

## Publishing a FHIR Implementation Guide

Ward Weistra, Firely

# HL7 FHIR DevDays

The largest FHIR-only  
event in the world

Minneapolis, MN



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**firely**

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# Who am I?

## Ward Weistra

- Product manager for data modeling
- Content lead for FHIR DevDays
- Member of FMG, FHIR-I



## Firely


- Co-creators of FHIR
- Firely Server, Simplifier, Firely .NET SDK, FHIR DevDays, ...



# Today's plan (90 minutes max)

- An interactive guide to the different ways to build a FHIR Implementation Guide from scratch.
- We will cover:
  - The **life cycle** of a FHIR Implementation Guide
  - **Building** FHIR resources, the machine readable FHIR artifacts for models, terminology and API interactions. Tools: FHIR Shorthand and Forge.
  - **Documenting** your specification with a human readable Implementation Guide, including commonly used pages and topics. Tools: IG Publisher and Simplifier.
  - **Publishing** your specification to the world.

# Today's use case

- Build a FHIR **Implementation Guide** to describe a real Cowboy and their favorite hat.
  - A **ValueSet** of hats 
  - A **Profile** on Patient to describe a cowboy with an **Extension** to capture their favorite hat

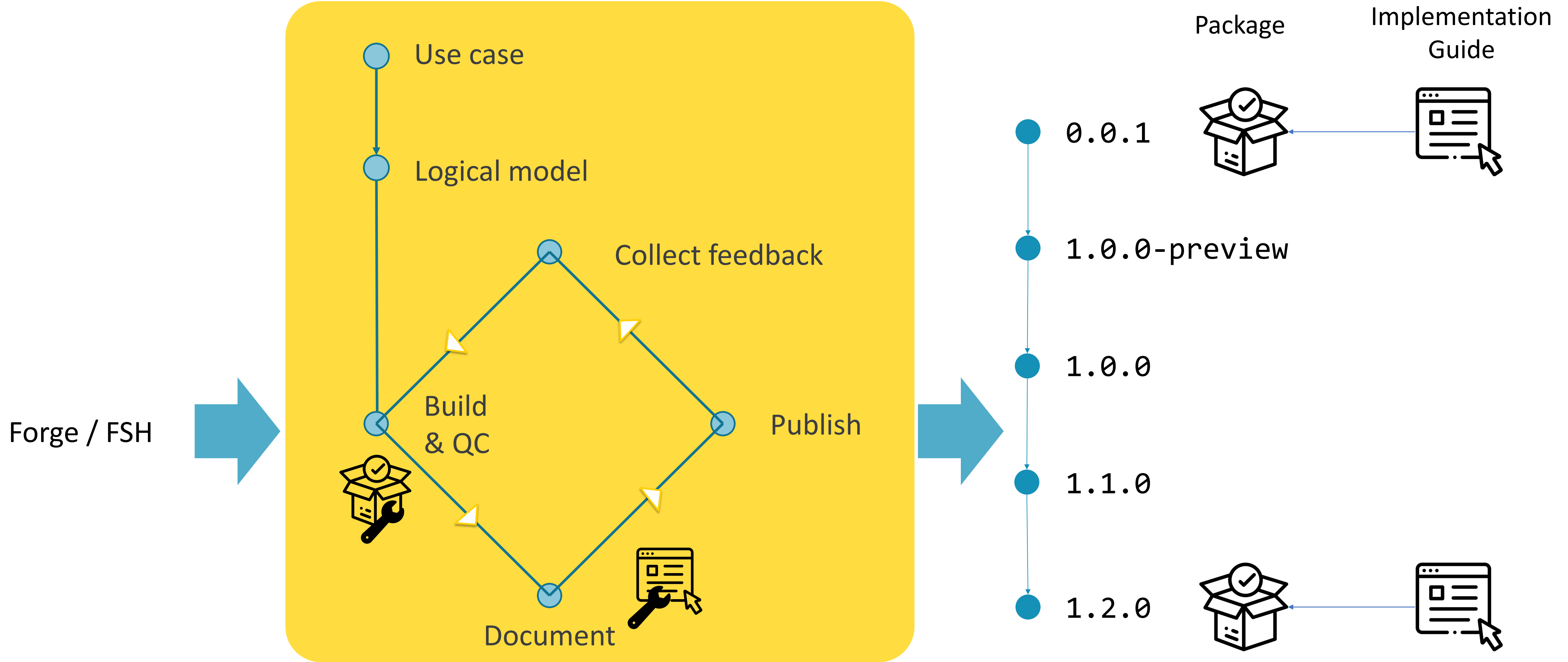
Find the end result at  
 → [simplifier.net/acme-dallas-cowboy](https://simplifier.net/acme-dallas-cowboy)



