#### **BLOOM COUNTY**

#### by Berke Breathed









My code never has bugs <sup>lt</sup> just develops <sup>lando</sup>m unexpected features.

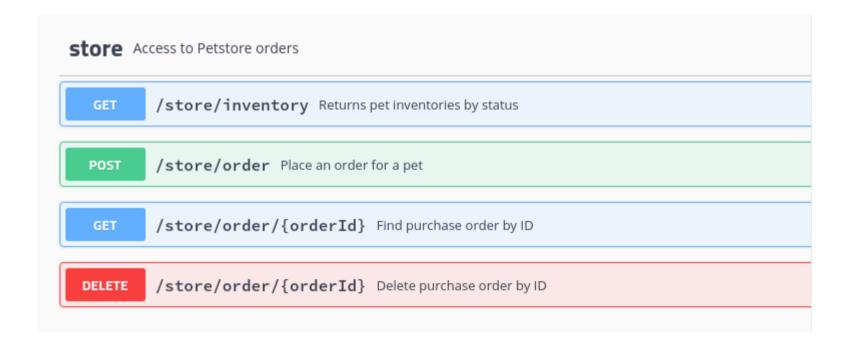
# Web Services (POST and Error Handling) in VUE

#### **Objectives**

- Make POST, PUT, and DELETE requests using Axios
- Catch and handle errors using Axios
- Explain what Cross-Origin Resource Sharing is and how it works
- Explain the cross-origin request process
- Explain why developers might encounter CORS errors when testing APIs on localhost

## POST, PUT, & DELETE

#### **HTTP Methods**



## **Axios Post**

```
axios
   .post("https://pokeapi.co/api/v2/pokedex/kanto/")
   .then(response => {
     this.pokemon = response.data;
})
   .catch(err => {
     console.log(err);
});
```

## **Axios Put**

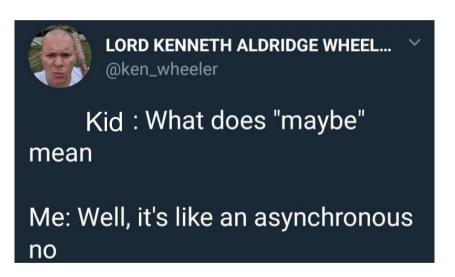
```
let userData = {
  firstName: 'Fredrick',
  lastName: 'Smith'
};

axios.put('/users/23', userData)
  .then((response) => {
    console.log(response);
  });
```

## **Axios Delete**

```
axios.delete(process.env.VUE_APP_BASE_URL + 'api/users/1/', config)
   .then(function (response) {
      console.log(response)
   })
   .catch(function (error) {
      console.log(error)
   })
```





## **Axios Verbs**

```
getItem(id) {
  return http.get(`/items/${id}`);
},
update(myItem) {
  return http.put(`/items/${myItem.id}`, myItem);
},
create(myItem) {
  return http.post('/items', myItem);
},
delete(myItem) {
  return http.delete(`/items/${myItem.id}`);
```

### Let's look at the code!



## Promise Error Handling

#### .catch method

#### Runs if:

- Server responds with no 2xx response code (2xx codes are "success" messages)
- Server fails to respond due to error
- Something happened that triggered an error.

#### .finally method

Runs ALWAYS

```
try { // let's mess this up a bit
   let chuckJokes =
      fetch(`https://api.chucknorrrrris.io/jokes/random`)
        .then(res => res.json());
      console.log('I have some data for you!');
      document.getElementById("guote").innerHTML = chuckJokes.value;
   catch(error) {
      console.warn(`We have an error here: ${error}`)
   finally {
      console.log('I will fire no matter what!')
```

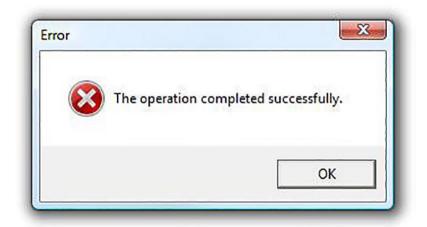
- ▶ GET <a href="https://api.chucknorrrris.io/jokes/random">https://api.chucknorrrris.io/jokes/random</a> net::ERR\_NAME\_NOT\_RESOLVED
- △ ► We have an error here: TypeError: Failed to fetch

I will fire no matter what!

