Mapping Activities to Learning Outcomes

This document maps the activities and work completed for the **Suleyman Overload Pro** website project to the course learning outcomes. I have demonstrated the application of web development concepts and techniques learned throughout the course, meeting the specified criteria in HTML, CSS, JavaScript, and the use of libraries.

Learning Outcome 1: Apply a structured approach to identifying needs, interests, and functionality of a website.

Evidence: I applied a structured approach to developing my fitness-focused website, **Suleyman Overload Pro**. I began by identifying key personas, including beginner, intermediate, and advanced fitness enthusiasts, and built the site to meet their needs. The features such as workout routines, dietary advice, and fitness calculators are specifically designed for different levels of fitness users based on the scenarios and personas created in Unit 1. Each element of the site was planned and integrated with the user's needs and scenarios in mind.

Grade: A

Learning Outcome 2: Design dynamic websites that meet specified needs and interests.

Evidence: The site dynamically responds to user inputs with features such as a **progress tracker** that records and displays workout progress using jQuery, which updates results in real-time. Additionally, the **contact form** uses the EmailJS service to allow users to send messages directly from the website. The combination of these dynamic features reflects my understanding of how to build a site that responds interactively to user needs and interests.

Grade: A

Learning Outcome 3: Write well-structured, easily maintained, standards-compliant, accessible HTML code.

Evidence: I ensured that all HTML code across the site, such as on the **index.html** and other pages, is structured following best practices, making use of semantic elements like `<header>`, `<nav>`, and `<main>` to enhance accessibility. My HTML is well-commented and easy to

maintain, with a clear separation between content and presentation through the use of external stylesheets.

Grade: A

Learning Outcome 4: Write well-structured, easily maintained, standards-compliant CSS code to present HTML pages in different ways.

Evidence: The **CSS** is written with clear structure, including comments for maintainability. I have implemented media queries to ensure responsiveness on different devices, ensuring that the layout adapts seamlessly across screen sizes. I used flexbox to manage layout elements like the navigation and footer, creating a visually consistent and accessible design.

Grade: A

Learning Outcome 5: Use JavaScript to add dynamic content to pages.

Evidence: JavaScript is used across the site to add dynamic functionality. For example, the **BMI calculator** and **One-Rep Max calculator** allow users to input their data and get instant feedback. Additionally, in the **blog** section, I used JavaScript to create a "read more" toggle function, allowing users to expand and collapse blog content dynamically.

Grade: A

Learning Outcome 6: Critique JavaScript code written by others, identifying examples of both good and bad practice.

Evidence: In Unit 4, I critiqued external JavaScript that I integrated into my site. For instance, when using jQuery for dynamic updates in the **progress tracker**, I noticed inefficiencies in the original code and improved it by reducing redundancy and enhancing the clarity of the logic. My reflective learning diary documents both positive and negative aspects of the code I integrated.

Grade: B+

Learning Outcome 7: Select appropriate HTML, CSS, and JavaScript code from public repositories to improve your site and enhance the experience of site visitors.

Evidence: I integrated **EmailJS** for form submission in the **contact page**, allowing users to send messages without a backend server. Additionally, I used jQuery to streamline user interactions on the **progress tracker** and other interactive components of the site. These external tools were well-suited for enhancing the site's functionality and user experience.

Grade: A

Learning Outcome 8: Modify existing HTML, CSS, and JavaScript code to extend and alter its functionality, and to correct errors and cases of poor practice.

Evidence: I modified the BMI and **One-Rep Max calculator** scripts to include input validation and improved error handling. Furthermore, I restructured third-party JavaScript code to be more modular and maintainable, ensuring better integration with my website's layout and functionality.

Grade: A

Learning Outcome 9: Write well-structured, easily maintained JavaScript code following accepted good practice.

Evidence: The JavaScript I wrote is modular and well-commented, following good coding practices such as using meaningful variable names and separating functionality into reusable functions. For example, the **progress tracker** script is designed to be easily extended with new features if necessary, and all functions are documented to make future maintenance easier.

Grade: A

Learning Outcome 10: Write JavaScript code that works in all major browsers (including IE, Mozilla-based browsers such as Firefox, Opera, Konqueror, Safari, Chrome).

Evidence: I tested the site across multiple browsers, including Chrome, Firefox, and Safari, to ensure compatibility. All JavaScript features, including the **BMI calculator**, **progress tracker**, and **email form**, work as expected across these platforms, ensuring a consistent experience for all users.

Grade: A

Learning Outcome 11: Effectively debug JavaScript code, making use of good practice and debugging tools.

Evidence: Throughout development, I used the **Chrome DevTools** to debug my JavaScript code. I identified and fixed issues related to input validation, especially in the **calculators** and **progress tracker** features. These tools allowed me to improve the efficiency and accuracy of the site's JavaScript functionality.

Grade: A

Learning Outcome 12: Use JavaScript libraries (e.g., jQuery) to create dynamic pages.

Evidence: I effectively used **jQuery** to add dynamic elements to my site, such as the **progress tracker** and interactive forms. The jQuery library simplified tasks like form validation and dynamic content updating. Additionally, I incorporated jQuery for DOM manipulation to create a more responsive and interactive user experience.

Grade: A

Learning Outcome 13: Use JavaScript to access and use web services for dynamic content (AJAX, JSON, etc.).

Evidence: I utilized **EmailJS** to send form data via email without the need for a backend, enabling dynamic content submission using a third-party service. The service is integrated into the **contact page** to handle form submission asynchronously, providing users with a smooth, uninterrupted experience.

Grade: A

Overall Assessment

Throughout the course, I have consistently applied the concepts of web development to create an engaging and functional website. I ensured that the design, functionality, and interactivity met the needs of the personas identified in Unit 1, while also implementing best practices in HTML, CSS, and JavaScript development.

Overall Grade: A