

# Code to Connect

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# Overview

## High-level Approach:

- Did incremental progress, commit often so that we can always revert back quickly
- Started test-cases by test-cases and amending our code as we go for a more generalisable approach

## Components Attempted:

- Market Data Producer
- Trade Event Data Producer
- Pricing Engine
- Report Generator
- Dashboard



# Solution Design



## Python

Easy, fast and efficient



## Separation of Concern

Decouple the components as much as possible for reusability and fault tolerance



## Helper Functions

Extract functions out whenever possible with helper functions to make code more clean



# Demonstration

```
EventId: 92
Event Type: ConfigEvent
Config {'EventId': 92, 'EventType': 'ConfigEvent', 'm': 0.03, 'b': 0.06, 'DivisorRatio': 100000, 'Spread': 3}
FX {'CHX': 0.88, 'KRX': 1317.82, 'JPX': 133.0, 'GBX': 0.81, 'EUX': 0.9}
```

Ccy	Tenor	Position	Bid	Ask	QuoteStatus
CHX	1M	-900	0.8757	0.8758	TRADABLE
JPX	6M	3000	132.9452	132.9452	TRADABLE
KRX	6M	5000	1317.7286	1317.7287	TRADABLE
EUX	3M	-100	0.9002	0.9005	TRADABLE
GBX	3M	-2500	0.8919	0.8921	NON-TRADABLE

## Dashboard

```
1  [
2      {
3          "EventId": 1,
4          "EventType": "ConfigEvent",
5          "m": 0.01,
6          "b": 0.07,
7          "DivisorRatio": 300000,
8          "Spread": 2
9      },
10     {
11         "EventId": 2,
12         "EventType": "ConfigEvent",
13         "m": 0.03,
14         "b": 0.08,
15         "DivisorRatio": 300000,
16         "Spread": 1
17     },
18     {
19         "EventId": 3,
20         "EventType": "TradeEvent",
21         "Ccy": "CHX",
22         "BuySell": "sell",
23         "Tenor": "1M",
24         "Quantity": 3000,
25         "TradeId": "T1"
26     },
27 ]
```

## Data Stream



# Key Takeaway



## Python

We learned more things about Python we didn't know before



## Jargons

We learned new jargons in regards to the banking sector, and how banks work



## Have fun

We had fun throughout this hackathon!

