

# برنامه نویسی در لینوکس : چرا و چگونه ؟





دنیای برنامه‌نویسی محدود به محیط ویندوز!  
دید شما از ابزارهای موجود، ابزارهای موجود بر روی ویندوز!



یاد گیری کد نویسی تحت بستر ویندوز  
مانند یاد گیری رقص است وقتی زره به تن کرده اید،  
من چندان خوشم نمی آید، به آن جا نروید.  
آن بخش بی نهایت کثیف است و از کثافت باید پرهیز کرد.



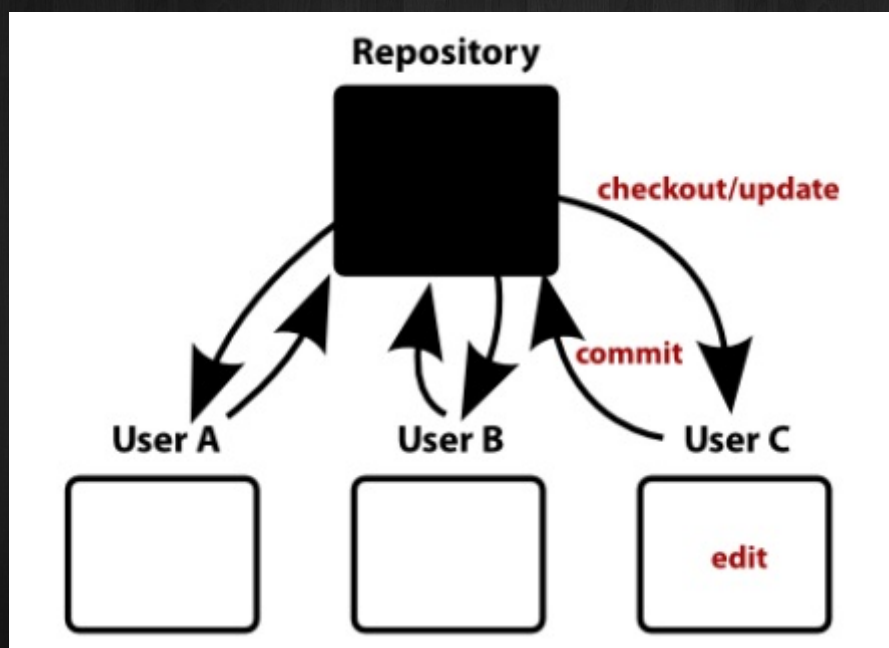
لینوکس بهشت برنامه نویسان؟!...

© Duncan Long

## ابزارهای زیاد



## همکاری در یک پروژه؟



کنترل پروژه !

سابورژن / گیت / ...



Bazaar

# پیگیری تغییرات در کد برنامه ؟

Diff Viewer ....

File Difference Settings Help

Source Folder: /tmp/ Destination Folder: /tmp/ Source File: paper\_old.tex Destination File: paper\_new.tex

Source Line	Destination Line	Difference
8	8	Changed 6 lines
15	15	Deleted 5 lines
22	17	Deleted 3 lines
68	60	Changed 1 line

paper\_old.tex

```
1 %
2 %
3 % Template for SLT-2006 paper; to be used with:
4 %     spconf.sty - ICASSP/ICIP LaTeX style file, and
5 %     IEEEbib.bst - IEEE bibliography style file.
6 %
7 \documentclass{article}
8 \usepackage{spconf,amsmath,epsfig}
9
10 \usepackage{ragged2e,multirow,multicol,lscap,booktabs,arydshln,latexsym}
11 \usepackage{mathrsfs}
12 \usepackage{psfrag}
13 \usepackage{afterpage}
14 \usepackage{xspace}
15 \usepackage{rotate}
16 \usepackage{hvdashln}
17 \usepackage{rotateright}{rotating}
18 \usepackage{rotateleft}{rotating}
19 \usepackage[font={rm,sl},labelfont={sf},labelformat=pars,labels]{caption}
20 \usepackage[font={rm,sl},caption]{caption}
21
22 \usepackage{setspace}
23 \setstretch{2}
24
25 \hyphenpenalty=5000
26 \hyphenpenalty=7500
```

