

# 39 自定义右键菜单

## 39.1 添加右键菜单

为Qt组件添加右键菜单一般遵循如下步骤：

1. 创建右键菜单中的动作并为每个动作指定槽函数
2. 将组件的contextMenuPolicy属性设置为Qt::CustomContextMenu
3. 定义连接于组件customContextMenuRequested信号的槽函数，并在其中添加弹出右键菜单的代码

## 39.2 案例

### 39.2.1 创建项目

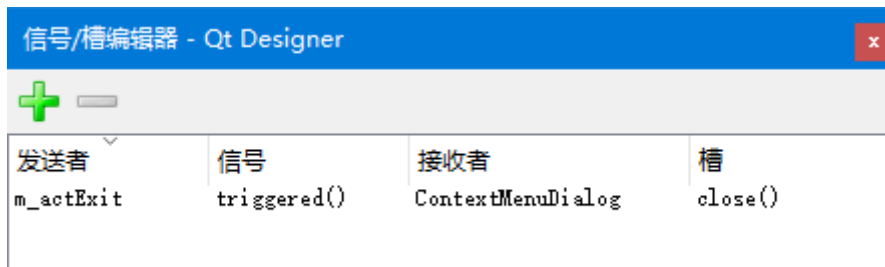
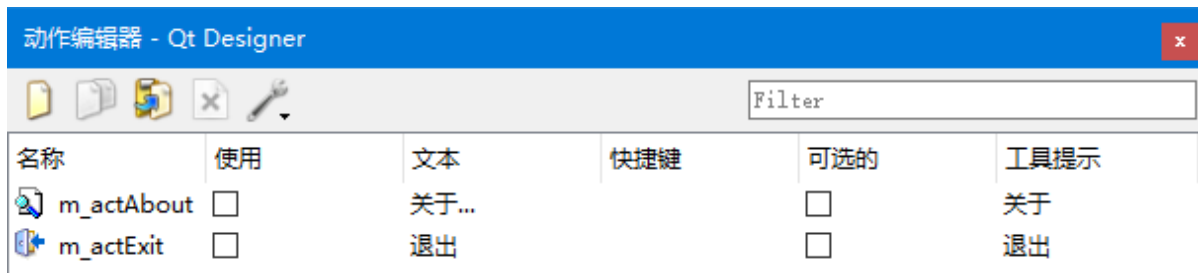
通过QtCreator，在C:\Users\Minwei\Projects\Qt路径下，创建名为ContextMenu的项目。

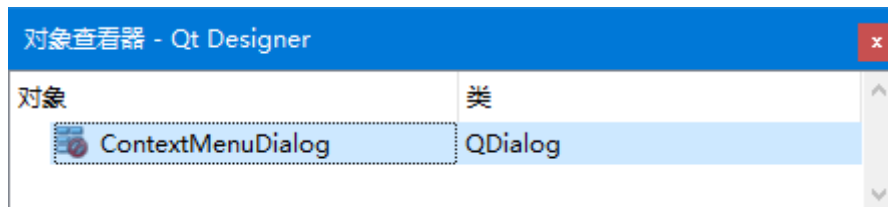
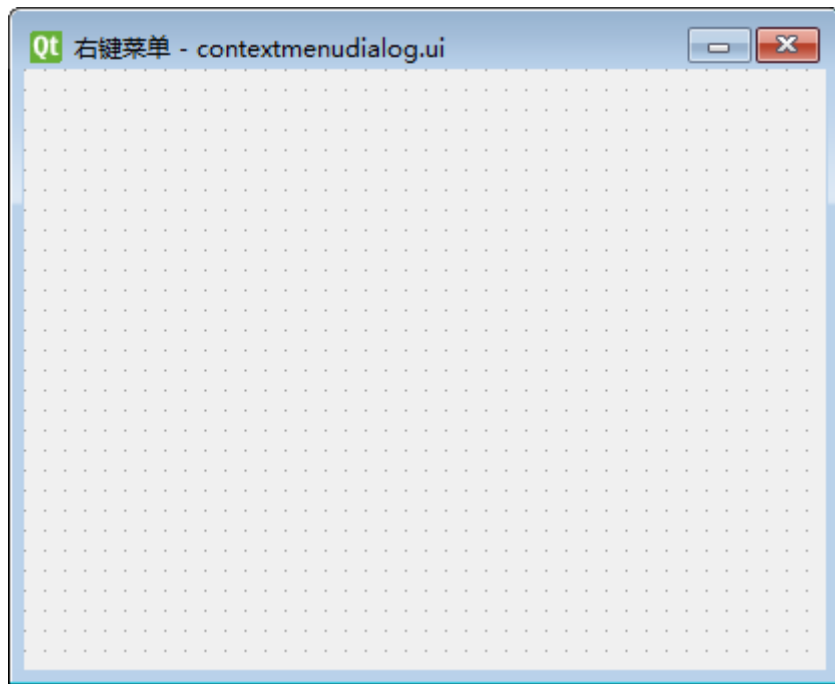
### 39.2.2 添加资源

