

Building developer.4d.com

a markdown-based documentation site

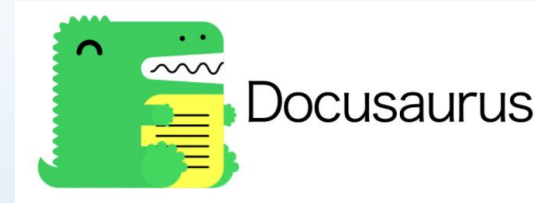
4DMethod user group presentation, 3 february, 2021

by Arnaud Schmitt, 4D documentation manager

Introduction

- Why a new documentation site for 4D ?
 - modern design to document new 4D technologies
 - object/ORDA/class functions hierarchy
 - more control for doc team

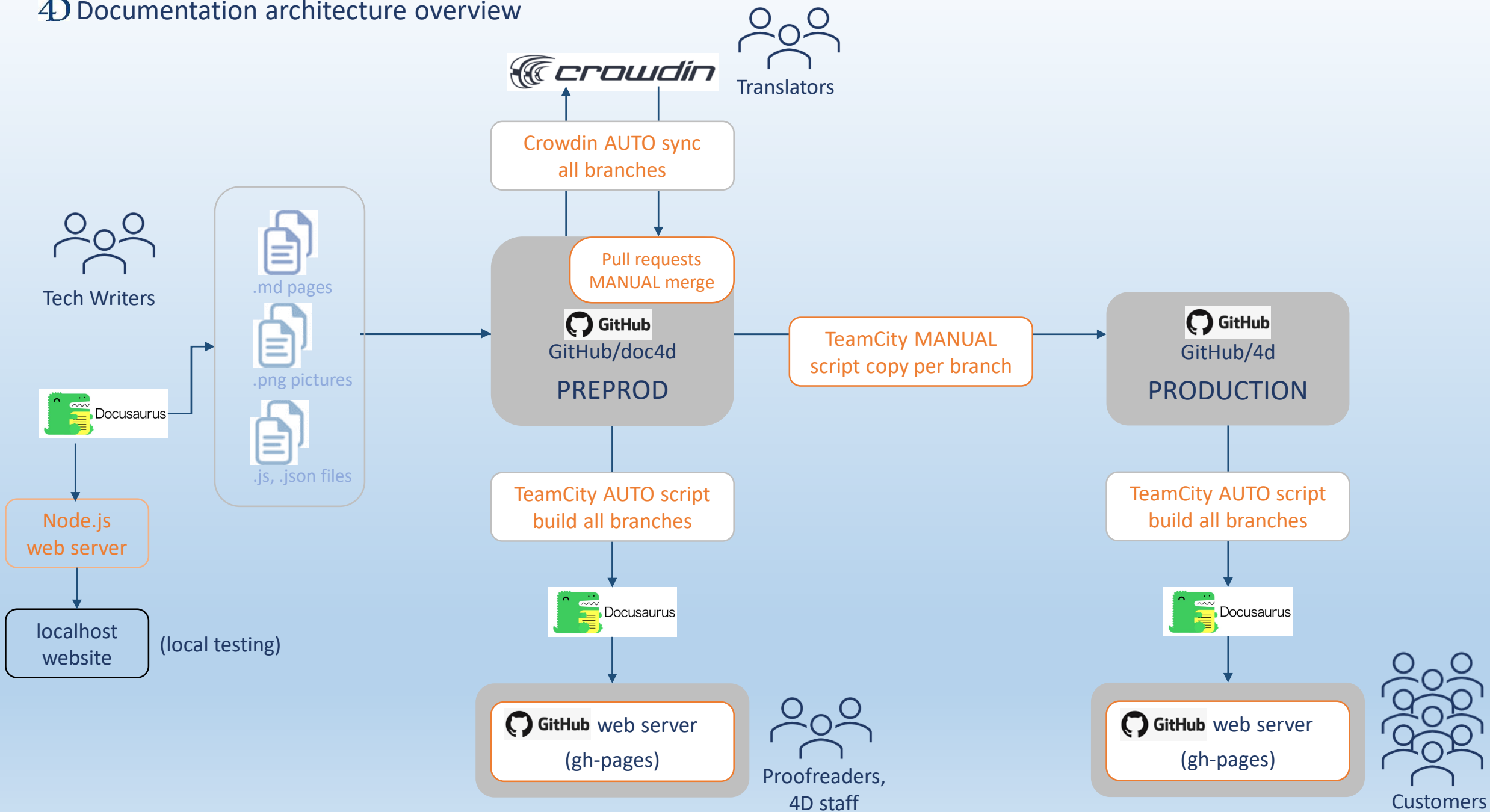
Why Docusaurus?



