

WIKIMEDIA TECHNICAL AREAS

AN OVERVIEW

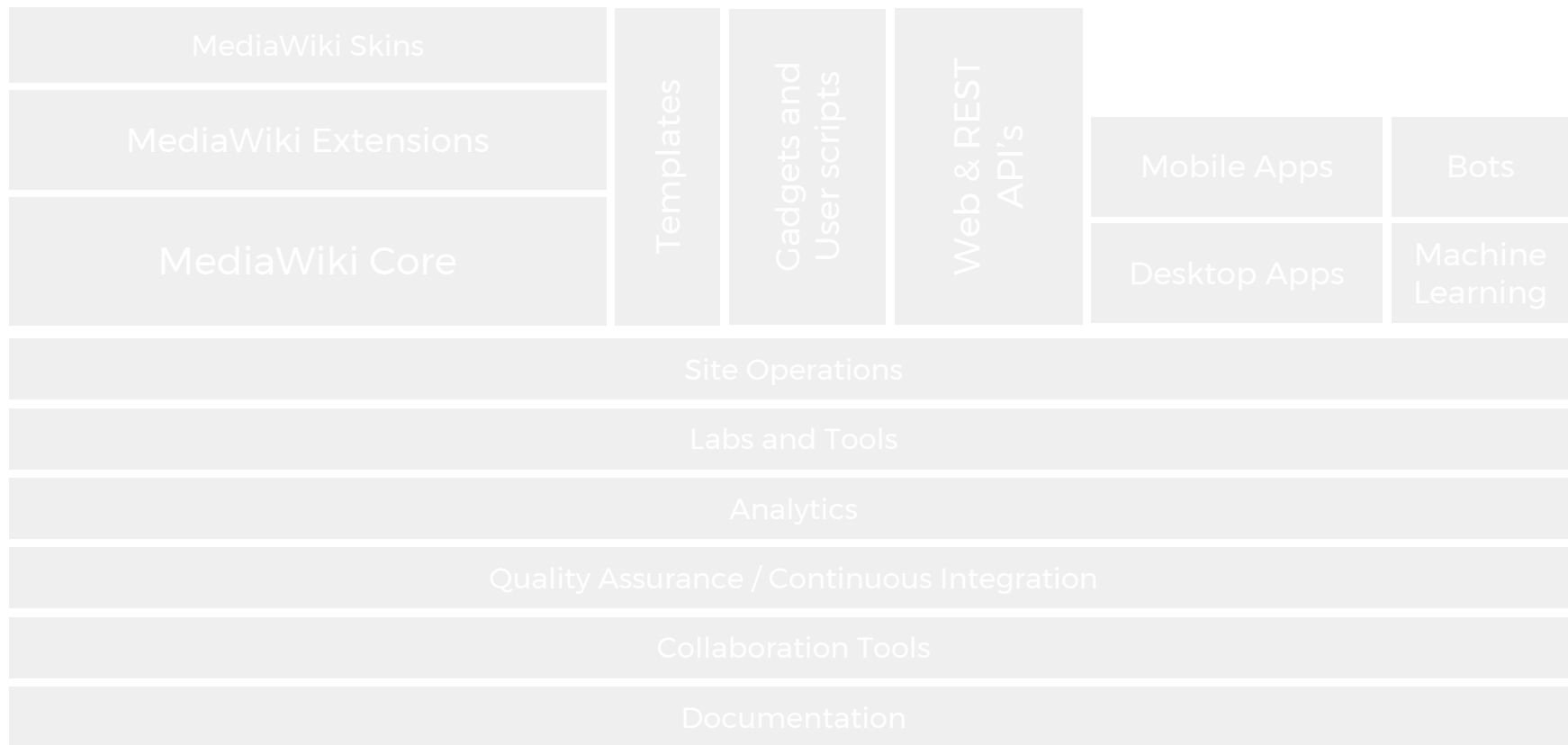


WIKIMEDIA
FOUNDATION

Topics

- Technical areas
- List of featured tasks
- Follow-up
- Resources

Technical Areas



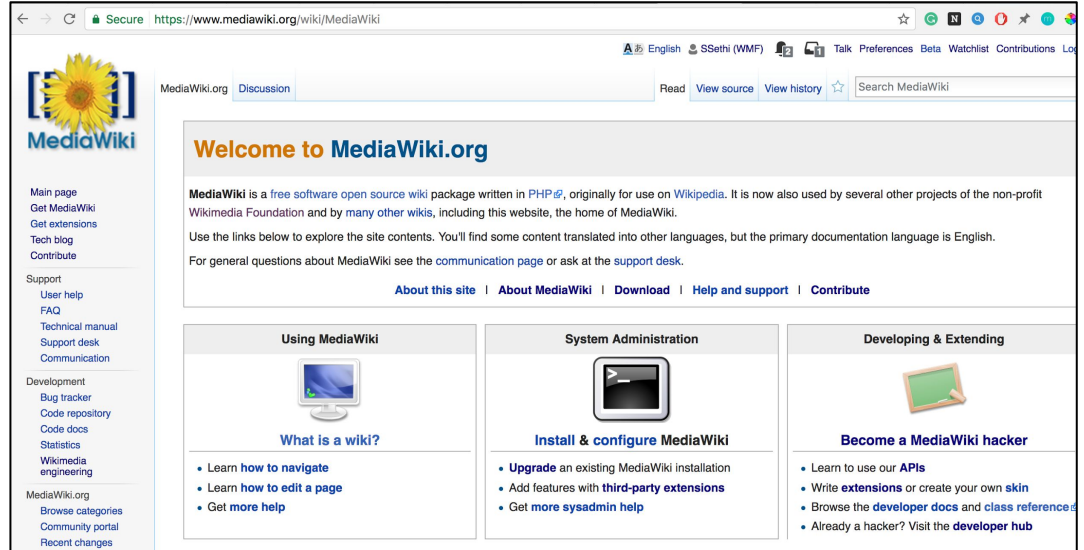
Technical Areas

MediaWiki Core

MediaWiki Core

Core software which provides basic wiki functionality.

PHP, MySQL/MariaDB, jQuery, Javascript, CSS/LESS



The screenshot shows the MediaWiki.org homepage in a web browser. The browser's address bar displays the URL <https://www.mediawiki.org/wiki/MediaWiki>. The page features a navigation bar at the top with links for "MediaWiki.org", "Discussion", "Read", "View source", "View history", and a search box. The main content area is titled "Welcome to MediaWiki.org" and contains a welcome message, a list of links for navigation, and three main sections: "Using MediaWiki", "System Administration", and "Developing & Extending".

Using MediaWiki

- Learn [how to navigate](#)
- Learn [how to edit a page](#)
- Get [more help](#)

System Administration

- [Upgrade](#) an existing MediaWiki installation
- Add features with [third-party extensions](#)
- Get [more sysadmin help](#)

Developing & Extending

- Learn to use our [APIs](#)
- Write [extensions](#) or create your own [skin](#)
- Browse the [developer docs](#) and [class reference](#)s
- Already a hacker? Visit the [developer hub](#)

