

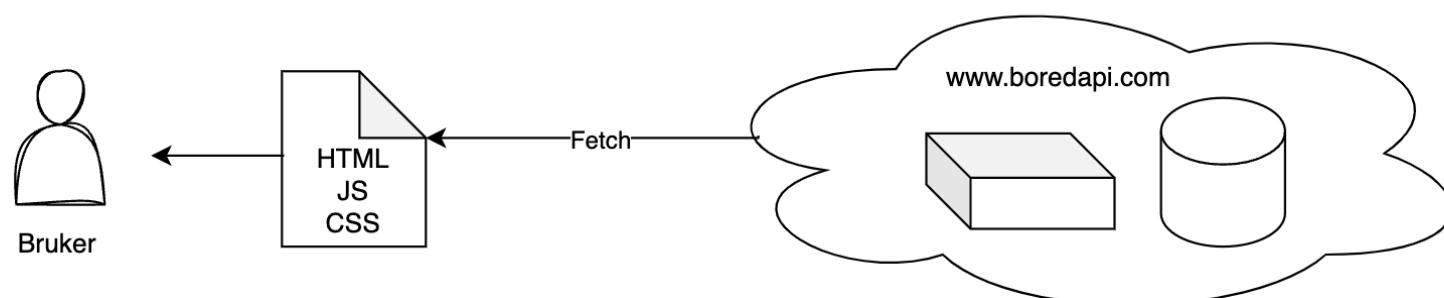
# APIer

HVA, HVORDAN og HVORFOR

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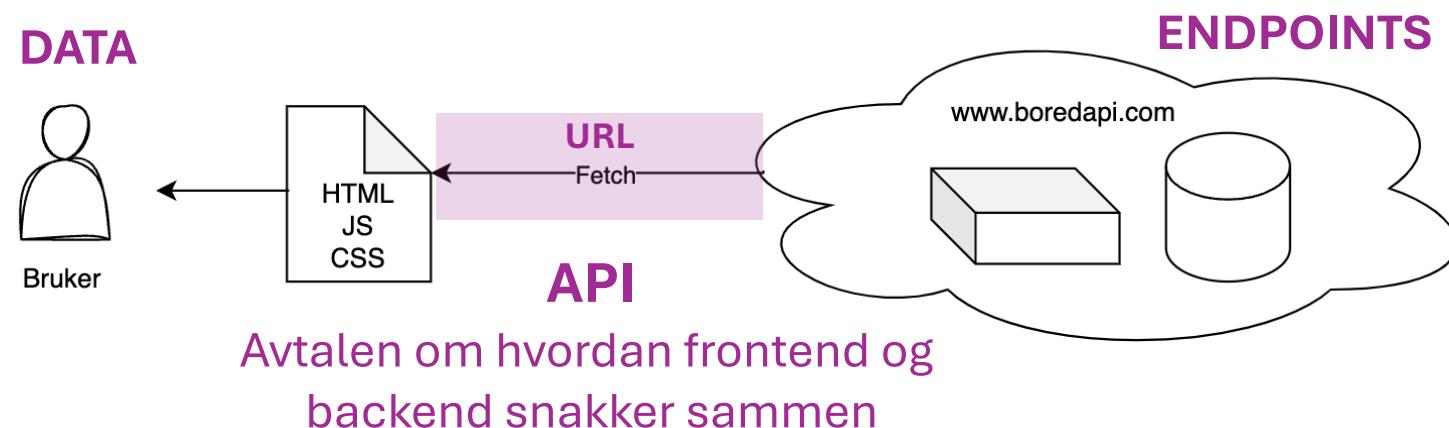
# Hva er et API?