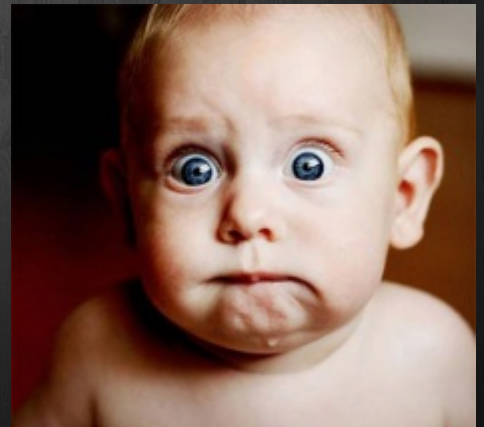
paper\_new.tex

```
1 %
2 %
3 % Template for SLT-2006 paper; to be used with:
4 %     spconf.sty - ICASSP/ICIP LaTeX style file, and
5 %     IEEEbib.bst - IEEE bibliography style file.
6 %
7 \documentclass{article}
8 \usepackage{spconf}
9 \usepackage{amsmath}
10 \usepackage{epsfig}
11 \usepackage{ragged2e}
12 \usepackage{booktabs}
13 \usepackage{arydshln}
14 \usepackage{xspace}
15 \usepackage[font={rm,sl}]{caption}
16
17 \hyphenpenalty=5000
18 \hyphenpenalty=7500
19 \tolerance=1000
20
21 \renewcommand{\figurename}{Fig.}
22 \showhyphens{milliseconds}
23 \hyphenation{int-ellig-ibility est-imation corres-ponding rectang-ular f}
24
25
26 %
```

Comparing file file:///tmp/paper\_old.tex with file file:///tmp/paper\_new.tex 1 of 4 differences, 0 applied 1 of 1 file

