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Links to:

GitHub repository: <https://github.com/DomB238/CSC317>

Live GitHub Pages URL: <https://domb238.github.io/CSC317/assignment/assignment-4%20Part%202/>

Implementation Description:

This project integrates a fully functional JavaScript calculator into my personal portfolio website. The calculator replicates the design and behavior of the iOS/Android calculator app and was developed using HTML, CSS, and vanilla JavaScript. It supports basic arithmetic operations, decimal input, percentage, and positive/negative toggling. Additionally, it implements keyboard support for better accessibility and interaction.

The calculator was embedded into the portfolio as the first project card. When clicked, it opens a dedicated calculator.html page with a responsive layout and all functionality working independently. The design follows modern UI practices with color-coded buttons and an intuitive layout.

The project was structured to meet all assignment requirements, including correct file organization, working navigation, and GitHub Pages deployment. A calculator preview image was added to the portfolio's project section along with a description, technology tags, and a working link.

One major challenge was ensuring the correct file paths between CSS and JavaScript files during integration. This especially affected the theme switcher and linking the calculator's standalone page. I resolved this by adjusting data-theme values and verifying the file locations using browser developer tools.

Extra Features added:

- **Theme Switcher:**

A light/dark mode toggle was added to the calculator with saved user preferences using localStorage.

- **Memory Functions:**

Full support for M+, M-, MR, and MC buttons. Memory state is indicated on the calculator when a non-zero value is stored.