

PROJECT IDEAS AND PLANNING - Currency Exchange

Our **currency converter** calculator converts your money based on current values from around the world.

Wire Frame

The wireframe illustrates a currency converter interface. It features two input fields at the top for selecting countries, each with a 'show flag' link and a 'drop down menu' indicator. The central area displays the 'Exchange Rate' as '1 Usd = 3.75 AED', with 'United States' and 'United Emirates' listed below to specify the currencies being compared.

show flag

Base Country

drop down menu

show flag

Compared Country

drop down menu

Exchange Rate

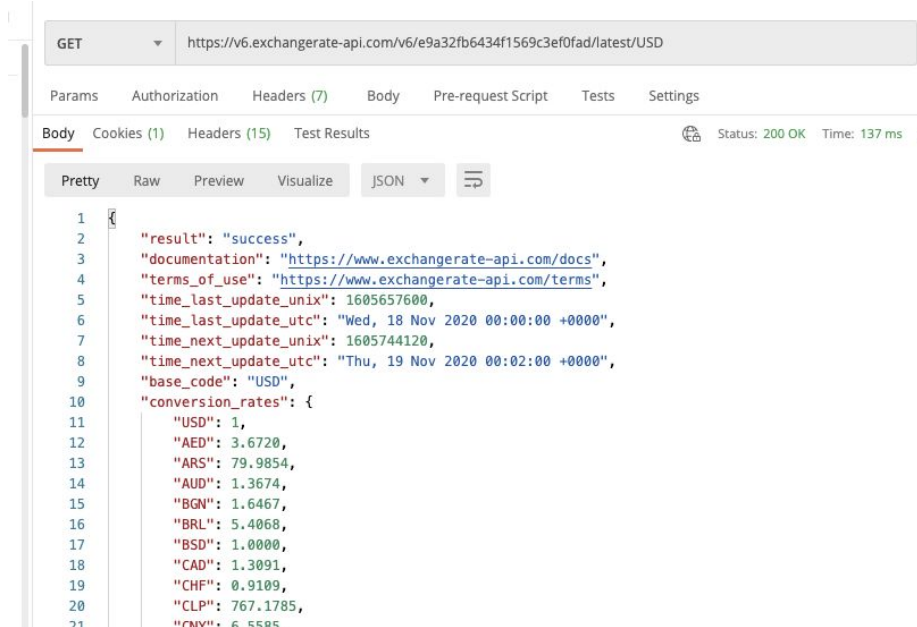
1 Usd = 3.75 AED

United StatesUnited Emirates

APIs

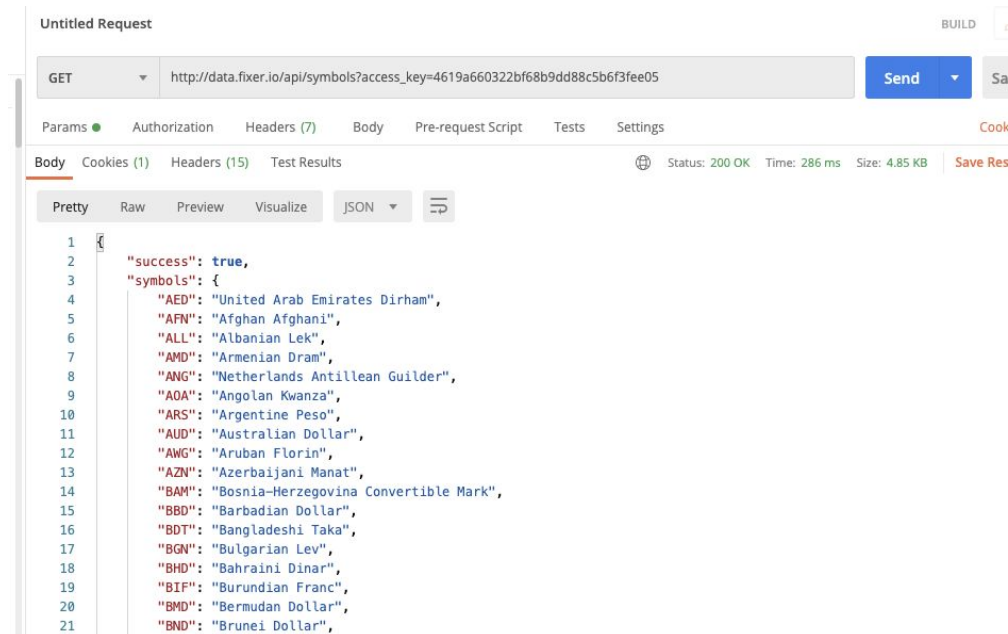
API for Exchange Rate with base Country

<https://v6.exchangerate-api.com/v6/e9a32fb6434f1569c3ef0fad/latest/USD>



API for Complete Country Names

http://data.fixer.io/api/symbols?access_key=4619a660322bf68b9dd88c5b6f3fee05



API for country flags

<https://www.countryflags.io/be/shiny/64.png>

<https://www.countryflags.io/us/shiny/64.png>

GET

https://www.countryflags.io/us/shiny/64.png

Send

- Params
- Authorization
