

Introduction to APIs

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What are APIs

How do they work

How can we do cool
things with them

A gate to another world



What are APIs

Terminology

API

Example

Twitter API,
Slack API

Library

requests,
tweepy

Framework

Django,
React

What are APIs

Different types of APIs

What are APIs

Browser APIs

Geolocation

Camera

What are APIs

Accessing the client camera (Browser API)

```
1  <video autoplay></video>
2
3  <script>
4    ..var errorCallback = function(e) {
5      ....console.log('Reeeejected!', e);
6    };
7
8    ..// Not showing vendor prefixes.
9    ..navigator.getUserMedia({video: true, audio: true}, function(localMediaStream) {
10     ....var video = document.querySelector('video');
11     ....video.src = window.URL.createObjectURL(localMediaStream);
12
13     ....// Note: onloadedmetadata doesn't fire in Chrome when using it with getUserMedia.
14     ....// See crbug.com/110938.
15     ....video.onloadedmetadata = function(e) {
16       ....// Ready to go. Do some stuff.
17     };
18   }, errorCallback);
19 </script>
```

What are APIs

Internal APIs



docs.enghub.io

What are APIs

Company APIs



Slack API



GitHub API



Clarifai API



Twitter API



Twilio API

What are APIs

How do they work

JSON

HTTP

REST

JSON

Demo Time

How do they work

HTTP

The protocol underpinning the web and REST APIs

HTTP Verbs

- GET
- POST
- PUT
- PATCH

HTTP Status Codes

- 200 - OK
- 404 - Not Found
- 400 - Bad Request
- 5XX - Server Error

Our central method of communication

How do they work

REST

CRUD

Create, Read, Update, Delete

URL is resource

<https://slack.com/api/channels.list>

Typically returns
JSON

How do they work

REST

Crud Operation	HTTP Verb
Create	POST
Read	GET
Update	PUT
Delete	DELETE

How do they work

How can we do cool
things with them

Postman

