Feedback — Quiz 8

Help

This quiz submission has not been authenticated. Please click here to authenticate your submission.

You submitted this quiz on **Tue 11 Nov 2014 3:01 PM WET**. You got a score of **67.00** out of **100.00**. You can attempt again, if you'd like.

Question 1

Which of the following is valid notation for a set in CodeSkulptor?

Your Answer		Score	Explanation
☑ `set([1, 2, 3])`	✔	4.00	
☑ `set()`	✔	4.00	
☐ `{}`	✔	2.00	No, this is a dictionary.
Total		10.00 / 10.00	

Question 2

Which of the following operations can mutate set `s`? You may want to try some examples in CodeSkulptor and refer to the documentation.

Your Answer		Score	Explanation
☑ `s.difference_update(t)`	✔	5.00	
☐ `s.add(x)`	✖	0.00	
☑ `t.difference(s)`	✖	0.00	
☐ `s = t`	✔	1.00	This *assigns* to `s`, but doesn't *mutate* `s`. You should review the difference.

☐ `s.symmetric_difference(t)`	✔	1.00
☐ `t.difference_update(s)`	✔	1.00
Total		8.00 / 10.00

Question 3

Which of the following always give the same result as `s.union(t)`?

Refer to the CodeSkulptor documentation or try them on examples.

Your Answer		Score	Explanation
☐ `s.intersection(s.union(t))`	✔	1.00	
☑ `t.union(s)`	✔	4.00	
☑ `s.union(s.symmetric_difference(t))`	✔	4.00	
☐ `s.union(s.difference(t))`	✔	1.00	
Total		10.00 / 10.00	

Question 4

A set is an unordered collection of distinct elements. Which of the following problem contexts represent instances of this idea?

Your Answer		Score	Explanation
☐ Names for everyone taking this course	✔	1.00	No, we could easily have multiple students with the same name.
☑ Alphabetized names	✖	0.00	No, sets are not ordered.
☑ Group of distinct cities	✔	8.00	
Total		9.00 / 10.00	

Question 5

How many frames per second are *typically* projected in modern movies? How many times per second is the draw handler typically called in CodeSkulptor?

Enter two numbers representing these frame rates in frames per second. Use only spaces to separate the numbers.

You entered:

24 60

Your Answer		Score	Explanation
24	✔	5.00	
60	✔	5.00	
Total		10.00 / 10.00	

Question 6

For this week, the mini-project defines and uses a `Sprite` class to support animations. What attribute (also known as a field) can be used to help index the sub-images forming an animated sprite? (If you are stuck, review the bonus phase in the mini-project description.)

Your Answer		Score	Explanation
○ `pos`			
○ `image_center`			
○ `image`			
○ `image_size`			
○ `lifespan`			
○ `vel`			
◉ `animated`	✖	0.00	

`radius`	
`angle`	
`sound`	
`angle_vel`	
`age`	
Total	0.00 / 10.00

Question 7

Consider a horizontally-tiled image where each sub-image has the same size. If each sub-image is of size 60×90 (in pixels), what is the horizontal distance (in pixels) between the centers of adjacent sub-images?

Your Answer		Score	Explanation
90			
180			
60	✔	10.00	
120			
Total		10.00 / 10.00	

Question 8

How many **distinct** numbers are printed by the following code? Enter the count.

```
def next(x):
    return (x ** 2 + 79) % 997

x = 1
for i in range(1000):
    print x
    x = next(x)
```

Hint: Consider how editing the code to use a set could help solve the question.

You entered:

45

Your Answer		Score	Explanation
45	✖	0.00	
Total		0.00 / 20.00	

Question 9

Which instructor exhibits the best coding style?

Your Answer		Score	Explanation
Scott	✔	10.00	His code is well commented and well structured. And he wears awesome looking ties.
John			
Stephen			
Joe			
Total		10.00 / 10.00	