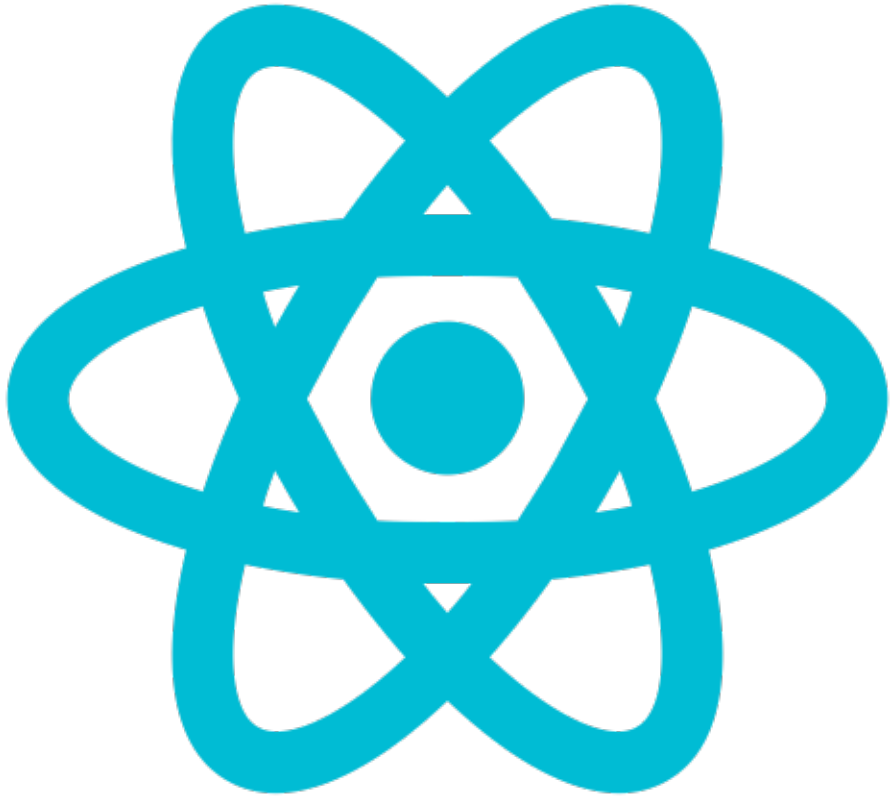
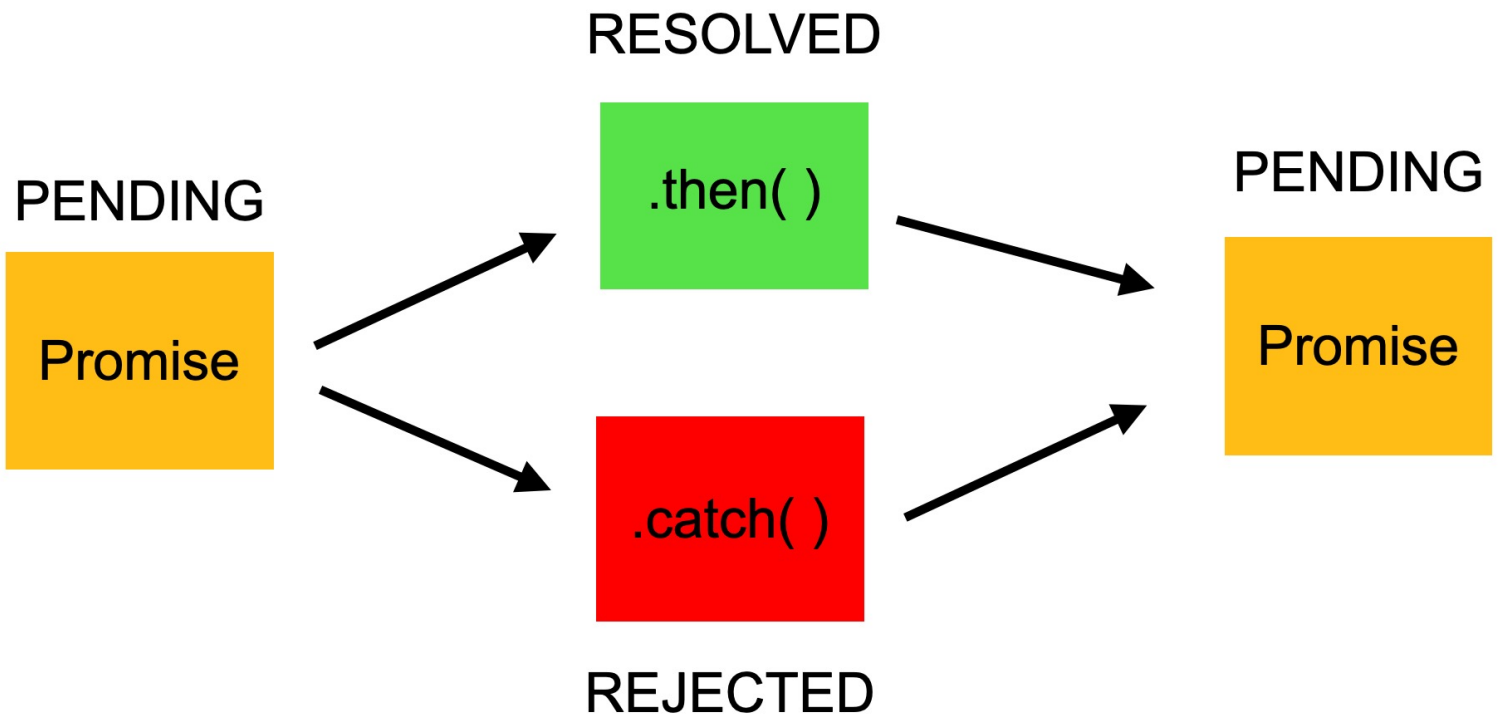

