



PGCert IT: Programming for Industry

Lab 13: SwingWorker

Before you start

The BitBucket repository for this lab is located at [this link](#). Fork it to get the starting point for this lab. Take a look at the examples given in the project, as they should help you to complete the exercises.

Exercise One: SwingWorker errors

For this exercise, examine the following code excerpt:

```
public class AwesomeProgram implements ActionListener {

    private JLabel progressLabel = ...;
    private JLabel myLabel = ...;
    private JButton myButton = ...;

    /** Called when the button is clicked. */
    @Override
    public void actionPerformed(ActionEvent e) {

        myButton.setEnabled(false);

        // Start the SwingWorker running
        MySwingWorker worker = new MySwingWorker();
        worker.doInBackground();

        // When the SwingWorker has finished, display the result in myLabel.
        int result = worker.get();
        myButton.setEnabled(true);
        myLabel.setText("Result: " + result);
    }

    private class MySwingWorker extends SwingWorker<int, Void> {

        protected int doInBackground() throws Exception {
            int result = 0;
            for (int i = 0; i < 100; i++) {

                // Do some long-running stuff
                result += doStuffAndThings();

                // Report intermediate results
                progressLabel.setText("Progress: " + i + "%");
            }

            return result;
        }
    }
}
```

There are **four errors** with the given code. For each error, state in detail what the error is, and what you would do to fix it.

Note: Assume that the Swing components have been created successfully, are displayed on the GUI correctly, that `doStuffAndThings` is a method that exists and performs some long-running task which returns an `int`, and that the `actionPerformed` method is called when the user clicks `myButton`.

Error one:

Error two:

Error three:

Error four: