

Fetch API

The Fetch API is a modern interface that allows you to make HTTP requests to servers from web browsers.

It uses the Promise to deliver more flexible features to make requests to servers from the web browsers.

The `fetch()` method is available in the global scope that instructs the web browsers to send a request to a URL.

Sending a Request

The `fetch()` requires only one parameter which is the URL of the resource that you want to fetch:

```
let response = fetch(url);
```

The `fetch()` method returns a Promise so you can use the `then()` and `catch()` methods to handle it

```
fetch(url)
  .then(response => {
    // handle the response
  })
  .catch(error => {
    // handle the error
  });
```

In general, you can convert the response to json using the code:

```
fetch('https://randomuser.me/api/')
  .then (response => response.json())
  .then ( data => {
    // handle the response
  })

  .catch(error => {
    // handle the error
  });
```

For example:

```
fetch('https://randomuser.me/api/')
  .then(response => response.json())
  .then(data => {
    console.log(data.results[0].name.title)
    console.log(data.results[0].name.first)
    console.log(data.results[0].name.last)
  })
  .catch(error => {
    // handle the error
  });
```

You can find many public APIs at:

<https://github.com/public-api-lists/public-api-lists>

Exercise:

Pick a public API of your choice and write a program that consumes the API data and renders it to a document. You are free in your choice of API and the design you want to have in your document.

For example:

```
<!DOCTYPE html>
<html>
<head>
  <meta name="viewport" content="width=device-width, initial-scale=1">
  <style>
    .card {
      box-shadow: 0 4px 8px 0 rgba(0, 0, 0, 0.2);
      transition: 0.3s;
      width: 40%;
    }

    .card:hover {
      box-shadow: 0 8px 16px 0 rgba(0, 0, 0, 0.2);
    }

    .container {
      padding: 2px 16px;
    }

    img {
      width: 70%;
      display: block;
      margin: auto;
    }
  </style>
</head>
```

```
<body>

  <h2>Card</h2>
  <div class="card">
    <img id="image" src="" alt="Avatar">
    <div class="container">
      <h4><b>John Doe</b></h4>
      <p>Architect & Engineer</p>
    </div>
  </div>

  <script>
    fetch('https://randomuser.me/api/')
      .then(response => response.json())
      .then(data => {
        console.log(data.results[0].picture);
        imgageSrc = data.results[0].picture.large;
        document.getElementById("image").src = imgageSrc;
      })
      .catch(error => {
        // handle the error
      });
  </script>
</body>
</html>
```