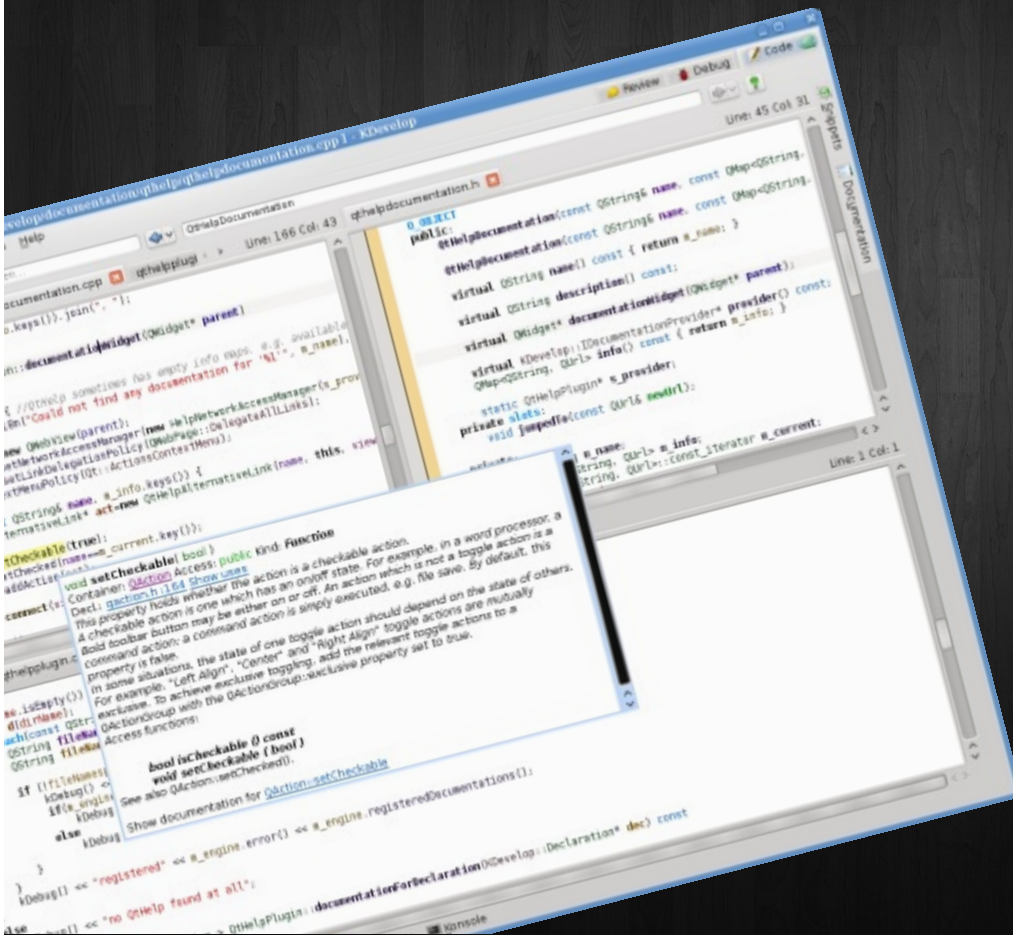


محيط توسعه ( IDE ) ؟



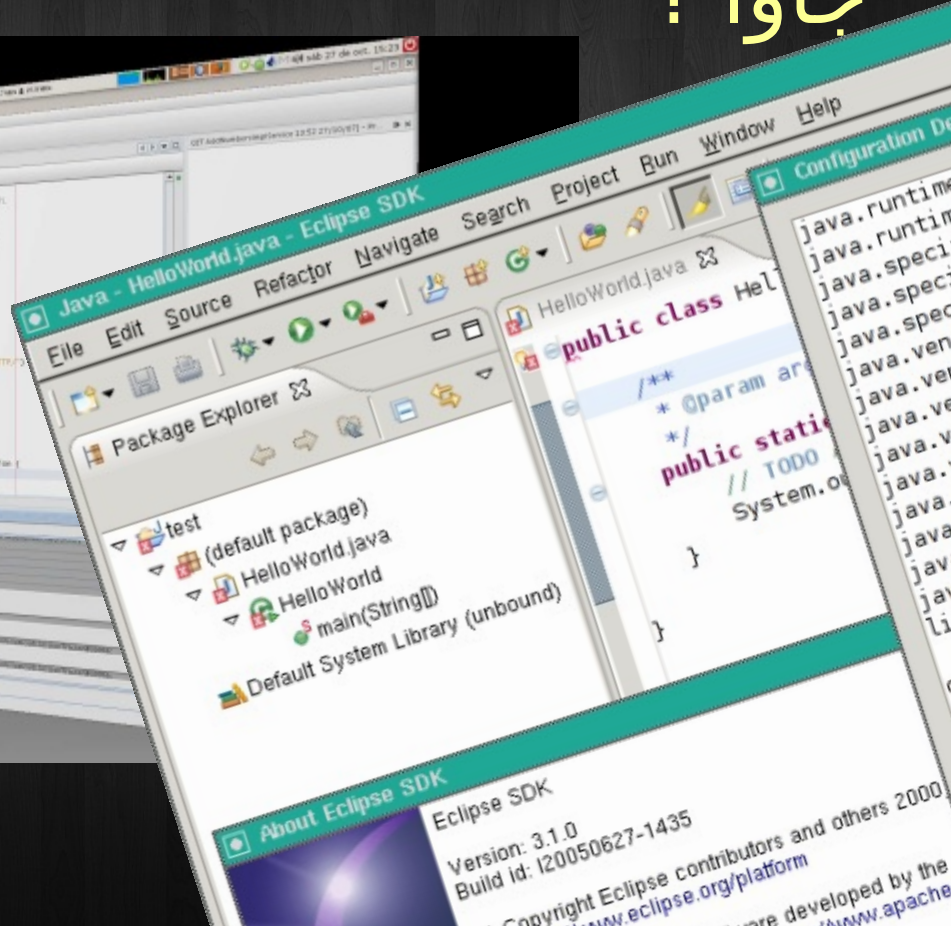


محيط توسعه ( IDE ) ؟

