Access Web APIs with XMLHttpRequest



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Overview



XMLHttpRequest

- > 25 years
- Documentation, reliability, ubiquitous
- Fetch, Axios, superagent, etc.
- XML and JSON
- XMLHttpRequest == XHR

In this module

- Create and initialize an XHR object
- Send a Web API request
- Process a Web API response
 - Parsing the JSON payload
 - Displaying the data
- OMDB : Open Movie Database



Understanding the OMDB API



OMDB API URL Example

http://www.omdbapi.com/?t=Star+Wars&y=1977

HTTP Protocol

GET

POST

- PU1
- DELETE

Domain Name Subdomain Path **Query Parameters**



http://www.omdbapi.com/?t=Star+Wars&y=1977

Domain Name

Subdomain

Path

HTTP Protocol

• GET

POST

- PUT
- DELETE

Query Parameters



http://www.omdbapi.com/?t=Star+Wars&y=1977





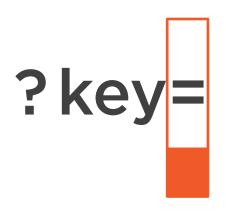




















http://www.omdbapi.com/?t=Star+Wars&y=1977



Connecting to a Web API



On Loading Event System

onload

- When the web api call succeeds

onabort

- When xhr.abort() is called

onerror

- When the web api call fails

onloadstart

- As soon as the data returns

onprogress

As the data is received

onloadend

- Always called no matter the outcome



Old XHR Event System

onreadystatechange

- Replaced by on loading events
- Ready states
 - UNSET
 - OPENED
 - HEADERS_RECIEVED
 - LOADING
 - DONE

Making Asynchronous Web Calls



Handling the HTTP Response



Parsing the JSON and Displaying the data



XHR

Data Types

Text

arraybuffer

blob

document

JSON

DOM String

Streams (Microsoft IE only. Depricated)



Summary



XMLHttpRequest

- Instantiate
- Initialize
- Send

useEffect

- To make Web API requests once

useState

- To share Web API data

Callback functions

- To process the Web API responses
- onload, onerror, etc.



Building Mobile Apps with React Native

Thank you!



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