

# Effective QML

Best practices for developing with Qt Quick

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- The case for QML
- How to train yourself or a team
- Overview on QML
- Good practices
- Advanced techniques

# What is this Q-Whatchamacallit?

- Qt Meta Language (QML)\*
- Declarative vs Imperative

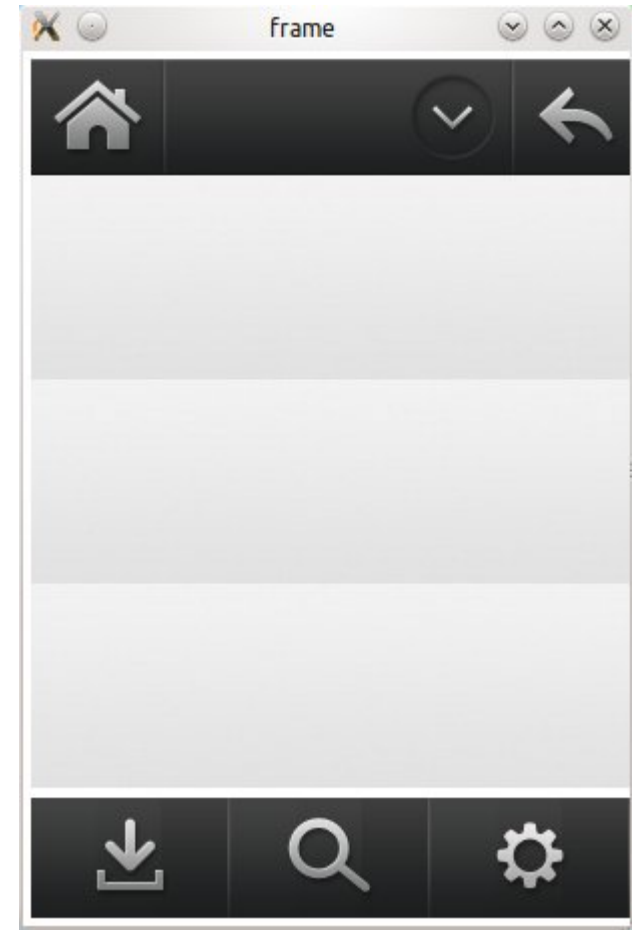
```
Button {  
    x: 10; y: 20  
    color: "blue"  
    visible: true  
}
```

```
Button obj  
obj.setColor("blue")  
obj.setPosition(10, 20)  
obj.show()
```