- Documentation web site generator
- Fairly easy to install and setup
- Uses common technologies: markdown, html, js
- Open source, Github
 - allows preprocessing, keep control of contents
- Integrated support for
 - Translation (Crowdin),
 - Versioning
 - Searching
 - Interaction with readers

<https://docusaurus.io>

4D Documentation architecture overview



Markdown - basics

- "lightweight markup language for creating formatted text using a plain-text editor".
- basic syntax: # or ## for titles, |--| for tables.
- supports html tags <!-- >, <table>
- ``` for code examples
- highlightjs_4d library for 4d code:
<https://github.com/highlightjs/highlightjs-4d>

Example

Markdown code

Web server functions

A `[web server class object](API/webServerClass.md#web-server-object)` contains the following functions:

Functions	Parameter	Return value	Description
<code>[start()](API/webServerClass.md#start)</code>	settings (object)	status (object)	Starts the web server
<code>[stop()](API/webServerClass.md#stop)</code>	-	-	Stops the web server

To start and stop a web server, just call the `[start()](API/webServerClass.md#start)` and `[stop()](API/webServerClass.md#stop)` functions of the web server object:

```
4d
var $status : Object
    //to start a web server with default settings
    $status:=webServer.start()
    //to start the web server with custom settings
    //$settings object contains web server properties
    webServer.start($settings)
```



Website

Web server functions

A `web server class object` contains the following functions:

Functions	Parameter	Return value	Description
<code>start()</code>	settings (object)	status (object)	Starts the web server
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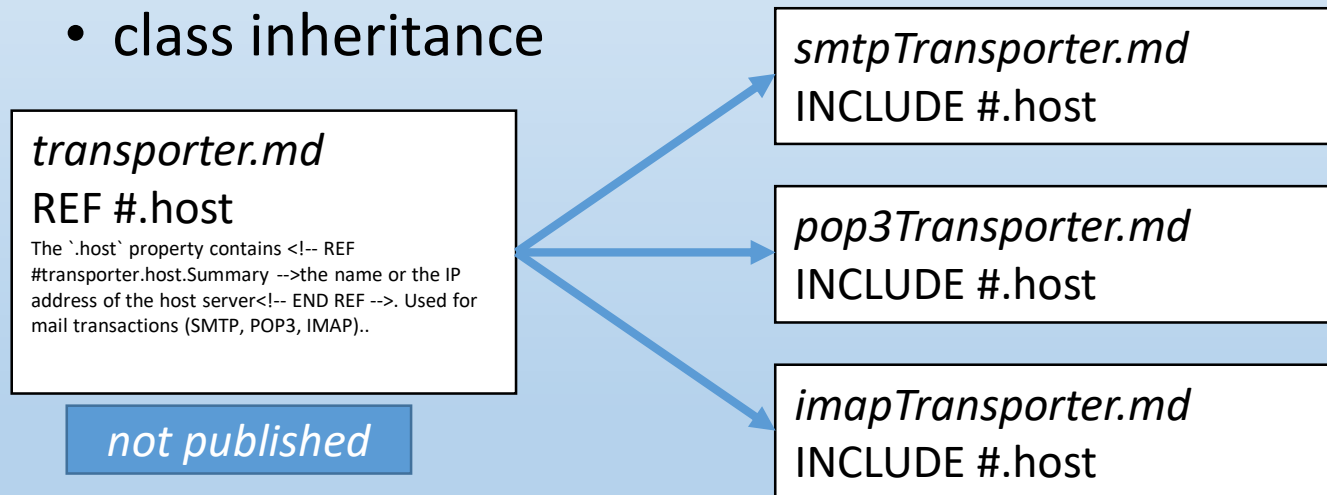
To start and stop a web server, just call the `start()` and `stop()` functions of the web server object:

