

Obilig 5 – Datamodellering & Databasesystemer

Oppgave 1

1. //creator
2. //CD/Disc/Track[../title/text()='Greatest Hits 1' and ../creator/text()='Queen']
3. //CD[./Disc/Track/WrittenBy/text()='Roger Waters']
4. //CD/Disc[1]/Track[3]/Title[../creator/text()='Pink Floyd' and ../title/text()='The Wall']/text()
5. //CD/Disc/Track[./WrittenBy/text()='Roger Waters' and count(./WrittenBy) > 1]
6. //CD[./Disc/Track/Title/text()[contains(.,'Girls')]]
7. //CD/Disc/Track[contains(@duration,'5:') and ./Lyrics/text()[contains(.,'love')]]
8. count(//CD/Disc/Track[./Title='Play The Game']/Lyrics/text())
9. //CD[./creator/text()='Queen']/Disc/Track[./WrittenBy/text() != 'Freddie Mercury' and ./WrittenBy/text() != 'Queen']/Title/text()
10. //CD[./title='The Wall']/Disc[2]/Track[./Title='Vera']/following-sibling::Track

Oppgave 2 ?php

```
$xml_file = file_get_contents("http://www.aftenposten.no/rss/?
kat=nyheter_uriks");

$doc = new DOMDocument;

// Ideally, we would not do this; instead we'd use $doc->loadXML($xml_file)
// but this wouldn't work for me as PHP complained the XML retrieved from
// afterposten.no was not well-formed XML. Loading it as HTML (which does not
require
// it to be well-formed and then saving it as XML works).
// For some reason, it also works by manually saving the xml and opening it from
file.
$doc->loadHTML($xml_file);

$xpath = new DOMXPath($doc);
$title = $xpath->query("//channel/title")->item(0)->textContent;

$item_count = $xpath->evaluate("count(//channel/item)");
?>

<html>
  <meta http-equiv="Content-Type" content="text/html; charset=UTF-8">
  <head>
    <title><?php echo $title; ?></title>
    <style type="text/css">
      body
      {
        background: #DDD;
      }
      div#wrapper
      {
        background: #ECECEC;
        width: 800px;
        margin: auto auto;
      }

      div#wrapper .item
      {
        color: #555;
        width: 390px;
        padding: 5px;
        position: relative;
        float: left;
        border-bottom: 1px solid #CCC;
        min-height: 350px;
      }

      .item a.readmore
      {
        color: orange;
        text-decoration: none;
      }

      .item .pubdate
```

```

        {
            font-size: small;
            margin-bottom: 0px;
        }

    </style>
</head>
<body>
<h1><?php echo $title; ?></h1>
<div id='wrapper'>
<?php
    $i = 1;
    while($i <= $item_count)
    {
        // Set up all important variables
        $item_title = $xpath->query("//channel/item[$i]/title")->item(0)->textContent;

        $item_description = $xpath->query("//channel/item[$i]/description")->item(0)-
>textContent;

        $publication_date = $xpath->query("//channel/item[$i]/pubDate")->item(0)-
>textContent;

        $url = $xpath->query("//channel/item[$i]/link")->item(0)->textContent;
        $img = $xpath->query("//channel/item[$i]/enclosure[@type='img/jpeg']/@url");

        // Create element for displaying this item
        echo "<div class='item'>";

        // Print title
        echo "<h2>" . $item_title . "</h2>";

        // Print image (if any)
        if($img->length > 0)
            echo "<p><img src='". $img->item(0)->textContent . "' /></p>";

        // Print description
        echo "<p>" . $item_description . "</p>";

        // Print read more link
        echo "<p><a href='". $url . "' class='readmore'>Read more</a></p>";

        // Print publication date
        echo "<p class='pubdate'>Published: " . $publication_date . "</p>";

        echo "</div>";

        $i++;
    }
?>
</div>
</body>
</html>

```