



BJSS RECRUITMENT

Candidate Coding Assignment

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BJSS Limited

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I Introduction

I.1 Pre-requisites

The candidate is expected to have access to a computer, email and software that can create a mobile application. It is also expected that the candidate will have a suitable professional environment in which to work.

I.2 Instructions

The purpose of this assessment is to complete a simple programming assignment.

The details of the assignment are elaborated in section 2.

You are required to:

- Produce 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 organiser 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 the organiser 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 your organiser.

Please complete the coding assignment within a maximum of 5 working days. Even if the solution is not complete, the workings to that point should be submitted.

2 Coding Assignment

2.1 Pricing a basket

Write a mobile application and associated unit tests that can price a basket of goods in a number of different 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.

No UI design constraints are enforced so feel free to design the UI in the way you see as most appropriate for the solution.

The list of currencies should be consumed from <http://fixer.io>. The exchange rates may change at any time.

The code and design should meet these requirements but be sufficiently flexible to allow for future extensibility. The code should be well structured, suitably commented, have error handling and be tested.