

A Reflection API demo class

```
/** A class used to demonstrate RTTI concepts
 */
public class CreateByName {
    /** Test method for the class
     * @param args names of classes to be
     * instantiated
     */
    public static void main( String[] args ) {
        for ( int i = 0; i < args.length; i++ ) {
            try {
                Class x = Class.forName( args[i] );
                Object y;
                try {
                    if ( x.isInterface() ) {
                        System.out.println( "The class " +
                                           x.getName() + " is an interface "
                                           + "and can't be instantiated." );
                    } else {
                        y = x.newInstance();
                        if ( y instanceof java.awt.Component ) {
                            System.out.println( "The GUI "
                                                + "component class "
                                                + x.getName() + " was specified." );
                        } else {
                            System.out.println("The non-GUI "
                                                + "component class "
                                                + x.getName() + " was specified." );
                        }
                    }
                }
            } catch( InstantiationException ix ) {
                ix.printStackTrace();
            } catch( IllegalAccessException iax ) {
                iax.printStackTrace();
            } // end inner try
        } catch( ClassNotFoundException cnfx ) {
            System.err.println( "Sorry, the class "
                               + args[i] + " could not be found." );
        } // end outer try
    } // end for
} // end main
} // end CreateByName
```

```
igraine:Week12 easwarac$ java CreateByName A javax.swing.JSlider java.util.List
The non-GUI component class A was specified.
The GUI component class javax.swing.JSlider was specified.
The class java.util.List is an interface and can't be instantiated.
igraine:Week12 easwarac$
```

```
class A {
    private int x;
    private String s;
    public A (int x, String s){
        this.x=x;
        this.s=s;
    }
    public A() {
        this.s=null;
    }
    private void setX(int x){
        this.x=x;
    }
    public int Squared_x(int x){
        return x*x;
    }
    public void info(){
        System.out.println("This is an A object");
    }
    public String getString(){
        return s;
    }
    public int getX(){
        return x;
    }
}
```