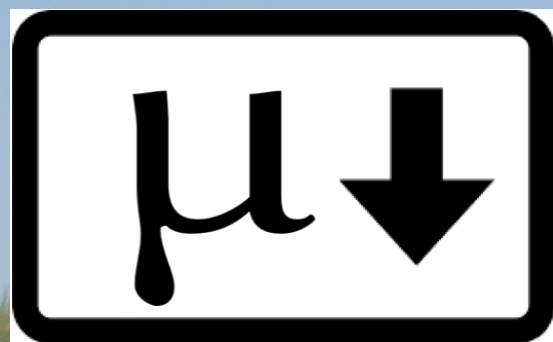


Pillar, Foliage, Microdown's news

Stéphane Ducasse



ESUG 2026



Pillar ecosystem news



- Pillar is alive
- Microdown is gorgeous
 - supports GH, books, slides, agenda, /doc, comments
- Foliage was the missing piece
- I do not want to have to use pandoc :)

Pillar news...



- Pillar only using Microdown 2.0
- No more Pillar syntax
- No more Pillar ASTs and Visitors
- Pillar is a compilation chain
- Updated to Clap

Pillar news...

- New LaTeX template for Book on Demand
- Cleaned other templates
- Latest version is v11.2.5

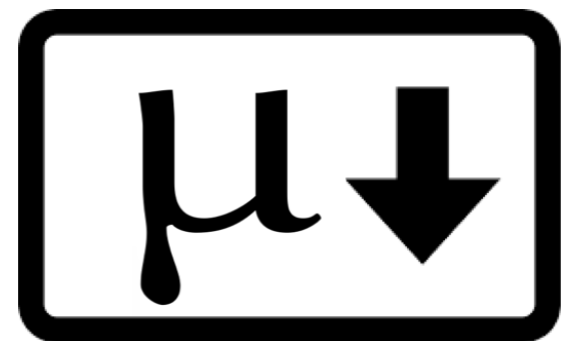
LaTeX hell 'solved'

- SBA book
 - Works in LaTeX 2024 locally and on GH
 - Works only locally in LaTeX 2025
 - Works in LaTeX 2026 locally and on GH

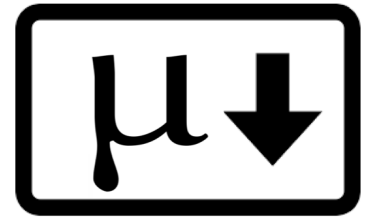
Next Step: others

- Books automatically published online [HTML]
- Tx Andrezej for the TOC logic
- Call for templates for slides
- Check the pillar archetype
 - microdown-mooc for microdown style contents
 - microdown-headerformat-mooc

Microdown news



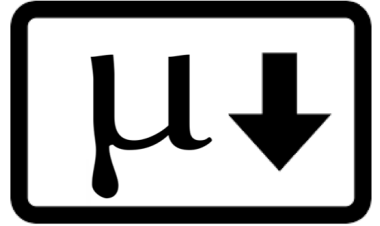
Microdown



a clean and extensible markup language

- Markdown clean and non-ambiguous **subset**
- **Extensible**
- A **robust parser** tolerates non-supported syntax

A Markdown Compatible Subset



*** horizontal lines

... ##### headers

```

code blocks

```

1. ordered

2. lists

* unordered

* lists

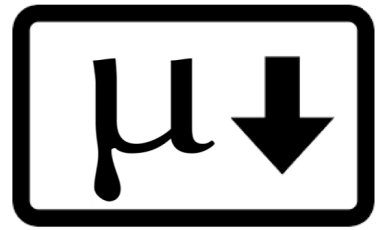
[link](https://
example.com)

![figure](image.jpg)

+ Blockquotes, tables,
bold, italics...

Microdown Extensions

(ignored by Markdown)



% Comments

This title has an anchor
@anchor

+ inline math

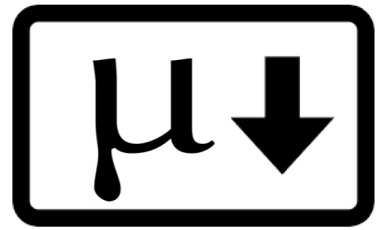
Extensible annotations

<?footnote | value=footnote is an annotation.?>

![Our Logo%?size=80&label=logo1](logo.png)

References to anchors ***@anchor@*** and figures
@logo1@.

