EE 4785 **Homework 5** **Due: 1 May 1996**

Problem 1: Design a frame hierarchy which stores two kinds of knowledge about furniture and electrical devices: knowledge about the objects themselves and about their ownership. There should be a furniture class frame that describes general furniture information and subclasses which describe tables and chairs. Similarly their should be a class describing electrical devices and subclasses for typewriters and televisions. For ownership, their should be a general ownership class and subclasses for property owned by businesses and property owned by people.

Construct the hierarchy so that `ako` links are placed at the most appropriate levels.

For at least one slot name, show when-constructed demon procedures in several different frames that can provide an appropriate default value for that frame.

For at least one slot name, show when-requested demons in several different frames that can provide an appropriate default value for that frame that could not be provided by a when-constructed demon.

Show two instance frames, one for a personal typewriter and one for an office chair.

Show three rules acting on the typewriter instance, one which is written for a typewriter frame, the others written for different superclasses of the typewriter frame.