W05 Team Activity: Mindfulness Design

- Due Oct 2 at 11:59pm
- Points 10
- Questions 5
- Available until Oct 16 at 11:59pm
- Time Limit None
- Allowed Attempts 3

Instructions

1. Meet with your team and follow the instructions for the **Inheritance Design Activity (https://byui-cse.github.io/cse210-ww-course/week05/design.html)** .
2. Each person should **individually** take this quiz to evaluate the design you created.

Take the Quiz Again

Attempt History

	Attempt	Time	Score
KEPT	Attempt 2	less than 1 minute	10 out of 10
LATEST	Attempt 2	less than 1 minute	10 out of 10
	Attempt 1	4 minutes	8 out of 10

ⓘ Correct answers are hidden.

Score for this attempt: 10 out of 10
Submitted Oct 4 at 1:40am
This attempt took less than 1 minute.

Question 1
2 / 2 pts
What is a benefit of having a base `Activity` class, instead of having only the three specific activity classes themselves?

- It keeps the size of the final program smaller.
- Putting shared behaviors in the base class makes them easier to maintain because if a bug is found, it only needs to be fixed in one place.
- All of these are benefits.
- It reduces the runtime complexity of the code.

Question 2

2 / 2 pts

Notice that all three of the derived classes contain a run function. Why can it not be defined in the base class and inherited?

- Because even though the method name is the same, the parameters are different.
- Because even though the method name is the same, the way you call it is different.
- Because even though the method name is the same, the actual behavior is different.
- Since the method name is the same, the program would not know which method to call.

Question 3

2 / 2 pts

Can a derived class method call a base class method? For example, can `DisplayQuestions()` in the `ReflectingActivity` class call the `ShowSpinner()` method? Why or why not?

- No. Base class methods can call derived class methods, but derived class methods cannot call base class methods.
- Yes, because the base class method requires no parameters.
- No. It can only be called by other base class methods.
- Yes, because the base class method was inherited by the derived class.

Question 4

2 / 2 pts

Notice that two of the three activity classes store a list of prompts. What is a potential benefit of defining it in those classes as apposed to including it in the base class and having the activity that does not need it simply ignore it and leave it empty?

- It makes the program slightly more efficient because unneeded variables are not declared.
- All of these are benefits.
- I avoids confusion in the future, because others may assume it was used when it was not.
- It makes the program easier to maintain because access to variables is isolated to only places that need it.

Question 5

2 / 2 pts

What is a benefit to requiring parameters for a constructor, instead of simply using the no-argument constructor and letting people use setters later to set the values?

- All of these are benefits.
- The constructor is easier to call than the no-argument constructor.
- It ensures that that the class will be populated with expected data.
- It more easily allows the user to change the values later if needed.

Quiz Score: 10 out of 10

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