# Recap JS objects & JSON



#### What is a JavaScript object?

- It's a representation of something
- It's an abstraction
- It's a logical grouping
- It's a data structure





#### JS object example

```
let car = {
    make: "Citroen",
    model: "Berlingo",
    wheels: 4,
    passengers: ["Jonas", "Gitte", "Storm", "Birk", "liv"]
}
```



```
let passenger = "The third passenger is " + car.passengers[2];
```



#### Accessing object and arrays

 We often see arrays of objects, arrays in objects, objects in objects etc.

#### Remember:

- Objects/properties are accessed using . (dot)
- Arrays are accessed using []

```
let passenger = "The third passenger is " + car.passengers[2];
```



#### **JSON**

- JSON is text with JavaScript Object Notation.
- JSON is a syntax for storing and exchanging data.
- When exchanging data between a browser and a server, the data can only be text.
- We can convert any JS object into JSON, and send JSON to the server.
- We can also convert any JSON received from a server into JS objects.

### Recap

#### **JSON Syntax Rules**

- JSON = JavaScript object notation =
  - Data is in name/value pairs
  - Data is separated by commas
  - Curly braces hold objects
  - Square brackets hold arrays
- { "name": "value", "otherName": "value" }
- In JSON, names (keys) must be strings, written with double quotes (unlike JS objects)!



## **JSON Syntax Rules**

- In JSON, values must be one of the following data types:
  - a string
  - a number
  - an object (JSON object)
  - an array
  - a boolean
  - null

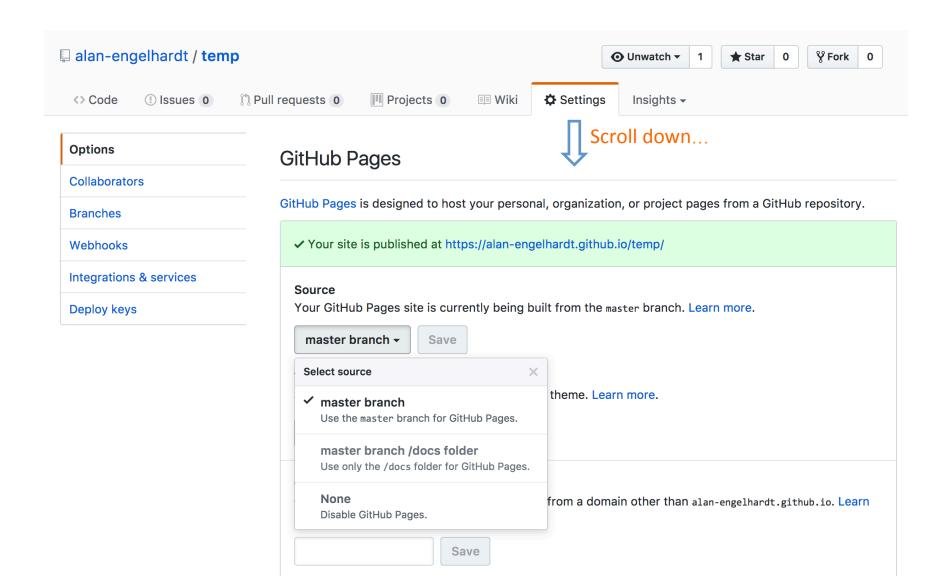
- In JavaScript values can be all of the above, plus any other valid JavaScript expression, including:
  - a function
  - a date
  - undefined

# Recap

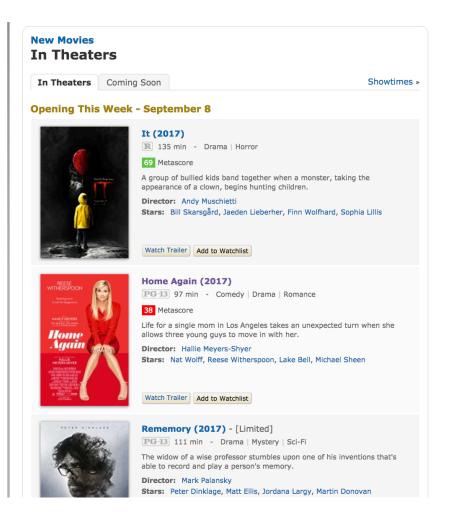
#### **JSON Syntax**

```
"id": "10",
  "category": "starter",
  "name": "Russian Ringbread",
  "price": 29,
  "soldout": false,
  "discount": 50,
  "shortdescription": "Russisk ringbrød af Karapatisk mel",
  "vegetarian": true,
  "alcohol": 0,
  "image": "ringbroed-druer"
},
  "id": "12",
  "category": "starter",
  "name": "Cabanossi with beetrootcreme",
  "price": 49,
  "soldout": false.
```

#### **Publish from GitHub**



#### JSON group exercise



- 1. Go to IMDb:
   http://www.imdb.com/
   movies-in-theaters/?
   ref =nv mv inth 1
- 2. Make a **json** file with 3-4 movie "objects"
- 3. Make a HTML file where you **fetch** the movies from your json file and display them in a **grid**.
- 4. Hand in a link to your GitHub site in fronter.