CSC466: Artificial Intelligence 2 Tic Tac Toe 1

Ace DeSiena - Jan 2015

```
;;; Tic Tac Toe One
;;; Ace DeSiena
;;; January 2015
;;; CSC466
(defmethod select ((list list))
  (nth (random (length list)) list))
(defmethod snoc ((item symbol)(list list))
  (if (null list)
      (list item)
    (cons (car list) (snoc item (cdr list)))))
(defmethod play (&aux play avail move)
  (setf play ())
  (setf avail '(nw n ne w c e sw s se))
  (dolist (player '(x o x o x o x o x))
    (cond
     ((eq player 'x)
      (setf move (select avail))
      (setf avail (remove move avail))
      (setf play (snoc move play)))
     ((eq player 'o)
      (setf move (select avail))
      (setf avail (remove move avail))
      (setf play (snoc move play)))))
  play)
```

```
* (load "ttt1.1")
STYLE-WARNING: Implicitly creating new generic function COMMON-LISP-USER::PLAY.

T
* (play)

(W SW E NE NW SE N S C)
* (play)

(N NE E C SW NW S W SE)
* (play)

(N W SE NE SW NW C E S)
* (play)

(NW SW E SE C W S NE N)
* (play)

(NE E C W N S NW SW SE)
```

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_	5x	7x	40	X loses	60	1x	20	_				
	1x	9x	3x		80	40	3x	X wins	X wins			
	2o	80	6o		5x	7x	9x	_				
	6o	1x	4o	X wins	1x	9x	8o	X wins	7x	5x	1x	
	2o	7x	8o		6o	5x	3x		40	3x	2o	X wins
-	5x	9x	3x		2o	7x	4o		8o	6o	9x	-