

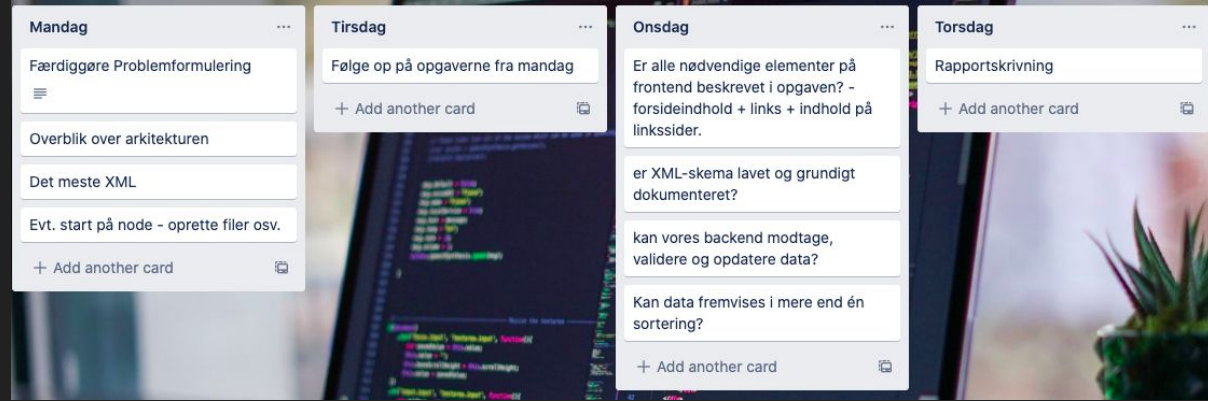
Project 1: Integration

Gruppe2

Indledning

- Hvad var opgaven
- Hvad har vi lavet
- Og hvordan har vi lavet det

Tidsplan



- Fik vi holdt tidsplanen?
- Og hvorfor ikke? (komplex mange mapper)

Sorting

- XML
- XSL
- Hvordan virker det? (demo)
- Hvilket problem havde vi?

```
<cd>
  <title>Appetite for destruction</title>
  <artist>Guns n Roses</artist>
  <country>USA</country>
  <company>Geffen Records</company>
  <price>9.90</price>
  <year>1987</year>
</cd>
```

```
<xsl:template match="/">
  <html>
  <body>
    <h2>My CD Collection</h2>
    <table border="1">
      <tr bgcolor="#9acd32">
        <th>title</th>
        <th>artist</th>
        <th>country</th>
        <th>company</th>
        <th>price</th>
        <th>year</th>
      </tr>
      <xsl:for-each select="catalog/cd">
        <xsl:sort select="price"/>
        <tr>
          <td><xsl:value-of select="title"/></td>
          <td><xsl:value-of select="artist"/></td>
          <td><xsl:value-of select="country"/></td>
          <td><xsl:value-of select="company"/></td>
          <td><xsl:value-of select="price"/></td>
          <td><xsl:value-of select="year"/></td>
        </tr>
      </xsl:for-each>
    </table>
  </body>
</html>
</xsl:template>
</xsl:stylesheet>
```

```
40 fs.readFile("databases.xml", "utf-8", (err, data) => {
41   if (err) {
42     throw err;
43   }
44   // convert XML data to JSON object
45   xml2js.parseString(data, (err, result) => {
46     if (err) {
47       throw err;
48     }
49
50     // replace `Neo4j` with `ArangoDB`
51     //result.catalog.cd[0].title = '';
52
53     // add a new database to list
54     const postgres = {
55       title: '1',
56       artist: '2',
57       country: '3',
58       company: '4',
59       price: '5',
60       year: '6'
61     };
62
63     result.catalog.cd.push(postgres);
64
65     // convert JSON object to XML
66     const builder = new xml2js.Builder();
67     const xml = builder.buildObject(result);
68
69     // write updated XML string to a file
70     fs.writeFile('databases.xml', xml, (err) => {
71       if (err) {
72         throw err;
73       }
74
75       console.log('Updated XML is written to a new file.');
```

This XML file does not appear to have any style information associated with it. The document tree is

```
<catalog>
  <cd>
    <title>Empire Burlesque</title>
    <artist>Bob Dylan</artist>
    <country>USA</country>
    <company>Columbia</company>
    <price>10.90</price>
    <year>1985</year>
  </cd>
  <cd>
    <title>Empire Burlesque</title>
    <artist>Bob Dylan</artist>
    <country>USA</country>
    <company>Columbia</company>
    <price>10.90</price>
    <year>1985</year>
  </cd>
  <cd>
    <title>Hide your heart</title>
    <artist>Bonnie Tyler</artist>
    <country>UK</country>
    <company>CBS Records</company>
    <price>9.90</price>
    <year>1988</year>
    <name><?xml-stylesheet type="text/xsl" href="browser2.xsl"?></name>
  </cd>
  <cd>
    <title>Appetite for destruction</title>
    <artist>Guns n Roses</artist>
    <country>USA</country>
    <company>Geffen Records</company>
    <price>9.90</price>
    <year>1987</year>
  </cd>
  <cd>
    <title>Still got the blues</title>
    <artist>Gary Moore</artist>
    <country>UK</country>
    <company>Virgin records</company>
    <price>10.20</price>
    <year>1990</year>
  </cd>
  <cd>
    <title>Eros</title>
    <artist>Eros Ramazzotti</artist>
    <country>EU</country>
```