\* <http://en.wikipedia.org/wiki/QML>

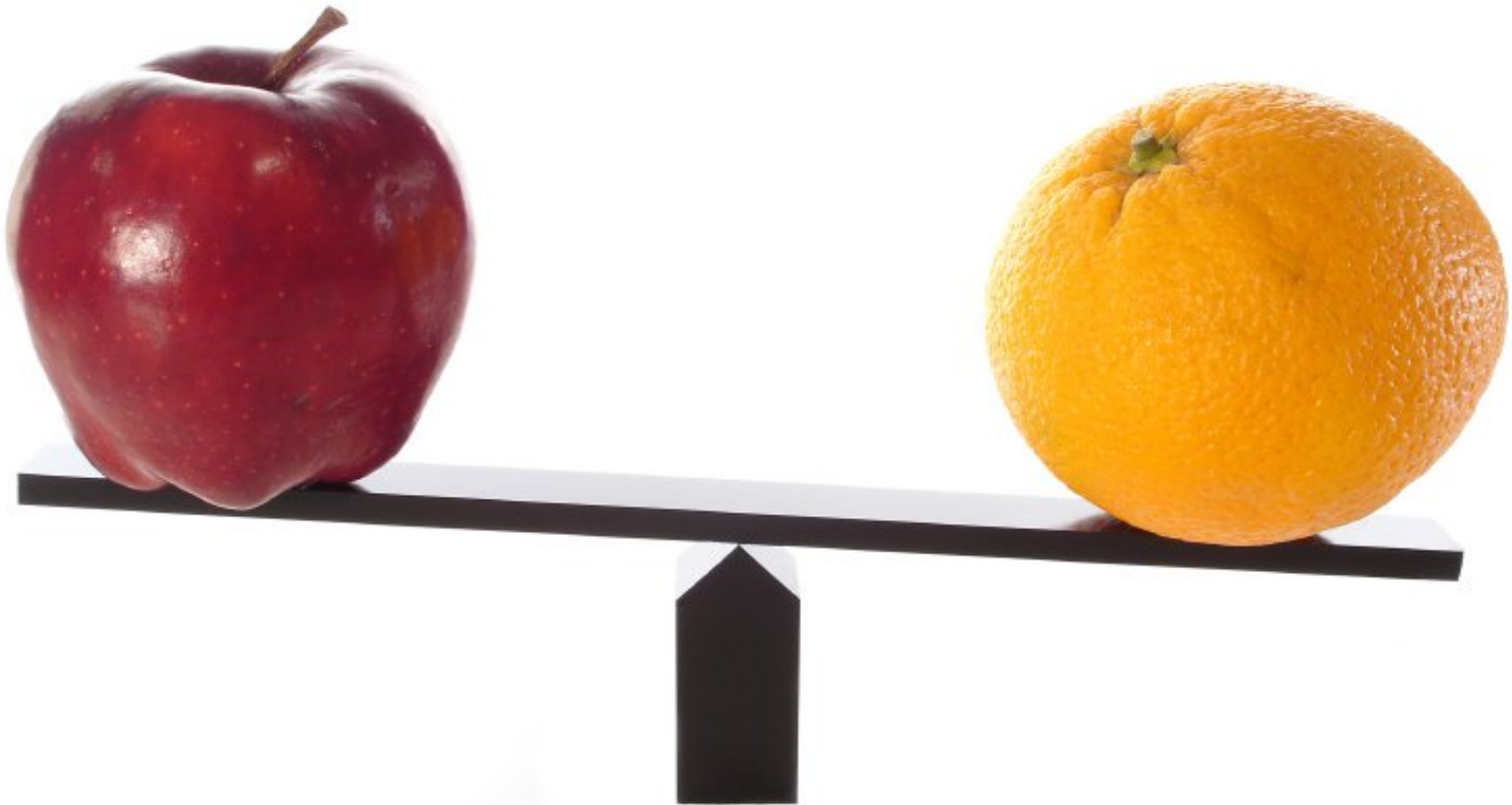
## Requirements:

- 1 top bar
- 1 lower bar
- scrolling kinetic list in the center
- re-scalable



\*QGV stands for QGraphicsView

- QGV vs QML: are different, but can solve similar problems.

