CODING ASSIGNMENT

Web Developer

Prepared for Internal

INTRODUCTION

PRE-REQUISITES

To take this challenge you will quite simply need to have access to a computer, email and software that can create a client side web application in JavaScript. We strongly recommend that you have a suitable professional environment in which to work.

INSTRUCTIONS

The purpose of this assessment is to complete a simple programming assignment. You are required to:

- Produce a working, object-oriented and tested source code to solve the problem

- Walk through your code with the assessor, answering questions on the code and programming/design choices as requested by the assessor

These should be supplied to the BJSS in electronic format, preferably as a complete project from your IDE of choice. If you have any issues with the programming assignment, please ensure that you inform BJSS immediately. You are expected to work on this task on your own, without help or advice from others. If you need clarification on any aspect of the assessment, please seek help from BJSS by emailing the Recruitment team.

CODING ASSIGNMENT

Write an application and associated unit tests that can price a basket of goods in several currencies.

The goods that can be purchased, which are all priced in GBP, are:

- Peas – 95p per bag

- Eggs – £2.10 per dozen

- Milk – £1.30 per bottle

- Beans – 73p per can

The program should allow the user to add or remove items in a basket. The user can click on a checkout button which will then display the total price for the basket with the option to display the amount in different currencies. For example, if the basket contained Milk and the currency selected was USD with an exchange rate of 1.5, the total would be $1.95 USD.

The list of currencies should be consumed from http://jsonrates.com/currencies.json. To convert to other currencies, you will need to create an account on http://jsonrates.com/. This will then issue you with an API Key that permits reading from the various public APIs listed on that site. The exchange rates may change at any time.

No UI design constraints are enforced – you should feel free to design the UI in the way you believe is most appropriate.

Your design and code should meet these requirements and be sufficiently flexible to allow for future extensibility.

Code should be well structured, suitably commented, have error handling and be tested.