

Essential Skills. Lab 1

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1 Step by step DokuWiki installation and setup

1. Checking apache2 installed

```
service apache2 status
```

2. Installing DokuWiki

```
sudo apt install dokuwiki
```

3. Set password for user admin in wiki while installing
4. Realizing that we haven't enabled php in apache2 config.

```
nano /etc/apache2/apache2.conf  
LoadModule php7_module modules/libphp7.so
```

5. Realizing that we haven't got libapache2-mod-php and apache2 won't start without it.

```
sudo apt install libapache2-mod-php
```

6. Restarting apache2.

```
sudo service apache2 restart
```

7. Go to <http://localhost/dokuwiki/doku.php> and add our first page about Federative Wiki

2 XML entities creating

1. XML + DDT

```
<!DOCTYPE root  
[  
<!ELEMENT root (animal)>  
<!ELEMENT animal (name,skin,voice)>  
<!ELEMENT name (#PCDATA)>  
<!ELEMENT skin (#PCDATA)>  
<!ELEMENT voice (#PCDATA)>  
<!ENTITY skin "have skin">  
<!ENTITY fur "have fur">  
<!ENTITY feathers "have feathers">
```

```

        <!ENTITY bark "bark">
        <!ENTITY mur "mur">
        <!ENTITY bee "bee">
        <!ENTITY brr "brr">
        <!ENTITY mooo "mooo">
        <!ENTITY oink "oink">
        <!ENTITY whistle "whistle">
        <!ENTITY no_voice "no_voice">
    ]>
    <root>
<animal>
    <name>cow</name>
    <skin>&skin;</skin>
    <voice>&mooo;</voice>
</animal>
<animal>
    <name>sheep</name>
    <skin>&fur;</skin>
    <voice>&bee;</voice>
</animal>
<animal>
    <name>horse</name>
    <skin>&skin;</skin>
    <voice>&brr;</voice>
</animal>
<animal>
    <name>pig</name>
    <skin>&skin;</skin>
    <voice>&oink;</voice>
</animal>
<animal>
    <name>mockingbird</name>
    <skin>&feathers;</skin>
    <voice>&whistle;</voice>
</animal>
<animal>
    <name>eal</name>
    <skin>&feathers;</skin>
    <voice>&whistle;</voice>
</animal>
</root>

```

2. XS SCHEME

```

<?xml version="1.0" encoding="utf-8"?>
<xs:schema xmlns:xs="http://www.w3.org/2001/XMLSchema">
<xs:element name="root"
  <xs:element name="animal" maxOccurs="unbounded">
    <xs:complexType>
      <xs:sequence>
        <xs:element name="name" type="xs:string"/>
        <xs:element name="voice" type="xs:string"/>
        <xs:element name="skin" type="xs:string"/>
      </xs:sequence>
    </xs:complexType>
  </xs:element>
</xs:element>
</xs:schema>

```

XSLT and CSS

1. XSLT

```
<?xml version='1.0' encoding='UTF-8'?>
<xsl:stylesheet version='1.0' xmlns:xsl='http://www.w3.org/1999/XSL/Transform'>
<xsl:template match='/'>
  <html>
    <body>
      <h2>Animals</h2>
      <table border='1'>
        <tr>
          <th style='text-align:left'>Name</th>
          <th style='text-align:left'>Skin</th>
          <th style='text-align:left'>Voice</th>
        </tr>
        <xsl:for-each select='root/animal'>
          <tr>
            <td class='name-vl'><xsl:value-of select='name'/></td>
            <td class='skin-vl'><xsl:value-of select='skin'/></td>
            <td class='voice-vl'><xsl:value-of select='voice'/></td>
          </tr>
        </xsl:for-each>
      </table>
    </body>
  </html>
</xsl:template>
</xsl:stylesheet>
```

2. CSS

```
td {
  background: #eecbb;
}
th {
  background: #ffff00;
}
.name-vl {
  color: #0f0;
}
.name-vl:hover {
  color: #00f;
}
.voice-vl {
  color: #00f;
}
.voice-vl:hover {
  color: #0f0;
}
.skin-vl {
  color: #f00;
}
.skin-vl:hover {
  color: #f0f;
}
```