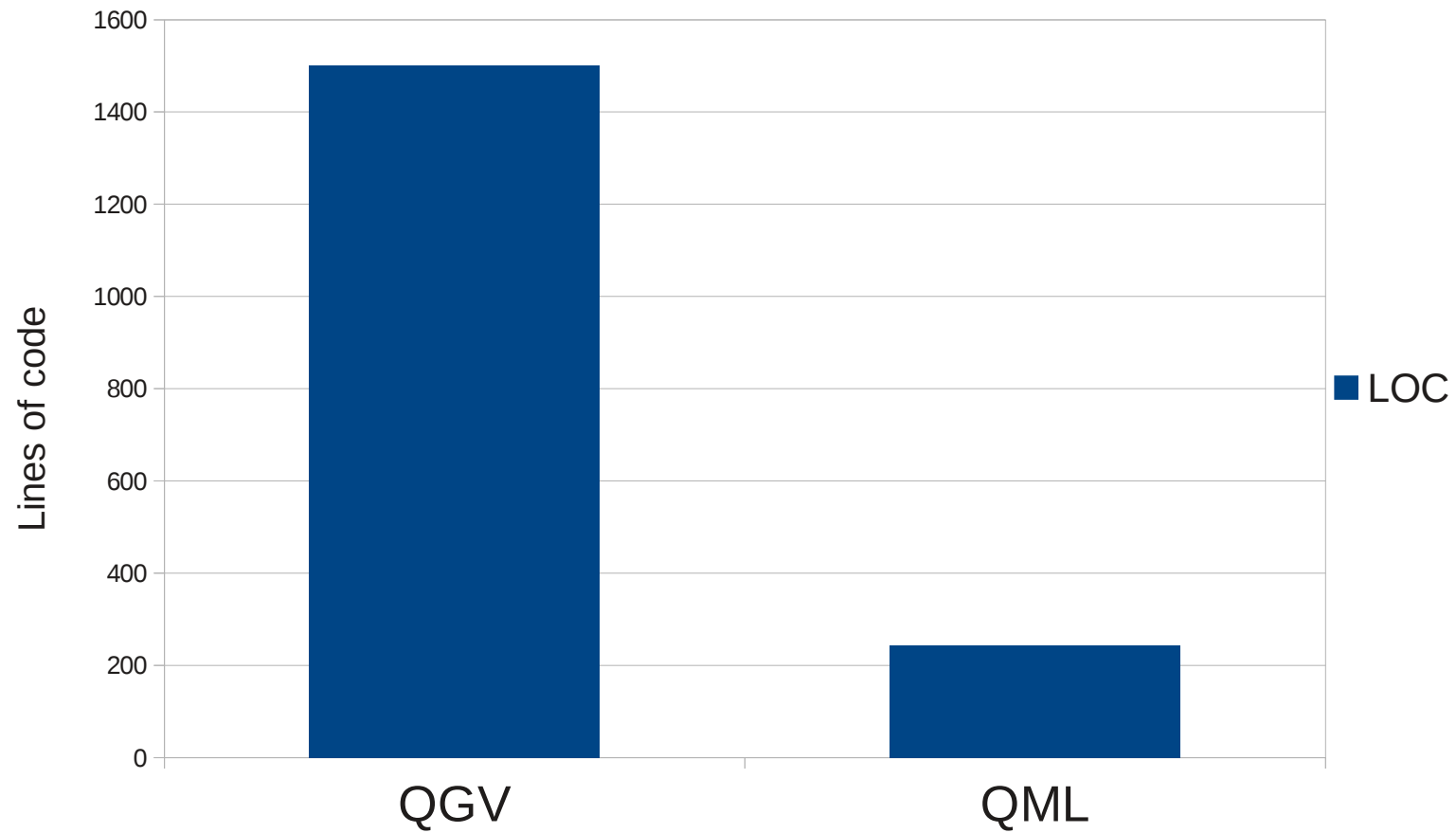


## A case study: QML x QGV

- Which one will be more verbose?
- Which one will be faster to develop?



## Results



## A case study: QML x QGV

A difference of almost 1000% in development time

- QGV: 1 ½ day (8-10 hours)\*
- QML: 1 hour (+ 30 minutes for minor adjustments)



\*Assuming a ready to use KineticScrolling list and a basic Button



- Question: if you start a new project today, which one will be done earlier?



