

Currency exchange

Your task, should you choose to accept it, is to create a currency exchange API.

API request interface

GET /quote

Query parameter	Description
baseCurrency	String, 3 letters ISO currency code. Currency to convert from.
quoteCurrency	String, 3 letters ISO currency code. Currency to convert to.
baseAmount	Integer. The amount to convert in cents. Example: 100 (1 USD)

Supported currencies are USD, EUR, GBP and ILS. API calculates the total amount expected in the quoteCurrency accordingly to the exchange rate provided by the 3rd party service.

API response interface

Response body: JSON with the following properties

Property	Description
exchangeRate	Decimal, the offered exchange rate. Up to 3 decimal digits.
quoteAmount	Integer, the expected amount in cents. You can choose the rounding policy.

3rd party exchange provider

Exchange rates are fetched from <https://exchangerate-api.com>. Issuing a GET request to the following URL will return the latest exchange rates for several currencies when the base currency USD: <https://api.exchangerate-api.com/v4/latest/USD>

Caching

For performance and cost reasons exchange rates are to be cached. Please **implement** a LRU Cache algorithm. For the purpose of the exercise use in memory storage.