

As discussed, please complete the coding challenge in any language/framework of your choice

If you have any questions about the exercise please do not hesitate to ask!

Please contribute 4 hours of work to complete this challenge

PROBLEM:

Bob runs a banana stand and is having difficulty keeping track of his inventory and business metrics.

We need you to create a service with a DB or storage that helps Bob solve his problems.

Please include a README file with instructions on building and starting the service.

Please take up to four hours to work on the solution.

GIVENS:

1. Bob sells each banana at a constant price of \$0.35
2. Bob sells his bananas with a FIFO policy (based on purchase date)
3. Bob purchases a banana from a supplier at a cost of \$0.20
4. Bananas will expire 10 days from purchase date (so if purchased on 2019-01-01, they will expire on 2019-01-10, meaning they can no longer be sold on 2019-01-11)

BACKEND:

1. Purchasing API: record the purchasing of bananas from supplier
 - Inputs are number of bananas (int) and the purchase date (YYYY-MM-DD)
2. Selling API: record the selling of bananas
 - Input is how many bananas were sold (int) and the sell date (YYYY-MM-DD)
3. Metrics API: return count of bananas in inventory (by end date), count of expired bananas (by end date), count of bananas sold (by end date), and profit/loss.
 - Inputs are start date (YYYY-MM-DD) and end date (YYYY-MM-DD). Dates are inclusive.

DATABASE or STORAGE:

Choice of DB/storage and schema design are yours.