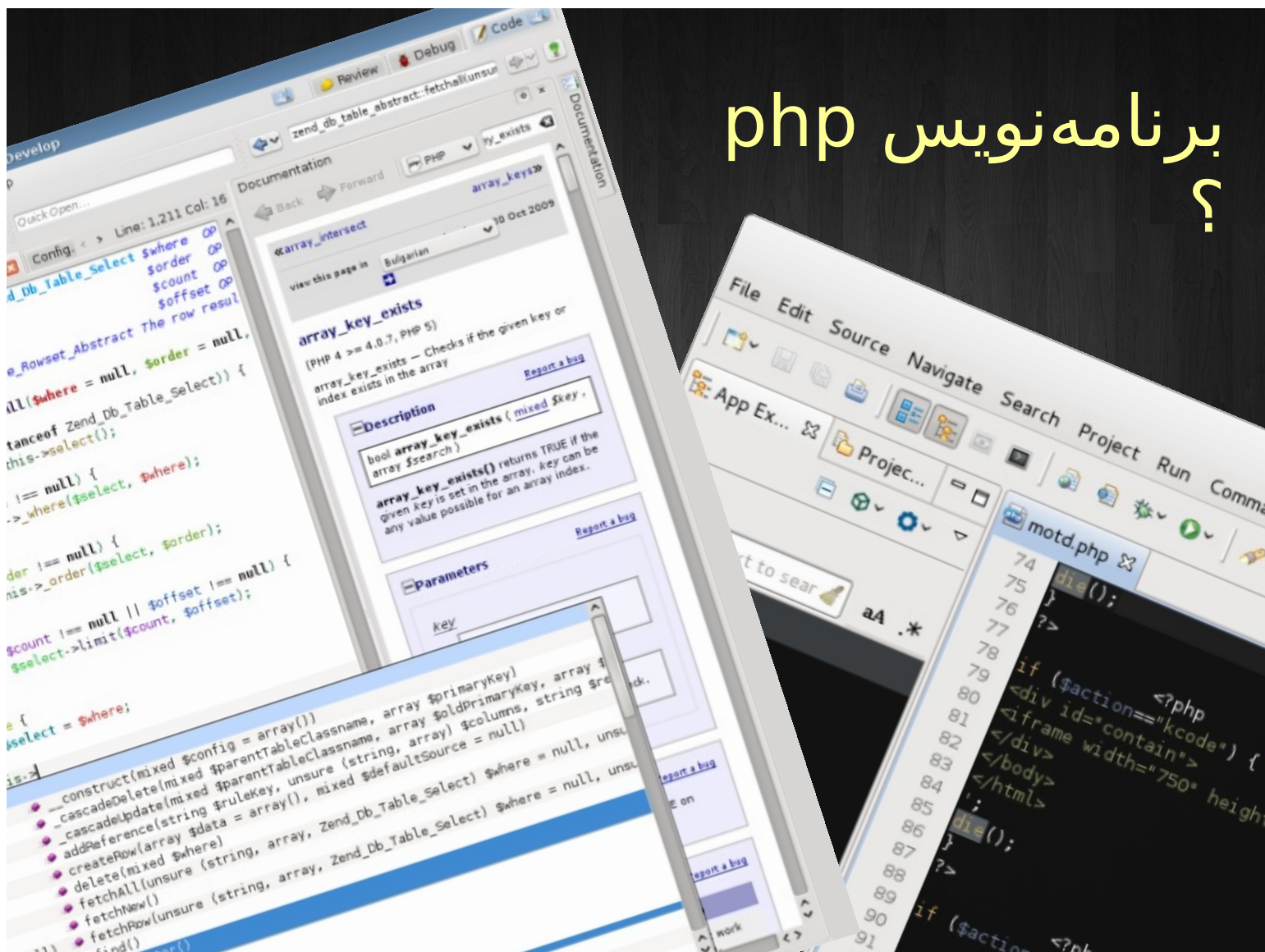


ابزار ها كاملا Cross Platform

برنامه نويس  
جاوا ؟

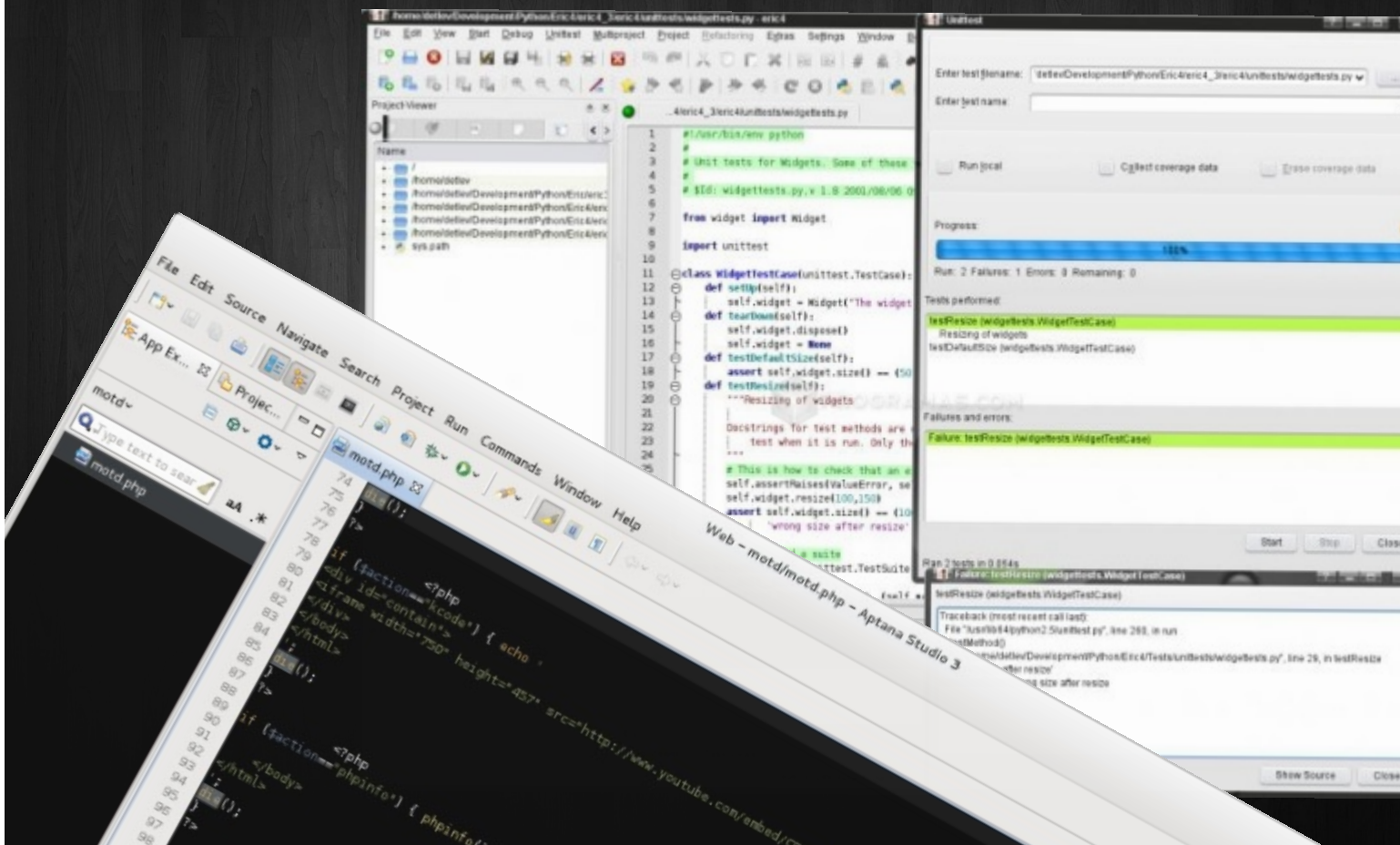