Microdown 2.0



- New support {{{
- Special break
- Support for <HTML> at start of lines (remember markdown in line based)
- generates the full <https://www.pharo.org> web site
- Document validator see IWST paper

Book Validation

- Why this figure is not referenced?
- “oh this example does not work?”
- “oh this example was working on the previous version and now it does not anymore :(“

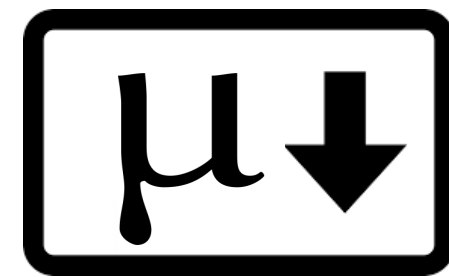
6 Rule kinds

- Typography
- Vocabulary
- Code display
- Infrastructure
- Semantics
- Evolution

Overview of rules

Rule name	Kind	Description
ENGLISH TYPOGRAPHY	typography	Check that punctuation follows English typography: in English, there is no space before diacritics (;?!), and there is space after diacritics and (.,). I pay attention that a diacritic can be the last character of a line: in this case, I do not report errors.
FRENCH TYPOGRAPHY	typography	Check that punctuation follows French typography: in French, there is a space before diacritics (;?!), and there is space after diacritics and (.,).
NOTTHEFIGUREX	typography	Check that references to figures, sections, and tables are correctly capitalized before an anchor and that there is no 'the' before.
HEADER CAPITALIZATION	typography	Check that headers follow a consistent capitalization strategy (uppercase or lowercase, including stopword handling).
LAST PERIOD IN CAPTION	typography	Check that caption in figure, math equation or code block either ends with a terminating period or not, depending on my configuration.
LAST PERIOD IN LABELS	typography	Check that paragraph labels consistently ends with a period.
EMPTY CAPTION	typography	I verify that captions are not left empty.
VOCABULARY	vocabulary	I check that certain vocabulary is not used. I'm configured with a list of pairs showing the vocabulary that should not be used and the correct one.
METHOD REFERENCE	code	Check that method references are consistent within a document.
METHOD STRUCTURE	code	Check that methods in code blocks have an empty line after the selector when there is no comment.
CODE INDENTATION	code	Check that code blocks use tabs for indentation instead of spaces.
CODE LAST PERIOD	code	Check that a code block either ends with a terminating period or not.
REFERENCE CHECKS	infrastructure	Check duplicated anchor definitions, missing references
NO SPACE IN FILENAME	infrastructure	Identify files with space in their names.
CODE EXPRESSION TEST	semantics	Check that code block 'evaluation' is correct.
DESYNCHRONIZED CODE	evolution	Verify that synchronizable code blocks are in sync with the system version.

Microdown 20 book Validator



✕

—

□

Microdown Checker Dashboard

☒ NotTheFigureX

☒ CodeBlockValidator

☒ CodeIndentation

☐ EnglishTypography

☒ EmptyCaption

☒ NoSpaceInFilename

☐ FrenchTypography

☐ HeaderCapitalization

☐ UnnamedChecker

☐ MethodReferenceUsingHash

/Users/ducasse/Workspace/FirstCircle/MyBooks/Bk-Writing/PharoBooks2/NewPharoByExample9/index.md

Browse

Run Checkers

Export HTML Report

Results

File Content

Unreferenced Figures

- test status: Passed

isExpectedFailure? false

Description of the test result : Test passed

the concerned code Block : 3 + 4

>>> 7

^

I check that references to figures, sections and tables are correctly capitalized before an anchor and that there is no 'the' before.

When there is a number (given by an anchor) the section/figure... must be uppercased and not preceeded by the or an.

In Microdown, references should be written as and the following texts are correct

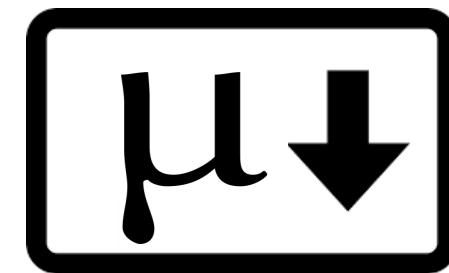
...