axios



Promise


RESOLVED
PENDING
.then( )
PENDING
Promise
Promise
.catch( )
REJECTED

What is axios

- **Axios** is an HTTP client library, helps you with just that: sending HTTP requests and managing the responses
- It is used to communicate with the backend and it also supports the Promise API that is native to JS ES6.
- Axios is a very popular (over 78k stars on Github) HTTP client, which allows us to make HTTP requests from the browser.

- `npm install axios`

- Not the news website ! https://www.axios.com/

Advantages of using Axios over the native Fetch API include:

- Request and response interception
- Streamlined error handling
- Protection against XSRF
- Support for upload progress
- Response timeout
- The ability to cancel requests
- Support for older browsers
- Automatic JSON data transformation

Making Http requests

- For a simple Axois POST request, the object must have a url property. If no method is provided, GET will be used as the default value.

```
// send a POST request
axios({
  method: 'post',
  url: '/login',
  data: {
    firstName: 'Finn',
    lastName: 'Williams'
  }
});
```

Even better - Shorthand methods

- axios.request(config)
- axios.get(url[, config])
- axios.delete(url[, config])
- axios.head(url[, config])
- axios.options(url[, config])
- axios.post(url[, data[, config]])
- axios.put(url[, data[, config]])
- axios.patch(url[, data[, config]])

Example Get

```
axios.get('https://api.github.com/users/mapbox’)
.then((response) => {
console.log(response.data);
});
```

POST JSON with Axios

- Axios automatically serializes JavaScript objects to JSON when passed to the axios.post function as the second parameter. This eliminates the need to serialize POST bodies to JSON.
- Axios also sets the Content-Type header to application/json. This enables web frameworks to automatically parse the data.
- If you want to send a preserialized JSON string to axios.post() as JSON, you'll need to make sure the Content-Type header is set.

Custom headers

- Sending custom headers with Axios is very straightforward. Simply pass an object containing the headers as the last argument. For example:

```
const options = {
  headers: {'X-Custom-Header': 'value'}
};

axios.post('/save', { a: 10 }, options);
```

axios.all

- One of Axios' more interesting features is its ability to make multiple requests in parallel by passing an array of arguments to the axios.all() method.

```
// execute simultaneous requests
axios.all([
  axios.get('https://api.github.com/users/mapbox'),
  axios.get('https://api.github.com/users/phantomjs')
])
.then(responseArr => {
  //this will be executed only when all requests are complete
  console.log('Date created: ', responseArr[0].data.created_at);
  console.log('Date created: ', responseArr[1].data.created_at);
});
```

Intercepting requests and responses

- HTTP interception is a popular feature of Axios. With this feature, you can examine and change HTTP requests from your program to the server and vice versa, which is very useful for a variety of implicit tasks, such as logging and authentication.

- Also try `axious.interceptors.response(..`

```
// declare a request interceptor
axios.interceptors.request.use(config => {
  // perform a task before the request is sent
  console.log('Request was sent');

  return config;
}, error => {
  // handle the error
  return Promise.reject(error);
});

// sent a GET request
axios.get('https://api.github.com/users/mapbox')
  .then(response => {
    console.log(response.data.created_at);
  });
```

HTTP response status codes

- HTTP response status codes indicate whether a specific HTTP request has been successfully completed. Responses are grouped in five classes:
- Informational responses (100–199)
- Successful responses (200–299)
- Redirects (300–399)
- Client errors (400–499)
- Server errors (500–599)

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