API = Application Programming Interface



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API = Application Programming Interface



<https://dette-er-en-url.no/api/hentnoe>

`https://dette-er-en-url.no/api/hentnoe`

**Base URL**

**Endepunkt**



Protokoll

Domene

API-info med parameter

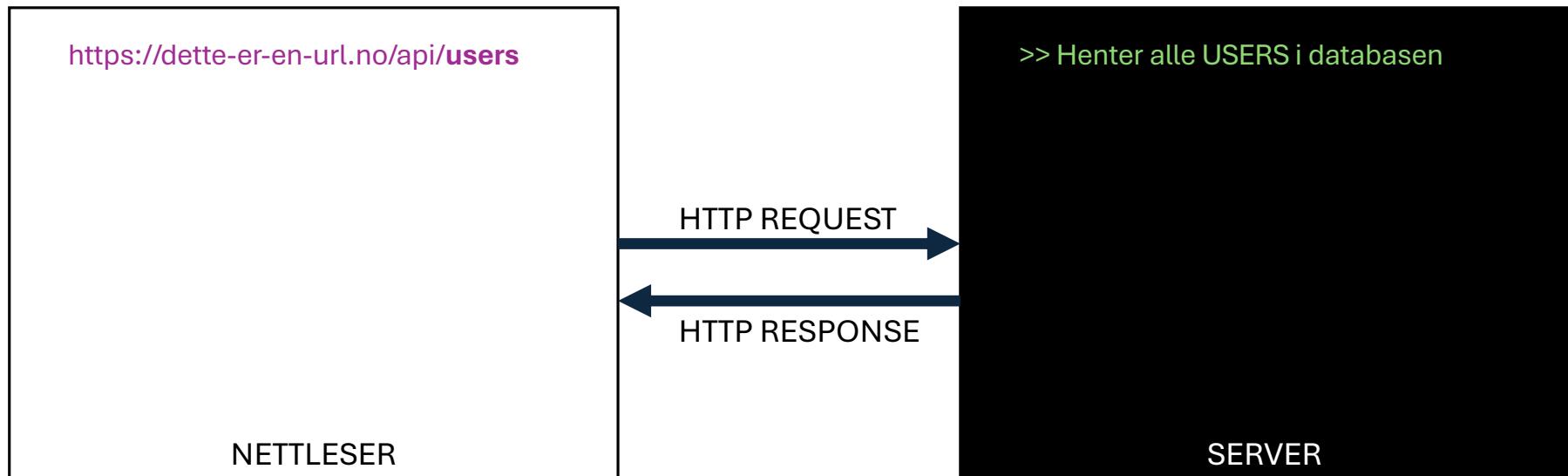
**https://dette-er-en-url.no/api/hentnoe?id={id}**

Base URL

Endepunkt

# URL → HTTP/HTTPS-request

Hver gang du skriver inn en url i nettleser din, kjøres det noe på serveren



HTTP-request	
Request	GET /users
Header:	Type, host-adresse og annen informasjon
Parameter:	Variabler/info fra URLen (params)
Auth:	Token for å verifisere
Body:	Annен relevant data

HTTP-response	
Status	200 OK
Header:	Type, host-adresse og annen informasjon
Body:	Info fra serveren, for eksempel liste med users

