

CS 311: Design and Development of Programming Languages

Functional and Expert System Programming

Assignment 6

Given the following deftemplates for facts describing a family tree,

(deftemplate father-of (slot father) (slot child))
(deftemplate mother-of (slot mother) (slot child))
(deftemplate male (slot person))
(deftemplate female (slot person))
(deftemplate wife-of (slot wife) (slot husband))
(deftemplate husband-of (slot husband) (slot wife))

Write rules that infer the following relations. Describe the deftemplates you use to solve the problem.

- a) Uncle, aunt
- b) Cousin
- c) Grandparent
- d) Grandfather, grandmother
- e) Sister, brother

Run the expert system for your own family tree.