```
var $status.: Object
    //to start a web server with default settings
    $status:=webServer.start()
    //to start the web server with custom settings
    //$settings object contains web server properties
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```

Copy

Markdown - custom processing

- Custom INCLUDE/REF tags that are processed by javascript at build
 - ex: `<!-- REF #_command_.New collection.Syntax -->`
- Reference parts within other parts
 - class inheritance



Markdown - custom processing

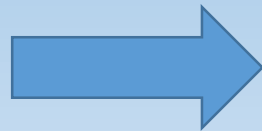
- Extract info from markdown pages to be used in the code editor (including multi syntax information)

Markdown code

```
<!-- REF collection.orderBy().Desc -->
## .orderBy()
|
<!-- REF #collection.orderBy().Syntax -->
** .orderBy** ( ) : Collection<br> ** .orderBy** ( *pathStrings* : Text ) :
Collection<br> ** .orderBy** ( *pathObjects* : Collection ) : Collection<br> ** .orderBy** (
*ascOrDesc* : Integer ) : Collection <!-- END REF -->
```

Description

The `.orderBy()` function <!-- REF #collection.orderBy().Summary --> returns a new collection containing all elements of the collection in the specified order <!-- END REF -->.



```
var $c : Collection
```

```
$c.orderBy|
```

orderBy

orderByMethod

.orderBy() : Collection
returns a new collection containing all elements of the collection in the specified order
+3 overload

