Feedback — Quiz - HtDW

You submitted this quiz on **Sat 28 Sep 2013 12:25 AM EDT (UTC -0400)**. You got a score of **3.80** out of **5.00**. You can attempt again, if you'd like.

Problem:

Consider designing a simple animation of a rocket that launches and goes straight up to outer space.

Answer the following questions on designing this world program by following the HtDW recipe.

Question 1

What is the first step you should complete when designing this world program?

Your Answer		Score	Explanation
◉ Domain Analysis	✔	1.00	
◯ Design the data definition for the world state using HtDD			
◯ Consult the HtDW recipe to determine the first step			
◯ Design the big-bang function using HtDF			
Total		1.00 / 1.00	

Question Explanation

We accepted both answers "Consult the HtDW recipe to determine the first step" and "Domain Analysis."

By following the HtDW recipe, Domain Analysis is the first step you should complete.

Question 2

Which of the following information is constant in this program? Select all that apply.

Your Answer		Score	Explanation
☑ The width of the scene	✔	0.25	
☑ The rocket image	✔	0.25	
☑ The background image	✔	0.25	
☐ The y-coordinate of the rocket	✔	0.25	
Total		1.00 / 1.00	

Question Explanation

All information except the y-coordinate of the rocket are not changing in this world program. The background image might be constant or changing information, depending on how you want to design the animation background.

Question 3

Which of the following information is changing in this program? Select all that apply.

Your Answer		Score	Explanation
☐ The width of the scene	✔	0.25	
☐ The rocket image	✔	0.25	
☐ The background image	✔	0.25	
☑ The y-coordinate of the rocket	✔	0.25	
Total		1.00 / 1.00	

Question Explanation

The y-coordinate of the rocket is the only thing that changes in this world program. The background image might be constant or changing information, depending on how you want to design the animation background.

Question 4

Suppose that in addition to animating the rocket to launch and fly up, we would like to restart the rocket launch after pressing the spacebar key. What `big-bang` options does the **overall** rocket program require? Select all that apply.

Your Answer		Score	Explanation
☑ `on-tick`	✔	0.20	
☑ `on-key`	✔	0.20	
☐ `stop-when`	✔	0.20	
☐ `on-mouse`	✔	0.20	
☐ `to-draw`	✘	0.00	
Total		0.80 / 1.00	

Question Explanation

The program:
- has information that changes as time goes by so it requires `on-tick`
- has to display something so it requires `to-draw`
- has to change in response to the spacebar key press so it requires `on-key`

Question 5

Assume the world state data definition is called `Rocket`, and the `on-tick` handler function is called `next-rocket`. What should the signature of `next-rocket` be?

Your Answer	Score	Explanation
⚪ `Rocket -> Rocket`		
⚪ `Image -> Rocket`		
⚪ `WS -> WS`		

◉ `Rocket -> Image`   ✖   0.00

◯ `Number -> Number`

Total   0.00 / 1.00

Question Explanation

The signature of the `on-tick` handler function should be of the form `WS -> WS`, where `WS` is the world state type.

In this case, our world state type is `Rocket`.

Question 6

Since your quiz grade and feedback will be given to you as soon as you submit this quiz, it is important that you answer this additional question before you proceed:

I promise that I will not post answers to this quiz before the hard deadline on Friday September 27, 11:00 pm PDT (UTC -7).

Your Answer		Score	Explanation
◉ Yes	✔	0.00	
◯ No			
Total		0.00 / 0.00	