



Let's Build! IG and packages with IG Publisher

José Costa Teixeira, imec / VAZG / RIZIV



HL7 FHIR DevDays 2020, Virtual Edition, November 17–20, 2020 | @FirelyTeam | #fhirdevdays | www.devdays.com/november-2020

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Who am I?

- José Costa Teixeira
- Consultant, imec / VAZG / RIZIV



Goal: Industrialize production and maintenance of Implementation Guides

- To enable fast growth, facilitate sharing and feedback
 - Community
 - Collaboration
 - Automation

Learning Objectives Tutorial/Let's Build

- Setting up an ImplementationGuide from scratch
- Mixing FHIR resources and sushi content
- Use a local template to change colors and logos
- Add some diagrams to your IG pages
- Add a feedback form and dashboard

<https://github.com/costateixeira/devdays-covid19-vaccine>

<https://github.com/costateixeira/devdays-covid19-vaccine/tree/c0cdfaaa31d568d70ba4c8a1b4dd638505e2bb61>

1. Setup a repository in github

- Add a license, a README
- Add a project to track issues
 - Add columns inside project
- Setup CI build: <https://github.com/FHIR/auto-ig-builder>
- (later) Add a feedback mechanism*

* (only with HL7 Be template for now)

<https://github.com/costateixeira/devdays-covid19-vaccine/commit/6c785ae56680affcbd136111435e9c9a90302883>

2. Set up one (or more) IG locally

- Choose a folder for your IGs – e.g. C:\ImplementationGuides
 - This way you don't have to get all those .jars every time.
- Use `sushi -i` **on your IGs folder**
- **OR** get an empty IG here: <https://github.com/hl7-be/empty-ig>
 - note that this IG uses the BE template by default
- Change names, ids, etc. (x marks the spot)
- **Check if it builds**
 - **(if not, use the auto-builder – for today)**

<https://github.com/costateixeira/devdays-covid19-vaccine/commit/6274d8b3b5a30b4217062e2e9a8cc7754051574b>

3. Add local template

- Add a my-template template folder to your ig folder
 - (This folder replicates the structure of a template and adds/replaces content)
- Tell your new template it's an add-on from another template
 - Add hl7.be.fhir.template as a base and dependency in package/package.json
- Tell your IG to use that template
 - In ig.ini, template = #my-template

<https://github.com/costateixeira/devdays-covid19-vaccine/commit/527e76bc1cca0bd2e2de3ffea811f00b8e98f86f>

4. Define your template - colors

- my-template/package/includes has a file `_append.fragment-css.html` ...
- ... which points to `devdays.css` ...
- ... which is in `package/content/assets/css`
- Let's change that one.

```

:root {
  --ig-status-text-color: #083b45; /* 1. IG Title and status text color */
  --navbar-bg-color: #0b5260; /* 2. Header container color */
  --footer-bg-color: #707070; /* 3. Footer background color*/
  --footer-container-color: #0b5260; /* 4. Footer container color */
  --stripe-bg-color: #999999; /* 5. Header strip color */

  --btn-hover-color: #077e74; /* 6. Menu button hover color */
  --btn-active-color: #559575; /* 7. Menu button active color */
  --btn-text-color: #e6e6e6; /* 8. Menu button text color */
  --btn-gradient-start-color: #428bca; /* 9. Menu item gradient start color */
  --btn-gradient-end-color: #357ebd; /* 10. Menu item gradient end color */
  --btn-gradient-start-color-alpha: #ff428bca; /* 11. Menu item gradient start color (with alpha) */
  --btn-gradient-end-color-alpha: #ff357ebd; /* 12. Menu item gradient end color (with alpha) */
  --link-color: #428bca; /* 13. Hyperlink text color */
  --link-hover-color: #2a6496; /* 14. Hyperlink text hover color */

  --publish-box-bg-color: yellow; /* 15. Publish box background color */
  --publish-box-border: 1px solid #0A0008; /* 16. Publish box border definition */

  --toc-box-bg-color: #ffeb7e; /* 17. TOC box background color */
  --toc-box-border: 1px solid navy; /* 18. TOC box border definition */

  --stu-note-background-color: #fff2ff; /* 19. (STU) Note box background color */
  --stu-note-border-left-color: #ffa0ff; /* 20. (STU) Note box border color */
}
  
