# **Box**Commerce

## Technical Assessment
Angular Engineer

### Premise

You have been approached by a client to design and develop an Angular based, mobile first; PWA; conversion calculator. The application must fulfil the basic tenets of modularity, maintainability, and scalability.

### Conversion Calculator

Please create a mobile first PWA Angular app with at least 2 components, as follows:

1. For the first, implement a currency converter e.g.
    - *150 ZAR* to *USD = 9.24 USD*
    - *1,020 AUD* to *CHF = 657.47 CHF*

      You can use any available api to get a currency list and exchange rates.
      Here are a some api's that have a free tier that you could try.
        - https://www.currencyconverterapi.com/
        - https://www.abstractapi.com/exchange-rate-api
        - https://api.ratesapi.io/api/latest
    - As a bonus include a historical view of the converted units, showing the trend over time

2. For the second, implement a length unit converter:
    - *9 yards to inches = 324 in*
    - *500 inches to meters = 12.7 m*

### Required solution

- The currency converter should support at least 3 different currency pairs
- The length converter should support these units at a minimum:
    - *meter (m)*
    - *yard (yd)*
    - *inch (in)*
- Support 2-way conversion i.e. allow the user to change values in either the *from* or *to* field
- The design of the code should support adding new units easily.
- The result should be displayed as user-friendly strings, for example *'R250.00', '$48.00', '27 yd'* etc.
- Use Angular Material for basic styling (buttons, inputs etc).
- Use Angular Flex-Layout for basic template layout
- It should be a fully tested app.

Your solution should be written using Angular 11 or greater