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Introduction to the API:

The Open Exchange Rates API is a popular free REST API that provides real-time and historical exchange rates for over 200 currencies, including precious metals and cryptocurrencies, against the US dollar. The API was created to help developers build applications and websites that require currency conversion functionality.

The Open Exchange Rates API was founded in 2010 by the software engineer, Nigel Green, and it has since become one of the most widely used APIs for currency exchange rates. The API is trusted by thousands of developers and companies worldwide, including well-known brands such as Airbnb, Stripe, and Uber.

The API offers a variety of endpoints for different use cases, including real-time exchange rates, historical exchange rates, currency conversion, and more. The API supports multiple formats for data exchange, including JSON, XML, and CSV.

The Open Exchange Rates API is easy to use, and it provides high-quality data with excellent documentation and developer support. The API offers a free plan with limited features and a paid plan with additional features, including higher API call limits and priority support.

Overall, the Open Exchange Rates API is an excellent choice for developers looking to integrate exchange rate functionality into their applications and websites. With its extensive coverage, reliable data, and developer-friendly features, the API is a trusted and widely used resource for currency exchange rates.

Endpoint:

The endpoint for this API is <https://openexchangerates.org/api/>. To access the latest exchange rates against the USD, you would add "latest.json" to the endpoint, resulting in the URL: <https://openexchangerates.org/api/latest.json>.

Request Information:

To access the API, you will need to sign up for a free API key, which can be obtained on the Open Exchange Rates website. You will need to include this API key as a parameter in your HTTP request. The parameter is called "app_id" and is included in the URL query string, like this: https://openexchangerates.org/api/latest.json?app_id=YOUR_APP_ID_HERE.

In addition to the app_id parameter, there are a few optional parameters that can be included in the query string to customize the response. These include:

- "base": the base currency to use for the exchange rates (default is USD)
- "symbols": the specific currencies for which to return exchange rates (comma-separated list)

Headers that need to be sent:

No specific headers need to be sent.

Response Information:

The API responds with a JSON object containing the requested exchange rates. The object has a few different properties, including:

- "timestamp": the Unix timestamp of when the exchange rates were last updated
- "base": the base currency used for the exchange rates (will be the same as requested or default to USD)
- "rates": a nested object containing the exchange rates for the requested currencies

The exchange rates are represented as key-value pairs, where the key is the currency code and the value is the exchange rate against the base currency.

Sample Requests and Responses:

Request:

`https://openexchangerates.org/api/latest.json?app_id=YOUR_APP_ID_HERE&base=EUR&symbols=USD,GBP`

Response:

```
{
  "disclaimer": "Usage subject to terms: https://openexchangerates.org/terms",
  "license": "https://openexchangerates.org/license",
  "timestamp": 1559509202,
  "base": "EUR",
  "rates": {
    "USD": 1.119271,
    "GBP": 0.884385
  }
}
```

In this example, we are requesting the latest exchange rates against the EUR for the USD and GBP currencies. The API responds with the timestamp of the rates, the base currency (EUR), and the exchange rates for the requested currencies (USD and GBP).