

Databases and XML (7)

04.04.2016

Time	Subject
08:30	Introduction to JSON
08:40	JSON tutorial
09:00	Make quiz
09.40	Play the quizzes
10.00	Break
10.30	JSON exercise
11.45	Reflection exercise
11.55	Next time

Today's agenda



Don't forget to join the Reality Check on Friday at 8.30 (right before your interface design class).

Makeable.dk

Reality check Friday



- JavaScript Object Notation
- A syntax for storing and exchanging data
- Easier-to-use alternative to XML

```
"company": Volkswagen,
    "name": "Vento",
    "price": 800000
}
```

```
<car>
     <company>Volkswagen</company>
     <name>Vento</name>
     <price>800000</price>
</car>
```

JSON



JSON syntax is a subset of the JavaScript object notation syntax:

- Data is in name-value pairs
- Data is separated by commas
- Curly braces hold objects
- Square brackets hold arrays

JSON values can be:

- A number (int or float)
- A string (in double quotes)
- A Boolean
- An array
- An object
- null

JSON Syntax



http://www.codecademy.com/courses/ javascript-beginner-en-xTAfX/0/1

Continue until you get your first badge

JSON exercise



In your table group (3-6 persons), make a quiz about JSON.

Make 5 questions that your fellow students are going to answer when it is finished.

Be creative with the questions – we want as many different questions as possible. But also take time to make sure the questions are well-formed and the options make sense – including the wrong ones.

At least one question should be with a code example.

JSON quiz - Kahoot.it



In this exercise, you'll practice using JSON to dynamically build up HTML. The starter webpage already has the videos described in JSON and functions that turn them into an interactive list.

Go through these steps, and do as many as you can in the time we have:

- Download <u>ison starter.html</u> into your favourite html/javascript editor.
- Read through the code to make sure you understand how it works
- Add an additional video to the JSON, so that you have 4 videos listed
- When you click on the video, it shows the video player on the side. Make it so that it also shows an h2 with the video title above the iframe.
- Add an "author" property to each video in the JSON and display that next to the title.
- Bonus: Add a "favourite" property to each video which is either true or false, and use that to decide whether to output the video's link in red or not.

Make sure that you use your browser developer tools to make debugging easier while working on this. Check for errors, and use console.log() to figure out how far your code makes it, and what the values of your variables are along the way.

JSON exercise 2



3 minutes in silence, where you write down the 3 most important or interesting things you have learned today.

Now, find a person from a different table that you haven't talked to today, and compare your answers with him/her. Explain and discuss.

Reflection



Next week: more on JSON – and intro to MongoDB

Finish the exercises from today's lecture JSON1 (the tutorial) and JSON2 (json_starter.html)

Read: MondoDB book ch. 1-4

Watch: [IntroMongo]

- Introduction
- Introduction to MongoDB
- The Mongo Shell

Next week

