

```
<body>
  <ol>
    <li> Studio apartment on Florida Ave.
    <li> 3 bedroom Apartment on Baron Way
  </ol>
</body>
</html>
```

The syntax of HTML is text with tags (e.g. `<title>`) written using angle brackets. The data model of HTML, known as the Document Object Model, defines the organization of these elements defined by tags into a hierarchical tree structure. For example, `<head>` should come before `<body>` and `` elements should appear within `` elements. Finally, the semantics of HTML tell us how the browser should interpret the web page. For example, the browser should render the content of the web page's body within the browser window and `` elements should be displayed as an ordered list. The syntax, data model, and semantics are all defined within the HTML standard.

HTML is designed to communicate information about the structure of documents for human consumption. For the Semantic Web, we need something richer. We need a data model that can be used by multiple applications, not just for describing documents for people but for describing application-specific information. This data model needs to be *domain independent* so that applications ranging from real estate to social networks can leverage it. In addition to a flexible data model, we also need a mechanism to assign semantics to the information represented using this data model. It should allow users to describe how an application should interpret “friend” in a social network description and “city” in a geographical description. Finally, like HTML, we need a way to write down all this information – a syntax.

RDF (Resource Description Framework) provides just such a flexible domain independent data model. Its basic building block is an entity-attribute-value triple, called a