- in Figure `*@figureExample@*`

in Section `*@sectionExample@*`

^

Books...



<https://squarebracketAssociates/BookBuilderdashboard>

SquareBracketAssociates / BookBuilderDashboard

CodeIssues1Pull requestsAgentsActionsProjectsWikiSecurity and qualityInsightsSettings

Files

master

Go to file

.github

.gitignore

README.md

BookBuilderDashboard / README.md

Ducasse Update README.md0fba767 · 8 months

PreviewCodeBlame200 lines (146 loc) · 25.1 KB

Watchdog list

In subsequent section, you can find the current todo to get this bar green. Here is a list of some of the books, we migrated to latest latex template and latest stable pillar.

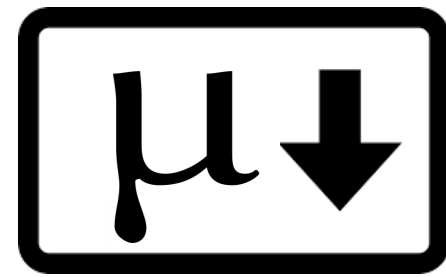
Books in print @ Book on Demand

Books	Build Status	PDF	State	Type	Notes
Booklet-TestingInPharo		Download PDF	Published	Microdown	For new version: adding mutation testing and test smells
PharoWithStyle		Download PDF	Published	Microdown	
NewPharoByExample9		Download PDF	Published	Microdown	Available on Bod but we should harvest fixes (note repository is newPBE and not PBE). May be postpone to Pharo 15
Reflective Kernel		Download PDF	Published	Microdown	
Building applications with Spec2		Download PDF	Published	Microdown	

Next books to be on print @ Book on Demand

Books	Build Status	PDF	State	Type	Notes
Booklet-AdvancedMicroProjects		Download PDF	Released	Microdown	Should be revisited for publication
Booklet-DataFrame		Download PDF	Ongoing	Microdown	Bod - Pillar 10.2 - BuildGHNotOk

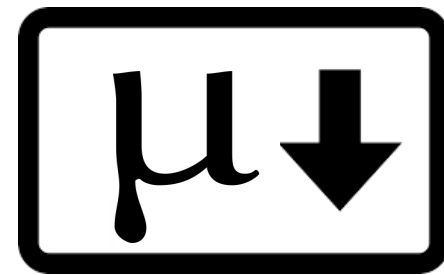
Support for Slides



- All the Mooc slides are written in Microdown
 - Special mapping μ Down headers to μ Down

Support for Slides

All the Mooc slides are written in Microdown



```
{  
  "title" : "A double dispatch starter",  
  "slidesid" : "M6S1",  
  "subtitle" : "Stone Paper Scissors"  
}
```

Goals

- Exercise dispatch
- Do not use conditionals!
- Implement:

...

> Stone new vs: Paper new

#paper

...

Advanced Object-Oriented Design

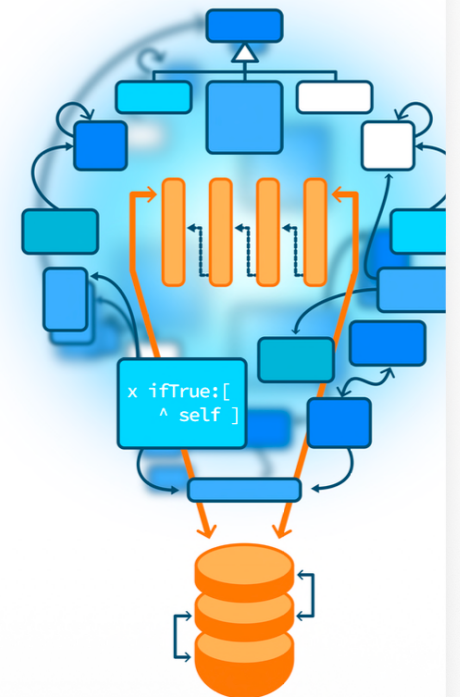
A double dispatch starter

Stone Paper Scissors

S.Ducasse, L. Fabresse, G. Polito, and P. Tesone



<http://www.pharo.org>



Goals

- Exercise dispatch
- Do not use conditionals!
- Implement:

> Stone new vs: Paper new
#paper

Next Step: templated renderer

- Should release and use the templated renderer
- Each DOM element can be associated with a template
- Style customization (HTML, LaTeX) in the hand of the user not the framework