# What is an Implementation Guide?

- Let's look at the [US Core Implementation Guide](#)
  - A bunch of FHIR resources
  - A website documenting a specification
- What does it mean to publish your Implementation Guide
  - Making the website available on the internet
  - Making the resources available in the [FHIR Package Registry](#)

# FHIR IG Life Cycle

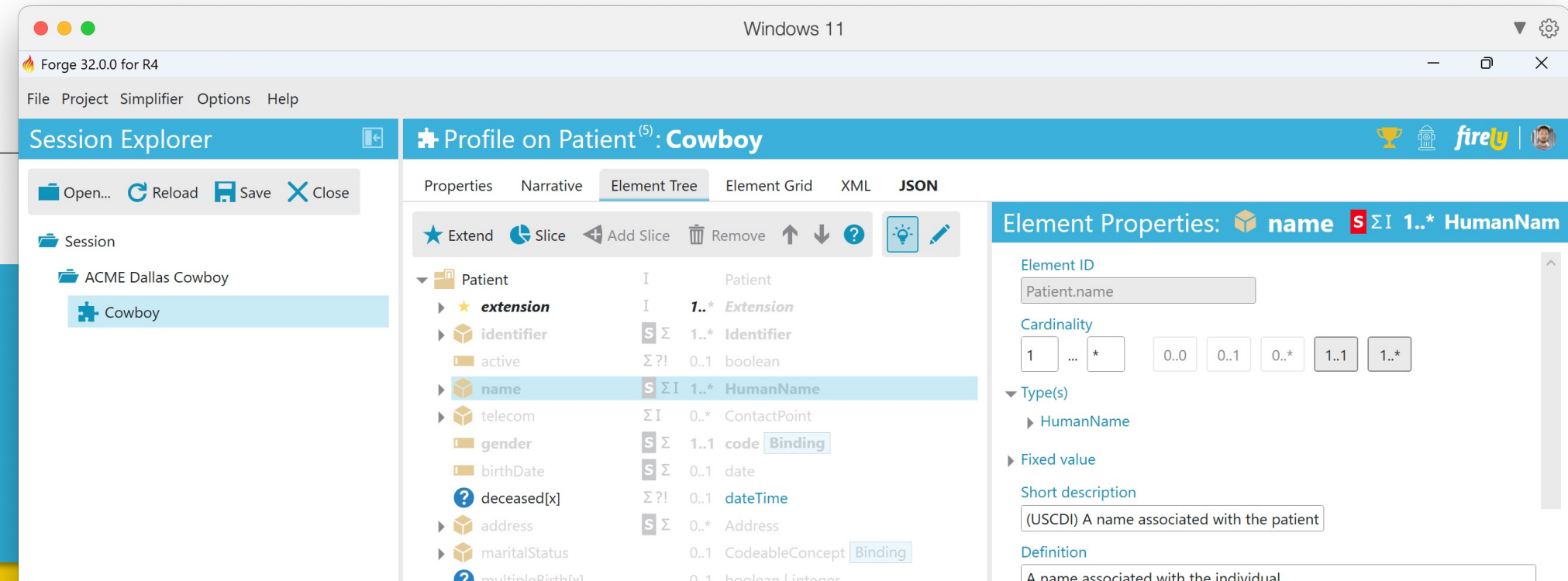
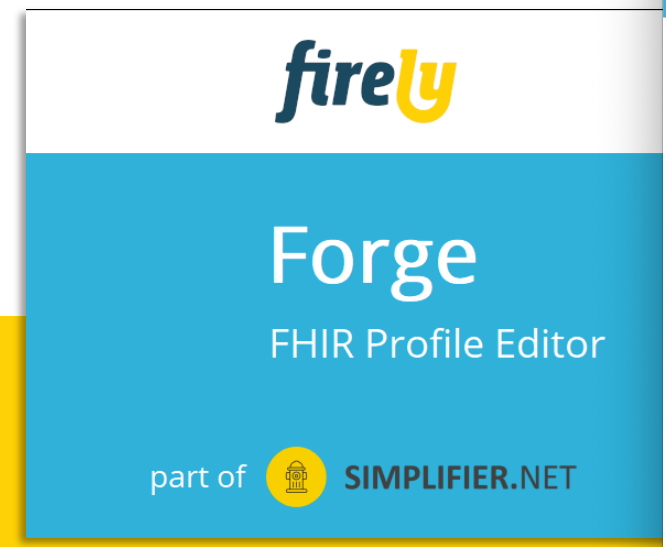