C:\Users\Minwei\Projects\Qt\ContextMenu\ContextMenu.qrc：

```
1 <RCC>
2     <qresource prefix="/">
3         <file>images/AppIcon.ico</file>
4         <file>images/exit.bmp</file>
5     </qresource>
6 </RCC>
```

### 39.2.3 设计界面





C:\Users\Minwei\Projects\Qt\ContextMenu\contextmenudialog.ui:

```
1 <?xml version="1.0" encoding="UTF-8"?>
2 <ui version="4.0">
3   <class>ContextMenuDialog</class>
4   <widget class="QDialog" name="ContextMenuDialog">
5     <property name="geometry">
6       <rect>
7         <x>0</x>
8         <y>0</y>
9         <width>400</width>
10        <height>300</height>
11      </rect>
12    </property>
13    <property name="contextMenuPolicy">
14      <enum>Qt::CustomContextMenu</enum>
15    </property>
16    <property name="windowTitle">
17      <string>右键菜单</string>
18    </property>
19    <property name="windowIcon">
20      <iconset resource="ContextMenu.qrc">
21
22        <normaloff>:/images/AppIcon.ico</normaloff>:/images/AppIcon.ico</iconset>
23      </property>
24      <action name="m_actAbout">
25        <property name="icon">
26          <iconset resource="ContextMenu.qrc">
27
28            <normaloff>:/images/AppIcon.ico</normaloff>:/images/AppIcon.ico</iconset>
```

```

27     </property>
28     <property name="text">
29         <string>关于...</string>
30     </property>
31 </action>
32 <action name="m_actExit">
33     <property name="icon">
34         <iconset resource="ContextMenu.qrc">
35             <normaloff>:/images/exit.bmp</normaloff>:/images/exit.bmp</iconset>
36     </property>
37     <property name="text">
38         <string>退出</string>
39     </property>
40 </action>
41 </widget>
42 <resources>
43     <include location="ContextMenu.qrc"/>
44 </resources>
45 <connections>
46     <connection>
47         <sender>m_actExit</sender>
48         <signal>triggered()</signal>
49         <receiver>ContextMenuDialog</receiver>
50         <slot>close()</slot>
51     <hints>
52         <hint type="sourceLabel">
53             <x>-1</x>
54             <y>-1</y>
55         </hint>
56         <hint type="destinationLabel">
57             <x>399</x>
58             <y>299</y>
59         </hint>
60     </hints>
61 </connection>
62 </connections>
63 </ui>

```

### 39.2.4 实现功能

C:\Users\Minwei\Projects\Qt\ContextMenu\contextmenudialog.h:

```

1  #ifndef CONTEXTMENUDIALOG_H
2  #define CONTEXTMENUDIALOG_H
3
4  #include <QDialog>
5
6  QT_BEGIN_NAMESPACE
7  namespace Ui { class ContextMenuDialog; }
8  QT_END_NAMESPACE
9
10 class ContextMenuDialog : public QDialog
11 {
12     Q_OBJECT
13

```

```

14 public:
15     ContextMenuDialog(QWidget *parent = nullptr);
16     ~ContextMenuDialog();
17
18 private slots:
19     void on_ContextMenuDialog_customContextMenuRequested(const QPoint &pos);
20     void on_m_actAbout_triggered();
21
22 private:
23     Ui::ContextMenuDialog *ui;
24 };
25
26 #endif // CONTEXTMENUDIALOG_H

```

C:\Users\Minwei\Projects\Qt\ContextMenu\contextmenudialog.cpp:

```

1  #include <QMenu>
2  #include <QMessageBox>
3
4  #include "contextmenudialog.h"
5  #include "ui_contextmenudialog.h"
6
7  ContextMenuDialog::ContextMenuDialog(QWidget *parent)
8      : QDialog(parent)
9      , ui(new Ui::ContextMenuDialog)
10 {
11     ui->setupUi(this);
12 }
13
14 ContextMenuDialog::~ContextMenuDialog()
15 {
16     delete ui;
17 }
18
19 void
20 ContextMenuDialog::on_ContextMenuDialog_customContextMenuRequested(const
21 QPoint &pos)
22 {
23     Q_UNUSED(pos)
24
25     QMenu* menuPopup = new QMenu;
26
27     menuPopup->addAction(ui->m_actAbout);
28     menuPopup->addSeparator();
29     menuPopup->addAction(ui->m_actExit);
30
31     menuPopup->exec(QCursor::pos());
32
33     delete menuPopup;
34 }
35
36 void ContextMenuDialog::on_m_actAbout_triggered()
37 {
38     QMessageBox::about(this, windowTitle(), "右键菜单演示程序\n版本: 1.0");
39 }

```

### 39.2.5 测试验证

运行效果如图所示：

