

World worksheet

4 Oct 2010

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; turtle-tick : turtle → turtle
   TICK FUNCTION NAME      STATE TYPE      STATE TYPE
; calculates the state following the given state if only time passes

(define ( turtle-tick current )
   TICK FUNCTION NAME
  current ) ; stub, state is unchanged

;                      :                      KeyEvent →                     
   KEY FUNCTION NAME      STATE TYPE      STATE TYPE
; calculates the state following the given state if given key is pressed

(define (                      current key )
   KEY FUNCTION NAME
  current ) ; stub, state is unchanged

; turtle-render : turtle → image
   RENDER FUNCTION NAME      STATE TYPE
; constructs an image representing the given state

(define ( turtle-render current )
   RENDER FUNCTION NAME
  (text current 40 "red") ) ; stub, renders as text

(define ( main init-val )
  (big-bang init-val

    (on-tick turtle-tick )
              TICK FUNCTION NAME

    (on-key                      )
            KEY FUNCTION NAME

    (to-draw turtle-render) )
            RENDER FUNCTION NAME

  (main turtle-init )
        INITIAL STATE

```