# How to make a bunch of resources?

- FHIR Shorthand
  - Powerful text-based editing of resources
    - Command-line, Visual Studio Code
  - Free



- Forge by Firely
  - Easy, visual editing of resources (Profiles, Extensions, ...)
  - Licensed, but free for learning



# Demo and code-along

- Create CodeSystem and ValueSet with **FHIR Shorthand**
  - Install sushi
  - Run `sushi init` (don't use a space in IG name)
  - Install VS Code plugins
- Create Extension and Profile with **Forge**
  - Install Forge
  - Create Extension and bind to ValueSet
  - Add US Core as dependency
  - Create Profile and add Extension
- Create Cowboy instance with **FHIR Shorthand**
  - Add US Core as dependency

Find all links in the **Whova** session description




**BREAK TIME**

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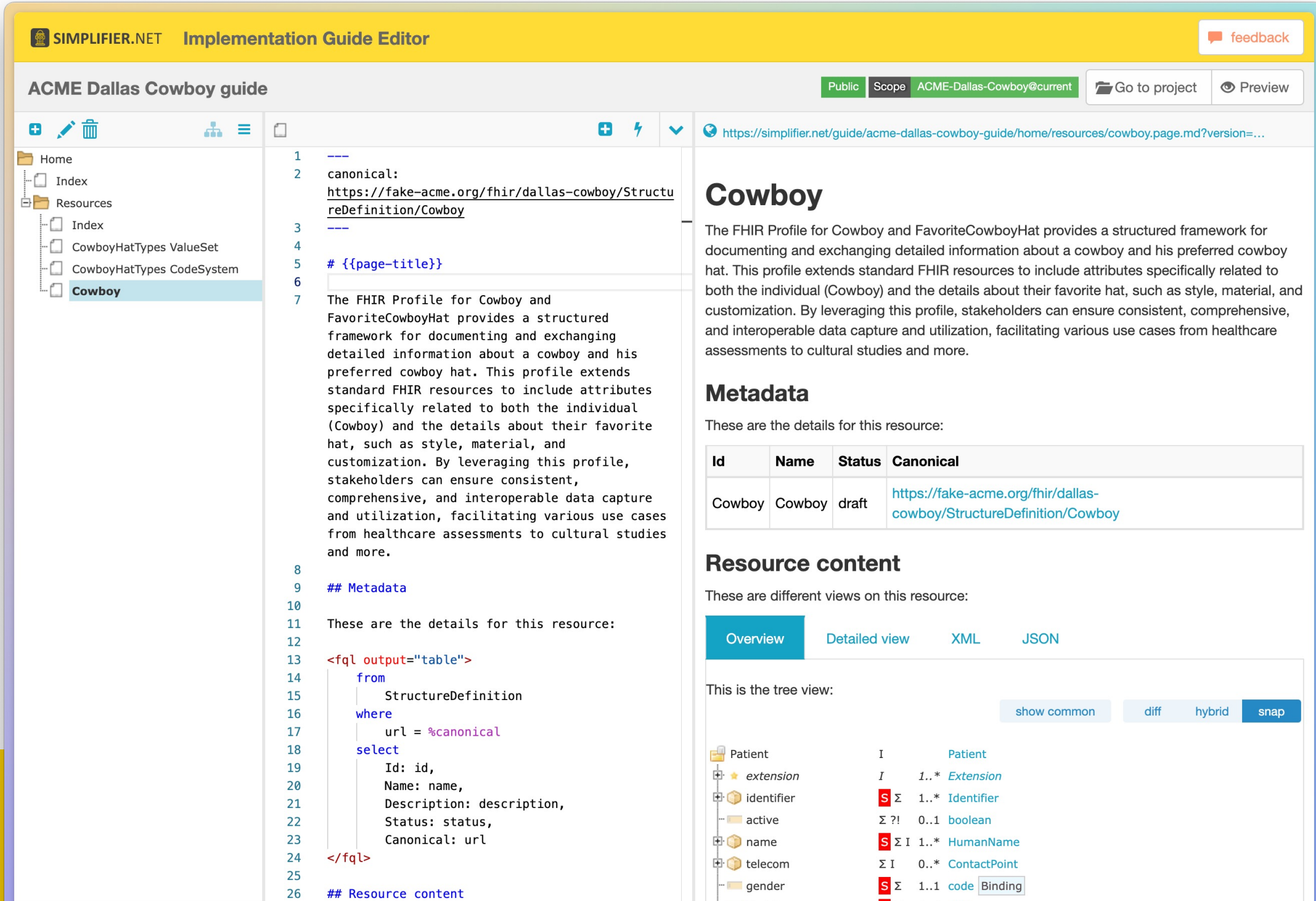
# How to make a website around it?