```


<https://github.com/costateixeira/devdays-covid19-vaccine/commit/a246016829d5845a0eb0aa7f97b42d1d900ca647>

5. Define your template - logos

- my-template/package/includes has a file `fragment-header.html` ...
- ... which points to a couple of icons ...
- ... which are in `package/content/assets/images`
- Let's use or change those

```

<!-- Left logo - typically the publisher's logo - project or affiliate -->
<div id="project-nav">
  <a id="project-logo" no-external="true" href="http://hl7.be">
    
  </a>
</div>

<!-- Right logo - for example the FHIR logo -->
<!-- Make sure you have authorization to use the FHIR logo -->
<div id="family-nav">
  <a id="family-logo" no-external="true" href="http://hl7.org/fhir"> </a>
</div>

<!-- search icon - if you want -->
<!--
<div id="hl7-search">
  <a id="hl7-search-lnk" no-external="true" href="http://hl7.org/fhir/search.cfm"></a>
</div>
-->

```

6. Add standard content


- Models, resources... Use forge or notepad
 - Save in input/resources OR input/profiles, vocabulary...
- Add pages – markdown or xhtml

6. <https://github.com/costateixeira/devdays-covid19-vaccine/commit/71d56d4320f489d7c6e33090b73a214e0afe0d44>

7. <https://github.com/costateixeira/devdays-covid19-vaccine/commit/573fb20aa5aa99090a7ae9ba16222fa51c24414b>

8. <https://github.com/costateixeira/devdays-covid19-vaccine/commit/2e7515ea92e5eaaa93547f5ec01e35287793c7db>

9. <https://github.com/costateixeira/devdays-covid19-vaccine/commit/4975757180b52336fe971f0bb69b7a0e92099c3c>

- 
- cql
 - examples
 - extensions
 - fsh
 - history
 - images
 - images-source
 - includes
 - models
 - pagecontent
 - profiles
 - resources
 - scenarios
 - testing
 - vocabulary

<https://github.com/costateixeira/devdays-covid19-vaccine/commit/3c479ba8c30fa60c73030adcc284522a6f4e09d4>

10 Add change history

- Add Provenance resources (or a Bundle of those) to the IG, where the Provenance target is one of your resources.

- This activates the “history” tab

<https://github.com/costateixeira/devdays-covid19-vaccine/commit/eebe64e7c5b48ecdc19dacao996475521c1fc57c>

11. Add some sushi

- Just put some sushi in the fsh folder

<https://github.com/costateixeira/devdays-covid19-vaccine/commit/a6a818f930960114457a19d33bfebd869699003>

12. Add diagrams

- Add a file `xxxxxxx.plantuml` in images-source folder
- Use `{% include xxxxxxx.svg %}` in your xhtml pages

Example of a diagram:

```

@startuml
actor "Nurse" as n
participant "FHIR Repository" as fhir
group "Get Immunizations"
n -> fhir: "Consult Immunizations"
fhir -> n: "Bundle"
end
...
group "Immunization report"
n -> fhir: "Register Immunization"
end
...
group "Adverse Event Reporting"
n -> fhir: "Register Adverse Event"
end
@enduml
  
```

- More info: plantuml.com

<https://github.com/costateixeira/devdays-covid19-vaccine/commit/799808424cf4ce165b8d4c53ab1d93259b936e19>

13. Add feedback feature*

- (Alpha feature – still to be documented and some issues fixed)
- Setup:
 - Add columns to your project
 - Inbox: every suggestion
 - To do: accepted issues
 - WIP – WIP
 - Done - Done
 - Setup a token
 - Add a Google Form (TBD)
- Add a features.yaml file that activates and configures the feedback

What did we do?

- Setup a repository
 - With Kanban
- Setup an IG
 - Basic content
 - Add resources (from Forge or sushi)
 - Add pages (and menu options)
 - Add diagrams
 - Add feedback

Contact

- During DevDays, you can find / reach me here:
 - chat.fhir.org
 - Via Whova App – Speaker’s Gallery
 - Email: jose.a.teixeira@gmail.com
 - Twitter: Jose_CostaT

Q&A