) Extras [15 marks]

- Incorporation of additional web components or libraries.
- Assessment of the attempt, integration, and rationale in the design report.

5) Report [15 marks]

- A concise one-page **readme.md** file explaining the development approach, challenges, and technical details of the chat's client-server communication.

Detailed Marking Breakdown

Section	Criteria	Marks
Web Structure	HTML Validation	7
	Navigation	7
	Semantic Structure	7
	Useful Extras	4
Styling and Design	CSS Validation	6
	Page Design	6
	Code Documentation	6

Section	Criteria	Marks
	Design Report	7
Chat Application	Notifications & User Interaction	20
Extras	Additional Components Integration and Rationale	15
Report	Completeness, Sources, Challenges, Design Discussion	15

Note: Deductions apply for validation errors and warnings in HTML, CSS, and JavaScript. Documentation of attempts, even if not fully functional, is essential for partial credit.

Submission

Submit your work within the Codio environment. Utilize the base code provided in the guide to aid in your development.

Good luck, and remember to balance functionality with creativity to create a portfolio that reflects your personal and professional journey!