# **Redington Code Mini Project**

This mini project is your opportunity to show us your style and thought process. Please ensure you are able to talk about **how** and **why** you built the project in the way you did. While this is an artificially small project we are looking for good code practices.

## **Project Brief**

Our consultants are looking for tool that will allow them to enter probabilities and carry out basic calculations. The program should also log each calculation for later analysis (**No** DB required, just log to a text file).

#### The calculator

The user should be able to enter two valid probabilities (0 to 1 e.g. 0.5 is valid while 1.1 or -0.1 is invalid). The user should be able to choose from the following functions:

- 1. CombinedWith: P(A)P(B) e.g. 0.5 \* 0.5 = 0.25
- 2. Either: P(A) + P(B) P(A)P(B) e.g. 0.5 + 0.5 0.5 \* 0.5 = 0.75

#### What to build

- 1. Use a technology you feel comfortable with (Forms, API, JavaScript, etc.)
- 2. A way for users to enter two numbers and see a calculated result
- 3. A log that includes the date, type of calculation, the inputs and the result

#### What we want to see

- 1. Maintainable code that is easy to extend
- 2. The project contains some degree of tests

Be prepared to explain your choices.

#### What we do NOT want to see

- 1. Security
- 2. Database

### **Delivery**

Please send us a zipped set of files or upload to GitHub and provide the link.