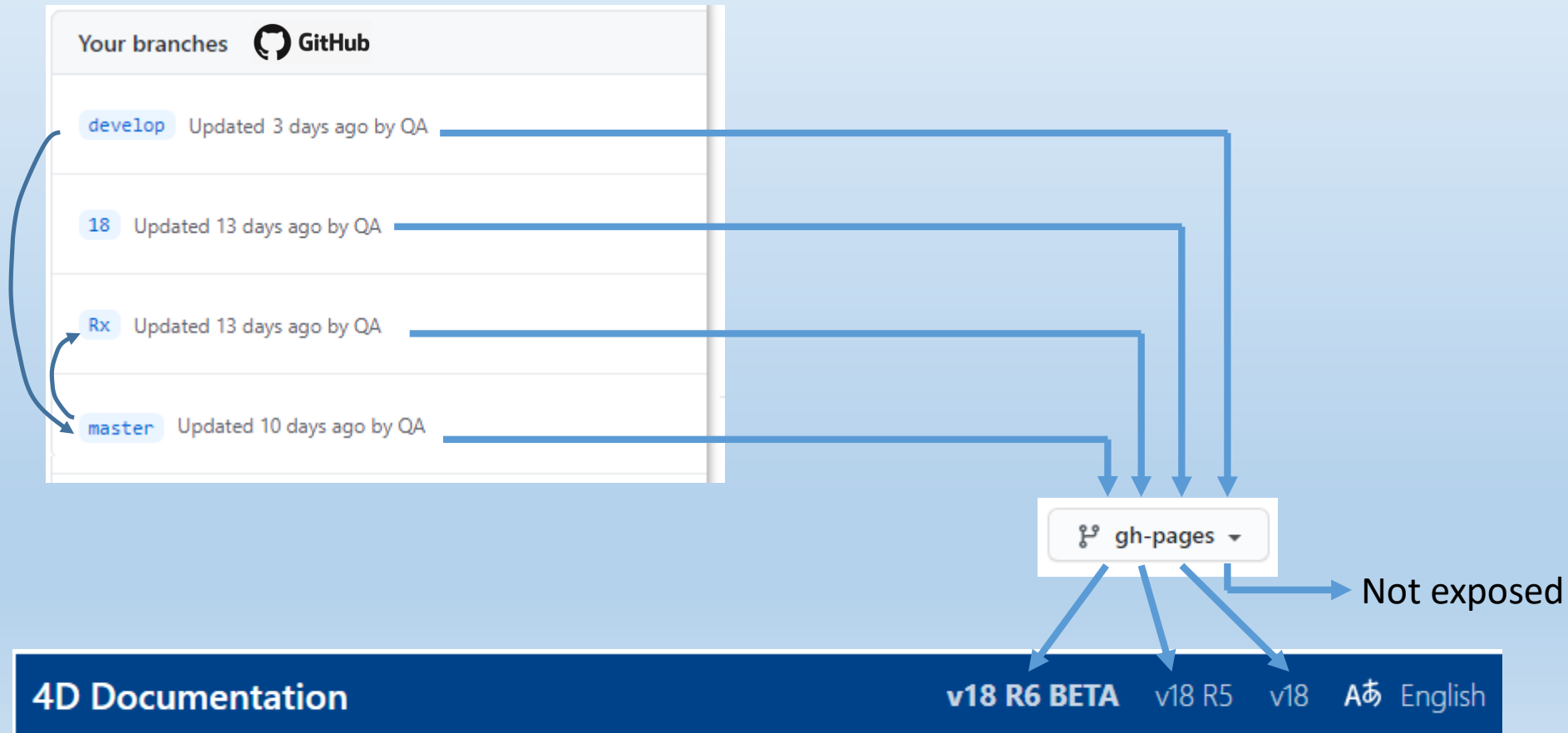


Github usage

- 4ddocs repositories: preproduction + production
 - Work in main branch (develop) for new features, fixes.
 - Standard collaborative work (creating branches, submit, merge)
- HTML pages built in the gh-pages branch (automatically published by github as a web site)

Versioning & Branches

- Versions based upon branches



Searching

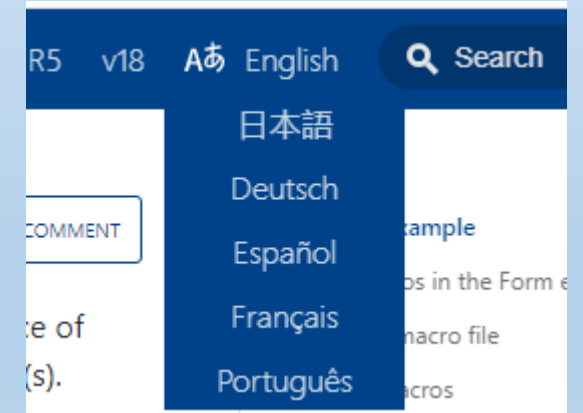
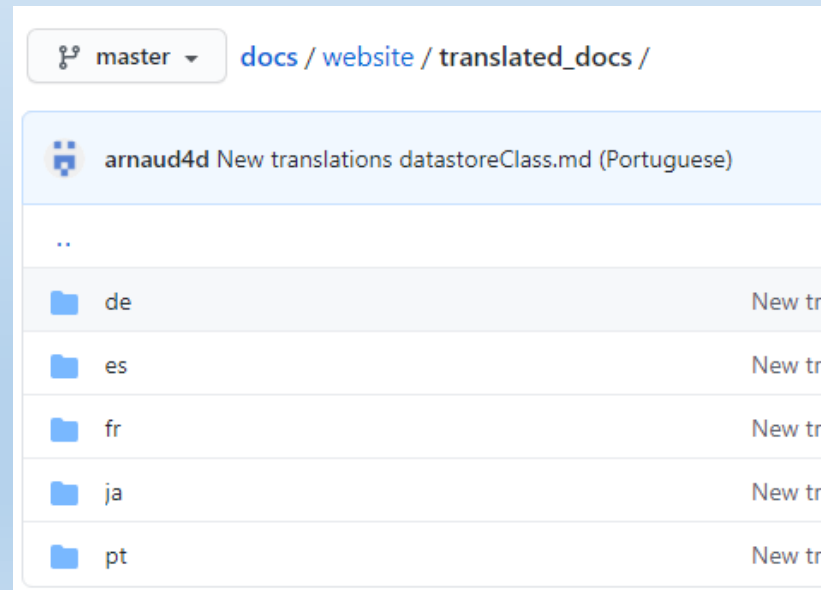
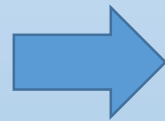
- <https://docsearch.algolia.com/>
- Simple implementation
 - create an account,
 - provide your url,
 - Insert key in siteconfig.js:

```
algolia: {  
  apiKey: '2f94e2c8270ac2b1db0c23691592fb10',  
  indexName: '4d',  
  algoliaOptions: {facetFilters: [ "language:LANGUAGE" ]},  
  lineHeight: '30px'  
},
```

