

What are we learning in this chapter?

In Part I, we looked at some of Python's built-in XML parsers. In this chapter, we will look at the fun third-party package, **lxml** from codespeak. It uses the ElementTree API, among other things. The lxml package has XPath and XSLT support, includes an API for SAX and a C-level API for compatibility with C/Pyrex modules. Here is what we will cover:

- How to Parse XML with lxml
- A Refactoring example
- How to Parse XML with lxml.objectify
- How to Create XML with lxml.objectify

For this chapter, we will use the examples from the **minidom** parsing example and see how to parse those with lxml. Here's an XML example from a program that was written for keeping track of appointments:

```
<?xml version="1.0" ?>
<zAppointments reminder="15">
  <appointment>
    <begin>1181251680</begin>
    <uid>040000008200E000</uid>
    <alarmTime>1181572063</alarmTime>
    <state></state>
    <location></location>
    <duration>1800</duration>
    <subject>Bring pizza home</subject>
  </appointment>
  <appointment>
    <begin>1234360800</begin>
    <duration>1800</duration>
    <subject>Check MS Office website for updates</subject>
    <location></location>
    <uid>604f4792-eb89-478b-a14f-dd34d3cc6c21-1234360800</uid>
    <state>dismissed</state>
  </appointment>
</zAppointments>
```

Let's learn how to parse this with lxml!