



Smart Currency Converter

Convert currencies fast and confidently with real-time rates worldwide.

Made by team HAS

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3. Ashhad Khan

Team contribution

1.Hassaan Nauman (logic developer)

make the logic of the code
and make the presentation

2.Syed Ayyan Ali (UI designer)

make the whole ui of the website
and make the animation of the website

3.Ashhad khan (code compiler and bug fixer)

compile the code
and overview the code





Why Choose Our Converter?

Real-Time Rates

Always up-to-date exchange values

Wide Currency Support

Thousands of global currencies available

Accuracy

Precise calculations you can trust

Anywhere Access

Use on web or mobile devices anytime

Languages and Api used in this project

HTML

- Defines the structure of web pages
- Ensures semantic and accessible content

CSS

- Styles and layouts the web pages
- Enhances user experience with responsive design

JavaScript

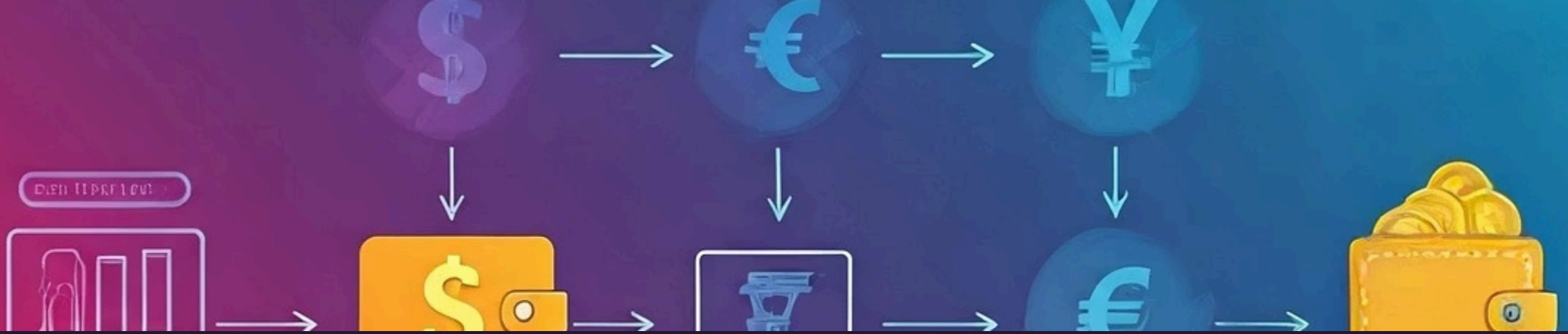
- Adds interactivity and dynamic behavior
- Handles real-time currency conversion calculations

Exchange Rate API

- Provides up-to-date currency exchange rates
- Ensures accurate and reliable conversion data

FlagCDN

- Supplies country flags for visual reference
- Improves interface clarity and user experience



How It Works

1

Select Currency Pair

Choose the currencies to convert

2

Enter Amount

Input sum to convert

3

Get Rate

Receive live exchange values

4

Convert


Instantly see converted amount

Currency Converter

Enter Amount

1

From

 USD ▼



To

 EUR ▼

1 USD = 0.88 EUR

Get Exchange Rate

Function in this currency converter

1

Data Encryption

Protecting your financial info

2

Trusted APIs

Reliable data from reputable sources

3

24/7 Uptime

Always available when you need it

4

Conversion

convert one currency to another

Loading flags



for logic see right side image -->

What's happening in this code

```
const loadFlag = (element) => {
  for (let code in country_list) {
    if (code == element.value) {
      let imgTag = element.parentElement.querySelector("img");
      imgTag.src = `https://flagcdn.com/48x36/${country_list[
        code
      ].toLowerCase()}.png`;
    }
  }
};
```

We had made a loop to load the flags in our currency converter

1.In this code by

```
for (let code in country_list) {
```

country list is a type of object in which loop check every currency code

2.Then after that

```
if (code == element.value) { ... }
```

then it will check the country code whether it is right or wrong

3.Now at end

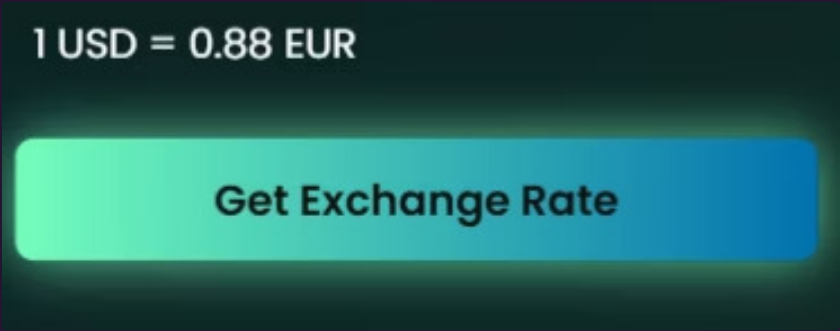
```
let imgTag =
element.parentElement.querySelector("img");
imgTag.src =
`https://flagcdn.com/48x36/${country_list[code].toLower
Case()}.png`;
```

It will find the img then change the flags according to country code then make it in to lowercase

```
.toLowerCase()
```

for the url and then it will show flags from this website{flagscdn}

Currency Converter



for logic see right side image -->

```
const getExchangeRate = () => {
  let amountVal = amount.value;
  if (amountVal == "" || amountVal == "0") {
    amount.value = "1";
    amountVal = 1;
  }

  exchangeRateText.innerText = "Getting exchange rate...";

  let url = `https://v6.exchangerate-api.com/v6/${apiKey}/latest/${fromCurrency.value}`;
  fetch(url)
    .then((response) => response.json())
    .then((result) => {
      let exchangeRate = result.conversion_rates[toCurrency.value];
      let totalExRate = (amountVal * exchangeRate).toFixed(2);
      exchangeRateText.innerText = `${amountVal} ${fromCurrency.value} = ${totalExRate} ${toCurrency.value}`;
    })
    .catch(() => {
      exchangeRateText.innerText = "Something went wrong";
    });
};
```

What's happening in this code

1. we use the arrow function

```
= () =>
```

1. to make the syntax short and easy to understand and instead of writing long version of code like [{...}] we use arrow function
2. in first five line of the code the function we made is to make the default value 1 if there is no value like the value is 0 so it give the default value 1
3. then on next line it giving output (Getting exchange rate..) so we know that it is working
4. now we put (API) and fetch it to the function to get latest result then convert it to (json) to make the data readable
5. then after fetching (API) in the function we calculate result by

```
.then((result) => {
  let exchangeRate =
result.conversion_rates[toCurrency.value];
  let totalExRate = (amountVal *
exchangeRate).toFixed(2);
  exchangeRateText.innerText = `${amountVal}
${fromCurrency.value} = ${totalExRate}
${toCurrency.value}`; // Show result
})
```

- in this code (result.conversion_rates) contain all the currency rates
- it calculates the amount and display it

What is the logic behind it let's see

1.By clicking on the icon it swap the country and there values also

```
let tempCode = fromCurrency.value;  
fromCurrency.value = toCurrency.value;  
toCurrency.value = tempCode
```

2.It is swaping the value of the currency

3.Then it is updating the flags by

```
loadFlag(fromCurrency);  
loadFlag(toCurrency);
```

1. At the end it gives the output of swaped exchange currency by

```
getExchangeRate();
```

The End