Translation: Docusaurus

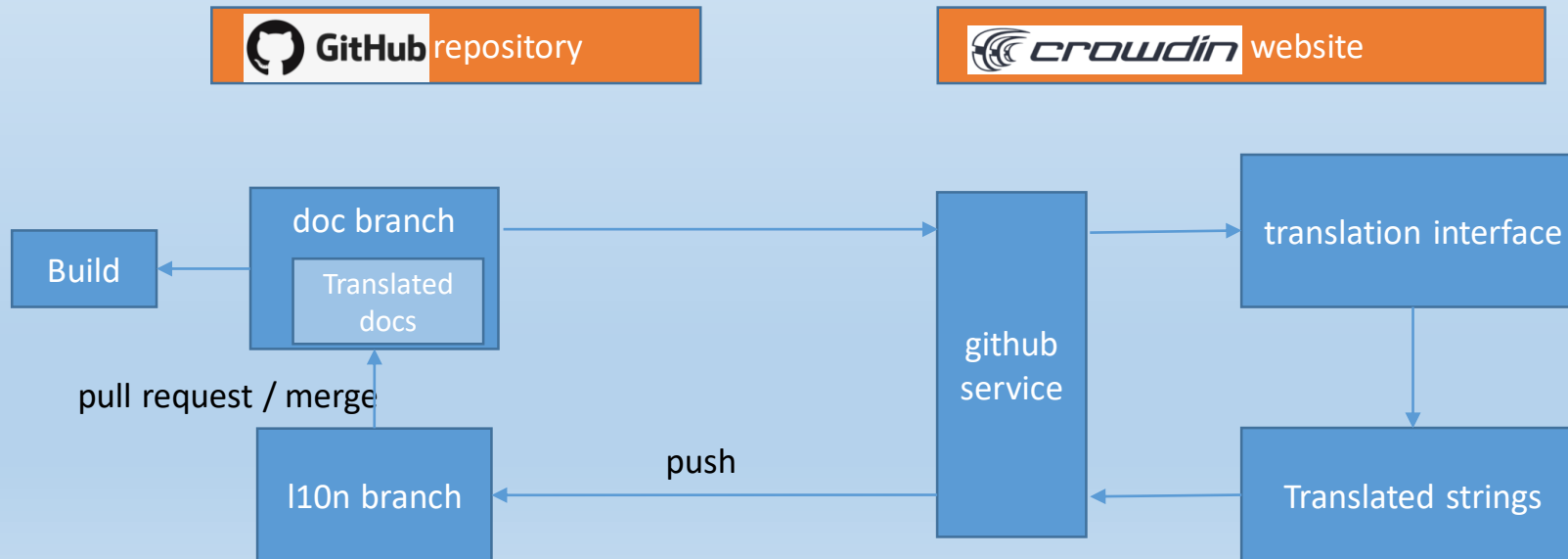
- declare languages to implement
- automatic support: subfolders and menu

```
languages.js
8  const languages = [
9    {
10     enabled: true,
11     name: 'English',
12     tag: 'en',
13   },
14   {
15     enabled: true,
16     name: '日本語',
17     tag: 'ja',
18   },
19   {
20     enabled: true,
21     name: 'Deutsch',
22     tag: 'de',
23   },
24 ]
```



Translation: Crowdin (workflow)

- translation framework, multi projects
- github integration service
- pull request and merge on github
- subscription license required



Demo - Q&A