

The Bitcoin Ticker Challenge

Level 1 - Bronze Medal 🏅

Complete this challenge to get the bronze medal. After completing this challenge, you can push yourself further by continuing to complete to the silver medal in the next lesson.

1. Start by **cloning a fresh copy** of the app that includes all the code up until this point:

<https://github.com/londonappbrewery/bitcoin-flutter-challenge-start>

2. **Run the app**, it currently has a single Text Widget, that displays 1 BTC = ? USD



1 BTC = ? USD

3. Using what you have learnt in previous modules to **display the** latest price of 1 Bitcoin (**BTC**) in US dollars (**USD**).

You'll need the **BitcoinAverage API for Ticker Data (Per Symbol)** to achieve this:

<https://apiv2.bitcoinaverage.com/#ticker-data-per-symbol>

The value we're interested from the API is the last price of Bitcoin in USD.

```
{  
  "ask": 418.79,  
  "bid": 418.35,  
  "last": 418.66,  
  "high": 418.83,  
  "low": 417.1,  
  "open": {
```



Last price

You'll want to write all the networking/request/parsing code inside a method called `getCoinData()` in the `CoinData` class in the `coin_data.dart` file.

NOTE: The CupertinoPicker/DropdownMenu is not supposed to work yet.

Hint: You'll need the [http](#) and [dart:convert](#) packages.

You can check your answer against the solution by cloning [this repository](#). Go through the comments in order starting from //1 in the Pubspec.yaml file.

Solution: <https://github.com/londonappbrewery/bitcoin-flutter-bronze-solution>

Level 2 - Silver Medal

If you've managed to complete the level 1 - bronze challenge without looking at the solution code, then it's time to push yourself and increase the difficulty. Complete this level 2 challenge to get the silver medal.

1. Start by **cloning a fresh copy** of the app that includes all the code up until this point:

<https://github.com/londonappbrewery/bitcoin-flutter-silver-start>

2. **Run the app**, notice that it can only fetch the bitcoin price in US dollars.



1 BTC = 5039 USD

3. Using what you have learnt in previous modules to **display the** latest price of 1 Bitcoin (**BTC**) in **any currency** selected by the user.

You'll need to look inside the onChanged for the **DropDownButton** and the onSelectedItemChanged for the **CupertinoPicker** to see what the user selected as the currency.

The [Bitcoin Average API](#) supports all the currencies in our currenciesList.

The URL is structured like this:

<https://api2.bitcoinaverage.com/indices/global/ticker/BTC><Currency>

e.g. For GBP (UK Pounds), the URL would look like this.

<https://api2.bitcoinaverage.com/indices/global/ticker/BTCGBP>

You can check your answer against the solution by cloning this repository. Go through the comments in order starting from //1

Solution: <https://github.com/londonappbrewery/bitcoin-flutter-silver-solution>

Level 3 - Gold Medal 🏆

If you've managed to complete the level 2 - silver challenge without looking at the solution code, then it's time to push yourself and increase the difficulty even more. Complete this final challenge to get the gold medal.

1. Start by **cloning a fresh copy** of the app that includes all the code up until this point:

<https://github.com/londonappbrewery/bitcoin-flutter-gold-start>

At the moment our app can only fetch the **bitcoin price** depending on the selected currency. But what if we wanted other cryptocurrency prices too?

2. If you look inside the **coin_data.dart** file, you'll find a const called `cryptoList`. This contains a List of Strings that represent 3 cryptocurrency symbols. **BTC - Bitcoin, ETH - Ethereum and LTC - Litecoin.**

```
const List<String> cryptoList = [
  'BTC',
  'ETH',
  'LTC',
];
```

3. Using what you have learnt in previous modules, update the code in the gold starter project to be able to display **all three cryptocurrency prices** in any selected currency.

You can check your answer against the solution by cloning this repository. Go through the comments in order starting from //1

Solution: <https://github.com/londonappbrewery/bitcoin-flutter-gold-solution>

Now that you've completed the challenge, it's time to personalise the app. Add more currencies, change up the styling and check [dribbble for inspiration](#).
The world is your oyster!

Be sure to share your best work with the community so we can marvel at your amazing work. Tweet your best screenshots with the hashtag #flutterbrew and we'll judge who's got the best designs and implementation!

You can find the completed project at this GitHub repository. If you have any bugs or are stuck on something, take a look through it and see if there's something you've missed.

<https://github.com/londonappbrewery/bitcoin-flutter-final>