

# Vochlea technical exercise (web)

## Intro

For this exercise, we want you to produce a simple web service using the language (and possibly framework) of your choice [JS/Ruby/Python preferred].

The service will be used to parse and store calls to Transport for London's (TFL) API. TFL provide a clean REST API that you can use to get data about transport systems in London. For example, the status of a tube line or where Santander bicycles are.

The API is well documented and can be found at <https://api.tfl.gov.uk/>

## Goal

We want you to use the Journey Planning part of the API to create a webservice that returns some of the *human-readable elements* of the Journey Planner, and stores the results for a short period of time.

The service you write should support the following:

- Take a *from postcode* and *to postcode* as parameters: [to, from]
- Concatenate the list of direction descriptions returned from the TFL API into a **single, human-readable** `directions` text string and store this result, along with the time of the request
- Return a JSON response with the following fields: {to, from, directions, stored}
- If the same request is made within 10 minutes, the stored result is returned with `stored: true`, otherwise regenerate the directions and overwrite any previously stored route and the response contains `stored: false`

(Very optional) bonus feature (only if you have spare time):

- Authentication for a single user: e.g. username: foo; password: bar

You can use any (**non-memory**) datastore you like, sqlite is sufficient!

It would be good to see some evidence of testing in your service. Please include documentation on how to run the server and tests. You could include a README.md that outlines this.

## Example request:

Assuming you are running a server locally on port 5555 using curl. Note, this is an example, you can design your API however you wish:

```
$ curl "from=E83EZ&to=E65XE" http://localhost:5555/routeplan
```

## Deliverable

When you're ready, zip up the repository and send it over to [daven@vochlea.co.uk](mailto:daven@vochlea.co.uk). Do not spend more than a couple of hours on this test. Therefore, in your README, don't hesitate to include a list of known limitations. What else would you have done if you had another 5 hours to work on it?