

# Petit Humane Assessment, with Delphi

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# How to start doing humane assessment

# Humane Assessment?

- decide knowingly
  - everyone makes decisions
  - decisions require accurate information
  - details are essential
  - assessment is a human activity
  - approach problems individually

# Why Delphi?

- seen by management as legacy, cq problem
- we know it,
- well known teaching language
- no clear-cut need to replace now
  - refactor or replace?
- well known weak spots

# Getting started

- from a strategic level (or grass roots)
  - visible to management
- fast trust building is needed
  - low initial investment, feedback
- can't start building a parser for a few weeks

# Complex problem

- management perceives a problem
  - formulating might be difficult
  - 5 why? (find root causes)
- multiple safe-to-fail experiments
  - fast feedback
  - low investment

# Low investment

- analyzing code requires parsing
- use/modify existing parser
  - java/smalltalk/c/delphi... in moose
  - reuse from development environment
- island parser
  - interesting part only

# Island parsing

- data conversion project
- Cobol
- data definitions+modules/files
- ignore 300 keywords, 90% of source



# Experiments

- dependencies
- code duplication
- typical issue list
  - language specific
  - general
- changes

# Dependencies

- do we have all source?
- how well balanced is the system?
- how complex are dependencies?

# Show dependencies

- system units (grey)
- missing units (red)
- interface dependencies (green)
- implementation dependencies (blue)
- classes nested
- [include files]

# Duplication

- Zip
- Du(plication)de(ctor)

# Typical legacy problems

- multiple styles/architecture
- copy paste and edit
- missing tests
- low abstraction

# Typical delphi issues

- code written in the form eventhandlers
- missing domain model, all transaction script
- no database abstraction
- sometimes still turbo pascal style  
structured programming/mixed with oop
- missing basic libraries/misuse of tlist
- no longer maintained components

# Code written in forms

- subclasses of form
- method with first parameter of type `TObject` (eventhandler)
- complexity view

# Changes

- EggRace
- (Torch)



# Results

- Shown with Delphi how to start strategic Humane Assessment
- Typical Delphi browser
- Moose browser
- Dude
- Sonar

# Iterative, Incremental!

- each answer leads to new questions
- focus on risk & value
- A rational design process, how and why to fake it (Parnas)

# Where?

- [www.humane-assessment.com](http://www.humane-assessment.com)
- [www.moosetechnology.org](http://www.moosetechnology.org)
- [www.smalltalkhub.com/mc/Moose/PetitDelphi/main](http://www.smalltalkhub.com/mc/Moose/PetitDelphi/main)