

# Technical Evaluation Document

Demonstrate your ability to engineer a software product by showcasing:

- Your **programming style** and **problem-solving** approach.
- How you structure and organize code for **maintainability** and **team collaboration**.
- Your proficiency in Elixir and familiarity with relevant **tools and libraries** in its ecosystem.
- Your knowledge of **architecture and design patterns** used in your solution.
- Your approach to **testing, validation, quality assurance**, and **operational** readiness.

## Requirements [🔗](#)

- The solution must be implemented in **Elixir**.
- Use a public **GitHub** repository to host your code.
- Include a comprehensive **test suite** to demonstrate the testability of your solution.

## 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're the lead developer for a supermarket chain. Your job is to design and build the first version of a cashier service that provides a feature for managing a shopping carts, applying pricing rules, and computing the final total.

Once your work is complete, three additional team members will join you to refine and enhance the project. However, the expectation is that your version should be production-ready.

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	Total Price Expected	
GR1,SR1,GR1,GR1,CF1	£22.45	
GR1,GR1	£3.11	
SR1,SR1,GR1,SR1	£16.61	
GR1,CF1,SR1,CF1,CF1	£30.57	