- Managers x designers x developers



# Should I put C++ out of the equation?



Porto de Galinhas (Pernambuco) - Brazil

## Relevant questions

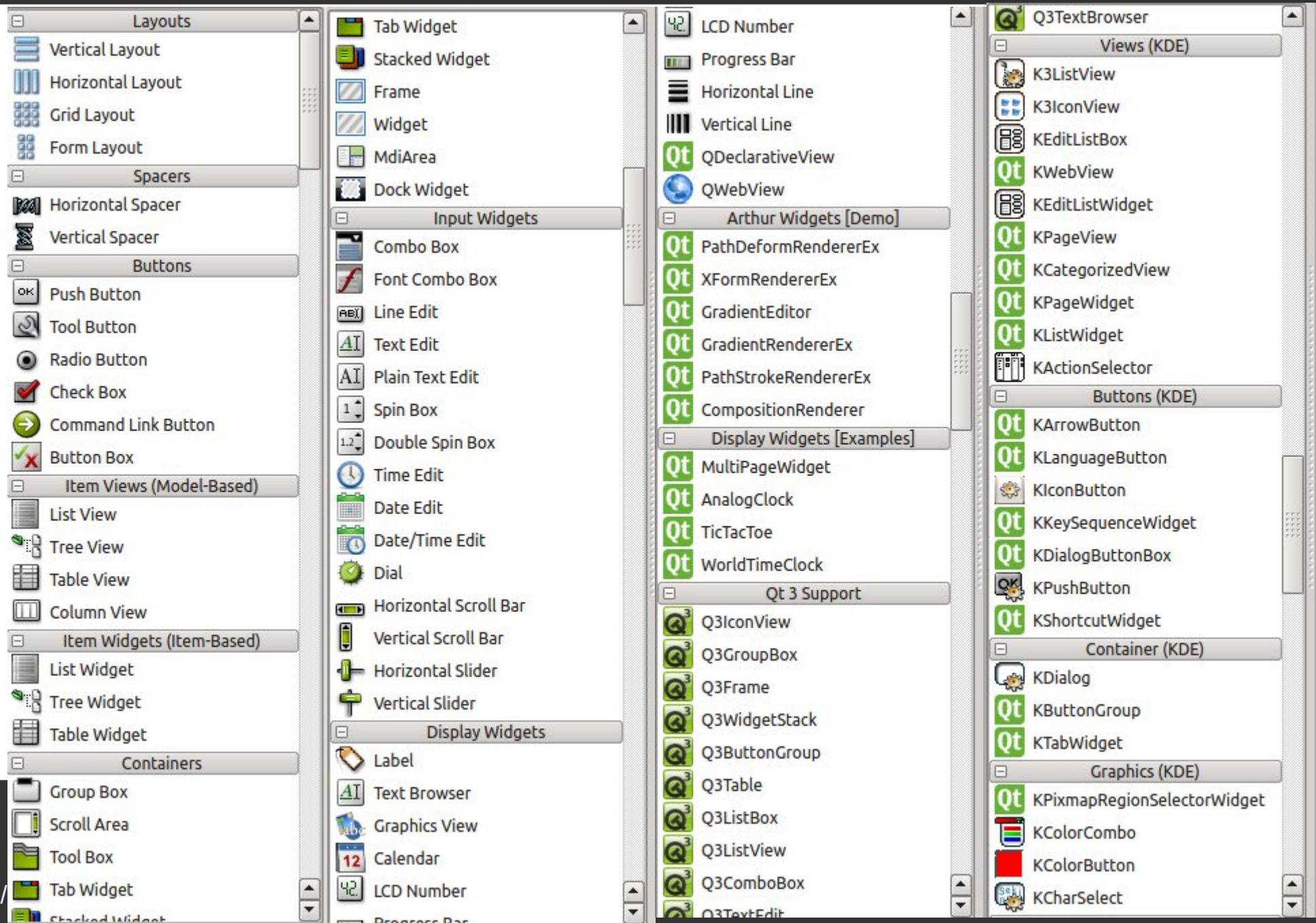
- Complexity
- Functionality
- Team

# What about QWidgets?





# How many QWidgets?



# 96 Widgets! Not counting all KDE widget or Qt add-ons...

## Relevant questions

- What your app need?
- Desktop x Touchscreen
- Animations?
- Designer assets?

# Right tool to the right job



DevDays@California - 2008



- How to become QML-proficient?



- If you are a student



Yeah, Matrix.

Students: use the power of Opensource!

- Great online documentation
- Qt is opensource
- KDE
- gSoC



## Lessons for students:

- Making mistakes is part of learning process
- The one who make more points is **also** the one who makes more mistakes
- While learning, look for the best!

Relax time...



Ilha Bela (Sao Paulo) - Brazil



- If you are a professional/manager



Qt has a real ecosystem

- ICS (USA based)
- KDAB (Europe)
- Digia (owned Trolltech)
- Collabora (ninja-ish guys)



- If you need it **today!!!!11!**



Must have Star Wars reference



## QML elements

- **Visual:** Rectangle, Image, BorderImage, Text, TextEdit, TextInput, AnimatedImage, Gradient
- **Positioner/Repeater:** Column, Row, Grid, Flow, Repeater
- **Views:** ListView, GridView, PathView
- **Utilities:** Connection, Loader, Timer, WorkerScript, Path(Line/Quad/Cubic/Attribute/etc)
- **Animations:** Property, Number, Vector3d, Color, Rotation, Parent, Anchor
- **Models:** ListModel, ListElement, XmlListModel, etc

We lack time to cover it all...



The end?

Not really...

To be continued...