# Web Software Development

# Screenshot of Grading Criteria and Progress

A screenshot of a computer

Description automatically generated

# Deno Deploy Project URL

https://feedbackbutton-9vvrr1nzkt1f.deno.dev

# Chapter Reflections

## Chapter 2: Internet and HTTP

### Purpose of the Chapter:

This chapter introduced the foundational concepts of the internet, including protocols like TCP/IP, URI, DNS, and HTTP. It focused on understanding HTTP protocol principles, requests, responses, and introduced newer versions like HTTP/2, HTTP/3, and HTTPS.

### Assignment Highlights:

The assignment "Peeking into Requests" offered crucial insights into the mechanics of the web. Learning about the client-server model and tools like `curl` greatly enhanced my understanding of web architecture and request handling.

## Chapter 3: First Web Applications

### Purpose of the Chapter:

This chapter focused on building and running a basic web server using Deno. It covered understanding paths, request methods, and extracting request parameters.

### Assignment Highlights:

Learning how to work with URLs and paths was particularly enlightening. Breaking down API routing and understanding JavaScript documentation for the first time was a significant turning point in my learning process. Most times was spent analysing the JavaScript documentation.

## Chapter 4: Hono Web Framework

### Purpose of the Chapter:

The chapter introduced web frameworks, particularly Hono, and their functionalities. Topics included routing, middleware, path mapping, and effectively using request parameters.

### Assignment Highlights:

Initially, routing and middleware concepts seemed complex, but the chapter provided clarity. I gained confidence in applying these concepts to build functional web applications.

## Chapter 5: Deployment

### Purpose of the Chapter:

This chapter covered deploying web applications, focusing on Deno Deploy. It explained how to create and deploy projects to make applications accessible to users.

### Assignment Highlights:

Deployment initially seemed daunting but understanding that it simply means putting an application into production was a game-changer. I now grasp the practical aspects of making apps available to users.

## Chapter 6: Data on Server

### Purpose of the Chapter:

The chapter explored storing data on the server, understanding key-value stores, and organizing applications using layered architecture. It demonstrated how to manage data effectively with Deno KV.

### Assignment Highlights:

Learning how Deno KV handles data and understanding layered architecture deepened my knowledge of server-side data management and project structure.

## Chapter 7: HTML and Document Structure

### Purpose of the Chapter:

This chapter covered the basics of HTML, including document structure, common elements like lists and tables, and adding links.

### Assignment Highlights:

Having prior experience with HTML, I quickly navigated this chapter. While it served as a helpful refresher, I encountered minimal new concepts.

## Chapter 8: View Templates

### Purpose of the Chapter:

This chapter introduced view templates and the Eta templating engine. It covered using templates for dynamic content, working with lists and objects, and implementing layouts and partials.

### Assignment Highlights:

The insights into template engines were invaluable. Learning how to use Eta for dynamic data handling and its basic functionalities was both fascinating and impactful.

## Chapter 9: Forms and Data

### Purpose of the Chapter:

This chapter focused on creating and managing HTML forms, reading and storing form data, and utilizing Deno KV for persistent storage. It also introduced the POST/Redirect/GET pattern.

### Assignment Highlights:

Understanding the mechanics of forms, from submission to data storage and retrieval, was highly rewarding. The POST/Redirect/GET pattern clarified effective methods for handling form data in web applications.

# Final Reflections

The course provided a comprehensive understanding of web software development, combining theoretical knowledge with practical applications. Key takeaways include:

* Mastery of HTTP protocols and the request-response cycle.
* Building and deploying web applications using Deno and Hono frameworks.
* A solid understanding of web architecture, including layered structures and key-value stores.
* Practical experience with HTML, view templates, and form handling.
* Backend knowledge and how data flows.

The hands-on assignments have been reinforcing the concepts, making this a highly effective in learning the concepts.

The assessment of my grade is five reason being

I have acquired the skills necessary to use any farmwork beyond the ones taught in the course.

I am confident to teach fellow students or anyone else explain clearly how these farmwork work and how websites are built.

I am able to work in a team and help fellow student when needed.

I will remain on track to complete the rest of the course before January.