

Qt复习

头文件

```
#include <QInputDialog>
#include <QFileDialog>
#include <QMessageBox>
#include <QKeyEvent>
#include <QTextStream>
#include <QDateTime>
#include <QTimer>
#include <QDebug>
#include <QDir>
#include <QList>
#include <QObject>
#include <QTextCodec>
#include <QPainter>

#include <QLabel>
#include <QLayout>
#include <QPushButton>
// #include <QGraphicsView>
// #include <QtMultimedia/QSound>
// #include <QGraphicsRectItem>
```

对话框

自建对话框

```
Dialog dlg(this);
if(dlg.exec()==QDialog::Accepted)
    //do something
```

打开(保存)文件

```
QString curPath=QDir::currentPath();
QString digTitle="Open";
QString filter="all (*.*)";
//打开一个文件
QString FileName = QFileDialog::getOpenFileName(this,digTitle,curPath,filter);
if(!FileName.isEmpty())
    //do something
//打开一堆文件
QStringList FileNames = QFileDialog::getOpenFileNames(this,digTitle,curPath,filter);
for(QString FileName:FileNames)
    //do something
```

输入对话框

```

QString dlgTitle="输入对话框";
QString txtLabel="请输入";
bool ok = false;
//输入字符串
QString text = QInputDialog::getText(this,dlgTitle,txtLabel, QLineEdit::Normal,"", &ok);
if (ok && !text.isEmpty())
    //do something
//输入整数
int minValue=0, maxValue=100, stepValue=1; //范围, 步长
int inputValue =
QInputDialog::getInt(this,dlgTitle,txtLabel,minValue,minValue,maxValue,stepValue,&ok);
if(ok)
    //do something

```

信息框

```

QString dlgTitle="消息框";
QString strInfo="";
QMessageBox::information(this, dlgTitle, strInfo);
QMessageBox::warning(this, dlgTitle, strInfo)

```

计时器

```

//类声明
QTimer* tm;
void on_timeout();//槽函数
//构造函数
tm=new QTimer(this);
tm->stop();

connect(tm,&QTimer::timeout,this,&Dialog::on_timeout);
//
tm->setInterval(...);
tm->start();

```

读取文本

```

QFile f(fileName);
if(!f.exists()||!f.open(QIODevice::ReadOnly|QIODevice::Text))
    return;
QTextStream stream(&f);
stream.setCodec(QTextCodec::codecForName("GB2312")); //读取中文
//do something
f.close();

```

读取图片并显示

```

//根据文件名读取图片
QImage* tmp=new QImage(fileName);
QPixmap pix = QPixmap(QPixmap::fromImage(*tmp));
//按label的大小保持比例缩放, 设置于label中显示
QPixmap dest=pix.scaled(ui->label->size(),Qt::KeepAspectRatio);
ui->label->setPixmap(dest)

```

音效播放

```
QT += multimedia
```

```
QSound::play(tr(":/sound/...wav")); //filename
```

QSignalMapper

```
QSignalMapper* m=new QSignalMapper(this);  
for(...){  
    connect(..., SIGNAL(clicked()), m, SLOT(map()));  
    m->setMapping(p,...);  
}  
connect(m, SIGNAL(mapped(int)), this, SLOT(...));
```

事件

```
void paintEvent(QPaintEvent* ev);  
void closeEvent(QCloseEvent * event);  
//鼠标事件  
void mouseMoveEvent ( QMouseEvent * ev );  
void mousePressEvent ( QMouseEvent * ev );  
void mouseReleaseEvent ( QMouseEvent * ev );  
void mouseDoubleClickEvent( QMouseEvent * ev );  
//按键事件  
void keyPressEvent(QKeyEvent* ev);
```

时间读取

```
QDateTime::QDateTime::currentDateTime().toString("yyyy-MM-dd hh:mm:ss");  
//.toUTC() //获得格林尼治标准时  
//.addSecs(...)//增加时间
```

随机数生成

```
qsrand(QTime::currentTime().msec());  
//随机数初始化, qsrand是线程安全的  
qrand(); //获取随机数
```