# برنامه نویسی php ؟





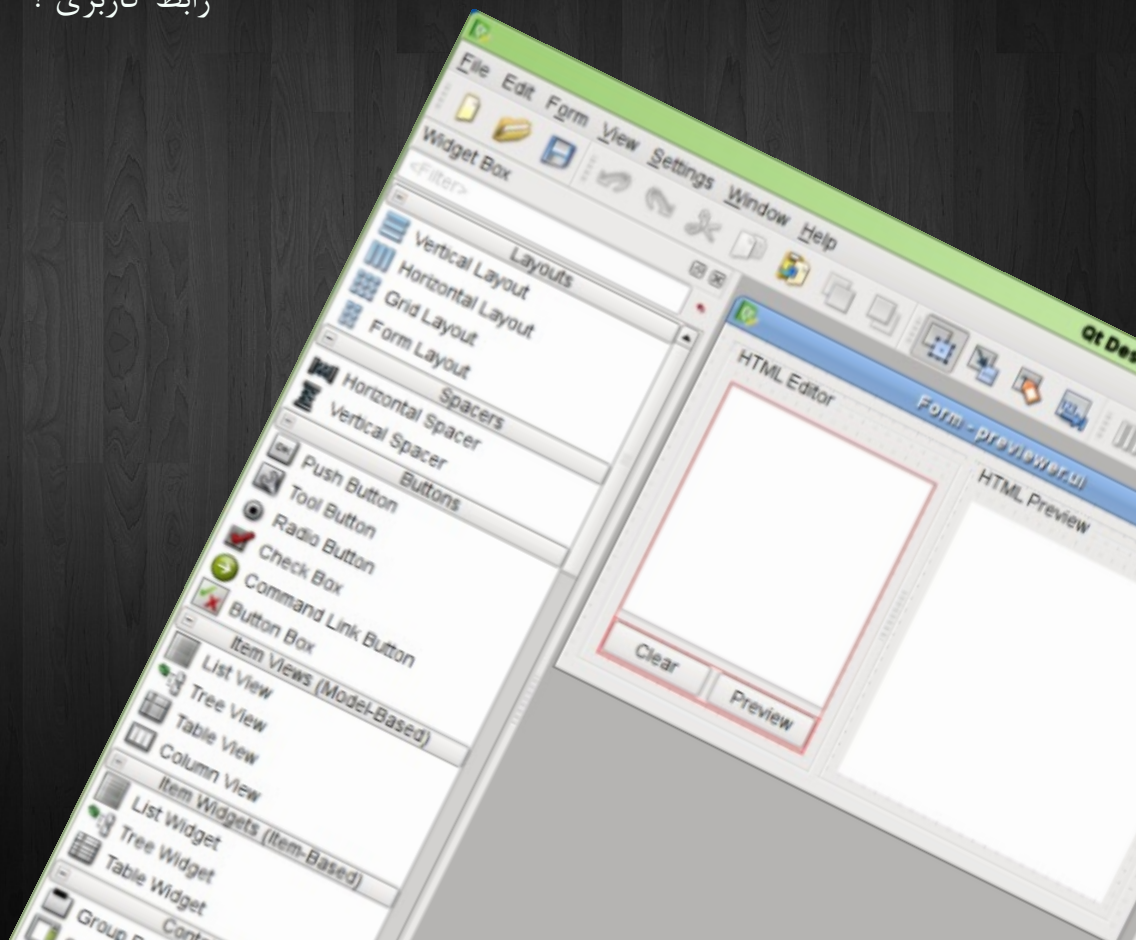
# برنامه نویسی python ؟





# برنامه‌نویسی سمت کلاینت ؟

رابط کاربری ؟



# What is Qt?

## Why Qt?

- **Qt** is a comprehensive C++ framework for developing cross-platform GUI applications using a "write once, deploy everywhere" approach.

