

# IMPROVING PILLAR GENERATION PROCESSES

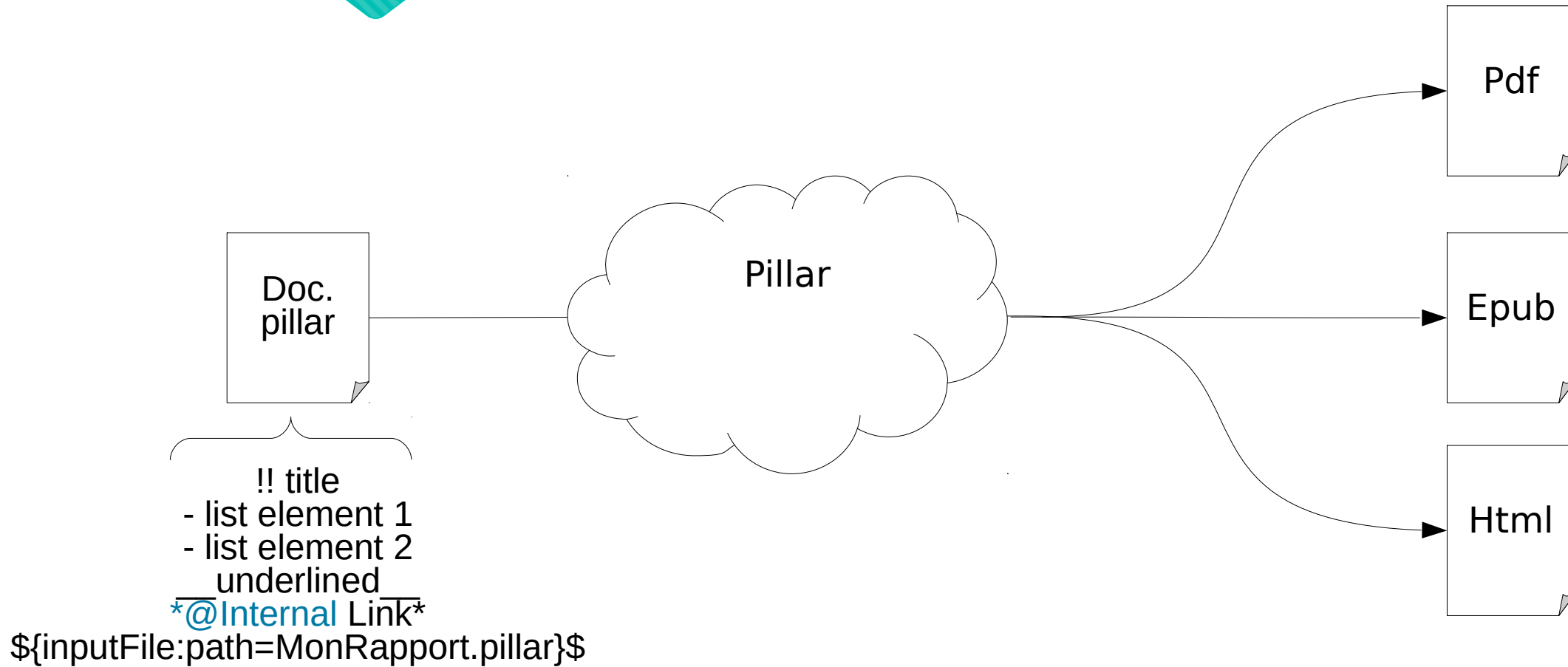


**Biyalou-Sama Asbathou**

# Plan

- Context
- Problems
- Solutions
- Demo
- Next Steps

# Context



# Problems

- Html templates were not in good state
- No Easy Hosting
- Compilation was not efficient
- Errors Handling and Reporting were not good

# My Main Contributions

- Propose new archetypes for books and personal websites
- Implement a pillar module to generate table of contents
- Automatic deploy platform using Continuous Integration
- Blogging / News list components