- IG Publisher

- Command-line, Visual Studio Code
- Free

- Simplifier.net by Firely

- Web-based visual editor
- Licensed, but first project free



# Demo and code-along

- Create documentation with **IG Publisher**
  - Run UpgradePublisher script
  - Run GenOnce script
  - See website and how to edit a page
- Create documentation with **Simplifier**
  - Create Simplifier project
  - Link and upload the project with Forge
    - Restore dependencies
  - Create guide and set template
  - Create pages

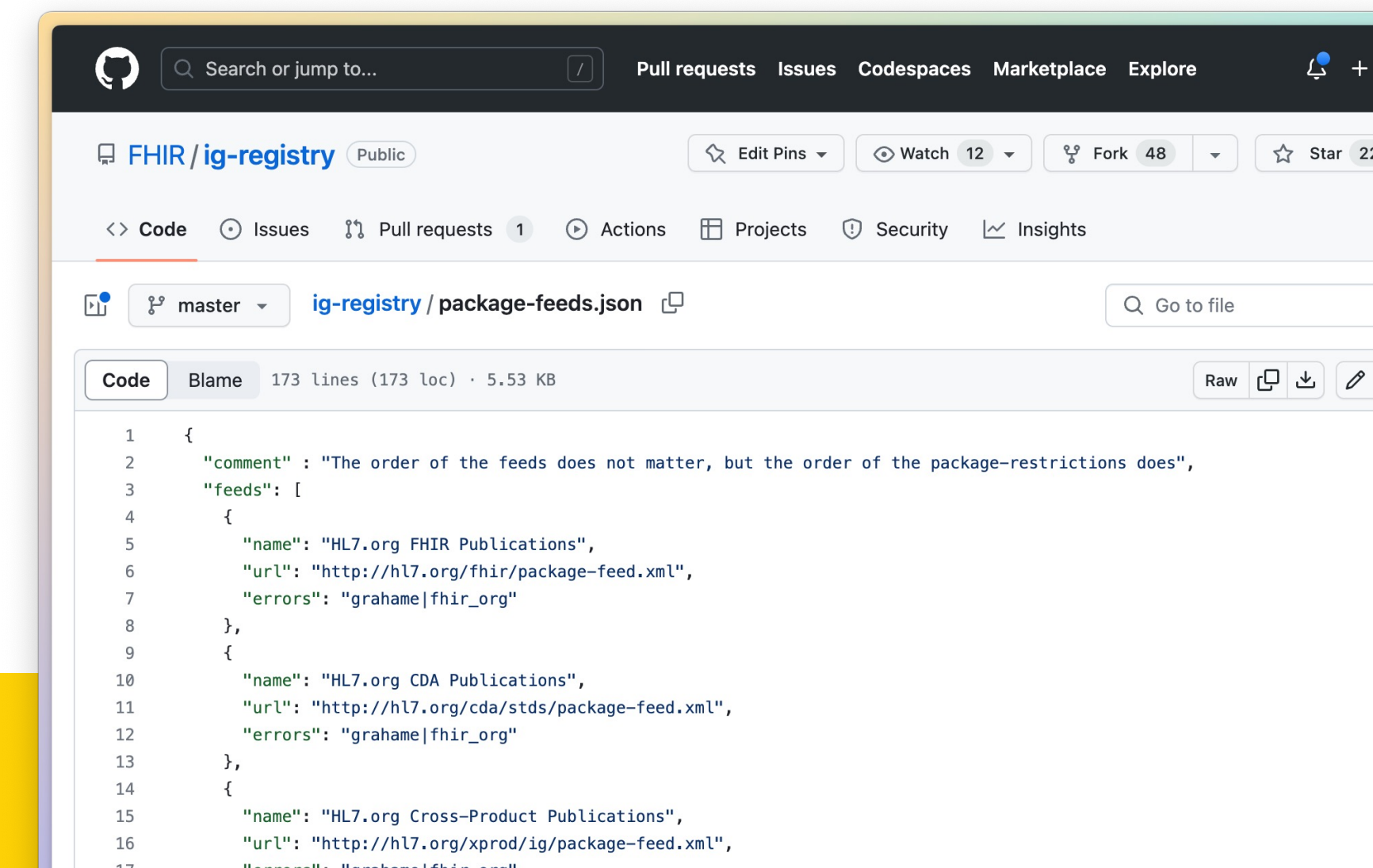
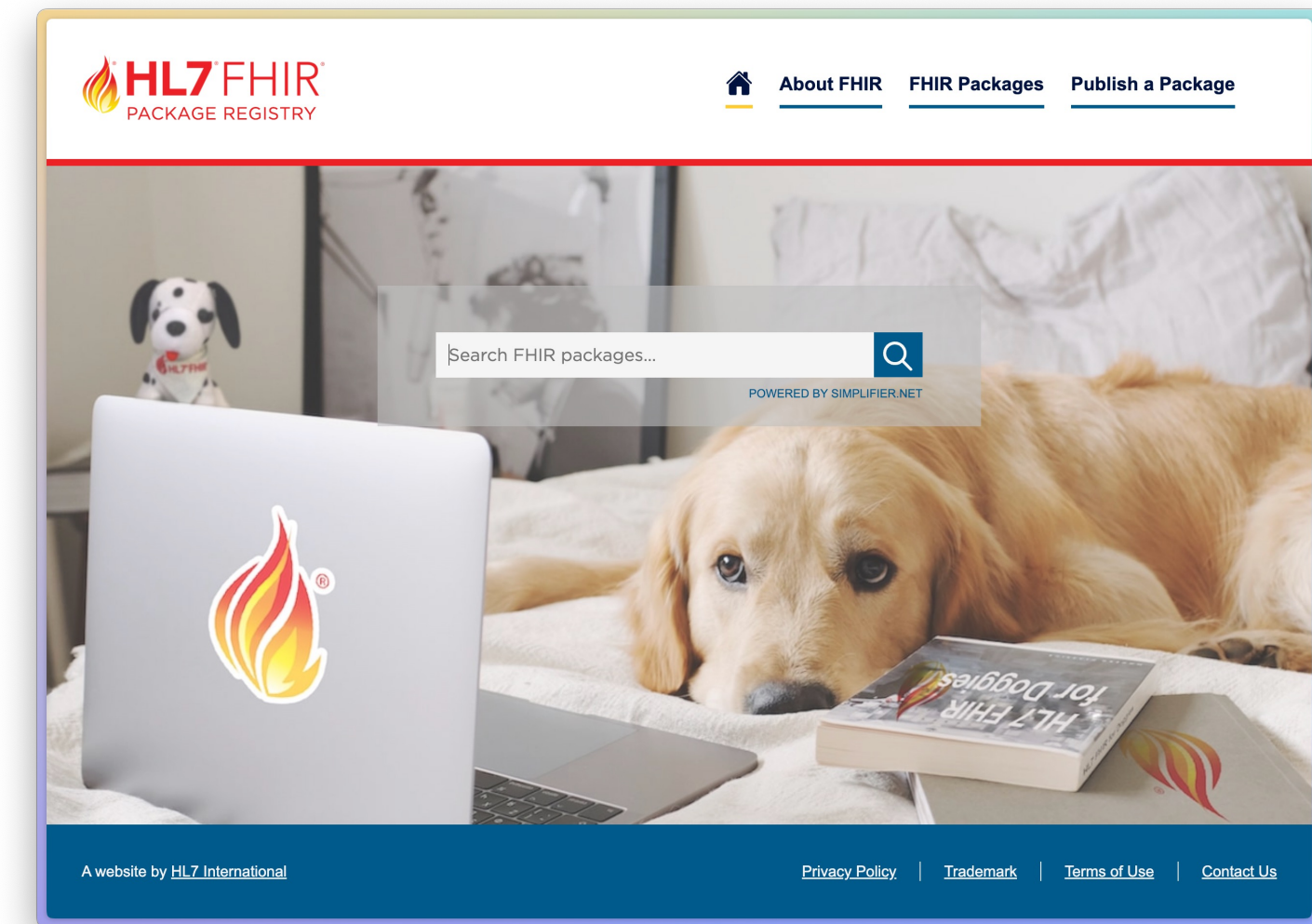
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Or start with an existing project:

