Fetch

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Fetch

- XMLHttpRequest() is quite cumbersome and outdated
  - Has been made palatable by wrapping it appropriately in most JavaScript libraries like jQuery as Ajax
- The Fetch API is a modern replacement for XMLHttpRequest
  - Provides an interface for fetching resources (including across the network)
  - More powerful and flexible feature set
  - Promise based

Fetch Abstractions

- Request: Represents a resource request
- Response: Represents the response to a request
- Headers: Represents response/request headers, allowing you to query them and take different actions depending on the results
- Body: Provides methods relating to the body of the response/request, allowing you to declare what its content type is and how it should be handled

Fetch Usage

```
fetch(baseUrl + 'dishes')
    .then(response => response.json())
    .then(data => console.log(data))
    .catch(error => console.log(error.message));
```

Fetch Posting Data

```
fetch(baseUrl + 'comments', {
    method: 'POST',
    body: JSON.stringify(newComment),
    headers: {
        'Content-Type': 'application/json'
    },
    credentials: 'same-origin'
})
```

Fetch Dealing with Errors

```
fetch(baseUrl + 'dishes')
        .then(response => {
                if (response.ok) {
                        return response;
                }
                else {

                        var error = new Error('Error ' + response.status + ': ' + response.statusText);
                        error.response = response;
                        throw error;

                }
        },
        error => {
                var errmess = new Error(error.message);
                throw errmess;
        })
        .then(response => response.json())
        .then(data => console.log(data))
        .catch(error => console.log(error.message));
```

Cross-Fetch

- Cross-Fetch library provides support for Fetch both in Node applications and Browsers
  - Uses whatwg-fetch polyfill in browsers that do not have fetch support
  - Uses node-fetch for Node applications on the server
- To use in the application:

  import fetch from 'cross-fetch';

Fetch Alternatives

- Axios

- Superagent