Requirements definition

REQ1 - We need to build a new web application that will allow us to create foreign exchange trades. For this, we will create a Client / Server web application, communicated with and RESTful API.

REQ2 - The main page of the application will list the trades existing in the database, sorted by booking date, and structured as shown in the *Figure 1* of the wireframe. The trades model will be stored in a relational database with the next attributes:

Attribute	Example Value
ID	TR428YR1O
Sell Currency	USD
Sell Amount	500,00
Buy Currency	EUR
Buy Amount	633,13
Rate	1,2756
Date Booked	2018/05/27 23:13:05

* ID should be unique and generated on creation by the next format:
      "TR" + 7 alphanumerics

REQ3 - In the page described in the **REQ2**, should have a button that redirects to a new page which allows the user to enter a new trade, as described in the *Figure 2* of the wireframe. The initial value of the currencies dropdown should be empty, and once the user enters a value in both of them, the frontend app should retrieve the latest rate for the selected currency pair and display it.
The buy amount is not editable, and should be automatically calculated by multiplying the rate against the sell amount.

REQ4 - As we don't have a direct connection with a central rate provider, we will need to connect to an external service that will give us this information through an API. This service will be fixer.io.

REQ5 - This application should be self-contained and ready to be shipped and deployed with an automatic script that installs all dependencies and services in an isolated machine.
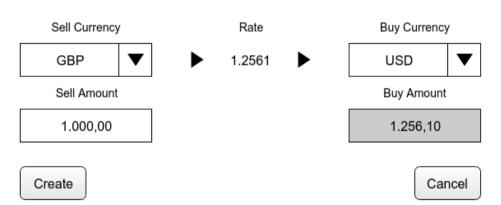
Ebury
What borders?

① Booked Trades

New Trade

Sell CCY	Sell Amount	Buy CCY	Buy Amount	Rate	Date Booked
USD	200,00	EUR	206,50	1,0325	25/03/2018 23:25
GBP	1250,50	USD	1023,89	0,9801	24/03/2018 18:01
EUR	23,50	GBP	18,05	0,9621	24/03/2018 17:25
GBP	5.054,98	EUR	4778,89	0,9802	23/03/2018 12:13
USD	82.422,08	GBP	96325,03	1,2536	23/03/2018 12:01

② New Trade

Sell Currency	Rate	Buy Currency
GBP ▼	▶ 1.2561 ▶	USD ▼

Sell Amount

1.000,00

Buy Amount

1.256,10

Create

Cancel

Constrains and Suggestions

* Test coverage, comments and the use of standardized style guides will be highly appreciated.

* The exercise could be sent in a compressed file by email. Alternatively, you could upload your codebase into a public git repository and send us the url.

* The only limitations will be the use of python and javascript for backend and frontend respectively.

GOOD LUCK!