- Download existing project as Zip file
- Upload to your new project
  - Restore dependencies
  - Restore guide and choose template

# The FHIR Package ecosystem

- Any FHIR tool (editing or server) gets their FHIR IGs from the Package Registry
- To get in:
  - Host your package online
  - Create a package feed to list them
  - Add the package feed in GitHub feeds list
  - Simplifier will pick it up and add to the registry
- Or: Just publish via HL7 ballot or Simplifier



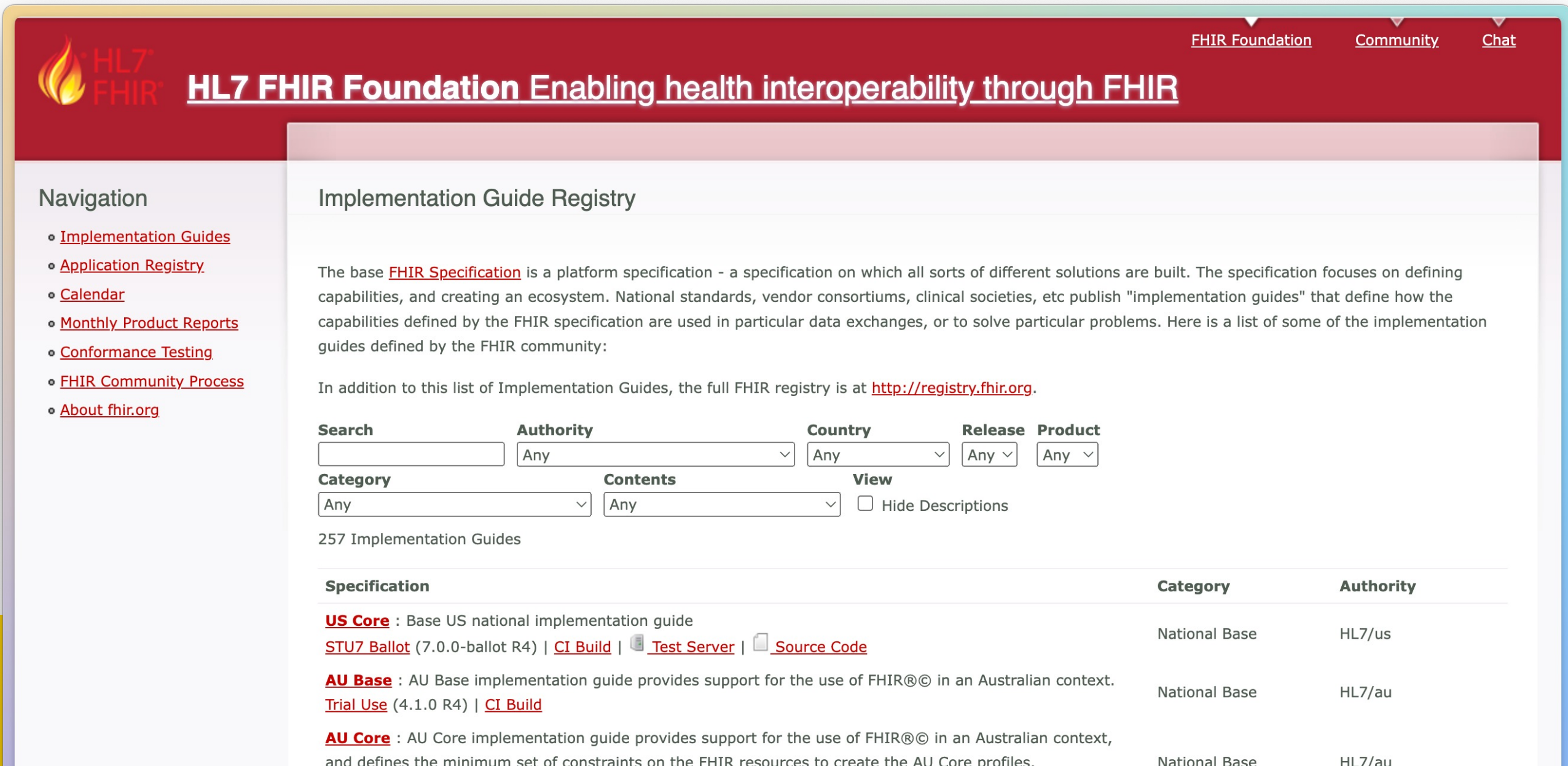
# Demo and code-along

- Publish a package with Simplifier
  - Set version to a prerelease version, to not confuse others

