## **DVLA Personalised Registrations**

Personalised Registrations for vehicles, aka, personalised car number plates, are available for purchase from DVLA. Their Timed Auction website lists the current set of registrations available for bidding in their monthly online auction.

https://www.dvlaauction.co.uk/

## https://dvlatimedauction.co.uk/

You want to purchase a personalised number plate that contains the initials from your name, however there are too many to choose from, or they do not have anything suitable in the current auction.

You decide this can be automated and begin writing a process to search through the list of available registrations.

How would you approach this?

Break down the system into the different parts.

- 1. Api for the number plates. What would be the ideal one for the user.
- 2. Auctions are timed so make sure that the API is able to work with the website.
- 3. Have a database of plates that are suitable
- 4. Check the available lists and compare them to yours to see if there is a match
- How can a list of registrations be retrieved?

Use an API to connect to the database and retrieve the different number plates that are

on offer to see if any of them match something that you would want to buy.

• How would the list be searched for your initials?

A basic match or search algorithm can be used to check for matches against your initials.

So you would need to write a loop that checks for any matches and saves the ones that are to do with your initials so you can check over them yourself.

• What other information would you need along with the found registration?

You would need to have a user account so that you can see the different number plates on sale.

You will need a timestamp and also to make sure that the number plate has not already been sold. This is to make sure that when you come to buy it you actually can bid on the matched number plate.

•How could this be scheduled to run for the next auction?

You can have the algorithm check to see when the start of the next auction is and auto add you to the list of buyers so that when you check it will be logged in and you can already see the different plates that you would want to place a bid on.

Having a small DB of matches is also useful here as the program can place bids for you so you can have it check against plates that you would definitely want and it could bid for you. Meaning that when you come to check its a simple matter of actually completing your details to checkout.

- What additional tasks could be automated? Having the program add the user and all of their information into the next auction is also something that can be automated. This will mean that the user will automatically be told via email if they have a match for the number plate that they want.
- Which technologies would you pick and why?

JS, SQL

JS so that the system is able to talk to the site using the new APIs and also to create different algorithms that are able to try and match the different plates to ones that are usable by the person.

SQL so that all of the information can be stored in an easy to access way and also so that when making a simple UI for the program it will be able to easily access the information.

• How would you view the results?

Using SQL means that having JS as the Backend and using html and css to create a simple way to view the information that has been collected by the program will be alot easier in the long run.