Plasma Sneaks Into Your Pocket...

Plasma for Phones...

Artur Duque de Souza and Alexis Menard

July 3rd 2010

Outline

Agenda

About Us
Who are we?

Alexis Menard (IRC : darktears)

- Qt Developer since 2008, based in Oslo
- Mainly work on QGraphicsView and Widgets
- Involved in QML development
- Recently moved to QtWebKit development
- Started KDE development in 2006 with KPlato
- Plasma developer since 2007

About Us
Who are we?

Artur Duque de Souza (IRC : MoRpHeUz)

- Mobile development since 2007
- Works for INdT - Nokia Research Institute in BR
- Involved in QML development
- KDE: Mainly a Plasma developer

Agenda

The world around us

The IT market

- The number of personal computers hits one billion in June 2008
- The mobile phone's sales totalled 314.7 million units in the first quarter of 2010
- Smartphones market increased by 48.7%

The KDE user experience (1/2)

How KDE is present in this world?

- A well defined user experience through artists and developers
- Nice innovative user interface for desktop computers
- A netbook interface released with KDE 4.4 which will be completed in 4.5

Plasma Netbook

The KDE user experience (2/2)

- A different desktop shell tailored for smaller screen
- The KDE look and feel is preserved
- KDE provides a better experience and reduce the learning curve

Now what's the future?
Look at the crystal ball

KDE on phones? WTF!

- Why not?
- Some smartphones are mobile computers
- Extend the KDE user experience to your phone
- So you can have KDE everywhere with you

The Challenge..
Life is not easy man

State of art

- The screen is way smaller (couple of inches)
- Resources are limited (we're talking about 10 years old desktop computers)
- The way you interact with the device is different, no mouse

KDE is evolving
Well not really with Ervin :p

KDE Mobile

- A beginning of support for platform profiles : Mobile, Tablet, Desktop
- Some projects are already using it : Plasma for example
- No solid, no webkit, no knewstuff, no kio
- Reduce the complexity, the size of the library and helps to package

Agenda

The project
KDE strikes back...

Plasma Mobile

- Some research has happened in Maemo Summit when some people got a N900

- Extra research on a complete Plasma in November/December 2009

- We officially kicked the project in February 2010

WARNING: The next slides are describing work in progress, everything can change

Tokamak 4 (1/5)

The Plasma code camp...

The starting line...

- An Intel Compal JAX10 with Moblin
- A Nokia N900 with Maemo5
- Qt, KDE, Plasma, three developers and a designer

Tokamak 4 (2/5)
The Plasma code camp...

The state of art...

- Maemo5 (and almost all others) : Multiple 'desktops' that you can slide + a gridview to launch applications
- Moblin : No real dedicated user interface
- Meego : They have a panel (funny :p), and gridviews organized in pages
- So pretty crowded but still the same approach more or less

Tokamak 4 (2/5)
The Plasma code camp...

The state of art...

- Maemo5 (and almost all others) : Multiple 'desktops' that you can slide + a gridview to launch applications
- Moblin : No real dedicated user interface
- Meego : They have a panel (funny :p), and gridviews organized in pages
- So pretty crowded but still the same approach more or less

Tokamak 4 (3/5)
The Plasma code camp...

Our ideas

- Make the navigation more context aware : where i am, what i am doing, who i am
- You should be able to define activities : work, messaging, social, games

A solution

- The desktop should be based on activities
- No big gridviews with all applications, just the relevant ones
- An activity switcher not on your way

Tokamak 4 (3/5)
The Plasma code camp...

Our ideas

- Make the navigation more context aware : where i am, what i am doing, who i am

- You should be able to define activities : work, messaging, social, games

A solution

- The desktop should be based on activities

- No big gridviews with all applications, just the relevant ones

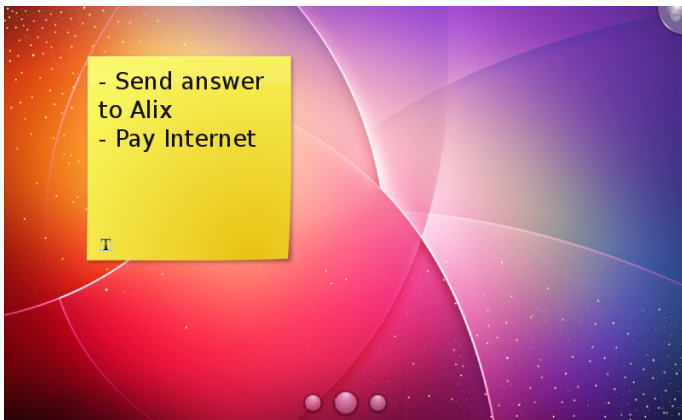- An activity switcher not on your way

Tokamak 4 (4/5)
The Plasma code camp...

How activities work?

- Activities can contain widgets (related to the activity itself)

- If you want to do more with a given widget you can switch to full view

Tokamak 4 (5/5)
The Plasma code camp...

How to launch applications?

Technical bits : Plasma core technologies
No it's not mega bits...

Applets

- have a built-in way to react on form factors they're running on
- shares data using data-engines
- can be shared on the network
- are SVG themable

Containments

- are containers for applets
- can layout them if you want to
- and they are applets!

Technical bits : Plasma core technologies
No it's not mega bits...

Applets

- have a built-in way to react on form factors they're running on
- shares data using data-engines
- can be shared on the network
- are SVG themable

Containments

- are containers for applets
- can layout them if you want to
- and they are applets!

Technical bits : Plasma Mobile

How it works...

- QML is built in
- Applets and Containments can be written in QML
- Designers can provide QML files for different devices
- QML script engine : you can package/ship QML applets on kde-apps.org

Disclaimer about the demo

- Plasma-mobile is running fullscreen alongside with hildon-desktop
- Applets used here are not related to the activities, well it's a demo :D
- LOTS of things are missing
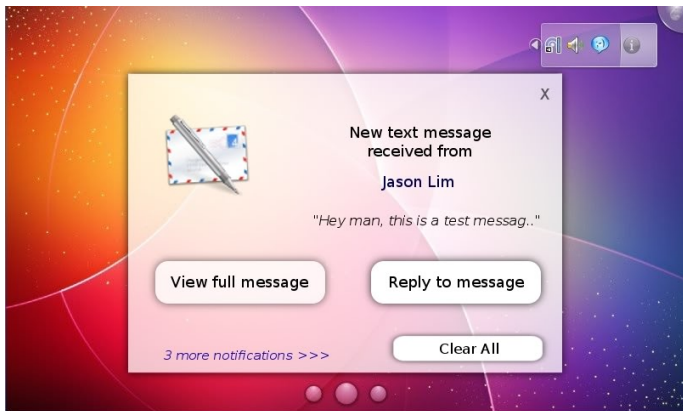
Demo

GSoC 2010 : Yuen Hoe Lim

The System Tray and notifications

- The systray implementation in desktop/netbook is not appropriate
- Not touch friendly, it requires the mouse
- Tooltips does not work on a touch screen phone
- But the plumbing is implemented

An idea of new notifications

Questions ?

Join us :
plasma-devel@kde.org
#plasma on freenode
Code : /playground/base/plasma/shells/mobile/

Alexis Menard : menard@kde.org
Artur Duque de Souza : asouza@kde.org