### EKSEMPEL

<https://dette-er-en-url.no/api/users>

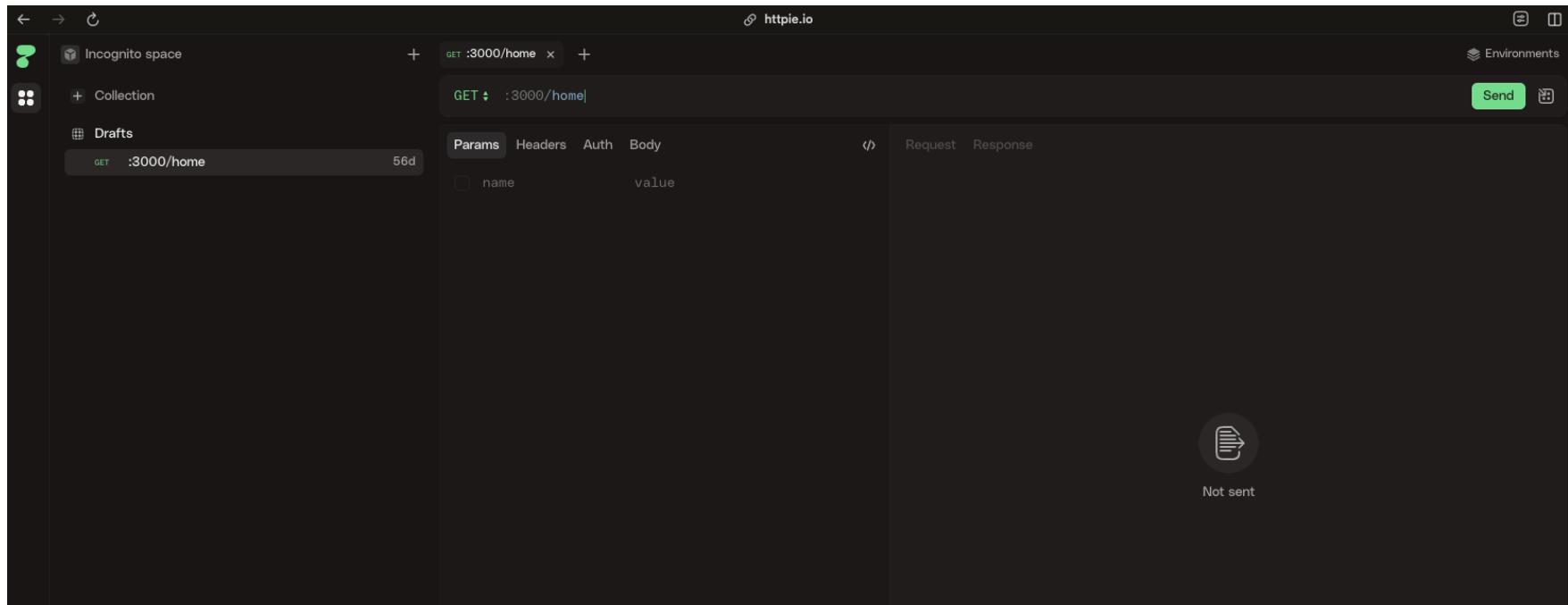
### EKSEMPEL:

Status: 200 OK

Body:

```
[{
  username: "Madde",
  email: "madde@epost.no" },
{
  username: »Magnus",
  email: »Magnus@epost.no"
}]
```

# https://httpie.io/app



Funker bra i nettleseren, enda bedre som desktop app 😊

## Bored API Documentation

Welcome to the Bored API by the App Brewery. This is a teaching tool for students of the App Brewery. API Requests are rate limited to 100 requests every 15 minutes.

### Get a Random Activity

Returns a randomly selected activity from the available activities.

**Example Request:**

```
GET https://bored-api.appbrewery.com/random
```

**Example Response:**

```
{
  "activity": "Learn Express.js",
  "availability": 0.25,
  "type": "education",
  "participants": 1,
  "price": 0.1,
  "accessibility": "Few to no challenges",
  "duration": "hours",
  "kidFriendly": true,
  "link": "https://expressjs.com/",
  "key": "3943506"
}
```

# Eksempel 1

URL: <https://bored-api.appbrewery.com/>

# EKSEMPEL: GET-request

<https://bored-api.appbrewery.com/>

HTTP-request	
Request	GET /random
Header:	
Parameter:	
Auth:	
Body:	

HTTP-response	
Status	200 OK
Header:	Type, host-adresse og annen informasjon
Body:	{ "activity": "Learn to write with your nondominant hand", "availability": 0.02, "type": "recreational", "participants": 1, "price": 0, "accessibility": "Few to no challenges", "duration": "minutes", "kidFriendly": true, "link": "", "key": "1645485" }