Foliage news



Foliage 2.0



- Based on Foliage 1.0
- More comments and tests
- No more Pillar AST and visitors duplicated
- Just using Microdown > 2.0
- Has the start of a **plugin** architecture
- Support to deploy on GH or elsewhere

Foliage 2.0

Full Pharo web site is in Foliage 2.0

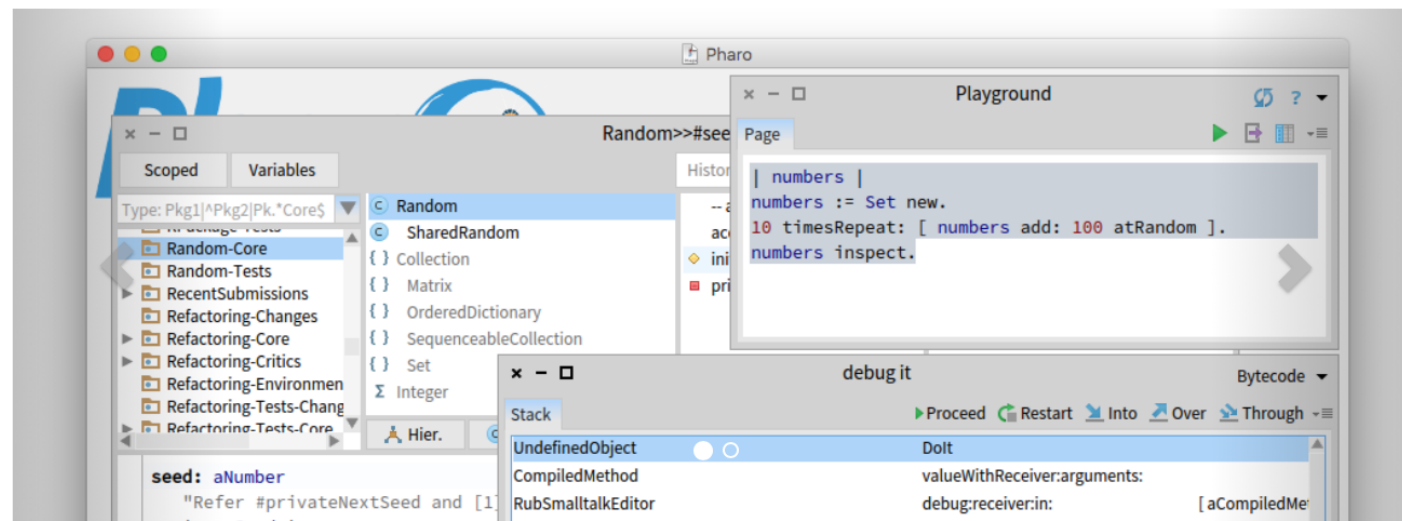


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The immersive programming experience

Pharo is a pure object-oriented programming language *and* a powerful environment, focused on simplicity and immediate feedback (think IDE and OS rolled into one).



Discover

Learn more about Pharo's key
[features](#) and elegant design.

Download

Download latest version !
Read more about [here](#)

Learn

Access the Pharo Mooc!
3000 people registered and
follow the Pharo Mooc. You can

Foliage 2.0 on GH

- less than 50s to publish esugweb20

The screenshot displays the GitHub Actions interface for the repository 'ESUG / ESUGWeb20'. The 'Actions' tab is selected, showing a workflow named 'pages build and deployment #6' with a green checkmark indicating success. The workflow was triggered via GitHub Pages 4 days ago. The summary table shows the status as 'Success', a total duration of '50s', and '1' artifact. The workflow steps are listed on the left: 'build', 'report-build-status', and 'deploy', all with green checkmarks. The 'Run details' section shows the 'Usage' of the workflow. The main area displays a diagram of the workflow steps: 'build' (30s) leads to 'report-build-status' (5s), which then leads to 'deploy' (10s). The 'deploy' step includes the URL 'http://esug.org/ESUGWeb20/'.

