4.4.3.1 Make Names Informative

The most basic principle of naming is to choose names that are informative, which makes them easier to understand and remember. It is easier to tell what a computer program or XML document is doing if it uses names like "ItemCost" and "TotalCost" rather than just "I" or "T." People will enter more consistent and reusable address information if a form asks explicitly for "Street," "City," and "PostalCode" instead of "Line1" and "Line2."

Identifiers can be designed with internal structure and semantics that conveys information beyond the basic aspect of pointing to a specific resource. An International Standard Book Number (ISBN) like "978-0-262-07261-8" identifies a resource (07261="Document Engineering") and also reveals that the resource is a book (978), in English (0), and published by The MIT Press (262).[209][Com]

The navigation points that mark intersections of radial signals from ground beacons or satellites that are crucial to aircraft pilots used to be meaningless five-letter codes that were changed to make them suggest their locations; semantic landmark names made pilots less likely to enter the wrong names into navigation systems, For example, some of the navigation points near Orlando, Florida —the home of Disney World—are MICKI, MINEE, and GOOFY.[210][Ling]

4.4.3.2 Use Controlled Vocabularies

One way to encourage good names for a given resource domain or task is to establish a *controlled vocabulary*. A *controlled vocabulary* is like a fixed or closed dictionary that includes the terms that can be used in a particular domain. A controlled vocabulary shrinks the number of words used, reducing synonymy and homonymy, eliminating undesirable associations, leaving behind a set of words with precisely defined meanings and rules governing their use.

A *controlled vocabulary* is not simply a set of allowed words; it also includes their definitions and often specifies rules by which the vocabulary terms can be used and combined. Different domains can create specific controlled vocabularies for their own purposes, but the important thing is that the vocabulary be used consistently throughout that domain.[211][LIS]

For bibliographic resources important aspects of vocabulary control include determining the authoritative forms for author names, uniform titles of works, and the set of terms by which a particular subject will be known. In library science, the process of creating and maintaining these standard names and terms is known as *authority control*.

When evaluating what name to use for an author, librarians typically look for the name form that is used most commonly across that author's body of work while conforming to rules for handling prefixes, suffixes and other name parts

that often cause name variations. For example, a name like that of Johann Wolfgang von Goëthe might be alphabetized as both a "G" name and a "V" name, but using "G" is the authoritative way. "See" and "see also" references then map the variations to the authoritative name.[212][LIS]

Official authority files are maintained for many resource domains: a gazetteer associates names and locations and tells us whether we should be referring to Bombay or Mumbai; the Domain Name System (DNS) maps human-oriented domain and host names to their IP addresses; the Chemical Abstracts Service Registry assigns unique identifiers to every chemical described in the open scientific literature; numerous institutions assign unique identifiers to different categories of animal species.[213][LIS]

In some cases, authority files are created or maintained by a community, as in the case of MusicBrainz, an "open music encyclopedia" to which users contribute information about artists, releases, tracks, and other aspects of music. Music metadata is notoriously unreliable; one study found over 100 variations in the description of the *Knockin' on Heaven's Door* song (written by Bob Dylan) as recorded by Guns N' Roses.[214][Web]