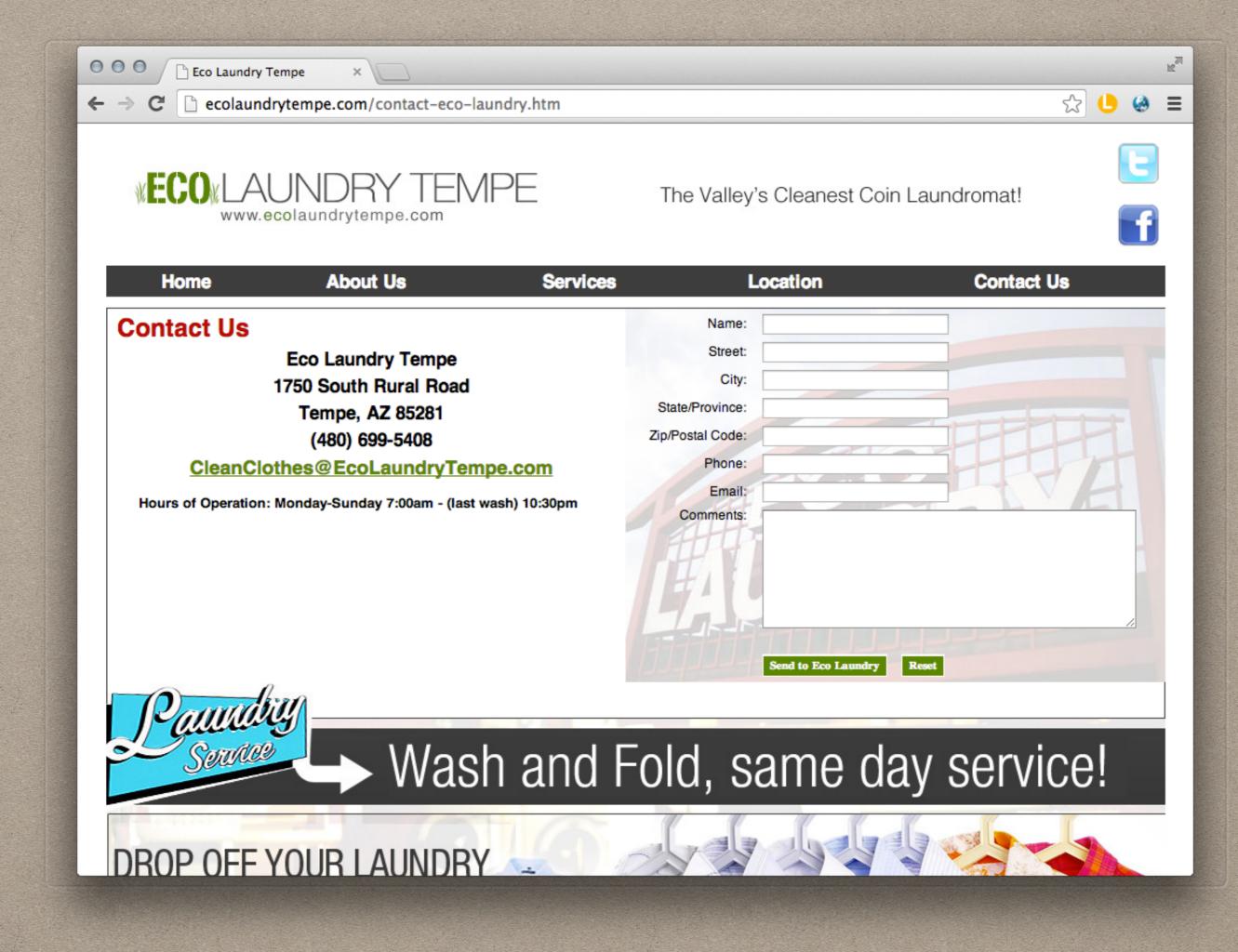# THE SEMANTIC WEB

INTRODUCTION TO DIGITAL & COMPUTATIONAL METHODS IN THE HUMANITIES

"The Semantic Web is not a separate Web but an extension of the current one, in which information is given well-defined meaning, better enabling computers and people to work in cooperation."

