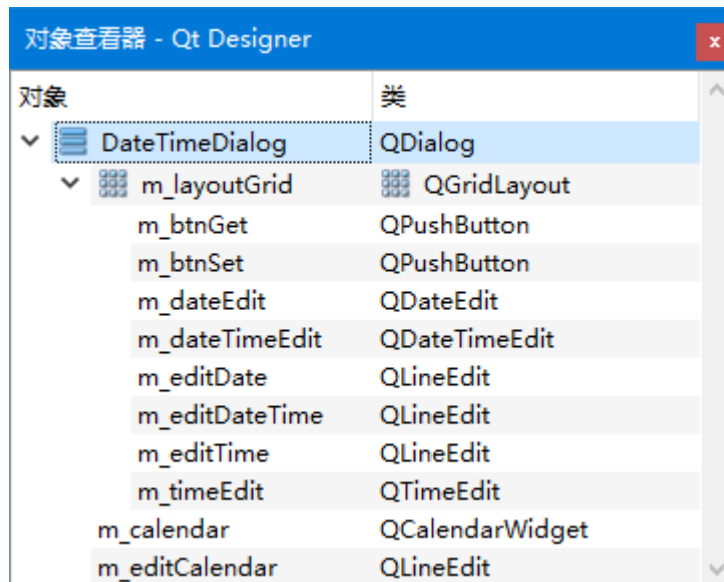


## 37 日期时间组件案例

### 37.1 创建项目

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

### 37.2 设计界面



C:\Users\Minwei\Projects\Qt\DateTime\datetimedialog.ui:

```
1 <?xml version="1.0" encoding="UTF-8"?>
2 <ui version="4.0">
3 <class>DateTimeDialog</class>
4 <widget class="QDialog" name="DateTimeDialog">
5 <property name="geometry">
6 <rect>
7 <x>0</x>
```

```
8     <y>0</y>
9     <width>308</width>
10    <height>350</height>
11    </rect>
12  </property>
13  <property name="windowTitle">
14    <string>日期和时间</string>
15  </property>
16  <layout class="QVBoxLayout" name="m_layoutVer">
17    <item>
18      <layout class="QGridLayout" name="m_layoutGrid">
19        <item row="0" column="0">
20          <widget class="QDateEdit" name="m_dateEdit">
21            <property name="displayFormat">
22              <string>yyyy-MM-dd</string>
23            </property>
24          </widget>
25        </item>
26        <item row="0" column="1">
27          <widget class="QLineEdit" name="m_editDate"/>
28        </item>
29        <item row="1" column="0">
30          <widget class="QTimeEdit" name="m_timeEdit">
31            <property name="displayFormat">
32              <string>HH:mm:ss</string>
33            </property>
34          </widget>
35        </item>
36        <item row="1" column="1">
37          <widget class="QLineEdit" name="m_editTime"/>
38        </item>
39        <item row="2" column="0">
40          <widget class="QDateTimeEdit" name="m_dateTimeEdit">
41            <property name="displayFormat">
42              <string>yyyy-MM-dd HH:mm:ss</string>
43            </property>
44          </widget>
45        </item>
46        <item row="2" column="1">
47          <widget class="QLineEdit" name="m_editDateTime"/>
48        </item>
49        <item row="3" column="0">
50          <widget class="QPushButton" name="m_btnGet">
51            <property name="text">
52              <string>获取</string>
53            </property>
54          </widget>
55        </item>
56        <item row="3" column="1">
57          <widget class="QPushButton" name="m_btnSet">
58            <property name="text">
59              <string>设置</string>
60            </property>
61          </widget>
62        </item>
63      </layout>
```

```

64     </item>
65     <item>
66         <widget class="QLineEdit" name="m_editCalendar">
67             <property name="alignment">
68                 <set>Qt::AlignCenter</set>
69             </property>
70             <property name="readOnly">
71                 <bool>true</bool>
72             </property>
73         </widget>
74     </item>
75     <item>
76         <widget class="QCalendarWidget" name="m_calendar">
77             <property name="gridVisible">
78                 <bool>true</bool>
79             </property>
80         </widget>
81     </item>
82 </layout>
83 </widget>
84 <tabstops>
85     <tabstop>m_calendar</tabstop>
86     <tabstop>m_dateEdit</tabstop>
87     <tabstop>m_timeEdit</tabstop>
88     <tabstop>m_dateTimeEdit</tabstop>
89     <tabstop>m_btnGet</tabstop>
90     <tabstop>m_editDate</tabstop>
91     <tabstop>m_editTime</tabstop>
92     <tabstop>m_editDateTime</tabstop>
93     <tabstop>m_btnSet</tabstop>
94     <tabstop>m_editCalendar</tabstop>
95 </tabstops>
96 <resources/>
97 <connections/>
98 </ui>