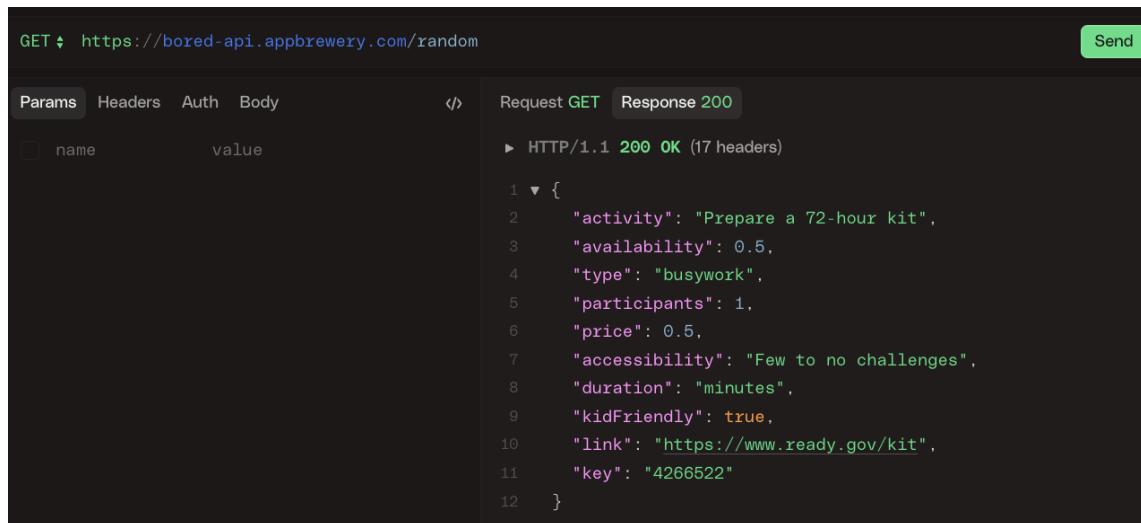
# EKSEMPEL: GET-request med params

<https://bored-api.appbrewery.com/>

HTTP-request	
Request	GET /filter
Header:	
Parameter:	type=education
Auth:	
Body:	

HTTP-response	
Status	200 OK
Header:	Type, host-adresse og annen informasjon
Body:	{ "activity": "Learn Express.js", "availability": 0.25, "type": "education", "participants": 1, "price": 0.1, "accessibility": "Few to no challenges", "duration": "hours", "kidFriendly": true, "link": "https://expressjs.com/", "key": "3943506" },...

# Prøv selv med HTTPIE



GET <https://bored-api.appbrewery.com/random> Send

Params	Headers	Auth	Body
<input type="text" value="name"/>			<input type="text" value="value"/>

Request GET Response 200

► HTTP/1.1 200 OK (17 headers)

```
1 ▼ {  
2   "activity": "Prepare a 72-hour kit",  
3   "availability": 0.5,  
4   "type": "busywork",  
5   "participants": 1,  
6   "price": 0.5,  
7   "accessibility": "Few to no challenges",  
8   "duration": "minutes",  
9   "kidFriendly": true,  
10  "link": "https://www.ready.gov/kit",  
11  "key": "4266522"  
12 }
```

Sjekk ut `/filter?type=educational` også!

# KOBLE på API med JS

## fetch()

En innbygd JavaScript-funksjon som henter fra REST API url-er

## Async/await – funksjoner

Gjør at du kan kjøre ting asynkront i Javascript. Altså at du kan vente til noe skjer før neste linje kjøres.

## .json()

Gjør om responser til JSON-format så du kan jobbe videre med det.

## EKSEMPEL:

<https://github.com/Madelelo/bo/red/blob/main/frontend/script.js>

```
async function hentData() {
  const response = await fetch(API_URL)
  const data = await response.json();

  printData(data);
}
```

# KOBLE på API med JS

BRUK <http://bored-backend.vercel.app/api/randomactivity>

EKSEMPEL:

<https://github.com/Madelelo/bored/blob/main/frontend/script.js>

```
async function hentData( ){
  const response = await fetch(API_URL)
  const data = await response.json()

  printData(data)
}
```

# LAGE API backend med Express

- Node og nodemon
- Express JS
- JSON/MariaDB/annen datalagring
- CORS

## EKSEMPEL:

[https://github.com/Madelelo/bored/  
blob/main/api/index.js](https://github.com/Madelelo/bored/blob/main/api/index.js)



Sjekk ut slides her: [KURS-Backend\\_med\\_Javascript.pdf](#)

Kode og eksempler her: <https://github.com/Madelelo/gameslibrary/tree/main/backend>

 KURS-Backend\_med\_Javascript.... ➔ ...  
ELV-TM-2IT905 > Madeleine