

Important classes and concepts

- QObject
- Container: QList
- QTimer
- QDebug
- QProperty
- Signals and slots
- Model View (MV)

QObject

<http://doc.qt.io/qt-5/qobject.html#details>

- Base class for all Qt Classes
- Provides Signal / Slot mechanism
- Maintain Object hierarchy

How to get Help

Auto Completion

- Type . or -> after object, or type ctrl->space

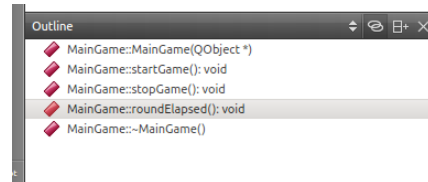
Context sensitive help

- Mark a word (e.g. QTimer and press F1), online help open

Navigate within Code

- <Ctrl> click on method name jumps between definition and implementation
- The outline window shows all methods in current class

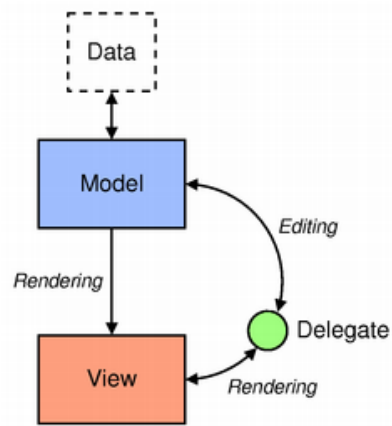
Use the examples on the home page in QCreator!



Model View

<http://doc.qt.io/qt-5/qtquick-modelviewsdata-modelview.html>

<http://doc.qt.io/qt-5/qtquick-modelviewsdata-cppmodels.html>



Examples

From QML to C++

Calling a C++ slot from Qml

Connect to a C++ signal

Examples

From C++ to QML

- Expose a single object

- Populate a QML list from C++

QObject

```
#ifndef MAINGAME_H  
#define MAINGAME_H
```

```
#include <QObject> //Include QObject so the type is known
```

```
class MainGame : public QObject //Inherit from QObject
```

```
{
```

```
    Q_OBJECT //Insert Q_OBJECT Macro, needed by MOC to work
```

```
public:
```

```
    explicit MainGame(QObject *parent = 0); //Parent / Children relations for hierarchy
```

```
    ~MainGame();
```

```
signals:
```

```
public slots:
```

```
};
```

```
#endif // MAINGAME_H
```

Q_Property

A property has: Name, type, read / write / notify

- Bind it to a QML object -> automatic update

Qt Quick Controls

QML General:

- <http://doc.qt.io/qt-5/qtqml-index.html>

QtQuick Controls:

- <http://doc.qt.io/qt-5/qtquickcontrols-overview.html>

Qml / C++ integration:

- <http://doc.qt.io/qt-5/qtqml-cppintegration-topic.html>

Exposing a C++ Object to QML with ContextProperty

- <http://doc.qt.io/qt-5/qtqml-cppintegration-contextproperties.html>