BLOOM COUNTY

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My code never
has bugs
lt just develops
random unexpected
features.

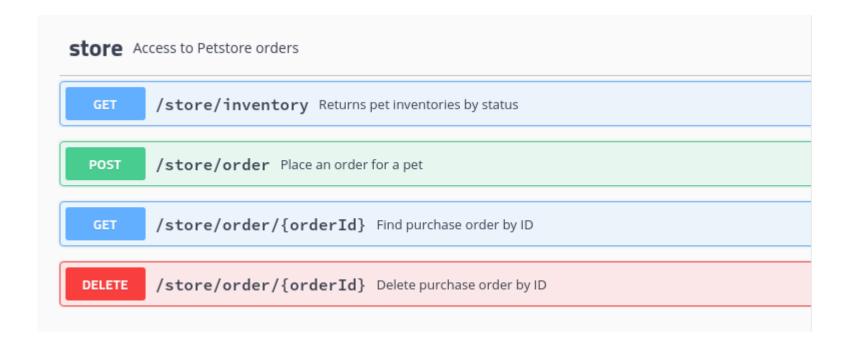
Web Services (POST and Error Handling) in VUE

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("quote").innerHTML = chuckJokes.value;
   catch(error) {
      console.warn(`We have an error here: ${error}`)
   finally {
      console.log('I will fire no matter what!')
```

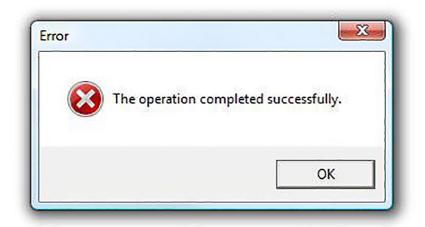
- ▶ GET https://api.chucknorrrris.io/jokes/random net::ERR_NAME_NOT_RESOLVED
- △ ► We have an error here: TypeError: Failed to fetch

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.get('/items');">http.get('/items');</a> // This is added to the end of baseURL specified above
12
      },
13
      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) {
       return http.post('/items', myItem);
24
      },
25
26
      delete(myItem) {
27
        return http.delete(`/items/${myItem.id}`);
28
29
30 };
```

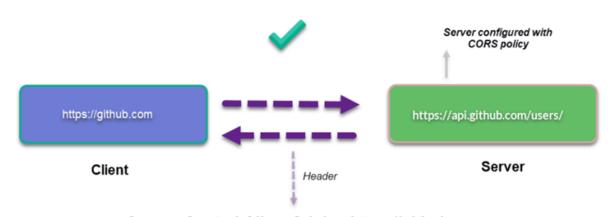
Let's Code!



Your code can't crash if you never run it

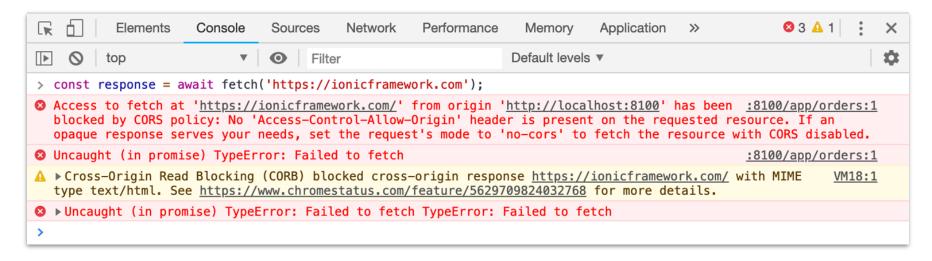


But Wait, There's More!

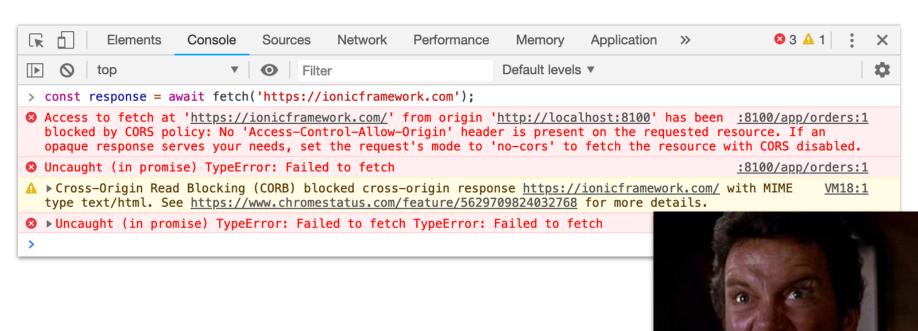


Access-Control-Allow-Origin: https://github.com

BUT WAIT, THERE'S MORE!



BUT WAIT, THERE'S MORE!



memegenerator.ne



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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