

```
package TextEditor1;
```

```
import java.awt.Color;  
import java.awt.Font;  
import java.awt.event.ActionEvent;  
import java.awt.event.ActionListener;  
import java.awt.event.KeyEvent;
```

```
import javax.swing.JButton;  
import javax.swing.JFrame;  
import javax.swing.JMenu;  
import javax.swing.JMenuBar;  
import javax.swing.JMenuItem;  
import javax.swing.JPanel;  
import javax.swing.JTextArea;  
import javax.swing.KeyStroke;
```

```
public class TextEditor1 {  
    JFrame EditorWindow;  
    JPanel MainPanel;  
    JTextArea TextArea;  
    JMenuBar MenuBar;  
    JMenu FontList,ColorMenu;  
    JMenuItem SansSerif;  
    JMenuItem Serif;  
    JMenuItem Sans;  
    JMenuItem Black, Red, Green, Blue;  
    JButton Plain, Bold, Italics, Save;  
  
    public static void main(String[] args) {  
        new TextEditor1();  
    }  
  
    public TextEditor1(){  
        //Window  
        EditorWindow = new JFrame();  
  
        EditorWindow.setTitle("Notepad");  
        EditorWindow.setSize(400,400);  
        EditorWindow.setResizable(false);
```

```
//Panel
MainPanel = new JPanel();
MainPanel.setLayout(null);

//Menu Bar
MenuBar = new JMenuBar();
MenuBar.setBounds(0,5,400,30);
MainPanel.add(MenuBar);

//Save Option
Save = new JButton("Save");
MenuBar.add(Save);

//Color Menu
ColorMenu = new JMenu("Color Menu");
MenuBar.add(ColorMenu);

Black = new JMenuItem("Black",KeyEvent.VK_T);
Black.setAccelerator(KeyStroke.getKeyStroke(KeyEvent.VK_1,
ActionEvent.ALT_MASK));

Red = new JMenuItem("Red",KeyEvent.VK_T);
Red.setAccelerator(KeyStroke.getKeyStroke(KeyEvent.VK_1,
ActionEvent.ALT_MASK));

Green = new JMenuItem("Green",KeyEvent.VK_T);
Green.setAccelerator(KeyStroke.getKeyStroke(KeyEvent.VK_1,
ActionEvent.ALT_MASK));

Blue = new JMenuItem("Blue",KeyEvent.VK_T);
Blue.setAccelerator(KeyStroke.getKeyStroke(KeyEvent.VK_1,
ActionEvent.ALT_MASK));

ColorMenu.add(Black);
ColorMenu.add(Red);
ColorMenu.add(Green);
ColorMenu.add(Blue);

//Color Options
ListenForBlack IForBlack = new ListenForBlack();
Black.addActionListener(IForBlack);

ListenForRed IForRed = new ListenForRed();
```

```
Red.addActionListener(IForRed);

ListenForGreen IForGreen = new ListenForGreen();
Green.addActionListener(IForGreen);

ListenForBlue IForBlue = new ListenForBlue();
Blue.addActionListener(IForBlue);

//Font Menu
FontList = new JMenu("Font Selection");

SansSerif = new JMenuItem("Sans Serif",KeyEvent.VK_T);
SansSerif.setAccelerator(KeyStroke.getKeyStroke(KeyEvent.VK_1,
ActionEvent.ALT_MASK));

Serif = new JMenuItem("Serif",KeyEvent.VK_T);
Serif.setAccelerator(KeyStroke.getKeyStroke(KeyEvent.VK_1,
ActionEvent.ALT_MASK));

Sans = new JMenuItem("Dialog",KeyEvent.VK_T);
Sans.setAccelerator(KeyStroke.getKeyStroke(KeyEvent.VK_1,
ActionEvent.ALT_MASK));

MenuBar.add(FontList);

FontList.add(SansSerif);
FontList.add(Serif);
FontList.add(Sans);

//Font Options
ListenForSans_Serif IForSansSerif = new ListenForSans_Serif();
SansSerif.addActionListener(IForSansSerif);

ListenForSerif IForSerif = new ListenForSerif();
Serif.addActionListener(IForSerif);

ListenForSans IForSans = new ListenForSans();
Sans.addActionListener(IForSans);

// Bold, Italics, Underline

Plain = new JButton("P");
MenuBar.add(Plain);
```

```

Plain.setFont(new Font(Font.SERIF,Font.PLAIN, 13));
ListenForPlain IForPlain = new ListenForPlain();
Plain.addActionListener(IForPlain);

Bold = new JButton("B");
Bold.setFont(new Font(Font.SERIF,Font.BOLD, 12));
MenuBar.add(Bold);
ListenForBold IForBold = new ListenForBold();
Bold.addActionListener(IForBold);

Italics = new JButton("I");
Italics.setFont(new Font(Font.SERIF,Font.ITALIC, 12));
MenuBar.add(Italics);
ListenForItalics IForItalics = new ListenForItalics();
Italics.addActionListener(IForItalics);

//Text Area
TextArea = new JTextArea();
TextArea.setBounds(0,35,400,350);
TextArea.setLineWrap(true);

MainPanel.add(TextArea);

TextArea.setFont(new Font(Font.SERIF, Font.PLAIN, 18));

EditorWindow.add(MainPanel);
EditorWindow.setVisible(true);

}

//Add Action Listeners Here
private class ListenForSans_Serif implements ActionListener{

    @Override
    public void actionPerformed(ActionEvent e) {
        //TODO Auto-generated method stub
        TextArea.setFont(new Font (Font.SANS_SERIF, Font.PLAIN, 18));
    }
}

private class ListenForSerif implements ActionListener{
    public void actionPerformed (ActionEvent e ) {

```

```

        //TODO Auto-generated method stub
        TextArea.setFont(new Font (Font.SERIF, Font.PLAIN, 18));
    }
}
private class ListenForSans implements ActionListener{
    public void actionPerformed (ActionEvent e ) {
        //TODO Auto-generated method stub
        TextArea.setFont(new Font (Font.DIALOG, Font.PLAIN, 18));
    }
}
private class ListenForPlain implements ActionListener{
    public void actionPerformed (ActionEvent e) {
        TextArea.setFont(new Font ("", Font.PLAIN, 18));
    }
}
private class ListenForBold implements ActionListener{
    public void actionPerformed (ActionEvent e) {
        TextArea.setFont(new Font ("", Font.BOLD, 18));
    }
}
private class ListenForItalics implements ActionListener{
    public void actionPerformed (ActionEvent e) {
        TextArea.setFont(new Font ("", Font.ITALIC, 18));
    }
}
private class ListenForBlack implements ActionListener{
    public void actionPerformed (ActionEvent e) {
        TextArea.setForeground(Color.black);
    }
}
private class ListenForRed implements ActionListener{
    public void actionPerformed (ActionEvent e) {
        TextArea.setForeground(Color.red);
    }
}
private class ListenForGreen implements ActionListener{
    public void actionPerformed (ActionEvent e) {
        TextArea.setForeground(Color.green);
    }
}
private class ListenForBlue implements ActionListener{

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```
        public void actionPerformed (ActionEvent e) {  
            TextArea.setForeground(Color.blue);  
        }  
    }  
}
```