# A new archetype for Html

- Get some existing templates from another template engine
- Adapt templates to Mustache template system
- Manage support files (css, img, js ...) to have an archetype

# New Book Archetype Example

Pharo Book



- > About Pillar
- > Installing Pillar and Creating a Booklet
- > Pillar core syntactic elements
- > Specific markup
- > Templates (draft)
- > Pillar from Pharo (To be updated)
- > Setting Up Travis
- > Deploying your documents
- > Deploy your html books using Travis and Github Pages
- > Pillar cheatsheet

## PUBLISHING DOCUMENTS WITH PILLAR 7.0

The current document is a little tutorial to show you how to begin with the creation of booklet. It describes the installation, customisation and integration with travis and bintray online services. From that perspective it can be mapped to other integration services.

We will use bintray to store the latest pdf produced by travis and we will use github to store the released pdf.

### About Pillar

Pillar is a system to manage documents (books, presentations, web sites). It is able to emit resulting documents in multiple formats (html, markdown, latex, AsciiDoc). It is composed of several modules such as importers, transformers, document model and outputers.

This book describes Pillar in its current version 7.0. Pillar is currently developed and maintained by Stéphane Ducasse and Guillermo Polito. The original author of Pillar was Damien Cassou. Many people have also contributed to Pillar: Ben Coman, Guillermo Polito, Lukas Renggli (original author of Pier from which a first version of Pillar has been extracted), Benjamin van Ryseghem, Cyril Ferlicot-Delbecque, Thibault Arloing and Yann Dubois.

This book adapts, extends, clarifies the chapter explaining Pillar in the *Enterprise Pharo: a Web Perspective* book.

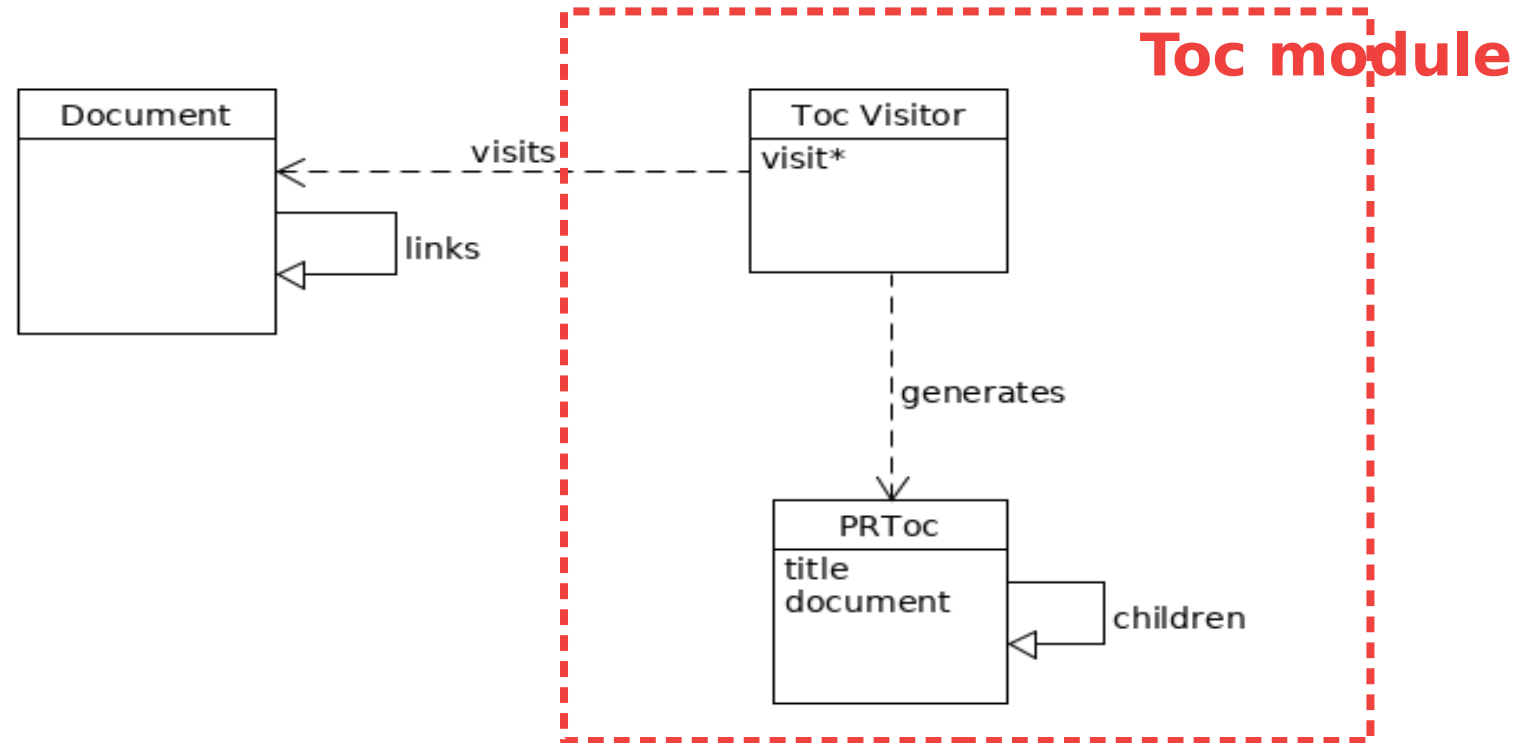
Pillar was sponsored by [ESUG](#).

