Parmenion Technical Test

I have made a start on the investor tool, however it is by no means finished, the result is what I achieved in around 8 hours spread across several days.

The visual studio solution includes 2 projects:

1. InvestorApp- the web application that calls the webservice and outputs the results as a graph to the browser.
2. InvestorWebService- the webservice that is called by the InvestorApp web application that calculates the compound interest for the Low and High Bounds depending on the risk factor.

Aspects that need completing include:

- Verifying correct output and potential rounding issues.
- Adding validation to the input page to ensure only valid data can be input.
- Tidying up the graph output and tweaking the scaling of the y axis.
- Adding marker line for End Timescale
- Adding coloured regions to indicate expected value.

Aspects that need refactoring/reworking

- The output page Index.cshtml.cs OnPostAsync method in in InvestorApp is doing too much and the processing should be split into separate methods/services.
- The DefaultCalculator service in the InvestorWebService has 2 private methods (CalculateMonths and CalculateYears) that should be in another service. They also have a lot of code that's repeated/copied that should be reworked into separate method(s).