CS101- Course Glossary

Unit One

Web crawler

A program that collects content from the web. A web crawler works by starting from one or more pre-defined seed pages, and following the links on those pages to find other pages, and continuing to follow links on the found pages to produce a large collection of web content.

Computer

A computer is can execute a program. In the early days, a computer meant a human who computes things by following written rules. Today, it means a machine that computes things by following programs. Computers are everywhere; a typical (non-self driving) car today contains dozens of computers.

Program

A precise sequence of steps that can be followed mechanically (that is, without any thought).

Programming language

A language designed to be read and written by humans, and executed by computers.

Python

The programming language we use in this class. Python is a high-level language, which means it

allows us to describe programs closer to the level humans think than the level of the instructions the machine executes. The Python interpreter is a program that takes a Python program as its input, and executes that program according to the rules of the Python language.

Backus-Naur Form (BNF)

A method for describing the surface forms in a language using simple replacement rules. A Backus-Naur Form rule has the form:

<Nonterminal> -> [make that look like a proper arrow] <Replacement>

where <Replacement> can be any sequence of <Nonterminal>s (things that appear on the left side of a rule) and <Terminal>s (ending points that never appear on the left side of a rule).

Expression

Something that has a value

Compiler

A program that produces other programs

Variables

A name that refers to a value

Uniform Resource Locator (URL)

A string that identifies an Internet resource. For example, the URL http://www.udacity.com identifies the Udacity homepage.

Web page

The contents found at a URL. A web page is just a long string of characters, in a language called HTML.

Web browser

A program that can display a web page in a graphical way, as well as make requests for new pages when a user clicks on a link. Examples of web browsers include Firefox, Internet Explorer, Chrome, and Safari.