

Code Reading

Below is the code for an animation of a character walking back and forth across a screen. Without contracts or comments, can you tell which of the functions handle...

Defining the data structure: A

Drawing the animation: D

Updating the animation state: B

Responding to keypresses: C

A	<pre>data WalkState: walk(x :: Number, direction :: Number) end</pre>
B	<pre>fun next-state-tick(w): if w.x > (WIDTH - 50): walk(w.x - 4, w.direction * -1) else if w.x <= 50: walk(w.x + 4, w.direction * -1) else: walk(w.x + w.direction, w.direction) end end</pre>
C	<pre>fun next-state-key(w, key): if string-equal(key, "r"): walk(75, 3) else if string-equal(key, "right"): walk(w.x + 50, w.direction) else if string-equal(key, "left"): walk(w.x - 50, w.direction) else: w end end</pre>
D	<pre>fun draw-state(w): put-image(CHARACTER-IMG, w.x, 150, BACKGROUND) end</pre>