```

## 37.3 实现功能

C:\Users\Minwei\Projects\Qt\DateTime\datetimedialog.h:

```

1  #ifndef DATETIMEDIALOG_H
2  #define DATETIMEDIALOG_H
3
4  #include <QDialog>
5
6  QT_BEGIN_NAMESPACE
7  namespace Ui { class DateTimeDialog; }
8  QT_END_NAMESPACE
9
10 class DateTimeDialog : public QDialog
11 {
12     Q_OBJECT
13
14 public:
15     DateTimeDialog(QWidget *parent = nullptr);

```

```

16     ~DateTimeDialog();
17
18     private slots:
19         void on_m_btnGet_clicked();
20         void on_m_btnSet_clicked();
21         void on_m_calendar_selectionChanged();
22
23     private:
24         Ui::DateTimeDialog *ui;
25     };
26
27 #endif // DATETIMEDIALOG_H

```

C:\Users\Minwei\Projects\Qt\DateTime\datetimedialog.cpp:

```

1 #include "datetimedialog.h"
2 #include "ui_datetimedialog.h"
3
4 DateTimeDialog::DateTimeDialog(QWidget *parent)
5     : QDialog(parent)
6     , ui(new Ui::DateTimeDialog)
7 {
8     ui->setupUi(this);
9
10    on_m_btnGet_clicked();
11    on_m_calendar_selectionChanged();
12 }
13
14 DateTimeDialog::~DateTimeDialog()
15 {
16     delete ui;
17 }
18
19
20 void DateTimeDialog::on_m_btnGet_clicked()
21 {
22     QDateTime dateTime = QDateTime::currentDateTime();
23
24     ui->m_dateEdit->setDate(dateTime.date());
25     ui->m_timeEdit->setTime(dateTime.time());
26     ui->m_dateTimeEdit->setDateTime(dateTime);
27
28     ui->m_editDate->setText(dateTime.date().toString(
29         ui->m_dateEdit->displayFormat()));
30     ui->m_editTime->setText(dateTime.time().toString(
31         ui->m_timeEdit->displayFormat()));
32     ui->m_editDateTime->setText(dateTime.toString(
33         ui->m_dateTimeEdit->displayFormat()));
34 }
35
36 void DateTimeDialog::on_m_btnSet_clicked()
37 {
38     ui->m_dateEdit->setDate(QDate::fromString(
39         ui->m_editDate->text(),
40         ui->m_dateEdit->displayFormat()));

```

```

41 ui->m_timeEdit->setTime(QTime::fromString(
42     ui->m_editTime->text(),
43     ui->m_timeEdit->displayFormat()));
44 ui->m_dateTimeEdit->setDateTime(QDateTime::fromString(
45     ui->m_editDateTime->text(),
46     ui->m_dateTimeEdit->displayFormat()));
47 }
48
49 void DateTimeDialog::on_m_calendar_selectionChanged()
50 {
51     ui->m_editCalendar->setText(ui->m_calendar->selectedDate().toString(
52         ui->m_dateEdit->displayFormat()));
53 }

```

## 37.4 测试验证

运行效果如图所示：

