12.5: PARSING HTML AND SCRAPING THE WEB

Contributed by Chuck Severance
Clinical Associate Professor (School of Information) at University of Michigan

One of the common uses of the `urllib` capability in Python is to *scrape* the web. Web scraping is when we write a program that pretends to be a web browser and retrieves pages, then examines the data in those pages looking for patterns.

As an example, a search engine such as Google will look at the source of one web page and extract the links to other pages and retrieve those pages, extracting links, and so on. Using this technique, Google *spiders* its way through nearly all of the pages on the web.

Google also uses the frequency of links from pages it finds to a particular page as one measure of how "important" a page is and how high the page should appear in its search results.