Feedback - Quiz 2b

Help Center

Thank you. Your submission for this quiz was received.

You submitted this quiz on **Sun 1 Mar 2015 6:58 PM WET**. You got a score of **100.00** out of **100.00**.

Question 1

In the following code, what does the number 100 represent?

my_button = frame.add_button("My Label", button_handler, 100)

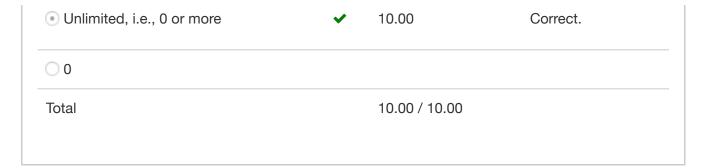
Use the CodeSkulptor documentation to look it up.

Your Answer		Score	Explanation
Width of the button in pixels	~	10.00	
O Height of the button in pixels			
O Vertical position of the button in pixels			
O Horizontal position of the button in pixels			
Total		10.00 / 10.00	

Question 2

How many control objects are allowed in a frame?

Your Answer	Score	Explanation

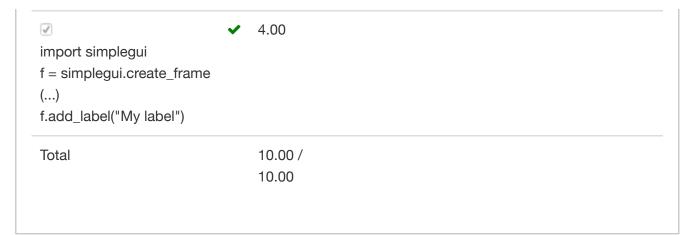


Question 3

Which of the following are valid ways of defining and using a label?

Note that ellipses denote code that is omitted from and irrelevant for the question. Feel free to fill in plausible parameters and test each choice in CodeSkulptor.

Your Answer		Score	Explanation
import simplegui	~	1.00	This is not a valid way to add a label. Labels don't have handlers.
def label_handler(): print "Handler called."			
f = simplegui.create_frame () f.add_label("My label",lab el_handler)			
import simplegui f = simplegui.create_frame () label = f.add_label("My label") label.set_text("My new label")	~	4.00	
import simplegui simplegui.create_frame() simplegui.add_label("My I	•	1.00	This is not a valid way to add a label. It's not simplegui.add_label.



Question 4

When you enter text into an input field and press enter, the text is passed to the input field's event handler. What is the data type of the text?

Your Answer		Score	Explanation
A number			
A string or a number, depending on the text entered			
A string	~	10.00	The entered data is a string. The text entered into an inpution field is always passed to the input handler as a string even if the text corresponds to a number.
Total		10.00 / 10.00	

Question 5

Consider the following conditional statement.

```
if p == False:
    return False
```

```
elif q == False:
    return False
else:
    return True
```

That is equivalent to which of the following simpler statements?

Try to reason logically about each of the statements, but also try each in CodeSkulptor.

Your Answer		Score	Explanation
return (not p) or (not q)	~	1.00	
return not(p or q)	~	1.00	
return p or q	~	1.00	
✓ return q and p	~	7.00	
Total		10.00 / 10.00	

Question 6

Which of the following describes the mistake in the following code?

```
def volume_cube(side):
    """ Returns the volume of a cube, given the length of its side. """
    print side ** 3

s = 5
print "The volume of a cube with sides", s, "long is", volume_cube(s), "."
```

Your Answer Score Explanation

The call to volume_cube shouldn't be within a print statement. More generally, function calls usually shouldn't be within print statements.

All of the printing should be done within the function.

10.00 Correct. In most cases, functions should return their computed results. Furthermore, the documentation string here specifies that it should be returning that value.

10.00

10.00

10.00

Question 7

What kind of errors can happen if you are missing a needed <code>global</code> declaration in one of your function definitions? For this question, you need only consider the case where the problem is in the function that is missing the <code>global</code> declaration.

If you are having trouble with this question, watch this week's Programming Tips video again.

Your Answer		Score	Explanation
<pre></pre>	~	4.00	
□ NameError	~	0.67	
SyntaxError	~	0.67	
☐ AttributeError	~	0.67	
An incorrect computation that	~	4.00	If you only assign to the variable, without trying to use its current value, you won't get any error message.

generates no error message	Instead, Python assumes the variable is local, which might lead to an unexpected result.
Total	10.00
	10.00

Question 8

Which of the following function definitions are in the recommended code style?

Your Answer		Score	Explanation
def f(x, y): """ Add the two input s. """ return x + y	•	7.00	
def myFunction(x, y): """ Add the two input s. """ return x + y	~	1.00	This does not follow recommended style, only class names should use "camel case".
def f(x, y): return x + y # Add t he two inputs.	~	1.00	This does not follow recommended style, a comment should be on a separate line.
def f(x,y): """ Add the two input s. """ return x + y	•	1.00	This does not follow recommended style, there should be a space after the comma.
Total		10.00 /	

Question 9

Cut and paste the following code into CodeSkulptor. Run it and make an attempt to understand how it works.

```
# Simple interactive application
import simplegui
# Define globals.
message = "Welcome!"
count = 0
# Define event handlers.
def button_handler():
    """Count number of button presses."""
    global count
    count += 1
    print message," You have clicked", count, "times."
def input_handler(text):
    """Get text to be displayed."""
    global message
    message = text
# Create frame and register event handlers.
frame = simplegui.create_frame("Home", 100, 200)
frame.add_button("Click me", button_handler)
frame.add_input("New message:", input_handler, 100)
# Start frame.
frame.start()
```

We'd like to modify the code so that the count is reset to zero whenever a new message is entered. Where would you need to modify this code to implement this change?

Your Answer Score Explanation

Add an assignment to count in the initialization of global variables.	
Add an assignment to count in the event handler for the input field. Also add a global count declaration there.	✓ 10.00
Add an assignment to count in the event handler for the button.	
0	
Add an assignment to count at the end of this code.	
Total	10.00 / 10.00

Question 10

In the game "Guess the number", what is the minimum number of guesses necessary to guarantee that the guesser can *always* win if the secret number is chosen in range(0,

400) ?

Review the mini-project description for "Guess the number" if you are having trouble with this problem.

Your Answer		Score	Explanation
9 guesses	~	10.00	
0 8 guesses			
10 guesses			
It's impossible to guarantee the you can always win at "Guess the number".			
12 guesses			

Total	10.00 / 10.00