Programming with the Qt Framework

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What is a framework?

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- A collection of tools and libraries to make certain tasks easier?

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- A collection of tools and libraries to make certain tasks easier?
  - Eg: A Dynamic Array, Hashtables etc (Collections)
  - Generic Algorithms to achieve a certain task

What is Qt?

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Some features of Qt

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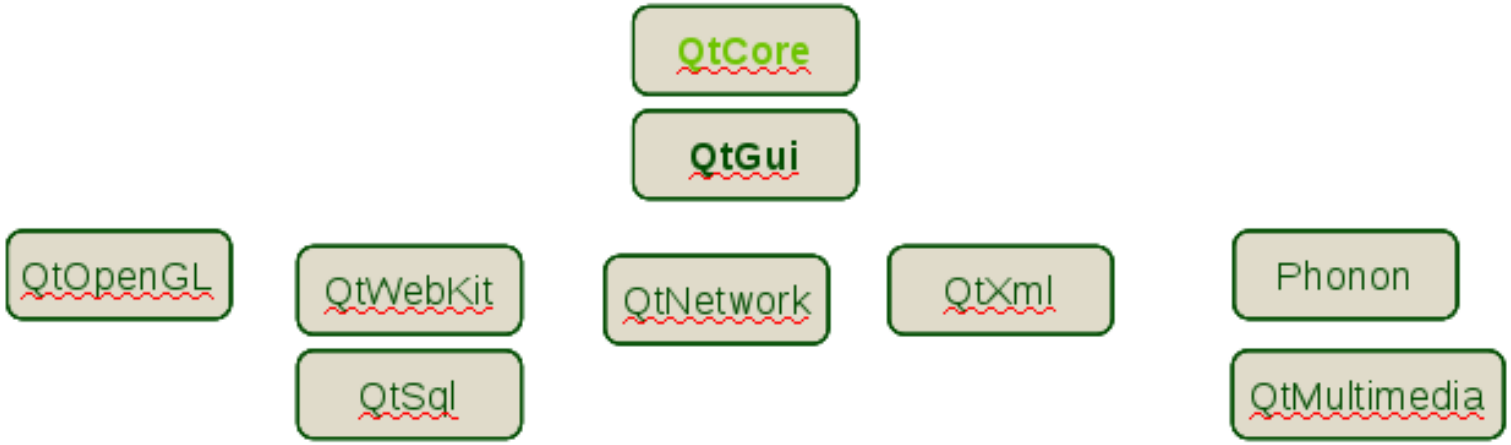
- Modular Design



Macros and Introspection

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- Qt extends with *macros* and *introspection*

```
foreach (int value, intList) { … }
```

```
QObject *o = new QPushButton;
o->metaObject()->className(); // returns "QPushButton"
```

```
connect(button, SIGNAL(clicked()), window, SLOT(close()));
```

Supported Platforms

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- *nix platforms
- Windows
- Android (through Necessitas)

Applications using it...

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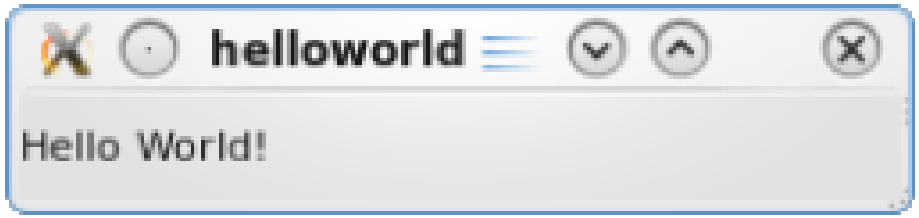
- KDE (The whole desktop environment along with the application suite)
- VLC Media Player
- Adobe Photoshop

Appease the Programming Gods...

Hello World!!!



Appease the Programming Gods...

Hello World!!!

```
#include <QApplication>
#include <QLabel>

int main( int argc, char **argv )
{
    QApplication app( argc, argv );
    QLabel l( "Hello World!" );
    l.show();
    return app.exec();
}
```

A Section by section disection of the code...

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- Soft Skills
- Long Term Commitment

After GSoc?

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You are Awesomer!!!!

Open Source communities cannot thrive without...

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mentors

Who is a mentor?

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Anyone who is passing down his/her experience to new and existing community members

You can become a mentor to

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- include new members into the project

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- get some help to finish off a project for which you dont have the time

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The Good

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- Engagement with other projects

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The Bad

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The Ugly

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- Too few mentors participating (Maybe we can solve it??)

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The Future

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- Google Code-In
- Google Summer of Code 2014

Google Code-In

Google Code-In

- Targets school students
- Different Goals

Google Code-In

- Targets school students
- Different Goals
  - Code
  - Documentation/Training
  - Outreach
  - QA
  - User Interface