Digital Picture Frame

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Motivation

- Massive amount of digital pictures
  - cheap memory
  - CCD technology
- Organizational difficulties
Project Challenge

- Commercial Quality Product
- Simple
- Easy to use
- Get the attention of the user
Product Development

- architectural design – subsystems, components, and other program units
- algorithm design – creation of routines for calculations and data manipulation
- human interaction design – creation of style of user interaction with the system
Commercial Product Development

- Reliability
- Correctness
- Robustness
- Scalability
- Support for multiple platforms
- Global support
- Time to market
Qtopia Palmtop Environment (qpe)

- Platform for embedded systems
- Standard for linux-based PDAs
- Phone-edition
- GUI Library
- Signals and Slots
Steps

- **New API**
  - `#include <qpopupmenu.h>`
  - `#include <qmenubar.h>`
  - `#include "FrmMain.h"
  - `FrmMain::FrmMain(QWidget* parent, const char* name, WFlags fl) : QMainWindow(parent, name, fl) {
      setCaption("Hello, World!");
      QMenuBar *menubar = this->menuBar();
      QPopupMenu *mnuFile = new QPopupMenu(this, "MenuFile");
      menubar->insertItem("&File", mnuFile);
      mnuFile->insertItem("&Quit", this, SLOT(cmdFileQuit()), 0, 1);
  }

- **IPK Packages**

- **Qt Libraries**
Future Development of Commercial Products

- Graphical IDE
- KDevelop
- Qt Designer
Conclusion

- Development of simple programs takes more time
- End product still needs to satisfy customer needs