

# Making a MediaWiki Skin

# I am Jon Robson

- Work as a developer at WMF.
- Frontend engineer who's had to learn PHP.
- Previously built Minerva
- Now working on Vector 2022 skin



# Session goals

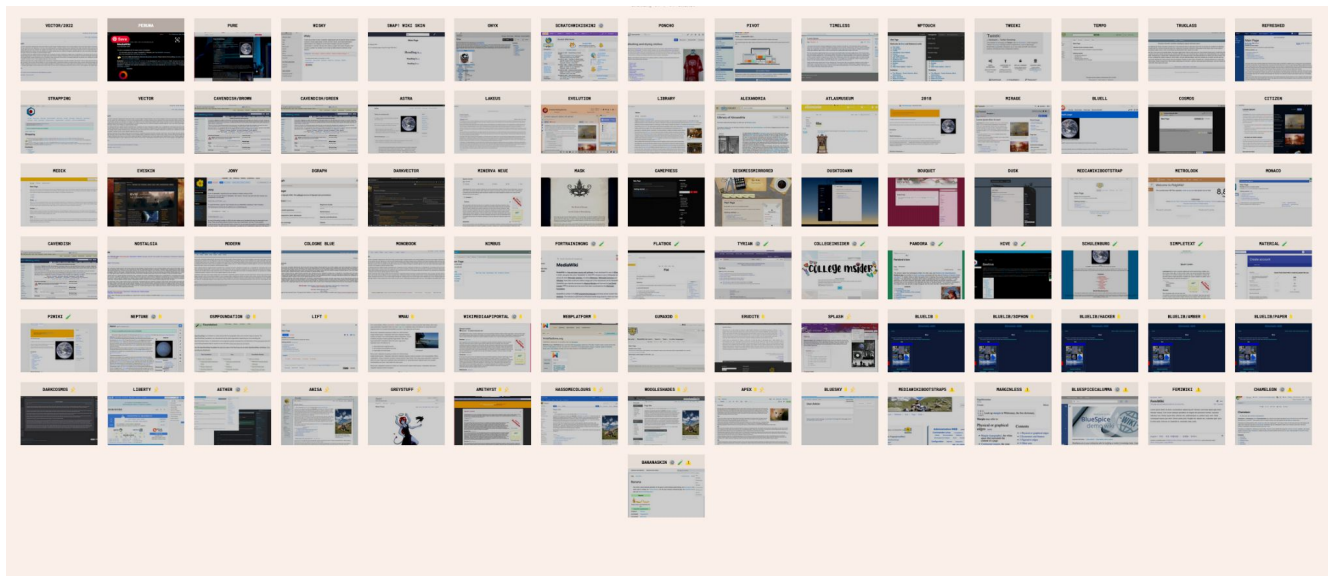
- (We only have 30 minutes, not 45!)
- Get more Wikimedians involved in skin development
- Summarize some of the changes that have been made to skins and why
- Create a skin
- Identify skin related projects for the hackathon
- Arrange follow up sessions over the weekend for people who want to build skins
- NOT to talk about new Vector skin. See session tomorrow for that.



# 91 working skins in the MediaWiki universe

MediaWiki can be used in 91 skins.  
MediaWiki development began in  
2002  
20 years later...

How can we grow the skin building  
community?



## How can we get more?



# Making skins was complicated

- Required PHP knowledge
- JS and CSS knowledge
- Ability to navigate MediaWiki core's documentation
- Skins had to spend lots of time tweaking themselves to work with different extensions
- Skins would often break with changes in core and extensions

# Desktop improvements

- WMF project.
- Meant that the developers maintaining mobile site for the first time were also maintaining the desktop site
- Seized opportunity to start standardizing all the good ideas across all the deployed skins (Timeless, Minerva, Monobook, Vector, CologneBlue, Modern)
- Connected with skin community and started to think about skin architecture

# Model <-> View

- Skins should be dumb. They are a visual representation of data.
- Re-architected skins to share a data layer
- Used Mustache as the view layer
- Converted Vector, Modern, CologneBlue, MonoBook to Mustache
- Not possible without help from volunteer (waves to Ammarpad, Mainframe, Ashley, Alistair, Isarra, Lens and all the people I forgot!)

# Reduced skin to 3 files + optional learn later config

- Skin.mustache
- Skin.css
- Skin.js
- Configuration
  - skin.json
  - i18n



# Making skins now easier!

- No PHP knowledge necessary
- Standardized hooks for extensions to integrate with skins
- Various tools to help you get started

# Mustache basics

```
{{#is-talk-page}}<!-- if block -->  
This is a talk page.  
{{/is-talkpage}}
```

```
<h1>{{ title }}</h1> <!-- two braces: escape! -->  
{{{ html }}} <!-- three braces = HTML:-->
```

```
{  
  title: 'Hello',  
  html: '<p>Hello world!</p>',  
  is-talk-page: false  
}
```

Hello

hello world



Let's make a skin!