Tim Berners-Lee et al. (2001). The Semantic Web. *Scientific American*, 284(5):34–43

THE "TRADITIONAL" WEB

- HTML pages

- Developed for the human user

- Only minimal semantic markup of information

- No relationships between "things"

ecolaundrytempe.com/contact-eco-laundry.htm

ECO LAUNDRY TEMPE
www.ecolaundrytempe.com

The Valley's Cleanest Coin Laundromat!

Home	About Us	Services	Location	Contact Us

Contact Us

Eco Laundry Tempe

1750 South Rural Road

Tempe, AZ 85281

(480) 699-5408

CleanClothes@EcoLaundryTempe.com

Hours of Operation: Monday-Sunday 7:00am - (last wash) 10:30pm

Name:

Street:

City:

State/Province:

Zip/Postal Code:

Phone:

Email:

Comments:

Send to Eco Laundry   Reset

Wash and Fold, same day service!

Laundry Service

DROP OFF YOUR LAUNDRY

```
223  <div id="xx2" style="position:absolute; top:172px; width:983px; left:0px">
224
225              <table width="100%" border="0" cellspacing="0" cellpadding="0">
226
227    <tr>
228
229      <td width="49%" align="left" valign="top" style="padding-left:10px;">
230
231          <h1>Contact Us</h1>
232
233          <h2 align="center">Eco Laundry Tempe<br />
234
235  1750 South Rural Road<br />
236
237  Tempe, AZ 85281<br />
238
239  (480) 699-5408<br />
240
241  <a href="mailto:CleanClothes@EcoLaundryTempe.com" class="i">CleanClothes@EcoLaundryTempe.com</a></h2>
242
243  <h3>Hours of Operation: Monday-Sunday 7:00am - (last wash) 10:30pm</h3>
244
245          </td>
246
247      <td width="51%" valign="top" style=" background-image:url(images/ecolaundry_contactus.jpg); background-repeat:no-
     repeat"> <form action="contact-eco-laundry.php" method="POST" name="form1" onSubmit="return validate();"
     style="margin:0px"/>
248
249                                      <table width="100%" border="0" cellpadding="0" cellspacing="3">
250
251
252
253                          <tr>
254
255                            <td width="237" align="right" valign="middle">Name:</td>
256
257                            <td width="21"> </td>
258
259                            <td width="467"><input name="fname" type="text" id="fname" size="30" /></td>
260
261                          </tr>
262
263
264
265                          <tr>
266
267                            <td align="right" valign="middle">Street:</td>
```

THE SEMANTIC WEB

- Software agents

- Retrieve information from the web

- Analyze information to make decisions

- Web services

ONTOLOGIES

- Hierarchy of concepts in a domain

- Specify properties of concepts

- Specify how concepts relate to each other

- Can be difficult in the humanities

RESOURCE DESCRIPTION FRAMEWORK (RDF)

- Form of XML

- Common format

- Information is encoded as triples

- Relies on URIs

```
1   <rdf:RDF
2           xmlns:rdf="http://www.w3.org/1999/02/22-rdf-syntax-ns#"
3           xmlns:ex="http://example.org/">
4
5           <rdf:Description rdf:about="http://embryo.asu.edu/pages/thomas-henry-
                    huxley-1825-1895">
6                   <ex:Topic rdf:resource="http://dbpedia.org/resource/
                            Thomas_Henry_Huxley" />
7                   <ex:Title>Thomas Henry Huxley (1825-1895)</ex:Title>
8           </rdf:Description>
9
10          <rdf:Description rdf:about="http://dbpedia.org/resource/
                    Thomas_Henry_Huxley" >
11                  <rdf:Type rdf:resource="http://example.org/Person" />
12                  <ex:Name>Thomas Henry Huxley</ex:Name>
13          </rdf:Description>
14
15  </rdf:RDF>
```