Overview

In this problem set, you'll make modifications to the metacircular evaluator, changing UML Scheme. To run the metacircular evaluator, download mceval.ss from the course web site. Use the MzScheme language. After executing the code, evaluate (driver-loop). This will run the interactions for your metacircular UML Scheme world. Remember that everything you type in (except for variables and numbers) should be prefixed by uml: if you forget, the system will have an error. If you type in an error, the driver-loop exits and you lose the state you had in the metacircular world.

You only need to turn in the portions of the code that you change.

Warm-up: Run the metacircular evaluator and evaluate some UML Scheme expressions. Nothing to turn in for this part.

Exercise 1: Exercise 4.1 on p. 368. Only do one of the two (left to right or right to left) – your choice.


Exercise 3: Add uml:or to the metacircular evaluator. You may want to look at the definitions for uml:and to help you with this problem.

Exercise 4: Change uml:if to the following syntax:

(uml:if <predicate> uml:then <consequent> uml:else <alternative>)

Exercise 5: Exercise 4.10 on p. 376. Choose your own way to change the syntax of UML Scheme. For this problem, explain what you did as well as turning in the code.