

## **Coding Exercise**

We are interested in seeing your coding and problem solving style, so we would love if you could complete this open code test.

For the purpose of this exercise, SEEK is in the process of rewriting its job ads checkout system. You have been assigned to build this new system.

We want to offer different products to recruiters:

- (i) Classic Ad: Offers the most basic level of advertisement
- (ii) Standout Ad : Allows advertisers to use a company logo and use a longer presentation text
- (iii) **Premium Ad**: Same benefits as Standout Ad, but also puts the advertisement at the top of the results, allowing higher visibility

Each of the product is billed as follows:

ID	Name	Price
classic	Classic Ad	\$269.99
standout	Standout Ad	\$322.99
premium	Premium Ad	\$394.99

We established a number of special pricing rules for a small number of privileged customers:

- (i) UNILEVER
  - Gets a for 3 for 2 deal on Classic Ads
- (ii) APPLE
  - Gets a discount on Standout Ads where the price drops to \$299.99 per ad
- (iii) NIKE
  - Gets a discount on **Premium Ads where 4 or more** are purchased. The price drops to \$379.99 per ad
- (iv) FORD
  - Gets a 5 for 4 deal on Classic Ads
  - Gets a discount on Standout Ads where the price drops to \$309.99 per ad
  - Gets a discount on **Premium Ads when 3 or more** are purchased. The price drops to \$389.99 per ad

These details are regularly renegotiated, so we want the pricing rules to be as **flexible** as possible as they can change in the future with little notice.



The interface to our checkout looks like this (shown in Ruby-ish pseudocode):

Checkout co = Checkout.new(pricingRules)
co.add(item1)
co.add(item2)
co.total()

Your task is to implement a checkout system that fulfils the requirements described above.

## #### Example scenarios

Customer: default

ID added: `classic`, `standout`, `premium`

Total expected: \$987.97

Customer: Unilever

SKUs Scanned: `classic`, `classic`, `classic`, `premium`

Total expected: \$934.97

Customer: Apple

SKUs Scanned: 'standout', 'standout', 'standout', 'premium'

Total expected: \$1294.96

Customer: Nike

SKUs Scanned: 'premium', 'premium', 'premium', 'premium'

Total expected: \$1519.96

Customer: ford

SKUs Scanned: `premium`, `premium`, `standout`, `standout`, `standout`, `classic`,

classic`, `classic`

Total expected: \$2909.91

## Tips:

- We do not want you to lose a weekend trying to solve this problem. Only spend enough time required to produce an **appropriate**, **clean**, **testable** and **maintainable** solution to the stated problem. You should focus on delivering either a front-end or a back-end implementation.
- Back-end implementations won't be assessed at all on the quality of the UI, if any is delivered.
   Our focus is understanding your back-end **engineering skills**, so please build a system that helps you demonstrate them.
- Front-end implementations will be assessed more on the quality and structure of your JS and CSS than the design per se. Our focus is on your **front-end engineering skills**, so please build a UI that helps you demonstrate them. Attention to usability and accessibility concerns is an advantage.
- Shiny is not important but **how** you make it shiny is critical.
- Deliver any **code**, **test code and test data** required so that this can be fully reviewed for accuracy and completeness of the solution that you prepare.
- Consider that technology may affect the app evaluation. Providing instructions on how to run the app is critical, since we may not have a development environment already setup. You may also provide a live environment with the app running.