### Introduction

Pillar (hosted at <http://github.com/pillar-markup>) is a markup language and associated tools to write and generate documentation, books (such as this one), web sites, and slide-based presentations. The Pillar screenshot in Figure shows the HTML version of chapter Voyage.



# Pillar Toc module





# Rendering the TOC

Pharo Book



- > About Pillar
- > Installing Pillar and Creating a Booklet
- > Pillar core syntactic elements
- > Specific markup
- > Templates (draft)
- > Pillar from Pharo (To be updated)
- > Setting Up Travis
- > Deploying your documents
- > Deploy your html books using Travis and Github Pages
- > Pillar cheatsheet

## PUBLISHING DOCUMENTS

The current document is a little tutorial to show you how to begin with the creation of booklet. It describes the installation and how to use the system. It is also mapped to other integration services.

We will use bintray to store the latest pdf produced by travis and we will use github to store the released pdf.

## About Pillar

Pillar is a system to manage documents (books, presentations, web sites). It is able to emit resulting documents in multiple formats (pdf, html, etc). It uses transformers, document model and outputters.

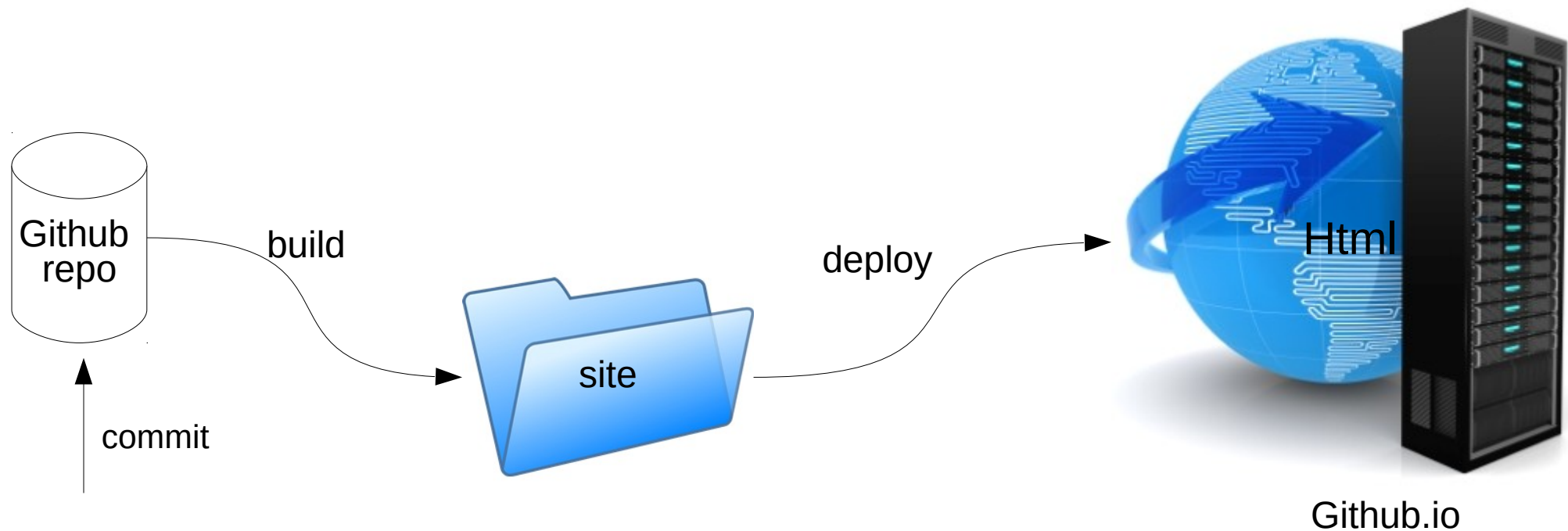
This book describes Pillar in its current version 7.0. Pillar is currently developed and maintained by Stéphane Ducasse. Pillar: Ben Coman, Guillermo Polito, Lukas Renggli (original author of Pier from which a first version of Pillar has been derived).

This book adapts, extends, clarifies the chapter explaining Pillar in the *Enterprise Pharo: a Web Perspective* book.

Pillar was sponsored by [ESUG](#).

## Introduction

# Automatic Deploy : Github + Travis



**TRAVIS CONTINUOUS INTEGRATION**

# Personal Sites Archetype

GUILLERMO POLITO


About me

Projects

Research Activities

