

Coding Test

For the coding Test I chose to complete the following User stories:

User story 1

List all plates with pagination - Completed

Add plate functionality - Not completed

Markup by 20% - Completed

Advanced - Completed

User story 2

Order the list by price - Completed

API can order by Registration, sale price and purchase price

User story 4

Add a reserved status to the plate - Completed

Plates are displayed as reserved - Completed

Advanced (unreserve and auditing) - Not completed

User story 5

Add filter to only show for sale items - completed

User story 7

Promotion code

DISCOUNT == £25 off - Completed

I have tried to cover unit testing, IoC and DI and pub/sub pattern.

For the plates API, this is all the available filters with an example:

[http://localhost:5101/plates?page=1&pagesize=10&searchTerm=MEA&sortColumn=registration&sortOrder=desc
&promoCode=DISCOUNT&hideUnavailable=true](http://localhost:5101/plates?page=1&pagesize=10&searchTerm=MEA&sortColumn=registration&sortOrder=desc&promoCode=DISCOUNT&hideUnavailable=true)

This is the reserve endpoint:

<http://localhost:5101/plates/c4e76158-ba7a-4f21-923d-056cf029d491/reserve>

If I was to continue working on this, I would:

- Upgrade to .NET 9
- Move to a minimal API pattern
- Implement a more robust entity update and storage solution (what I have made is for this POC)
- Built a simple UI

If I had the time to create a UI, I would create one like this:

MyRegSales.com

Search

Promo code:

Sort by

Registration
Purchase Price
Sale Price

Order by

Ascending
Descending



Hide Unavailable

Search

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Registration	Purchase Price	Sale Price	Actions
ABC123	£300	£3000	Buy Reserve
XYZ456	£300	£3000	RESERVED
123BOB	£300	£3000	Buy Reserve
FRED1	£300	£3000	SOLD

With the reserved, I'd add the call to action to sign up for notifications if it becomes unreserved

SOLD could link to a search of similar plates. It could also list when it was sold (if recently) to add a sense of FOMO to the person browsing the site