# Platforms

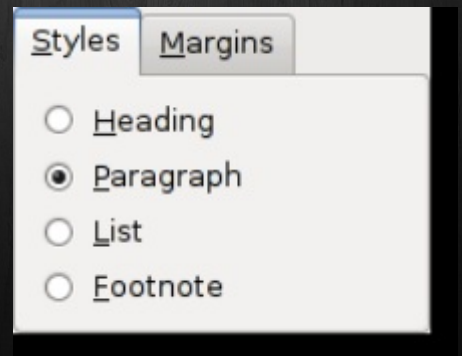
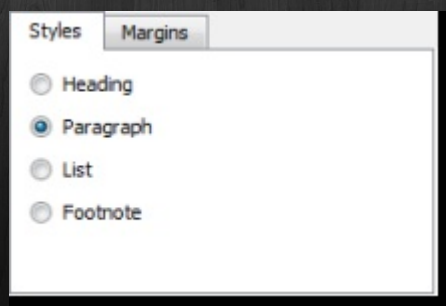
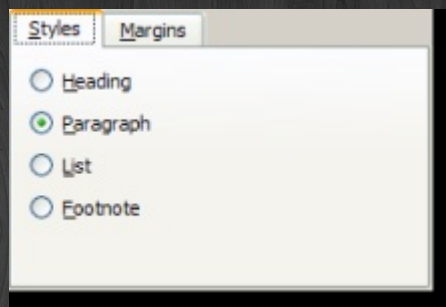
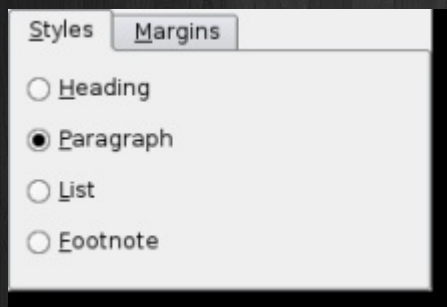
- Linux/X11 – Qt for X Window System (Unix / Linux)
- Mac OS X – Qt for Apple Mac OS X. Support for applications on top of Cocoa APIs
- Windows – Qt for Microsoft Windows
- Embedded Linux – Qt for embedded platforms (PDA, Smartphone, etc.)
- Windows CE – Qt for Windows CE
- Symbian – Qt for the Symbian platform. Qt is to replace Nokia's Avkon as the supported UI SDK for the development of Symbian applications.
- MeeGo – Qt for MeeGo

# External ports

- Qt for OpenSolaris – Qt for OpenSolaris
- Qt for Haiku – Qt for Haiku OS
- Qt for OS/2 – Qt for OS/2 eCS platform.
- Qt-iPhone – Experimental development of Qt for the iPhone.
- Android-Lighthouse – Experimental development of Qt for Android.
- Qt for webOS – Experimental development of Qt for webOS on Palm Pre.
- Qt for Amazon Kindle DX – Experimental development of Qt for Amazon Kindle DX.