# Skin builder

<https://skins.wmflabs.org/#/add>

SKINS

JON ROBSON AND LINZ LIM  
MADE A PLACE TO FIND THE  
PERFECT SKIN FOR YOUR  
MEDIAWIKI

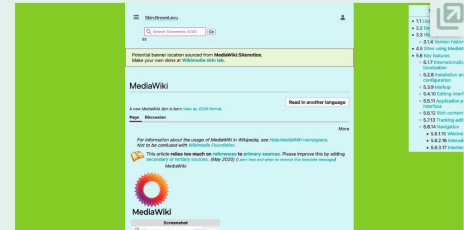


PREVIEW OF:

Stevia



DOWNLOAD



ARTICLE:

MediaWiki



desktop



☒ ANONYMOUS

RESET

HTML ( Mustache )

CSS / LESS

JS

```
<header class="mw-header">
  <{<Logo>}>
  <{<Notifications>}>
  <{<Dropdown>}>{<PersonaMenu>}>
  <{<Search>}>
  <{<Sidebar>}>ss
</header>
```

EXPLORE

CREATE

# Command line

```
npm install mediawiki-skins-cli  
npx create-mw-skin SkinName  
cd SkinName
```

Update your LocalSettings.php:

1094

1095

1096

1097

```
wfLoadSkin( 'Foo' );
```

# Explore data

<https://github.com/jdlrobson/mediawiki-skins-skinjson/>

JSON	Raw Data	Headers
Save	Copy	Collapse All Expand All Filter JSON
▶ html-title-heading:	"<h1 id=\"firstHeading\" _nium category test</h1>"	
html-title:	"Selenium category test"	
is-title-blank:	false	
is-anon:	false	
is-article:	true	
is-mainpage:	false	
is-specialpage:	false	
▶ data-logos:	{...}	
data-toc:	[]	
▶ data-search-box:	{...}	
▶ data-portlets:	{...}	
▶ data-portlets-sidebar:	{...}	
▶ data-footer:	{...}	
array-indicators:	[]	
▼ html-site-notice:	"<div id=\"localNotice\"><div class=\"sitenotice\" lang=\"en\" dir=\"ltr\"><div style=\"height: 200px; background: red;\>Banner</div></div></div>"	
html-user-message:	null	
html-subtitle:	""	
▶ html-body-content:	"<div id=\"mw-content-text_id=605</a>\"></div></div>"	
▶ html-categories:	"<div id=\"catlinks\" class=\"category\"></div></div>"	
▼ html-after-content:	"<div id=\"mw-data-after-content\">\n\t<div class=\"skin-json-hook-validation-element skin-json-validation-element\" data-hook=\"SkinAfterContent\"></div><div id=\"more-container\"></div>\n</div>\n"	
html-undelete-link:	null	
html-user-language-attributes:	""	
link-mainpage:	"/wiki/Home_page"	



# Hackathon projects



CC BY-SA 3.0, Ludovic Péron

[https://commons.wikimedia.org/wiki/File:Hackathon\\_-\\_Z%C3%BCrich\\_-\\_2014\\_-\\_1.jpg](https://commons.wikimedia.org/wiki/File:Hackathon_-_Z%C3%BCrich_-_2014_-_1.jpg)

# Make a new skin

New skins help us identify better architecture

- Follow guide on [https://www.mediawiki.org/wiki/Manual:How\\_to\\_make\\_a\\_MediaWiki\\_skin](https://www.mediawiki.org/wiki/Manual:How_to_make_a_MediaWiki_skin)
- Publish to github/ gerrit
- Add your skin to mediawiki.org !
- Blog about your experience / open Phabricator tickets

```
1 [[Category:Skins_using_deprecated_features]] <!-- Use of BaseTemplate::getFoc
2
```



# Port an existing (Wordpress) skin

I have been experimenting with converting Wordpress skins into MediaWiki skins.

- Find a Wordpress theme you like
- Try porting it [with the experimental converter tool](#)
- Help me make it better :-)

```
1 [[Category:Skins_using_deprecated_features]] <!-- Use of BaseTemplate::getFoc
2
```

# Fork an old skin

Many skins that used to work were archived.

How to help:

- Find a skin in [https://www.mediawiki.org/wiki/Category:Archived\\_skins](https://www.mediawiki.org/wiki/Category:Archived_skins) that is worth saving.
- Resurrect it

```
1 [[Category:Skins_using_deprecated_features]] <!-- Use of BaseTemplate::getFoc
2
```

# Fix an existing skin

Many skins are using deprecated code and will break in a future release.

How to help:

- Go to [mw.org category](#)
- View source of the skin for details
- Submit pull request

```
1 [[Category:Skins_using_deprecated_features]] <!-- Use of BaseTemplate::getFo
2
```

# Port an existing skin

Many skins are written in PHP.  
Might be a lot simpler if written  
using  
SkinMustache

- [Read](#)
- Change
- Update docs

```
1 [[Category:Skins_using_deprecated_features]] <!-- Use of BaseTemplate::getFoc
2
```

# Improve architecture

Help the skins of the future by  
improving all skins.

How to help:

- Go to our [Phabricator board](#)
- Pick a task!

```
1 [[Category:Skins_using_deprecated_features]] <!-- Use of BaseTemplate::getFoc
2
```

# Let's talk more

- Around on IRC today (#wikimedia-hackathon) and Telegram group to talk more and help you get started
- We can arrange a follow up session to help anyone stuck.

