

Signature \_\_\_\_\_

CSE 70

Name \_\_\_\_\_

Quiz 3

cs70f \_\_\_\_\_

Fall 2009

Student ID \_\_\_\_\_

This quiz is to be taken **by yourself** with closed books, closed notes, no electronic devices.

1) General OO Principles

\_\_\_\_\_ what varies.

Favor \_\_\_\_\_ over \_\_\_\_\_.

Program to \_\_\_\_\_, not \_\_\_\_\_.

Strive for \_\_\_\_\_ coupled designs between objects that interact.

2) Design Patterns

\_\_\_\_\_ pattern defines a family of algorithms, encapsulates each one, and makes them interchangeable. This pattern lets the algorithm vary independently from clients that use it.

\_\_\_\_\_ pattern defines a one-to-many dependency between objects so that when one object changes state, all its dependents are notified and updated automatically.

3)

In the MVC architecture, which part(s) plays the Observable? \_\_\_\_\_

In the MVC architecture, which part(s) plays the Observer? \_\_\_\_\_

4) Which is usually considered the better design in the Observer Pattern?

- A) Push data to the Observer
- B) Push data to the Observable
- C) Pull data from the Observer
- D) Pull data from the Observable

5) In the following Java GUI/Event Handling code fragment:

```
/* Some GUI control object that lays out GUI components */  
  
    JButton button1 = new JButton( "Stop" );  
  
    button1.addActionListener( new ResizableBall( /* args */ ) );  
  
public class ResizableBall implements ActionListener  
{  
    /* Lots of other stuff associated with a ResizableBall */  
  
    public void actionPerformed((ActionEvent evt )  
    {  
        /* Do something with evt */  
    }  
}
```

Which object is the Observable? \_\_\_\_\_

Which object is the Observer? \_\_\_\_\_