# Student Loan Calculator – Testing Strategy

## White Box Testing

WB1 – Insert a new loan, ensure that it is displayed properly.

WB2 – Add several loans, and delete one. Check that the correct loan was deleted.

WB3 – Create a scenario with this criteria: 10 year plan, no loan forgiveness, minimum payments only, no refinance, using autopay, and snowball. Then add a loan of $3000 and 4%, and another for $5000 and 3%. The weighted score for the scenario should be 12.7.

## Black Box Testing

BB1 – Create a scenario with this criteria: 10 year plan, no loan forgiveness, minimum payments only, no refinance, using autopay, and snowball. Then add a loan of $3000 and 4%, and another for $5000 and 3%. The payoff date should be 3/2026 and the total of payments should be $9440.65.

BB2 – Use the same initial inputs as BB1 above. In the amortization graph, ensure that the correct amounts are displayed as specified in BB1. The monthly payment should be $78.67. Now, in the monthly payments graph, drag all payments up to $100 per month.

BB3 – Both the loan forgiveness checkbox and the refinance option checkbox should open their respective hidden inputs.

## Server Load Testing

SL1 - Use Jmeter to test 1000 concurrent connections to the server. This should test loading the main page, as well as sending feedback.

## Browser Compatibility Testing

For all browser tests, check that all html elements work and are visible, and that all javascript files load. This can be done by running the test BB1 as described above.

BC1 – View and interact with the web page in Chrome version 48.

BC2 – View and interact with the web page in Chrome version 45.

BC3 – View and interact with the web page in Firefox version 43.

BC4 – View and interact with the web page in Firefox version 44.

BC5 – View and interact with the web page in Internet Explorer 11.

BC6 – View and interact with the web page in Internet Explorer 10.

BC7 – View and interact with the web page in Internet Explorer 9.