



Backend Engineer Take Home Test

What we'd like you to do

We're really happy to invite you to complete the next stage of the engineering interview process. For this we'd like you to design a vending machine that behaves as follows:

- Once an item is selected and the appropriate amount of money is inserted, the vending machine should return the correct product
- It should also return change if too much money is provided, or ask for more money if insufficient funds have been inserted
- The machine should take an initial load of products and change. The change will be of denominations 1p, 2p, 5p, 10p, 20p, 50p, £1, £2
- There should be a way of reloading either products or change at a later point
- The machine should keep track of the products and change that it contains

We're not monsters, so please don't take longer than a couple of hours to complete this and feel free to let us know if you have any questions.

How we'll mark your solution

As well as the functional requirements on the previous slide we also want your solution to:

- Be written in ruby
- Have tests
- Include a readme - think of it like the description you write on a github PR. Consider: explaining any decisions you made, telling us how to run it if it's not obvious, signposting the best entry point for reviewing it, etc...

The bulk of our score comes from how you completed these functional and non-functional requirements. We also evaluate:

- How idiomatic your ruby code is
- The OO design of your classes and methods
- The simplicity of your solution