# Optional add-on

- Advertise your IG in the [FHIR Implementation Guide registry](https://registry.fhir.org)

“To add additional implementation guides, make a pull request against <https://github.com/FHIR/ig-registry> or email the [FHIR Product Director.](mailto:product-director@fhir.org)”




# Today's recap

- An interactive guide to the different ways to build a FHIR Implementation Guide from scratch.
- What we covered:
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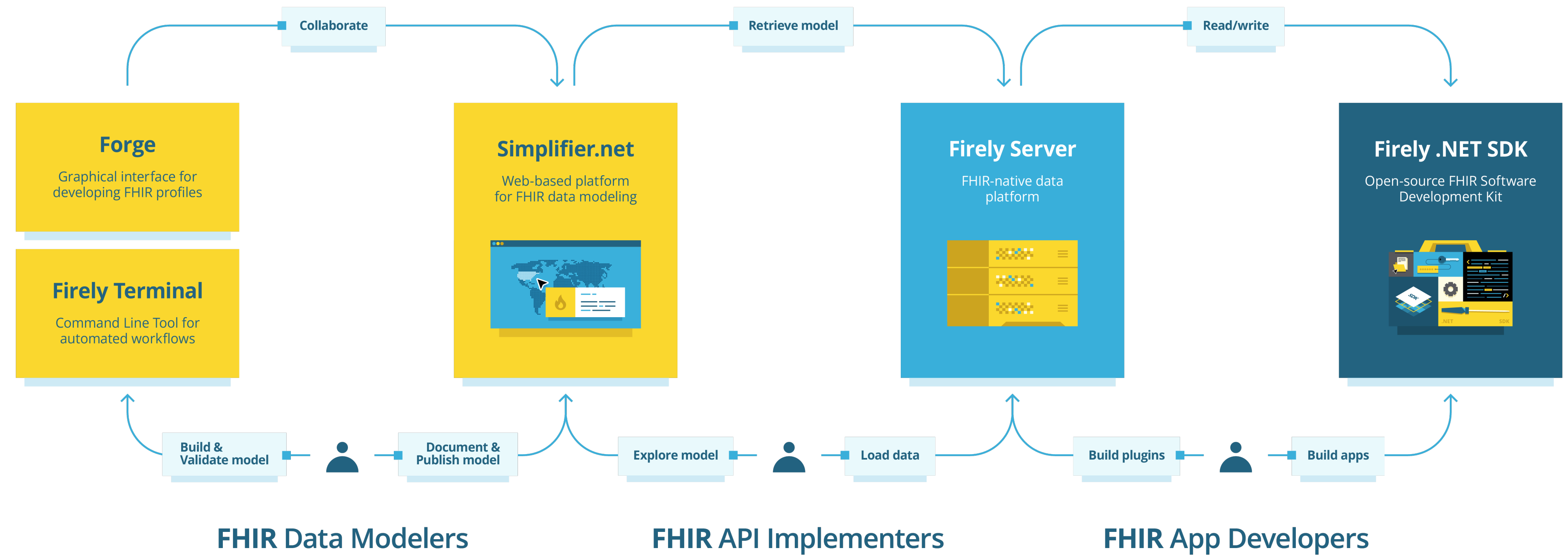
# More questions?

[ward@fire.ly](mailto:ward@fire.ly) / @wardweistra

Feedback?



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