# TIL:

## Creating Open Documentation Through Public Note-taking and Literate Programming

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### Contents

## Who am I?

- Jay L. Colbert
- he/him pronouns
- Metadata & Discovery Strategy Librarian
- University of New Hampshire

Bachelor's degree in... Literature

## Learning Primo VE

In September 2019, I was hired as the University of New Hampshire's Metadata & Discovery Strategy Librarian.

One of my primary position responsibilities is managing our Primo VE Discovery Layer, which UNH had implemented in July 2019.

### Challenges

- New to software
- No formal tech background beyond metadata

- Primo? Primo NUI? Primo VE?
- Documentation isn't always clear
- A lot of documentation and third-party information is years out of date!

The instructions for the Primo Development Environment do contain some information for Primo VE.

But most of the third-party packages do not.

And many of the third-party packages also use the --browserify option...

And Ex Libris does not provide official documentation for using it.

#### **Solutions**

- Explore GitHub repositories
  - Commits
  - Issues
  - Pull requests
- Watch conference presentations
- "Mess around and find out"

## The Importance of Documentation

- 1. A single source of truth saves time and energy
- 2. Documentation is essential to quality and process control
- 3. Documentation cuts down duplicative work
- 4. Documentation makes hiring and onboarding easier
- 5. Documentation increases collective knowledge

With documentation, we are able to share our knowledge with others internally and externally.

Without documentation, knowledge is lost over time. Consistency is lost. Quality control is lost.

### System-based

"here's what the system does"

#### Task-Based

"here's how to do your job using the system"

## Learning in Public

"Learning in Public" is scary for many reasons – people can find and cling to outdated information and users are exposing their knowledge during a vulnerable time in the project (i.e. when they don't yet have all the answers).

However, during this part of the process is when learning can be most valuable.

— via How Do Rocket Scientists Learn? (aka, knowledge management lessons learned at Goddard, NASA)

- Track learning process
- Public log
- Continual feedback
- Tap into network of community knowledge

## Methods

#### Beginner: Git Repository

Example: https://github.com/jbranchaud/til

### Intermediate: Digital Garden

The phrase "digital garden" is a metaphor for thinking about writing and creating that focuses less on the resulting "showpiece" and more on the process, care, and craft it takes to get there.

We gather and work together in community gardens to share the labor as well as the rewards of a collective effort. It's a comparison that you can take very far. From "planting seeds" and "pulling weeds" to tending mutiple gardens that each serve an individual need or desired outcome.

Like with real gardens, our digital gardens are a constant ebb and flow towards entropy.

— My blog is a digital garden, not a blog, by Joel Hooks

#### **Tools**

All tools are free and open source. I have purposefully omitted tools which are not free (like Roam Research) and/or open source (like Obsidian) https://github.com/MaggieAppleton/digital-gardeners

- Dendron
- Foam
- Git Repository
- Logseq
- Neuron
- Org Roam
- TiddlyWiki

### Advanced: Literate Programming

#### Literate programming

- is a style and paradigm of programming and documentation
- emphasizes natural language and human logic
- embeds code snippets within documentation
- generates software from documentation instead of the converse
- encourages reproducible research and open access

#### Tools

- NoWEB
- Literate
- pyWeb
- Emacs org-mode\*
- $\bullet$  Codebraid
- Jupyter Notebook

You can combine these methods and tools:

host your digital garden(s) (using whatever tool) in a Git repository (as well as a website if desired) and include any literate programming documents within.

# Questions?

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