Uden XSL -> derfor ingen sorting

C:\Users\erikh\Desktop\Dataintegration\ch16\tryout\databases.xml

C:\Users\erikh\Desktop\Dat... x

Konverter Vælg

My CD Collection

title	artist	country	company	price	year
Appetite for destruction	Guns n Roses	USA	Geffen Records	9.90	1987
chris	tof	eerrrr	4	5	6
chris	tof	eerrrr	4	5	6
chris	tof	eerrrr	4	5	6
Empire Burlesque	Bob Dylan	USA	Columbia	10.90	1985
Empire Burlesque	Bob Dylan	USA	Columbia	10.90	1985
Eros	Eros Ramazzotti	EU	BMG	9.90	1997
Hide your heart	Bonnie Tyler	UK	CBS Records	9.90	1988
Still got the blues	Gary Moore	UK	Virgin records	10.20	1990

Med XSL

```
result.catalog.cd[2].name = '<?xml-stylesheet type="text/xml" href="browsere2.xml"?>';
```

Ovenstående “hjemmelavede” funktion skulle hjælpe os med at kombinere et stylesheet til en xml fil til nedenstående funktion. Til stor forundring kan vi observere at < og > bliver konverteret til < og >. Dette sker med stor forundring hos os grundet at det er i en string, og denne string egentlig bør blive udskrevet som den er.

```
<name>&lt;?xml-stylesheet type="text/xml" href="browsere2.xml"?&gt;</name>
```

Vedligeholdelse

CD's

Title:

Artist:

Country:

Company:

Price:

Year:

title: Empire Burlesque
artist: Bob Dylan
country: USA
company: Columbia
price: 10.90
year: 1985

title: Hide your heart
artist: Bonnie Tyler
country: UK
company: CBS Records
price: 9.90
year: 1988

1

```
11 // AJAX
12 function loadXMLDoc() {
13     var xmlhttp = new XMLHttpRequest();
14     xmlhttp.onreadystatechange = function() {
15         if (xmlhttp.readyState == XMLHttpRequest.DONE) { // XMLHttpRequest.DONE == 4
16             if (xmlhttp.status == 200) {
17                 //console.log(xmlhttp.responseText);
18                 ajax(JSON.parse(xmlhttp.responseText))
19                 test = xmlhttp.responseText
20             }
21             else if (xmlhttp.status == 400) {
22                 console.log('There was an error 400');
23             }
24             else {
25                 console.log('something else other than 200 was returned');
26             }
27         }
28     };
29
30     xmlhttp.open("GET", "bookData", true);
31     xmlhttp.send();
32 }
```

3

```
207
208 function post(url, data) {
209     console.log(test)
210     console.log(JSON.stringify(data, null, 4))
211
212
213     var xmlhttp = new XMLHttpRequest();
214     xmlhttp.open( "POST", url, true );
215     xmlhttp.send(JSON.stringify(data, null, 4));
216     return xmlhttp.responseText;
217 }
```

2

```
45 function displayContent(content) {
46
47     var displayWrap = document.getElementById("display");
48
49     for (var i = 0; i < content[0].cd.length; i++) {
50
51         const div = document.createElement("div");
52         div.id = "book" + i
53         div.classList.add("books");
54
55
56         for(var elm in content[0].cd[i]) {
57             const row = document.createElement("div");
58
59             const property = document.createElement("span");
60             property.classList.add("property");
61             const propertyTxt = document.createTextNode(elm + ": ");
62             property.appendChild(propertyTxt);
63             row.appendChild(property);
64
65             const value = document.createElement("span");
66             value.classList.add("value");
67             const valueTxt = document.createTextNode(content[0].cd[i][elm]);
68             value.appendChild(valueTxt);
69             row.appendChild(value);
70
71             div.appendChild(row);
72         }
73     }
```


Proces

Hvad kunne vi have gjort anderledes?

- Bedre overblik i gennem hele projektet
- I samarbejde prædefinerede dokumenter, så der ikke pludselig dukker nye op.
- Skrive forklaringer på de forskellige tasks (hvad gør dette module eller funktion)
- ^ også ift. rapporten at få det forklaret i rapporten hurtigt

Konklusion

- Kom ikke helt i mål
- Fik dog nogle redskaber til fremtiden - lærer af sine fejl

Demo