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CS 499 - Computer Science Capstone

Southern New Hampshire University

## Artifact Narrative for ePortfolio Submission

### Artifact Description:

The artifact I am showcasing focuses on the front-end design of my meal plan and workout web application. Originally a travel-related website, I am now repurposing this full-stack application for health and wellness, where the front-end design plays a crucial role in user interaction. I am working on using HTML and CSS to build a user-friendly, visually appealing interface, while JavaScript will be implemented to handle dynamic content and interactivity in the future.

Currently, I have designed the basic layout and structure using HTML and CSS, ensuring that the application is clean and responsive across devices. While JavaScript isn't yet implemented, the plan is to use it to add dynamic features, such as interactivity with user inputs, the ability to filter workouts and meal plans, and other engaging user interactions.

### Justification for Including This Artifact:

I selected this artifact because it highlights my skills in designing a user-friendly front-end and my ability to create a clean, responsive interface using HTML and CSS. Even though I have not yet implemented JavaScript, the design sets the foundation for adding interactive elements that will improve the user experience. I chose this artifact to showcase my proficiency in front-end development and my understanding of how to make a web application visually appealing and functional.

The improvements I've made include:

- **HTML/CSS Structure:** I've designed the basic structure of the application, focusing on ensuring it's easy to navigate and visually clear, especially as users will be interacting with different meal plans and workout information.
- **Responsive Design:** Using CSS, I've implemented media queries to ensure the site is mobile-friendly and works seamlessly across different screen sizes.
- **Future JavaScript Integration:** Although JavaScript hasn't been implemented yet, the layout is designed with functionality in mind. JavaScript will soon be integrated to handle dynamic elements, such as workout data retrieval, meal plan filtering, and form validation for user login and account management.

### **Skills Showcased in the Artifact:**

- **Front-End Design with HTML/CSS:** I have applied my knowledge of HTML and CSS to design a well-structured, visually appealing front-end for the web application. This includes organizing content and ensuring a smooth user experience through effective layout and typography.
- **Responsive Design:** The website is built to be fully responsive, ensuring users on mobile, tablet, or desktop devices will have an optimal experience.
- **Planning for Future Interactivity with JavaScript:** The design of the front-end has been structured with future JavaScript functionality in mind, which will allow the application to be dynamic and user-interactive.

### **Improvements to the Artifact:**

This artifact demonstrates the foundational work that has been completed on the front-end design. Moving forward, I plan to integrate JavaScript to bring the application to life with dynamic elements and real-time updates. By structuring the front-end with scalability and interactivity in mind, I'm ensuring that the website will be both functional and engaging for users.

### **Course Outcomes Addressed:**

This artifact addresses course outcomes related to software engineering and design, specifically in front-end web development. The creation of a responsive and well-structured front-end using HTML and CSS is a key aspect of designing effective computing solutions. The next steps of incorporating JavaScript to add interactivity will continue to build on these skills.