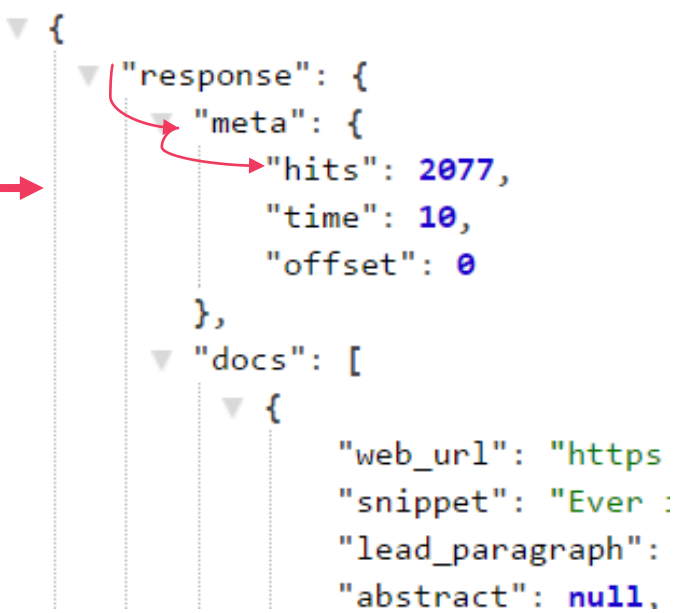
Code and Datafication

Winnie’s Code

```
14  var url = 'http://api.nytimes.com/svc/search/v2/articlesearch.json';
15  var apikey ='INPUT YOUR OWN KEY HERE';
16  var request; //the full request API with your critera
17  var freq; //the returned hits
18  var barsize = 25; //size of the bar chart
19  var request_time =0;
20
21  //search criteria
22  var words = ["Sweden", "Denmark", "Hong+Kong", "San+Francisco", "Taiwan", "Oslo", "United+Kingdom", "China", "Boston", "
23  //var words = ["Sweden", "Denmark", "Hong+Kong"];
24  var start = "20160201";
25  var end = "20160301";
26
27
28  function setup() {
29          createCanvas(700,700);
30          background(0);
31          frameRate(1);
32  }
```

```
34  function gotData(data) {    //a callback needs an argument
35          //console.log(data);  //to test if there is any response
36          freq = data.response.meta.hits;
37          console.log("There were " + freq + " occurrences of the term " + words[request_time]);
38          fill(255);
39          translate(barsize*request_time, 0);
40          rect(width/4, 0, barsize, map(freq, 0, 20000, 0, height));
41
42          //try getting other data e.g image
43          //console.log(data.response.docs[0].multimedia[0].url)
44
45  }
46
47
48  function draw() {
49
50          if (request_time<words.length) {
51                  request = url + "?q=" + words[request_time] + "&begin_date=" + start + "&end_date" + end + "&api-key=" + apikey;
52                  console.log(request);  //print the full query request
53                  loadJSON(request, gotData);
54                  request_time++;
55          }else{
56                  noLoop();
57          }
58  }
59
```



NB! Loader JSON filen hver gang draw sker!
Det kan være rigtig meget, hvis ikke frameraten nedsættes en del
-Derfor setInterval();

Eksperimentér med API!

Kig på Winnie's sample code

- Opret jer og brug jeres egne API-keys
- Prøv at ændre nogle parametre
- Prøv at se hvilken anden data der kan hentes

Eksperimentér med andre API'er

- Vejret! https://openweathermap.org/api
- Sociale Medier! https://www.instagram.com/developer/
- Space! http://open-notify.org/
- Aarhus! https://www.odaa.dk/

MiniEx

Do it in pairs if you want

Make a program that uses an API

1/ The json data format (json object and json array) > select the data that you want

2/ Study the data specification about what available query parameters

3/ Make it work (to turn data into some sort of representation/display on screen)

README:

- Which API have you chosen? and Why?
- Can you describe your process of making this mini exercise in terms of acquiring, processing, using and representing data?
- What is your reflection on the aesthetics of (big) data?