Publications

Coordinates



Guillermo Polito

Mastering objects

## About me

Coding enthusiast. Mad hatter. Software engineer and researcher.

I am currently working as a post-doc researcher at Vrije Universiteit Brussel, on security for programming languages in cloud computing applications.

My main topics of interests are the runtime adaptation of applications, Virtual Machine design and development, and programming language tools. For that, I work on reflective applications and programming languages. I participate in the open source community of the [Pharo](#) programming language and environment.

I obtained the 13 of april 2015 my Phd entitled "Virtualization support for application runtime specialization and extension" under the direction of Stéphane Ducasse ([Inria Rmod team](#)) and the supervision of Noury Bouraqadi and Luc Fabresse([CAR team](#) of Mines Douai).

I love coding. I spend a lot of my free time helping the amazing community of [Pharo](#). I also participate in several projects such as the Pharo's database driver suite ([DBXTalk](#)), it's shortcut framework, or the static web page generator Ecstatic.

## Awards

- 2013 "1st prize" of the [ESUG innovation technology awards](#) presenting Oz Recovery Tools.
- 2012 "2nd prize" of the [ESUG innovation technology awards](#) presenting Hazelnut.
- 2011 "3rd prize" of the [ESUG innovation technology awards](#) presenting Ozono(formerly LOOP) in conjunction with Nicolas Passerini, Gisela Decuzzi, Carla Griggio and German Leiva.

## News

23-10-2015 I will be @Pittsburgh for [SPLASH'15](#). I'll present there two papers on the onward track!

03-07-2015 I will be @Prague for [ECOOP'15](#). I'll present [Pharo](#) there and we will do some fun coding!

22-05-2015 I got two papers accepted in [Onward'15](#). Thanks to everybody that collaborated, and see you @Pittsburg!

