

# Working with APIs in JavaScript

An [API](#) is simply a medium to fetch or send data between interfaces. Let's say you want to make an application that provides the user with some real-time data fetched from the server or maybe even allows you to modify or add data to some other endpoint. This is made possible by the API or the **Application Programming Interface**.

We will use a simple public API that requires no authentication and allows you to fetch some data by querying the API with **GET** requests.

<https://randomuser.me/> is a website that provides dummy data for random users that we can easily work with. We can get the response by making a request to <https://randomuser.me/api/>. The JSON response that we receive is in the following format: -

```
{
  "results": [
    {
      "gender": "female",
      "name": {
        "title": "Miss",
        "first": "Nina",
        "last": "Simmons"
      },
      "location": {
        "street": {
          "number": 970,
          "name": "Eason Rd"
        },
        "city": "Fullerton",
        "state": "Wyoming",
        "country": "United States",
        "postcode": 57089,
        "coordinates": {
          "latitude": "83.1807",
          "longitude": "104.7170"
        },
        "timezone": {
          "offset": "+8:00",
          "description":
            "Beijing, Perth, Singapore, Hong Kong"
        }
      },
      "email": "nina.simmons@example.com",
      "login": {
        "uuid": "bd0d135f-84df-4102-aa4f-5baaa41baf5c",
        "username": "yellowfrog722",

```

```

        "password": "dawg",
        "salt": "q28gdiyN",
        "md5": "291987daea22bb91775226574925b271",
        "sha1": "a0463a26ea5c2ff4f3ad498fd01c5994926e5021",
        "sha256":
"6583eb74ca08bfac50b3b29aa52c9f02ea5d9d017fef0e5a5a6fae4f5225f928"
    },
    "dob": {
        "date": "1980-11-01T23:10:05.403Z",
        "age": 40
    },
    "registered": {
        "date": "2013-04-02T02:26:52.904Z",
        "age": 7
    },
    "phone": "(216)-693-7015",
    "cell": "(501)-534-9413",
    "id": {
        "name": "SSN",
        "value": "847-09-2973"
    },
    "picture": {
        "large":
"https://randomuser.me/api/portraits/women/60.jpg",
        "medium":
"https://randomuser.me/api/portraits/med/women/60.jpg",
        "thumbnail":
"https://randomuser.me/api/portraits/thumb/women/60.jpg"
    },
    "nat": "US"
}
],
"info": {
    "seed": "82a8d8d4a996ba17",
    "results": 1,
    "page": 1,
    "version": "1.3"
}
}

```

We now can properly refer to this json tree using javaScript commands, and load them in our DOM.