



ID	...	Creation date	03 February 2009
Platform	S60 3rd Edition FP1, S60 3rd Edition FP2, S60 5th Edition	Tested on devices	Emulator
Category	Qt for Symbian	Subcategory	Game

Keywords (APIs, classes, methods, functions): QPushButton

Overview

This article demonstrates how to create a simple tic-tac-toe game in [Qt for Symbian](#). All of you might be familiar with this game so there is no point in explaining the rules here. And the code of the game is also self explanatory.

Preconditions

- Download and Install latest version [Qt for Symbian - Installation packages](#) which has links on how to install the latest version

Source File

```
#include "tictactoe.h"
#include <QPushButton>
#include <QVBoxLayout>
#include <QHBoxLayout>

tictactoe::tictactoe(QWidget *parent)
    : QWidget(parent)
{
    =newQVBoxLayout(this);
    = newQHBoxLayout(this);
    = newQHBoxLayout(this);
}
```

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```
= new QHBoxLayout(this);
=1; flag

    button11(new QPushButton(this);
    button12(new QPushButton(this);
    button13(new QPushButton(this);
    button21(new QPushButton(this);
    button22(new QPushButton(this);
    button23(new QPushButton(this);
    button31(new QPushButton(this);
    button32(new QPushButton(this);
    button33(new QPushButton(this);
    stylesheet(QString("background-color:rgb(199,147,88); padding: 7px ; color:rgb(255,255,255)"));

    (button11,SIGNAL(clicked()),this,SLOT(mark_button11()));
    (button12,SIGNAL(clicked()),this,SLOT(mark_button12()));
    (button13,SIGNAL(clicked()),this,SLOT(mark_button13()));
    (button21,SIGNAL(clicked()),this,SLOT(mark_button21()));
    (button22,SIGNAL(clicked()),this,SLOT(mark_button22()));
    (button23,SIGNAL(clicked()),this,SLOT(mark_button23()));
    (button31,SIGNAL(clicked()),this,SLOT(mark_button31()));
    (button32,SIGNAL(clicked()),this,SLOT(mark_button32()));
    (button33,SIGNAL(clicked()),this,SLOT(mark_button33()));
->addWidget(button11);
->addWidget(button12);
->addWidget(button13);
->addWidget(button21);
->addWidget(button22);
->addWidget(button23);
->addWidget(button31);
->addWidget(button32);
->addWidget(button33);
->addLayout(rw1);
->addLayout(rw2);
->addLayout(rw3);

    setLayout();

}

tictactoe::~tictactoe()
{
    // No need to delete any object that got a parent that is properly deleted.
}

void tictactoe::mark_button11()
{
    if(flag==1)
    {flag=0;
        ->setText("X"); button11
        =1;          b11
    }
    else
    {flag=1;
        =0;          b11
        ->setText("O"); button11
    }
    ->setDisabled(button11);
    (); check_winner
}

}
```

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```
void tictactoe::mark_button12()
{
if(flag==1)
{flag=0;
    =1;                b12
    ->setText("X"); button12
}
else
{flag=1;
    ->setText("O"); button12
    =0;                b12
}
    (); check_winner
    ->setDisabled(1);
}

void tictactoe::mark_button13()
{
if(flag==1)
{flag=0;
    =1;                b13
    ->setText("X"); button13
}
else
{flag=1;
    ->setText("O"); button13
    =0;                b13
}
    (); check_winner
    ->setDisabled(1);
}

void tictactoe::mark_button21()
{
if(flag==1)
{flag=0;
    ->setText("X"); button21
    =1;                b21
}
else
{flag=1;
    ->setText("O"); button21
    =0;                b21
}
    (); check_winner
    ->setDisabled(1);
}

void tictactoe::mark_button22()
{
if(flag==1)
{flag=0;
    ->setText("X"); button22
    =1;                b22
}
else
{flag=1;
    =0;                b22
    ->setText("O"); button22
}
    (); check_winner
```

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```
        ->setDisabled(1);
    }

void tictactoe::mark_button23()
{
    if(flag==1)
    {flag=0;
      =1;
      b23
      ->setText("X"); button23
    }
    else
    {flag=1;
      =0;
      b23
      ->setText("O"); button23
    }

    (); check_winner
    ->setDisabled(1);
}

void tictactoe::mark_button31()
{
    if(flag==1)
    {flag=0;
      =1;
      b31
      ->setText("X"); button31
    }
    else
    {flag=1;
      =0;
      b31
      ->setText("O"); button31
    }

    (); check_winner
    ->setDisabled(1);
}

void tictactoe::mark_button32()
{
    if(flag==1)
    {flag=0;
      =1;
      b32
      ->setText("X"); button32
    }
    else
    {flag=1;
      =0;
      b32

