Noting Much About Ado

Dr. Ana Nelson
dexy.it/ado

Integrating Development, Documentation and Reporting

A Little About Me

- I'm a software developer (used to be an economist).
- Became interested in software development and document automation while working on my thesis.
- Lots of similarities between software documentation and scientific document automation.
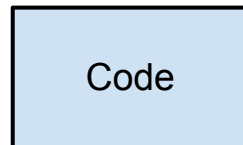- Wrote my "dream tool" after I learned Python.
- My twitter: @ananelson

Dexy

- My dream tool.
- Supports *any* programming language.
- Lets you write any kind of document.
- Automates your whole project.
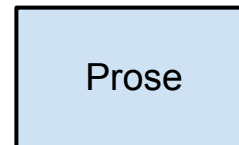- http://dexy.it
- @dexyit

Ado

An experimental command-line TODO app which might be interesting (or is just a useful vehicle for talking about dexy).

Code & Prose

Code   Documentation   Prose

Tools:

version control   version control
text editors   text editors
github   github
                         word processors
                         wikis/CMSs/blogs

Tools for Documentation, i.e. Integrating Code and Prose

- Automated
  - Usually one of two approaches:
  - place the code in the prose (literate programming)
  - place the prose in the code (comments -> API docs)
  - Problems
    - inflexible
    - hard to re-use
- Manual
  - well, yeah, manual.

Code is Code, Prose is Prose

- Code lives in Code Files
- Prose lives in Prose Files
- Tools mix them together

Benefits

- No editing or copy/pasting code in tools designed for formatted text.
- All code is executable.
- Can still do "code in prose" literate programming and "prose in code" automated API generation.

But wait!

Code
Documentation
Prose

Let's add "Data"

Code

Data

Prose

Data

- Data from an external API.
- Code performance analysis data.
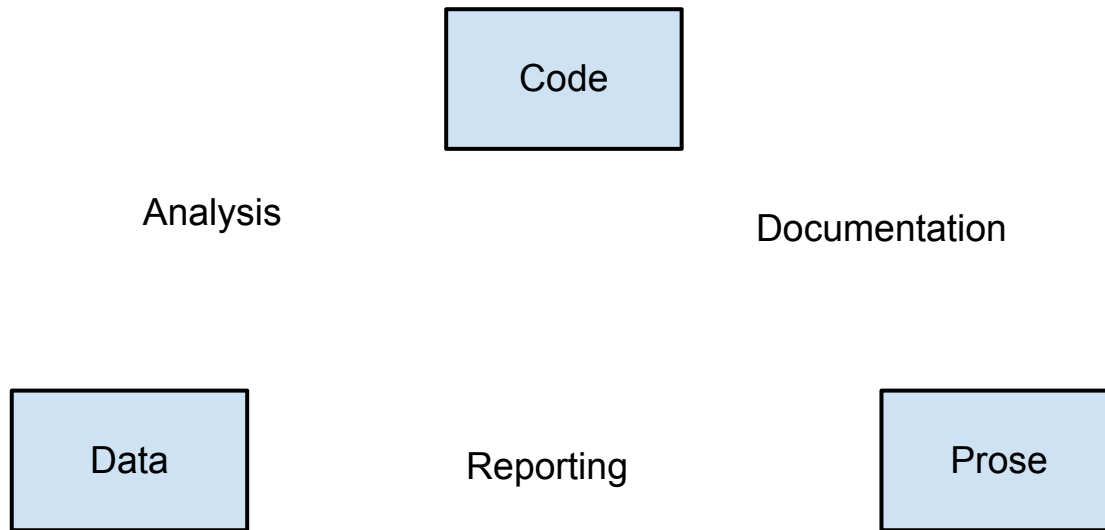- Website traffic data.
- Support/helpdesk metrics.
- Big Data
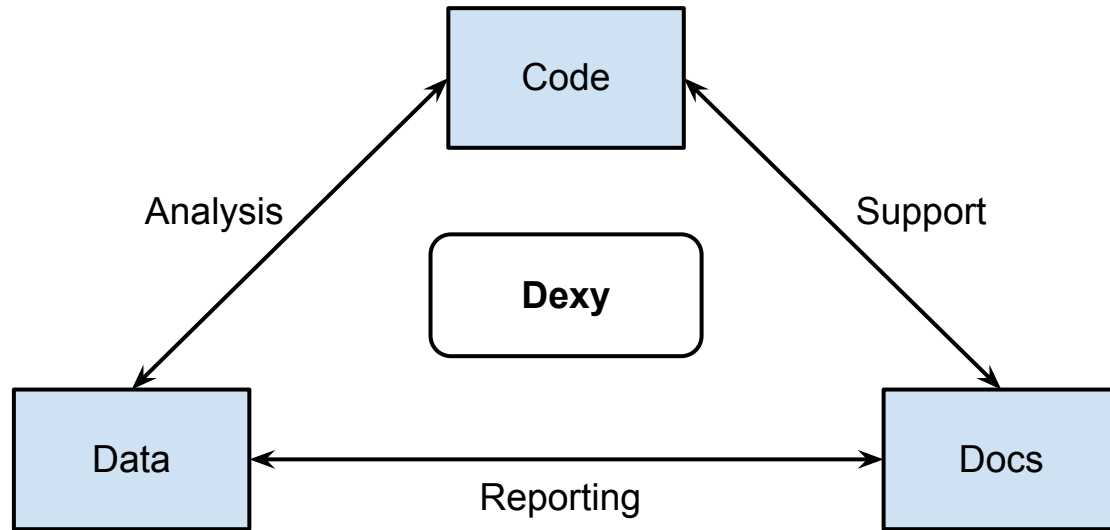
Let's add "Data"

Code

Data

Prose

Relationships

Code

Analysis   Documentation

Data   Reporting   Prose

Or...

Inputs/Costs:

- Code
- Prose
- Data

Output/Added Value:

- Documentation
- Reporting
- Analysis

Code is Code, Prose is Prose, Data is Data

Dexy

A tool for automating the integration of code, prose and data.

A tool for automating analysis, reporting and documentation.

Get the best of both worlds: the flexibility of the Manual approach with the maintainability of an Automated approach.

Dexy can:

- run code
- insert code into documents
- insert code output into documents
- convert documents to/from different formats
- run data analysis scripts
- insert results and graphs into documents
- run task automation scripts
- interact with remote APIs

Example: Ado

- A demo/example to illustrate the intersection of code, prose and data.

Ado: Command Line ToDo Software

- I wanted a simple, local (not web-based) TODO app.
- I wanted to leverage Dexy's templates and automation to be Ado's reporting system
- So: I wrote a simple wrapper for a SQLite database, and a simple command line tool for inserting data.
- Dexy does everything else.

Demo

dexy.it/ado