

Software Design I (CS 120)
Quiz 09: Monday, 27 November 2017

NAME _____

- (1) (*5 points*) The class below needs to be completed so that it can properly handle the events that are generated by the two buttons it contains. (You can assume that the buttons have been created properly.) Fill in the blank at the top of the class, along with the `actionPerformed()` method; complete that method so that, when each button is pressed, a different message is printed out, using standard `System.out`.

```
import java.awt.event.*;
import javax.swing.JButton;

public class ButtonUser _____ {

    private JButton button1, button2;

    // Assume all code to create and set up the buttons is complete.

    // Method to produce two different messages, depending upon
    // which of the two buttons is pressed.
    public void actionPerformed( ActionEvent e ) {

        }

    }
```

- (2) (10 points) The class below has two instance variables. One, a **JFrame**, is given as input to the constructor; the other is an array of **String** objects, initially all **null**. Fill in the blanks so the class can respond to keyboard-related events (recall: these are passed in via the **JFrame**). After that, fill in the **keyTyped()** method so that, if the letter 'A' is typed, the array is filled with 10 instances of "Apple", and if the letter 'B' is typed, it is filled with "Banana". If anything else is typed, then the array is filled with empty, but non-null **String** objects. (Assume the remaining methods required for responding to keys are included, but do nothing.)
-

```
import java.awt.event.*;
import javax.swing.JFrame;

public class KeyboardUser _____ {
    private JFrame window;
    private String[] fruit = new String[10];

    // Save input, enable KeyboardUser to respond to KeyEvents it creates.
    public KeyboardUser( JFrame win ) {
        window = win;
    }

    // Responds to a typed key.
    public void keyTyped( KeyEvent e ) {

    }

    // Assume all remaining methods are included here.
}
```