- Headers (9)
- Body
- Pre-request Script
- Tests
- Settings

Query Params

KEY	VALUE	DESCRIPTION	***
Key	Value	Description	

Body

Cookies (2)

Headers (17)

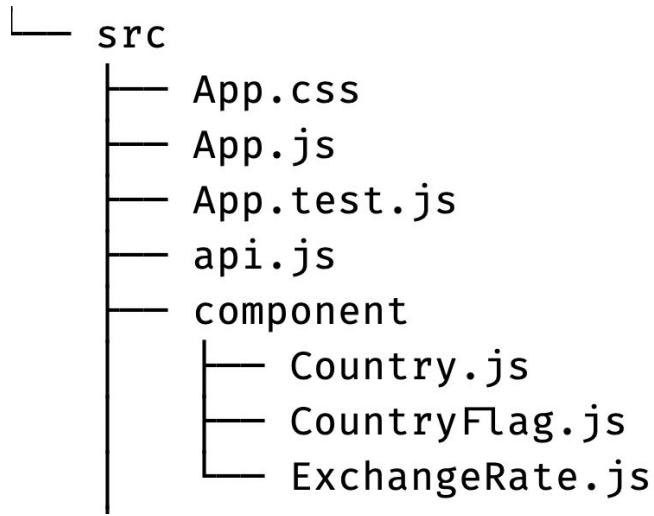
Test Results

Status: 200 OK Time: 304 ms Size: 2.82 KB

Save



Components



APP

- Constructor

```
this.state({
  exchangeRateResponse: {},
  compareCurrency: 'EUR',
  increments: 1
})
```

<>

```
{this.state.exchangeRateResponse.data ? (
  <Country
    changeCompared={this.changeCompared}
    exchangeRate={this.exchangeRate}
    exchangeRateResponse={this.state.exchangeRateResponse}
    comparedCurrency={this.state.comparedCurrency}
    toggleCurrency={this.toggleCurrency}
  />
) : null}
```

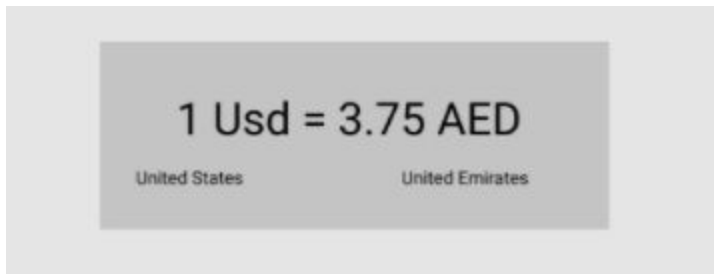
```
<ExchangeRate
  comparedCurrency={this.state.comparedCurrency}
  exchangeRateResponse={this.state.exchangeRateResponse}
  onAmountChange={this.handleAmountChange}
  increments={this.state.increments}
/>
</>
```

Country.js

- (componentDidMount)
 - Function in API.js setCountryNames<http://data.fixer.io/api/symbols?...>
 - Function in API.js getExchangeRate
<https://v6.exchangerate-api.com/v6/e9a32fb6434f1569c3ef0fad/latest/USD>

