Programming Knowledge Systems in PROLOG

Make rules, not programs!

Tore Amble

After planning an application and developing the problem definition in chapter 4, acquiring the domain knowledge from sources in chapter 5, designing the knowledge model and human factors model in chapter 6, and selecting PROLOG as our major AI development tool, we need to pause before continuing to develop prototype systems in chapter 8 and 9 (Figure 8–1). In the present chapter, we discuss the strengths and weaknesses of PROLOG and provide an introduction of the main elements of the PROLOG language. If the reader has never programmed in any language before, we suggest this chapter be skipped because it will convey little useful information. On the other hand, readers who are programmers in other languages, should be able to understand the essence of PROLOG from this introduction. Those already familiar with PROLOG programming may regard this chapter as a useful review.

Before we introduce the PROLOG language elements and their use for KBS development, let us briefly review the major advantages of this language.
Figure 7–1. Before examining knowledge system implementation using PROLOG in chapters 8–9, we provide a brief overview of PROLOG in this chapter.