## Services

```
1 import axios from 'axios':
 3 // Create our Axios instance used to communicate with the server
 4 const http = axios.create({
 5 baseURL: 'https://some.url.net'
 6 });
 8 export default { // This object is what other files will import via the import keyword
       getAllItems() {
10
        return <a href="http.qet('/items')">http.qet('/items')</a>; // This is added to the end of baseURL specified above
12
       },
13
14
      getItem(id) {
       return http.get(`/items/${id}`);
15
16
       },
17
      update(myItem) {
19
       return http.put(`/items/${myItem.id}`, myItem);
20
      },
21
22
       create(myItem) {
23
        return http.post('/items', myItem);
24
       },
25
26
      delete(myItem) {
        return http.delete(`/items/${myItem.id}`);
27
28
29
30 };
```

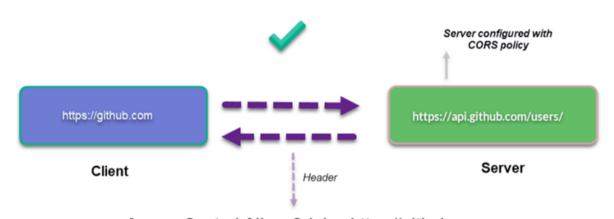
## Let's Code!



## Your code can't crash if you never run it

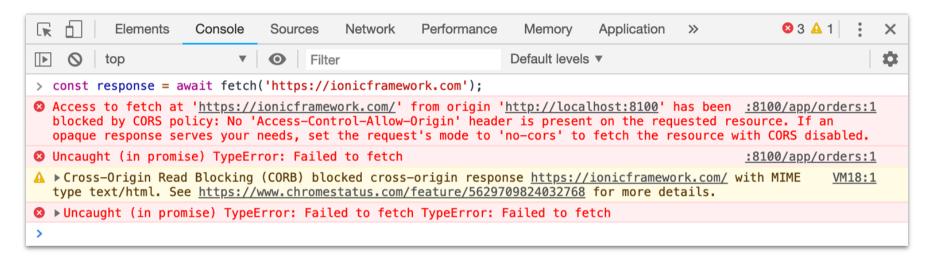


### But Wait, There's More!

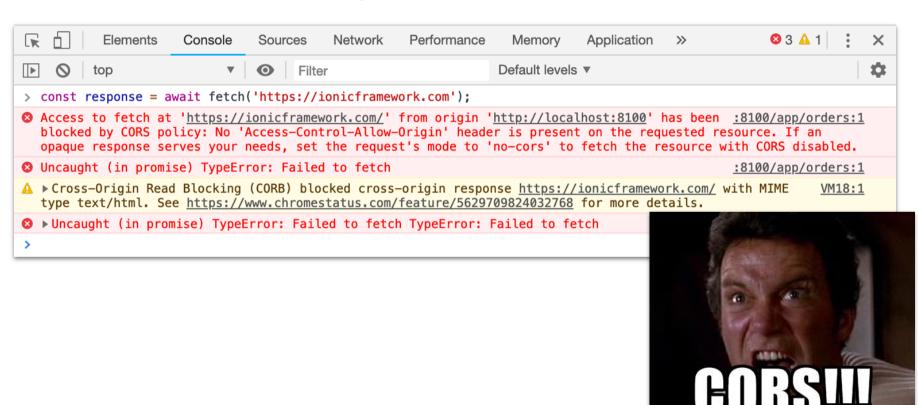


Access-Control-Allow-Origin: https://github.com

## BUT WAIT, THERE'S MORE!



## BUT WAIT, THERE'S MORE!



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#### Literally any HTTP error



## CORS errors

## Handling CORS on Java Backend

```
import javax.validation.Valid;

@RestController

@CrossOrigin

public class AuthenticationController {

private final TokenProvider tokenProvider;
 private final AuthenticationManagerBuilder authenticationManagerBuilder;
 private UserDAO userDAO;
```

#### Main request: defines origin. GET / (main page) GET layout.css Web server domain-a.com Image GET image.png domain-a.com Same-origin requests (always allowed) Canvas w/ image from domain-b.com GET image.png Web server GET webfont.eot domain-b.com Web document Cross-origin requests domain-a.com (controlled by CORS)

The CORS mechanism supports secure cross-origin requests and data transfers between browsers and servers. Modern browsers use CORS in APIs such as XMLHttpRequest or <u>Fetch</u> to mitigate the risks of cross-origin HTTP requests.

https://developer.mozilla.org/en-US/docs/Web/HTTP/CORS

https://auth0.com/blog/cors-tutorial-a-guide-to-cross-origin-resource-sharing/

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