Two Functions

- exchange Rate
- changeCompared
- Filter: remove the countries from Symbol API not in our ExchangeRate API



ExchangeRate.js

- Get exchangeRate from App.js
- Get compareCurrency

Technical Challenges:

Filter Countries

- remove the countries from Symbol API not in our ExchangeRate API

Country Flag

- CORS restriction with Flag API so as a work around is to dynamically creating the source string to display the image

User Stories:

1. Base Country

As a user I want to select a base country to begin the display of the exchange rate.

Acceptance Criteria:

1. The base country list will be populated with Country names and codes
 - a. United States - USD
2. The base country list will be sorted alphabetically by Country Name
 - a. Austria - AUT
 - b. Belgium - BEL
 - c. ...
 - d. United States - USD
3. The base country list will be populated when the page loads.
4. The list will be populated with results from API
<https://v6.exchangerate-api.com/v6/e9a32fb6434f1569c3ef0fad/latest/USD>

2. Exchange Country

As a user I want to select an exchange country to complete the selection process and display of the exchange rate.

Acceptance Criteria:

1. The exchange country list will be populated with Country names and codes
 - a. United States - USD
2. The exchange country list will be sorted alphabetically by Country Name
 - a. Austria - AUT
 - b. Belgium - BEL
 - c. ...
 - d. United States - USD
3. The exchange country code will be populated when the page loads.
4. The list will be populated with results from API
<https://v6.exchangerate-api.com/v6/e9a32fb6434f1569c3ef0fad/latest/USD>

3. Exchange Rate

As a user when I complete selecting a Base Country and Exchange Country I want to view the exchange rate for the counties that I selected.

Acceptance Criteria:

1. The exchange rate will be displayed below the base and exchange country drop down lists

2. The exchange rate will display the amount and exchange rate along with country codes:
 - a. "1 USD → 2.345 AUT"
3. The exchange will display the country names below the rate values
 - a. United States -----> Austria

4. Navigation - clear rate results

As a user when I select a Base Country any previous exchange rate results will be removed from the page

Acceptance Criteria:

1. The exchange rate displayed below the base and exchange country drop down lists will be cleared
2. The flags, if any displayed, will be removed and the new base country selected flag will be displayed.:

5. ReadME -

As a user when I want to understand the different components used for the project.

Acceptance Criteria:

1. Create ReadME to include the following items:
2. App URL
3. Approach
4. Unsolved Problems
5. User Stories
6. APIs
7. Technologies Used
8. Stretch Goals

6. STRETCH - Country Flags

As a user when I select a Base Country and Exchange Country I want to see the flags for the countries that I selected.

Acceptance Criteria:

1. The flags will display about the drop down list for for the country code
2. The flag will display when the country value is selected in the drop down.
3. The query to the API will use the first two chars of the country code
4. The flag will be populated from an API query by passing in the first two char of the three char country code <https://www.countryflags.io/be/shiny/64.png>
5. If no flag is found a message of "Flag not Available" will display.

7. STRETCH - Update Base Currency exchange Amount

As a user I would like to change the base currency amount, value other than 1, so I can see the total exchange amount.

Acceptance Criteria:

1. User is able to enter a numeric value in FROM amt
2. User is not allowed to enter an alpha value
3. TO: value is updated to reflect the base about multiplied by the exchange amount.

8. STRETCH - Toggle Exchange Countries

As a user I would like to switch the currently selected base and exchange country values so I can see the exchange amount.

If base = USD and Exchange Country = EUR then

Base = EUR and Exchange Country = USD

Acceptance Criteria:

1. User is able to click the button to switch the two values
2. When clicked Base flag is changed to exchange country flag
3. When clicked Exchange country flag is changed to base flag
4. Base dropdown list is changed to Exchange dropdown list value
5. Exchange dropdown list is changed to Base dropdown list value
6. To value is updated to reflect the new base about multiplied by the exchange amount.
7. The from amount remains unchanged

9. STRETCH - CSS Styling