

Offline Coding Test - Interest Rates

Purpose

The purpose of the offline test is to give you an opportunity to show your opinions on how code should be written. It is a purposefully simple and isolated brief to give you opportunity to demonstrate your "ideal style".

We value simple, effective, readable code over "clever" solutions.

If you subsequently have a pair-programming exercise with our team you will be asked to discuss and extend your solution.

Instructions

- Please take no more than 60 mins on this solution (your time is valuable and this is not a test of how much code you can produce in a given time)
- The coding exercise should be completed using a TDD approach
- The submission should be in the form of a git repository (granularity of commits is your choice)
 - You can either zip and email the repo or point us to a publicly available repository (but if doing the latter please make sure there is nothing in the repository that identifies DPR).
 - If you aren't able to use git for any reason then just a zipped file system will be accepted
- You are free to use whatever tools, libraries, frameworks that you see fit.
- Ensure the solution contains a README (txt or md)which will tell the reviewer anything they need to build, run and modify the solution and to communicate any assumptions or design considerations that you have made.

Scenario

A Building Society is introducing a new savings account which pays a variable amount of interest depending on the balance of the account. The interest is calculated based on the following bands:

```
< £1,000 - 1%
£1,000 - < £5,000 - 1.5%
£5,000 - < £10,000 - 2%
£10,000 - < £50,000 - 2.5%
£50,000 + - 3%
```

Write code that, given a balance, will calculate the amount of interest (in pounds and pence) that should be paid, e.g. A balance of £1,001 would pay interest at 1.5% resulting in an interest rate of £15.02

Good luck and have fun!