ESUG / ESUGWeb20

Code Issues Pull requests Agents Actions Projects Wiki Security and quality Insights Settings

✓ pages build and deployment #6

Summary

All jobs

- ✓ build
- ✓ report-build-status
- ✓ deploy

Run details

Usage

Triggered via GitHub Pages 4 days ago

Status	Total duration	Artifacts
Success	50s	1

pages-build-deployment
on: dynamic

build 30s

report-build-status 5s

deploy 10s
<http://esug.org/ESUGWeb20/>

FoliageSample to get started

- Tiny web site with blogs
- <https://github.com/pillar-markup/FoliageSample>

Tintin: an Independent Journalist

[Home](#)

[Publications](#)

[News](#)

Current responsibilities

I'm a journalist. I joined several international expeditions with my smart dog Milou.

My best friends are Captain Haddock and Prof. Tournesol.

Some Adventures

- L'Oreille cassée
- L'île noire
- Le Sceptre d'Ottokar
- Le crabe aux pinces d'or
- Objectif lune



[Tintin](#)

[Home](#) | [Tintin.com](#)

Foliage plugin at work

```
{  
  "title" : "Publications",  
  "layout" : "index",  
  "plugin" : [ "kind" : "publicationList",  
    "pluginSpec" : [  
      "authorMatchingString" : "Ducasse",  
      "setFiltering" : "true",  
      "keysOfBlackListedEntries" : [ "Berg13b", "Berg16a", "Denk14a", "Denk15a", "Denk16a",  
"Denk18a", "Denk19a", "Denk20a", "Denk21a", "Anqu17a", "Denk22a", "Denk23a", "Denk24a" ,  
"Denk25a" ],  
      "bodySpecification" : [ "internationalJournal", "nationalJournal", "topConference",  
"internationalConference", "nationalConference", "invitedPaper", "bookChapter", "book", "editor",  
"internationalWorkshop", "booklet", "technicalReport", "vulgarisation" ],  
      "bibFilename" : "rmod.bib" ] ],  
  "publishDate" : "2025-06-01"  
}
```

Publications

Stéphane Ducasse

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Publications

Here is a list of the articles I wrote over the years. Not all my books may be listed here.

Check

- <https://books.pharo.org>
- <http://stephane.ducasse.free.fr/Books.html>

Refereed Articles in International Journals

1. Nahuel Palumbo, Guillermo Polito, Stéphane Ducasse and Pablo Tesone, [Meta-compilation of Baseline JIT Compilers with Druid](#), The Art, Science, and Engineering of Programming, 10, Aspect-Oriented Software Association (AOSA), 2025, [URL](#), [DOI](#)
2. Juan Pablo Sandoval Alcocer, Harold Camacho-Jaimes, Geraldine Galindo-Gutierrez, Andrés Neyem, Alexandre Bergel and Stéphane Ducasse, [C](#), [Statistical Machine Translation for Suggesting Variable Names for Decompiled Code: The Pharo Case](#), Journal of Computer Languages, 2024, [DOI](#), [PDF](#)
3. Balsa Sarenac, Nicolas Anquetil, Stéphane Ducasse and Pablo Tesone, [A New Architecture Reconciling Refactorings and Transformations](#), Journal of Computer Languages, 101273, 2024, [DOI](#), [PDF](#)
4. Iona Thomas, Vincent Aranega, Stéphane Ducasse, Guillermo Polito and Pablo Tesone, [A VM-Agnostic and Backwards Compatible Protected Mode for Dynamically-Typed Languages](#), The Art, Science, and Engineering of Programming, 8, 2024, [DOI](#), [PDF](#)
5. Iona Thomas, Stéphane Ducasse, Pablo Tesone and Guillermo Polito, [Pharo: a reflective language - Analyzing the reflective API and its internal dependencies](#), Journal of Computer Languages, 2024, [DOI](#), [PDF](#)
6. Nour Jihene Agouf, Stéphane Ducasse, Anne Etien, Abdelghani Alidra and Arnaud Thieffaine, [Understanding Class Name Regularity: A Simple Heuristic and its Supportive Visualization](#), Journal of Object Technology, 21, 1312-1330, 2022, [DOI](#), [PDF](#)
7. Nicolas Anquetil, Julien Delplanque, Stéphane Ducasse, Oleksandr Zaitsev, Christopher Fuhman and Yann-Gael Guéhéneuc, [What do developers think about magic literals? A smalltalk perspective](#), Information and Software Technology, 2022, [DOI](#), [PDF](#)
8. Stéphane Ducasse, Guillermo Polito, Oleksandr Zaitsev, Marcus Denker and Pablo Tesone, [Deprewriter: On the fly rewriting method deprecation](#), Object Technologies (JOT), 21, 2022, [DOI](#), [PDF](#)
9. Vincent Aranega, Julien Delplanque, Matias Martinez, Andrew Black, Stéphane Ducasse, Christopher Fuhrman, Guillermo Polito and Anne Etien, [Tests in Java, Pharo and Python An Empirical Study](#), Journal of Empirical Software Engineering, Springer-Verlag, 2021, [DOI](#), [PDF](#)
10. Giuseppe Antonio Pierro, Henriche Rocha, Stéphane Ducasse, Michele Marchesi and Roberto Tonelli, [A user-oriented model for Oracles' Gas price](#), Future Generation Computer Systems, 2021, [PDF](#)
11. Benoît Verhaeghe, Nicolas Anquetil, Anne Etien, Stéphane Ducasse, Abderrahmane Seriai and Mustapha Derras, [GUI visual aspect migration: a VM-agnostic solution](#), Automated Software Engineering, 28, 6, 2021, [DOI](#), [PDF](#)
12. Benoît Verhaeghe, Anas Shatnawi, Abderrahmane Seriai, Anne Etien, Nicolas Anquetil, Mustapha Derras and Stéphane Ducasse, [From GWT to Java: An Experiment Report on Migrating a Legacy Web Application](#), IEEE Software, IEEE, 2021, [DOI](#), [PDF](#)
13. Pablo Tesone, Guillermo Polito, Luc Fabresse, Noury Bouraqadi and Stéphane Ducasse, [Preserving Instance State during Refactorings in Live Environments](#), Future Generation Computer Systems, 110, 1-17, Elsevier, 2020, [DOI](#), [PDF](#)
14. Pablo Tesone, Stéphane Ducasse, Guillermo Polito, Luc Fabresse and Noury Bouraqadi, [A new modular implementation for Stateful Traits](#), Science of Computer Programming, 195, 1-37, Elsevier, 2020, [DOI](#), [PDF](#)

