

## Simple Data Warehouse (extract, transform, load, query)

You are going to write a simple backend application that *exposes* data - *extracted* from a csv file - via an API.

The file can be found here

<http://adverity-challenge.s3-website-eu-west-1.amazonaws.com/PlxSyYrIKFORrCXfMYqZBl.csv>

*Transform* it to your needs so it can be *loaded* into your favorite data store.

The API should make it possible to *query* the data in a generic and efficient way.

Possible queries might look like this:

- Total *Clicks* for a given *Datasource* for a given *Date* range
- *Click-Through Rate (CTR)* per *Datasource* and *Campaign*
- *Impressions* over time (daily)

And the data looks like this:

- a time *dimension (Date)*
- regular *dimensions (Campaign, Datasource)*
- *metrics (Clicks, Impressions)*

As a hint, the API consumes these parameters

- a set of *metrics* (plus calculated ones) to be aggregated on
- an optional set of *dimensions* to be grouped by
- an optional set of *dimension filters* to be filtered on

## Tech / architecture

Feel free to

- Choose any JVM based language and framework
- Design any architecture that fits the problem/usecase best
- Model the API contract on your behalf
- Use any additional tech that helps extracting, transforming, loading and querying data

## Deliverable

- Publish your solution on GitHub
- Deploy it somewhere so that the API can be publicly queried from