# Demo



# Next Steps

- Blogging Plugin for personal sites
- New system of compilation : Mike
- Review the way warnings and errors are reported

# Conclusion

POLITO

About me Projects Research Activities Publications Coordinates



Guillermo Polito

Working objects

## About me

Coding enthusiast. Mad hatter. Software engineer and researcher.

I am currently working as a post-doc researcher at Vrije Universiteit Brussel, on security for programming languages in cloud computing applications.

My main topics of interests are the runtime adaptation of applications, Virtual Machine design and development, and programming language tools. For that, I work on reflective applications and programming languages. I participate in the open source community of the [Pharo](#) programming language and environment.

I obtained the 13 of april 2015 my Phd entitled "Virtualization support for application runtime specialization and extension" under the direction of Stéphane Ducasse ([Inria Rmod team](#)) and the supervision of Noury Bouraqadi and Luc Fabresse([CAR team](#) of Mines Douai).

I love coding. I spend a lot of my free time helping the amazing community of [Pharo](#). I also participate in several projects such as the Pharo's database driver suite ([DBXTalk](#)), it's shortcut framework, or the static web page generator Ecstatic.

## Awards

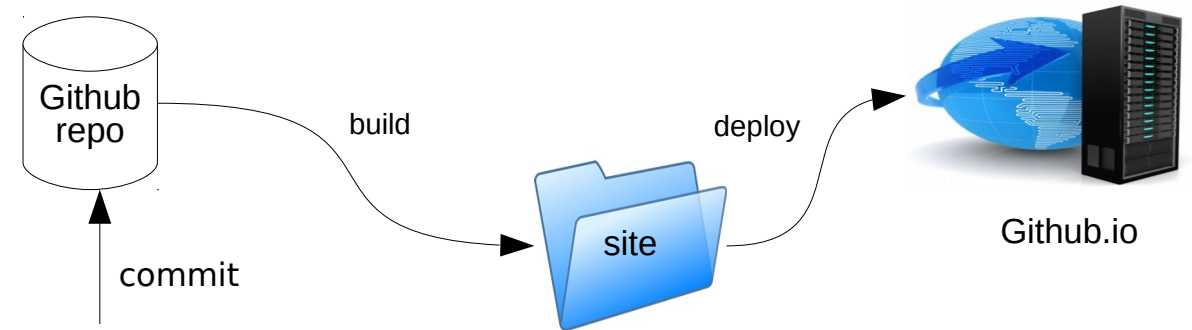
- 2013 "1st prize" of the [ESUG innovation technology awards](#) presenting Oz Recovery Tools.
- 2012 "2nd prize" of the [ESUG innovation technology awards](#) presenting Hazelnut.
- 2011 "3rd prize" of the [ESUG innovation technology awards](#) presenting Ozono(formerly LOOP) in conjunction with Nicolas Passerini, Gisela Decuzzi, Carla Griggio and German Leiva.

## News

23-10-2015 I will be @Pittsburgh for [SPLASH'15](#). I'll present there two papers on the onward track!

03-07-2015 I will be @Prague for [ECOOP'15](#). I'll present [Pharo](#) there and we will do some fun coding!

22-05-2015 I got two papers accepted in [Onward'15](#). Thanks to everybody that collaborated, and see you @Pittsburg!



## TRAVIS CONTINUOUS INTEGRATION

Pharo Book

- ✱
- > About Pillar
- > Installing Pillar and Creating a Booklet
- > Pillar core syntactic elements
- > Specific markup
- > Templates (draft)
- > Pillar from Pharo (To be updated)
- > Setting Up Travis
- > Deploying your documents
- > Deploy your html books using Travis and Github Pages
- > Pillar cheatsheet

## PUBLISHING DOCUMENTS WITH PILLAR 7.0

The current document is a little tutorial to show you how to begin with the creation of booklet. It describes the installation, customisation and integration with travis and bintray online services. From that perspective, it is mapped to other integration services.

