**Chapter 7 Questions and Answers**

1. Describe the characteristics of a well-structured command language.

* Creates an explicit model of objects and actions
* Chooses meaningful, specific, distinctive names
* Hierarchical structure
* Provides a consistent structure (hierarchy, argument order, action-object)
* Supports consistent abbreviation rules (prefer truncation to one letter)
* Offers frequent users the ability to create macros
* May offer command menus on high-speed displays
* Limits the number of commands and ways of accomplishing a task

1. What are the guidelines for creating usable abbreviations for a command set?

* Special key combinations (e.g. CTRL-S to save a file). This strategy uses the “s” in the word “save” combined with the control key, facilitating quick learning.
* A simple primary rule should be used to generate abbreviations for most items; a simple secondary rule should be used for those items where there is a conflict.
* Abbreviations generated by the secondary rule should have a marker (for example, an asterisk) incorporated in them.
* The number of words abbreviated by the secondary rule should be kept to a minimum.
* Users should be familiar with the rules used to generate abbreviations.

1. Explain the benefits and limitations of Natural Language Interaction (NLI).

Arguments in favor include its appeal for novices, artificially intelligent applications, e.g. agents and expert systems, or those with any universal usability limitations who can enjoy the lack of typing and power of speech recognition of natural language. Has become an important part of the success of text-database searching. Also finding success in speech-based guided interactions on phones.

Arguments against include a limited user demand and therefore limited set of available tools, habitability (users determining which actions and objects are appropriate per application), and many enjoy a more visual (less verbose) user interface such as a direct manipulation application.