Agenda generation

Tx C. Demarey

International Workshop on Smalltalk Technologies *Schedule*

Abstracts of talks and hands-on are available on [the asbtracts page](#)

DAY-01
TUES. JULY 7TH

DAY-02
WED. JULY 8TH

DAY-03
THUR. JULY 9TH

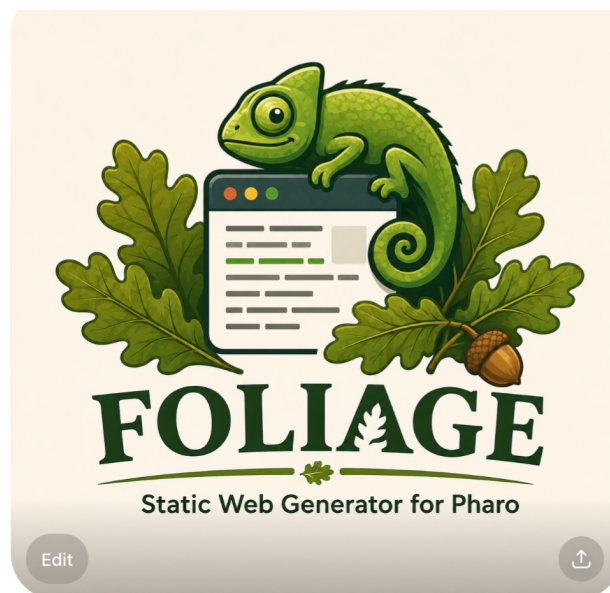
TIME	SUBJECT	SPEAKER	VENUE
🕒 10:30 am - 11:00 am	Visualizing Large Scale Project Evolution With DVision	Ian Abuaf Pelo, Marco Raglianti and Michele Lanza	Room B
🕒 11:00 am - 11:30 am	Visualizing GitHub Repositories with Nautilus	Phillip Entin, Marco Raglianti and Michele Lanza	Room B
	Information Retrieval and Pattern		

Next Step: More plugins

- Team support
- Topic-based publication

Next Step: More Documentation

- FoliageSample is a good start
- We need more simple templates
- Call for a logo



Pillar ecosystem

- Microdown is gorgeous
 - supports GH, books, slides, agenda, /doc, comments
- Foliage is working and has great potential
- Join and have fun