We will use bintray to store the latest pdf produced by travis and we will use github to store the released pdf.

## About Pillar

Pillar is a system to manage documents (books, presentations, web sites). It is able to emit resulting documents in multiple formats (html, markdown, latex, AsciiDoc). It is composed of several modules such as transformers, document model and outputters.

This book describes Pillar in its current version 7.0. Pillar is currently developed and maintained by Stéphane Ducasse and Guillermo Polito. The original author of Pillar was Damien Cassou. Many people have contributed to Pillar: Ben Coman, Guillermo Polito, Lukas Renggli (original author of Pier from which a first version of Pillar has been extracted), Benjamin van Ryseghem, Cyril Ferlicot-Delbecque, Thibault Arloing and Yann L.

This book adapts, extends, clarifies the chapter explaining Pillar in the *Enterprise Pharo: a Web Perspective* book.

Pillar was sponsored by [ESUG](#).

## Introduction

Pillar (hosted at <http://github.com/pillar-markup>) is a markup language and associated tools to write and generate documentation, books (such as this one), web sites, and slide-based presentations. The Pillar Figure shows the HTML version of chapter Voyage.

# Toc Visit

The screenshot displays the PR TocBuilderVisitor IDE interface. The top bar shows the command `PR TocBuilderVisitor>>#visitInputFileAnnotation:`. The left sidebar contains a project tree with 'Pillar-Ex' at the top, followed by 'Last Modified Methods', 'Configurations', 'Work', and several 'Pillar-Exporter' sub-projects. The 'Toc' class is selected under 'Pillar-ExporterCore'. The main editor area shows the 'visitInputFileAnnotation' method, which is an annotation that takes parameters for document, source, current, and new source, and performs a series of operations including resolving, parsing, and updating in-process files. The right sidebar shows a 'History Navigator' with a list of methods, including 'addToToc:', 'currentFile:', 'documentSource:', 'inProcessFiles:', 'initialize', 'pop', 'push:', 'tableOfContents', 'top', 'validateInclusionOfFile:', 'visit:', 'visitHeader:', and 'visitInputFileAnnotation:'. The 'visitInputFileAnnotation:' method is highlighted in blue.

PR TocBuilderVisitor>>#visitInputFileAnnotation:

Scoped Variables

Pillar-Ex

- Last Modified Methods
- Configurations
- Work
- Pillar-ExporterAsciiDoc
- Pillar-ExporterBeamer
- Pillar-ExporterCore
  - Base
  - Configuration
  - Exceptions
  - Export
  - Feature-ScriptFromFile
  - Feature-Structures
  - Features
  - Manifest
  - Toc**
  - Utilities
- Pillar-ExporterDeckJS
- Pillar-ExporterEPub
- Pillar-ExporterHTML
- Pillar-ExporterLaTeX
- Pillar-ExporterMarkdown
- Pillar-ExporterPillar
- Pillar-ExporterText

PR TocBuilderVisitor

Hier. Class Com.

History Navigator

- all --
- accessing
- initialization
- visiting

- addToToc:
- currentFile
- currentFile:
- documentSource
- documentSource:
- inProcessFiles:
- initialize
- pop
- push:
- tableOfContents
- top
- validateInclusionOfFile:
- visit:
- visitHeader:
- visitInputFileAnnotation:**

**visitInputFileAnnotation:** anAnnotation

```
[ document sourceSave currentSave newSource ]
"Resolve and parse the new file"
sourceSave := self documentSource.
currentSave := self currentFile.
newSource := self documentSource parent resolve: anAnnotation path.
self validateInclusionOfFile: newSource.
document := PRPillarParser parse: newSource contents.
self documentSource: newSource.
self currentFile: anAnnotation path.

"Update inProcessFiles with the actual document"
self
    inProcessFiles: (inProcessFiles copyWith: self documentSource);
    visit: document.

"Get the original values"
self currentFile: currentSave.
self documentSource: sourceSave
```



