

World worksheet

4 Oct 2010

```
; tick-alien : AState → AState (State of list of aliens)
   TICK FUNCTION NAME STATE TYPE STATE TYPE
; calculates the state following the given state if only time passes
```

```
(define ( tick-alien 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
```

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

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

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

    (on-tick tick-alien )
              TICK FUNCTION NAME

    (on-key                      )
            KEY FUNCTION NAME

    (to-draw render-alien ) )
            RENDER FUNCTION NAME
```

```
(main INIT ALIEN )
      INITIAL STATE
```