# Test Plan

## Test the input field

* Enter valid and invalid inputs (e.g., positive integers, negative integers, positive fractional numbers up to any number less than one billion) and verify that the input field only accepts numerical values, and the input is correctly displayed.

## Test the submit button

* Click the submit button without entering any value and verify that the system does not submit the form and returns an error message.
* Click the submit button after entering a valid input (in the range of 0 to 999,999,999.99) and verify that the system sends the input value to the server and displays the results returned by the server.
* **Note**: both the UI and the number converter will round any cents to two decimal places.

## Test error handling

* Test the system's error handling by purposely entering an invalid URL in the browser and verifying that the system displays an error message.

## Test responsiveness

* Test the responsiveness of the webpage by opening it on different devices with different screen sizes and verify that the webpage adapts to the screen size and layout is not distorted. At very narrow screen widths, the header bar will wrap, and the hamburger button will be partially obscured. Due to time constraints, I have not done anything about this issue and the screen width where this visual issue occurs is below any practical mobile screen widths.

## Test cross-browser compatibility

* Test the webpage on different browsers (e.g., Chrome, Firefox, Safari) and verify that it works correctly on each browser.

## Test security

* Test the webpage for security vulnerabilities such as XSS attacks by entering malicious code in the input field and verifying that the system prevents the code from executing. The HTML input only accepts numerical input and the server side service only accepts a double input so no strings can be sent to the server from user input.