# Toc Tests

- ▲ actualClass
  - createCyclicPillarFile1
  - createPillarFile1
  - createPillarFile2
  - createPillarFile3
- ▲ setUp
- ▲ tearDown
- testDocumentWithCyclicInputShouldRaiseError
- testDocumentWithInputAnnotationAndTitle
- testDocumentWithInputAnnotationContainsMultipleTocs
- testDocumentWithInputAnnotationHasTocs
- testDocumentWithOnlyInputAnnotation
- testDocumentWithoutInputAnnotationOnlyContainsTitles
- testTitlesHaveGoodFileRefs
- testTocChildrenHasTheSameLevel
- testTocHasGoodLevelOfChildren
- testTocHasOneChildren
- testTocIsEmpty
- testTocOnlyContainsTocs



# Travis config

```
language: smalltalk

os:
  - linux

smalltalk:
  - Pharo-6.1

env:
  matrix:
    - JOB=test TYPE=System ARCHETYPE=book OUTPUT=html

install:
  # Pillar installation
  - git clone https://github.com/pillar-markup/pillar.git .pillar -b dev-7 # Clone pillar
  - cd .pillar && ./scripts/build.sh && cd ..

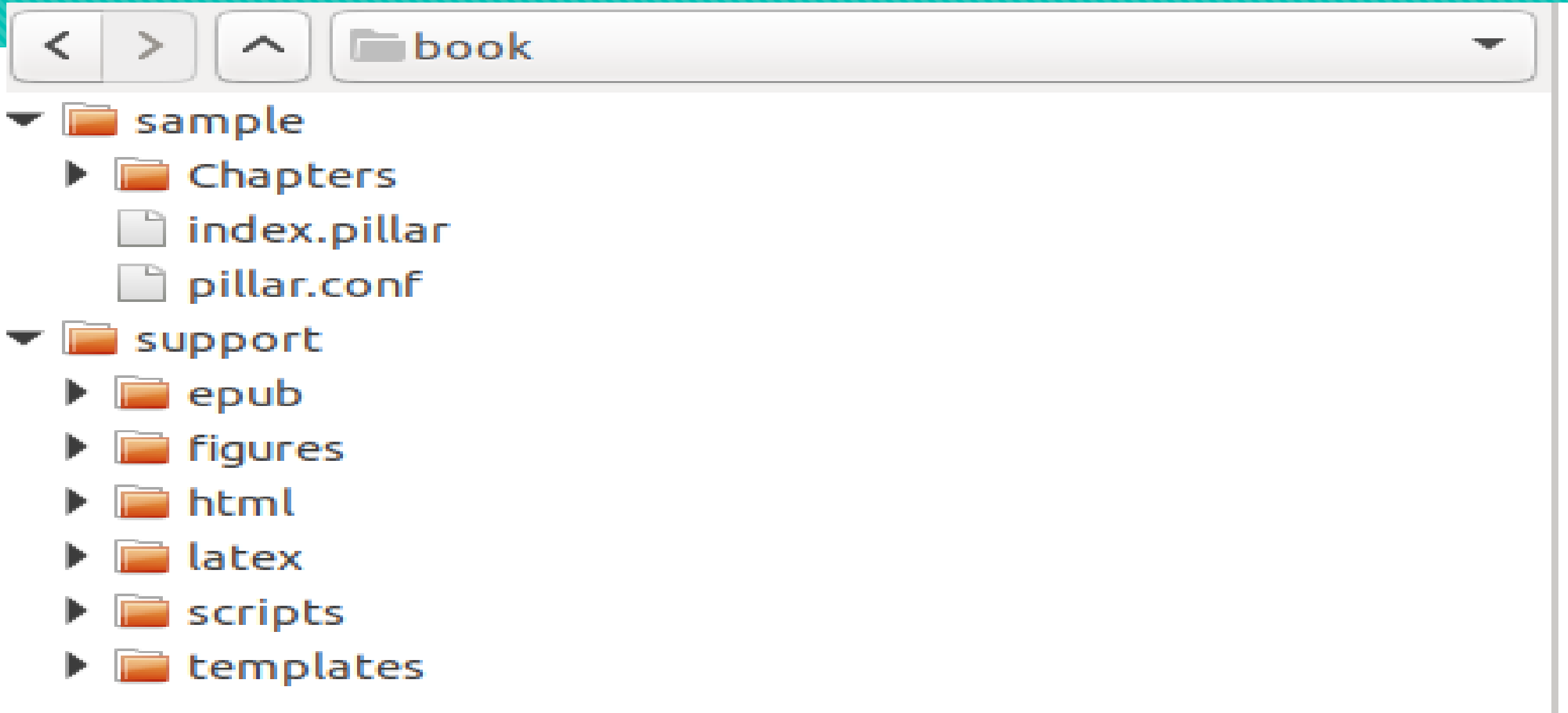
script:
  - .pillar/build/pillar build html
  - cd _result/html && touch .nojekyll && cd ..

deploy:
  provider: pages
  skip-cleanup: true
  github-token: $GH_TOKEN
  keep-history: true
  local_dir: _result/html
  on:
```