# Use of native UI-rendering APIs



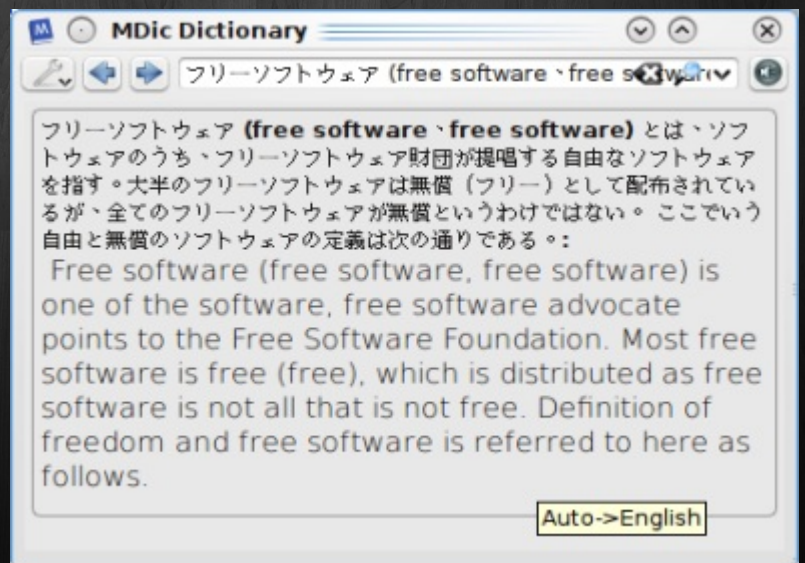
# Uses: Applications

- **Autodesk Maya**, 3D modelling and animation software
- **Google Earth**, a 3D map program
- **LyX**, a GUI frontend to LaTeX
- **Opera**, cross-platform internet browser
- **Skrooge**, a personal finance manager
- **Skype**, a P2P VOIP application
- **SMPlayer**, a multiplatform multimedia player front-end for Mplayer.
- **VirtualBox**, a PC virtualization application
- **VLC Media Player**, an open source media player.
- **Xconfig**, Linux Kernel configuration tool

# MDic Dictionary

- <http://mdic.gnufolks.org>
- Programming language: C++
- Development platform: Qt4

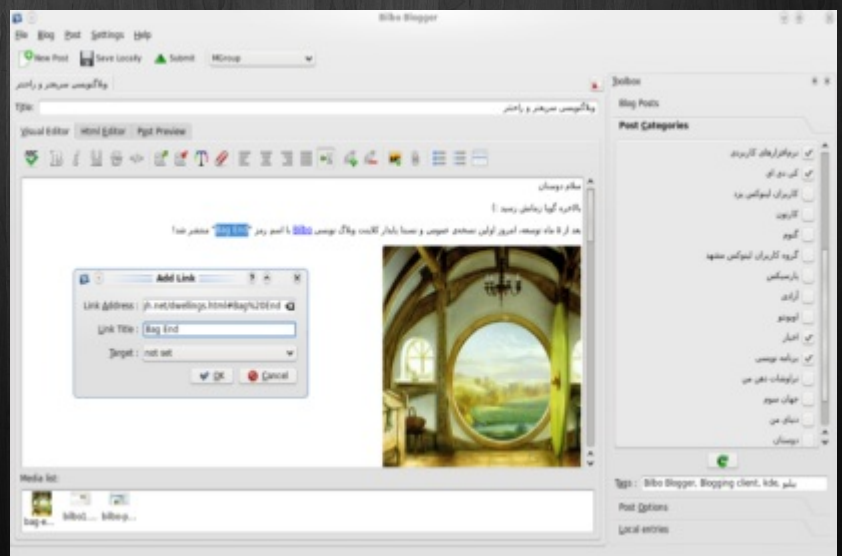
- Developers:
  - Majid Ramezanpour
  - Mehrdad Momeny



# KDE Blogging Client (Blogilo)

- <http://blogilo.gnufolks.org>
- Programming language: C++
- Development platform: Qt4 / KDE4

- Developers:
  - Golnaz Nilieh
  - Mehrdad Momeny





# KDE MicroBlog Client (Choqok)

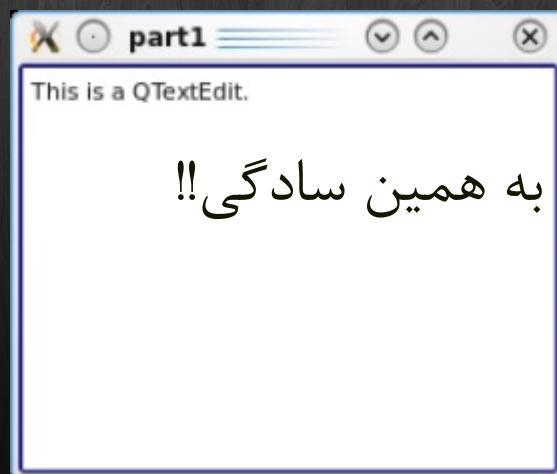
- <http://Choqok.GnuFolks.org>
- Programming language: C++
- Development platform: Qt4 / KDE4
- Developers:
  - Mehrdad Momeny
  - Andrey Esin
  - Others



```

1      #include <QApplication>
2      #include <QTextEdit>
3
4      int main(int argv, char **args)
5      {
6          QApplication app(argv, args);
7
8          QTextEdit textEdit;
9          textEdit.show();
10
11         return app.exec();
12     }

```



کیا میخوان برنامه نویس لینوکس بشن ؟

