Cross Platform GUI with GTK#

Introduction

- Who am I?
    - Ben Rousch
    - Manager of Information Systems
    - Van Dam Iron Works
- What's going on?
    - Last Month Summary
    - PDFTK
    - MonoDevelop2
    - Creating the GTK# GUI for PDFTK
    - Linux/Windows/OSX Demo

Cross Platform GUI with GTK#

Summary of Last Month's Presentation

- Introduction to Mono

- Possible risks with relying on Mono

- "Hello World" in MonoDevelop

- Ran same executable on Linux, Windows, and OSX

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What is PDFTK

- A free and open source command line program for working with PDFs

    - Combine multiple PDFs into one

    - Split a PDF into pages

    - Many more operations

- Available for Linux, Windows, and OSX

- http://www.accesspdf.com/pdftk/

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What do we use PDFTK for?

- We are in the construction business, so we deal with a lot of electronic blueprints.

- Those blueprints come as a large multipage PDF, or a folder full of single page PDFs

- We want to reorganize the PDFs

- PDFTK is a cheap and easy way to combine or split (burst) PDFs.

Cross Platform GUI with GTK#

MonoDevelop2

- A Mono IDE
- Supports C++, C#, VisualBasic
- Integrated GTK# Designer (Stetic)
- Available for Linux and OSX
- More stable than MonoDevelop1

Cross Platform GUI with GTK#

Creating the GTK# GUI wrapper

- MainWindow
    - Menu
        - File → Quit
        - Help → About
    - Notebook
        - Burst Page
            - File Select Section
                - Label
                - Text Entry
                - Button
                    - File Select Dialog
            - Burst It Button
        - *Combine Page*
    - *StatusBar*
        - *ProgressBar*

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- Common Trip-ups
  - If you get an error about gettext in Windows, set the following in your project:
    - Project -> Options -> General -> GTK# Settings
    - Disable gettext support
  - To remove the DOS window while the program runs:
    - Project -> Options -> Build -> General
    - Compile Target: Executable with GUI

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Ubuntu Demo

- Copy our executable to ~/pdftkgui

- apt-get install pdftk

- apt-get install mono-common gtk-sharp2

- Run from command line:

  - mono ~/pdftkgui/PdftkGui.exe

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OSX Demo

- Copy our executable to ~/pdftkgui

- Install PDFTK for OSX

  - http://www.accesspdf.com/pdftk/#packages

- Install Mono Framework for OSX

  - http://www.go-mono.com/mono-downloads/download.h

- Run from command line:

  - mono ~/pdftkgui/PdftkGui.exe

Cross Platform GUI with GTK#

Windows Demo

- Copy our executable to My Documents\pdftkgui

- Download PDFTK for Windows

  - http://www.accesspdf.com/pdftk/#packages
  - Move pdftk.exe to My Documents\pdftkgui

- Install GTK# for .NET from Mono web site

  - http://www.go-mono.com/mono-downloads/download.h

- Double-click My Documents\pdftkgui\PdftkGui.exe

Cross Platform GUI with GTK#

Resources

- Mono: http://www.go-mono.com/
- MonoDevelop: http://monodevelop.com/
- PDFTK: http://www.accesspdf.com/pdftk/

Mono, MonoDevelop, GTK# Additional Talking Points

- MonoDevelop2 F1 Help

- HBox, VBox, Expand, Fill

- GTK Stock Buttons, Icons

- Stetic XML vs Glade XML

- Winforms is fugly on OSX and Linux

- Deploying GTK# to Windows is easier than PyGTK