# Mustache template New archetype

```
3 <div class="burger" ><a href="javascript:void(0); style="font-size:15px; >☰</a></div>
4
5 </header>
6 <article>
7   <aside>
8     <ul class="menu">
9       <li data-nav-id="123" class="dd-item">
10        <a href="{{base_url}}">
11          <i class="fa fa-fw fa-home"></i>
12        </a>
13      </li>
14      {{# toc.children }}
15      <li class="dd-item {{# hasChildren}} haschildren {{/ hasChildren}}">
16        <div>
17          <a href="{{base_url}}{{href}}">
18            {{name}}
19          </a>
20          {{# hasChildren}} <i class="fa fa-angle-right fa-lg category-icon"></i> {{/ hasChildren}}
21        </div>
22        <ul class="dd-item">
23          {{# children }}
24          <li class="dd-item {{# hasChildren}} haschildren {{/ hasChildren}}">
25            <div>
26              <a href="{{base_url}}{{href}}">
27                {{name}}
28              </a>
29              {{# hasChildren}}<i class="fa fa-angle-right fa-lg category-icon"></i>{{/ hasChildren}}
30            </div>
31            <ul class="dd-item">
32              {{# children }}
33              <li class="dd-item">
34                <a href="{{base_url}}{{href}}">{{name}}</a>
35              </li>
36            </ul>
37          </li>
38        </ul>
39      </li>
40    </ul>
41  </aside>
42  <section class="page">
43    <h1>{{title}}</h1>
44    {{{content}}}
```

# Archetype architecture



# Pillar syntax

## Headers

!Header 1

!!Header 2

!!!Header 3

## Special Paragraphs

Annotation      @@note this is a note

Todo            @@todo this is todo

## Lists

- Unordered List      # Ordered List

; Description Term      : Description Definition

## Text Formats

""bold""

"italic"

--strikethrough--

\_\_underline\_\_

==monospace==

@@subscript@@

## Comment

% each line starting with % is ignored

## Tables

|| Centered Cell      || Centered Title

|{ Left-Aligned Cell      || Right-Aligned Cell

## Links

Anchor            @anchor

Internal Link      \*@anchor\*

External Link      \*Google>www.google.fr\*

## Figures

+Caption>file://pic.png|width=50|label=fig+

## Scripts

```
[[[label=hello|language=Smalltalk
Transcript show: 'Hello World'.
]]]
```

## Raw

```
{{{latex:
injects raw \LaTeX in your output file
}}}
{{{html:
injects raw <b>html</b> in your output file
}}}
```