      ->setText("O"); button32
    }

    (); check_winner
    ->setDisabled(1);
}

void tictactoe::mark_button33()
{
    if(flag==1)
    {flag=0;
      =1;
      b33
      ->setText("X"); button33
    }
    else
    {flag=1;
      =0;
      b33
```

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```
->setText("O"); button33
}
    (); check_winner
    ->setDisabled(!b1);
}

void tictactoe::check_winner()
{
if ((b11==1 && b12==1 && b13==1)|| (b21==1 && b22==1 && b23==1)|| (b31==1 && b32==1 && b33==1)|| (b3
{
    = new QMessageBox(this);
    ->setText("Player 1 Win ");
    ->setStyleSheet("qMessageBox" { background-color:rgb(199,147,88); padding: 7px ; color:rgb(255,255,255
    ->exec(); msgbox
    ->quit();    QApplication
}
if ((b11==0 && b12==0 && b13==0)|| (b21==0 && b22==0 && b23==0)|| (b31==0 && b32==0 && b33==0)|| (b3
{msgbox = new QMessageBox(this);
    ->setText("Player 2 Win ");
    ->setStyleSheet("qMessageBox" { background-color:rgb(199,147,88); padding: 7px ; color:rgb(255,255,255
    ->exec(); msgbox
    ->quit();    QApplication
}
}
}
```

Header File

```
#ifndef TICTACTOE_H
#define TICTACTOE_H

#include <QtGui/QWidget>
#include "ui_tictactoe.h"
#include <QPushButton>
#include <QVBoxLayout>
#include <QHBoxLayout>
#include <QMessageBox>

class tictactoe : public QWidget
{
    Q_OBJECT

public:
    tictactoe(QWidget *parent = 0);
    bool flag;
    int b11,b12,b13,b21,b22,b23,b31,b32,b33;
    ~tictactoe();
private slots:
    void mark_button11();
    void mark_button12();
    void mark_button13();

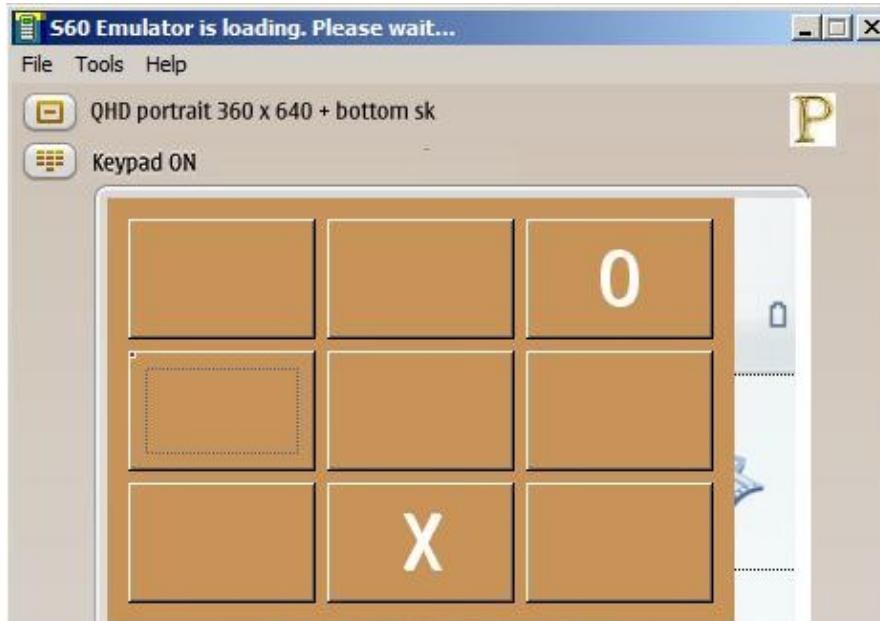
    void mark_button21();
    void mark_button22();
    void mark_button23();

    void mark_button31();
    void mark_button32();
    void mark_button33();
};
```

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```
void check_winner();  
private:  
    *lay@VB@xLayout  
    *rw1@H@xLayout  
    *rw2@H@xLayout  
    *rw3@H@xLayout  
    *msg@M@ssageBox  
    *but@Bn@h@Button  
    *but@Bn@s@Button  
    *but@Bn@B@Button  
    *but@Bn@h@Button  
    *but@Bn@s@Button  
    *but@Bn@B@Button  
    *but@Bn@h@Button  
    *but@Bn@s@Button  
    *but@Bn@B@Button  
};  
  
#endif // TICTACTOE_H
```

Screenshots





Download

- Download the working example from this link: [tictactoe.zip](#)

Related links

[How to use QPushButton \(Qt for Symbian\)](#)