

Menu Accessing in java

22at1a3524

Java AWT MenuItem & Menu

Java Abstract Window Toolkit (AWT) provides a comprehensive set of classes and methods to create graphical user interfaces. In this article, we will explore the MenuItem and Menu classes, which are essential for building menus in Java applications.

Java AWT MenuItem

MenuItem is a class that represents a simple labeled menu item within a menu. It can be added to a menu using the Menu.add(MenuItem mi) method.

Syntax of Class Declaration MenuItem:

```
public class MenuItem extends MenuComponent implements Accessible
```

Methods of the MenuItem Class

List of methods available in MenuItem with description.

Method	Description
public MenuItem(String label)	Constructs a new MenuItem with the specified label.
public String getLabel()	Returns the label of the menu item.
public void setLabel(String label)	Sets the label of the menu item to the specified string.
public void addActionListener (ActionListener l)	Adds an action listener to the menu item.

Java AWT Menu Class

The Java AWT Menu class represents a pop-up menu component in a graphical user interface (GUI) that can contain a collection of MenuItem objects. It provides a way to create and manage menus in Java AWT applications.

Syntax of Class Declaration of Menu

```
public class Menu extends MenuItem
```

Methods of the Menu Class

List of methods available in MenuItem with description

Method	Description
public Menu(String label)	Constructs a new menu with the specified label.
public void add(MenuItem mi)	Adds the specified menu item to the menu.
public void addSeparator()	Adds a separator between menu items within the menu.
public MenuShortcut getShortcut()	Returns the menu shortcut key associated with this menu.

Example usage of the MenuItem & Menu

```
//Java class to implement AWT Menu

// and MenuItem

import java.awt.*;
import java.awt.event.*;

//Driver Class

public class MenuExample {

    //Main Method

    public static void main(String[] args) {
        Frame frame = new Frame("Menu Example");
        MenuBar menuBar = new MenuBar();
        frame.setMenuBar(menuBar);
        // Create a "File" menu
        Menu fileMenu = new Menu("File");
        MenuItem openItem = new MenuItem("Open");
        MenuItem saveItem = new MenuItem("Save");
        fileMenu.add(openItem);
        fileMenu.add(saveItem);
    }
}
```

```

fileMenu.addSeparator();

// Create an "Exit" menu item with an action listener

MenuItem exitItem = new MenuItem("Exit");

exitItem.addActionListener(new ActionListener() {

    public void actionPerformed(ActionEvent e) {

        System.exit(0);

    }

});

//Added exit as item in MenuItem

fileMenu.add(exitItem);

menuBar.add(fileMenu);

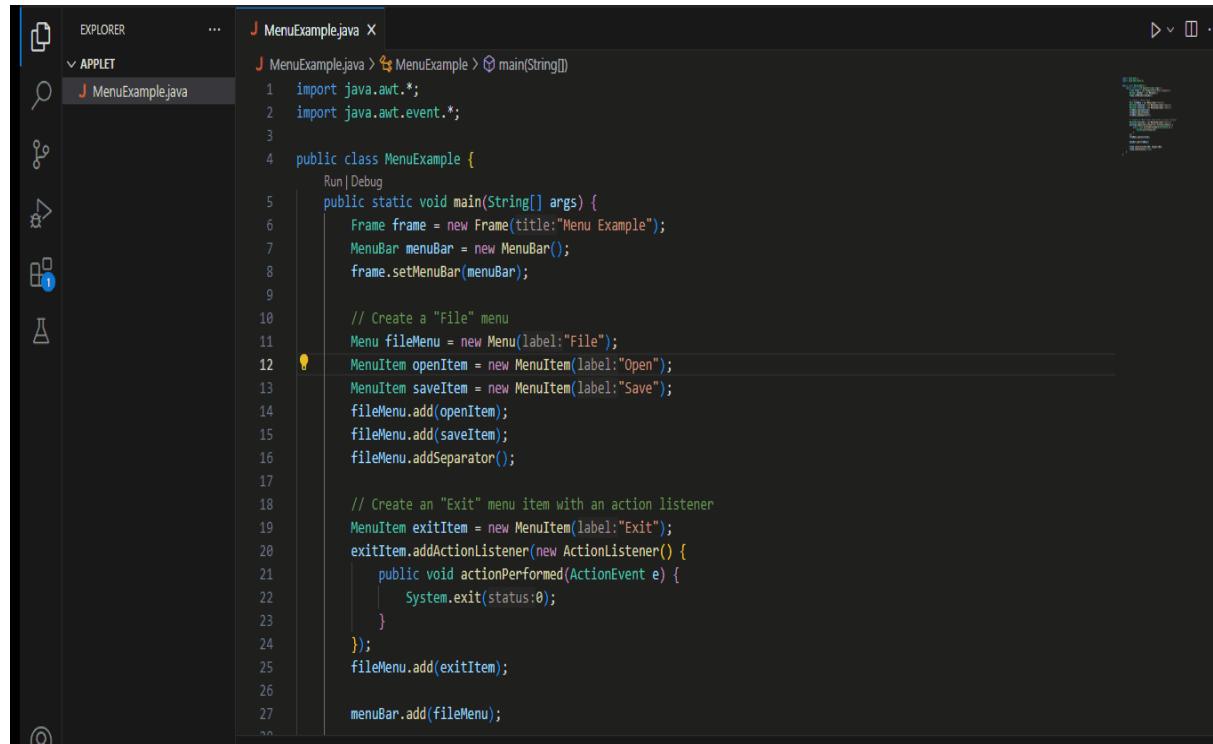
frame.setSize(300, 300);

frame.setVisible(true);

}

}

```



The screenshot shows the Java IDE interface with the following details:

- Explorer View:** Shows a file named **MenuExample.java** under the **APPLET** category.
- Code Editor:** Displays the **MenuExample.java** code, which includes imports for `java.awt.*` and `java.awt.event.*`, and defines a `MenuExample` class with a `main` method. The code creates a `Frame`, a `MenuBar`, and a `File` menu with `Open` and `Save` items. It also adds a separator and an `Exit` item with an action listener that exits the application.
- Right Panel:** Shows the **Properties** and **Toolbox** panels.

Conclusion

In this article, we explored the very necessary components of Java AWT's `MenuItem` and `Menu` classes.

- These classes are material for creating menus in graphical user interfaces.

- We discussed the phrase structure of class declarations,
- Registered the methods with their descriptions.
- Introduced the constructors for some classes.

By combining these classes and their joint methods, you can build interactive and user-friendly menus for your Java applications. The provided code example demonstrated how to make a singleton fare bar, offer a practical starting point for development of more complex graphical interfaces in Java.