STI Innsbruck, University Innsbruck
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Semantic Web

Exercise sheet 4
Web of Data

Exercise 1 (RDFa) (6 points)

Embed RDFa description with Schema.org vocabulary into the HTML document below. Visualize the RDF graph embedded into HTML. [1](min ¼ page, max ½ page).

```
<html xmlns="http://www.w3.org/1999/xhtml" xml:lang="en" lang="en">
  <head>
    <meta http-equiv="Content-Type" content="text/html; charset=iso-8859-1" />
    <base href="http://www.sti-innsbruck.at/" />
    <link rel="stylesheet" type="text/css" href="typo3temp/stylesheet_9430803bf8.css" />
    <link rel="stylesheet" type="text/css" href="fileadmin/stylesheets/subpage_general.css" title="" />
    <link rel="stylesheet" type="text/css" href="fileadmin/stylesheets/subpage.css" title="home" />
    <link rel="alternate stylesheet" type="text/css" href="fileadmin/stylesheets/subpage_medium.css"
title="home_medium" />
    <link rel="alternate stylesheet" type="text/css" href="fileadmin/stylesheets/subpage_large.css"
title="home_large" />
    <script language="JavaScript" src="fileadmin/scripts/styleswitcher.js" type="text/javascript"></script>
    <script language="JavaScript" src="fileadmin/scripts/page.js" type="text/javascript"></script>
    <title>STI Innsbruck - Events</title>
    <script type="text/javascript" src="typo3temp/javascript_56ae7398ee.js"></script>
  </head>
  <body>
    <div id="container">
      <div id="box">
        <div id="main_content">
          <div id="content">
            <div id="title">
              <h1>Events</h1>
            </div>
            <div>
              <a id="c61"></a>
              <div class="tx-derievents-pi1">
              <p>This page lists upcoming events. Please see the <a
href="research/events/archive/">archive</a> for more on held events.</p>
                <hr />
                <div>
                  <div class="twocolumnsright">
                  <p style="text-align:center; ">
                    <a href="http://www.fis2010.org/" target="blank">
                      <img src="typo3temp/pics/6ecfd9c197.jpg" width="200" height="75" border="0" alt=""
title="" />
                    </a>
                  </p>
                  <div class="projects_subheadings">Website</div>
                  <div class="details_indented_15px"><a href="http://www.fis2010.org/"
```

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[1] You can use http://rdfa.info/play or any other tool you like for visualization.

```
target="blank">fis2010.org</a></div>
                <div class="projects_subheadings">Venue</div>
                <div class="details_indented_15px">Berlin, Germany</div>
                <div class="projects_subheadings">Date</div>
                <div class="details_indented_15px">September 20-22, 2010</div>
                <div class="details_indented_15px"></div>
            </div>
            <div>
              <h2><a name="126"></a>3rd Future Internet Symposium 2010 (FIS 2010)</h2>
              <p>The Future Internet Symposium (FIS 2010) is now in its third year and will once again
offer a forum for researchers and practitioners to discuss key issues in the Future Internet: networks,
services, multimedia, Internet of Things, security and trust. This year we will offer a particular focus on
the aspect of virtualisation of ICT resources and services.</p>
                </div>
                <div class="clearer"></div>
                </div>
            </div>
          </div>
        </div>
      </div>
    </div>
  </body>
</html>
```

Exercise 3 (Linked Data Principles) (6 points)

Explain in your own words: What is represented by Linked Data initiative and what are the Linked Data principles? (min ½ page, max ¾ page).

Exercise 4 (Linked Open Data) (6 points)

Assume that you published the following 1-star data[2]. Make it 5-star, based on 5-star Linked Open Data Principles. Show your steps and attach the data you created at every step.

Event Name	Date and Time	Organizer	Place	Description
InDay Students	24/11/2016 13:00-22:00	University of Innsbruck	Technikerstraße 21a 6020 Innsbruck Austria	Am 24. November 2016 findet an den Informatikinstituten, Institut für Informatik und Forschungsinstitut STI Innsbruck, ICT Campus Technik, zum dritten Mal der inDay students statt. Zwischen 13.00 und 21.00 Uhr wechseln sich an diesem Tag

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[2] Adapted from http://informatik.uibk.ac.at/events/inday-students/

				Workshop, Get-together, Netzwerken, Keynotes und Präsentationen ab.

Exercise 4 (voiD) (2 points)

Explain in your own words what is voiD while focusing on its main characteristics. (min ¼ page, max ½ page).