Technical evaluation

Objectives:

- Evaluation of programming style
- Evaluation of language knowledge
- Evaluation of testing approach

Scope:

- Use Elixir
- Use TDD (Test-Driven Development) methodology
- Use github as public repository
- Use of DB is not required

Deadline:

- Assignment should be ready within 5 natural days of inbox reception
- Assignment is completed when we receive the link to the repository

Assignment:

You are the lead programmer for a small chain of supermarkets. You are required to make a simple cashier function that adds products to a cart and displays the total price.

You have the following test products registered:

Product code	Name	Price
GR1	Green tea	£3.11
SR1	Strawberries	£5.00
CF1	Coffee	£11.23

Special conditions:

- The CEO is a big fan of buy-one-get-one-free offers and of green tea. He wants us to add a rule to do this.
- The COO, though, likes low prices and wants people buying strawberries to get a price discount for bulk purchases. If you buy 3 or more strawberries, the price should drop to £4.50 per strawberry.
- The CTO is a coffee addict. If you buy 3 or more coffees, the price of all coffees should drop to two thirds of the original price.

Our check-out can scan items in any order, and because the CEO and COO change their minds often, it needs to be flexible regarding our pricing rules.

Implement a checkout system that fulfills these requirements.

Test data:

Basket: GR1,SR1,GR1,GR1,CF1
Total price expected: £22.45

Basket: GR1,GR1

Total price expected: £3.11

Basket: SR1,SR1,GR1,SR1
Total price expected: £16.61

Basket: GR1,CF1,SR1,CF1,CF1
Total price expected: £30.57