Technical Areas

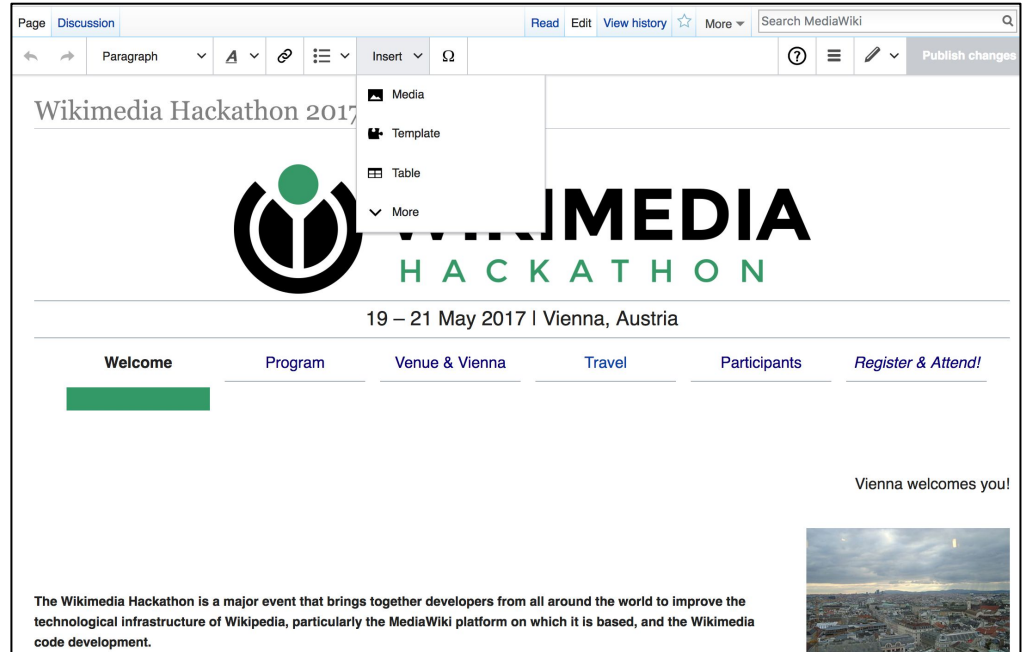
MediaWiki Extensions

MediaWiki Core

MediaWiki Extensions

Extends default
functionality provided by
MediaWiki

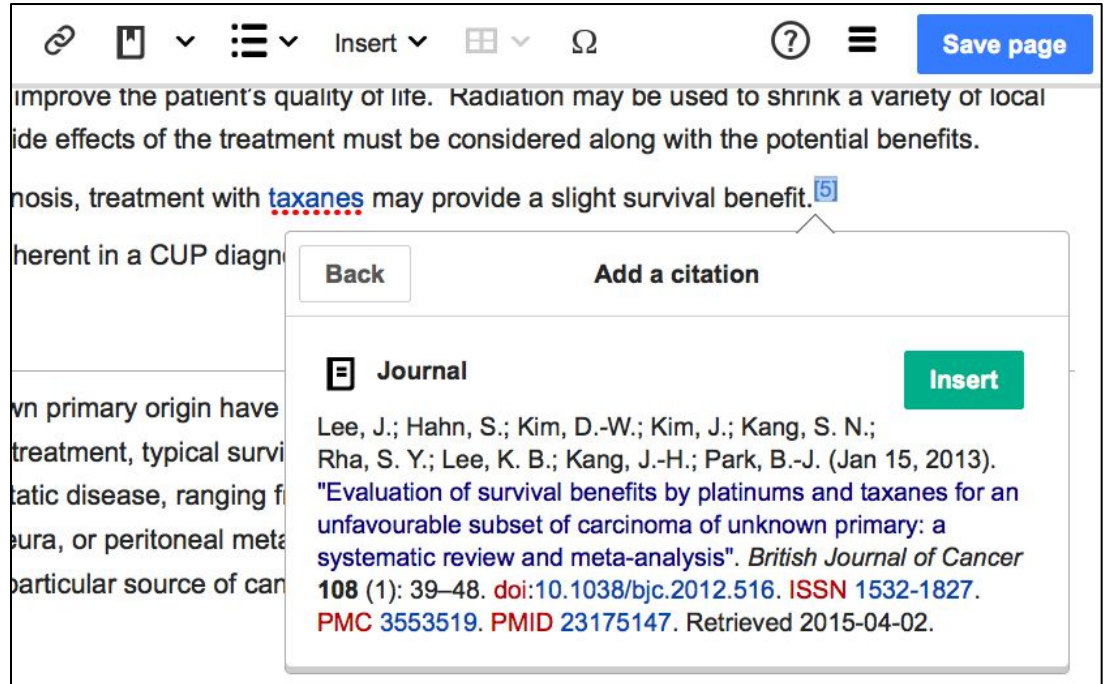
PHP, jQuery, Javascript



VisualEditor (alpha)

MediaWiki Extensions

Citoid: A Visual
Editor tool



The screenshot shows the MediaWiki Citoid extension interface. At the top, there is a toolbar with icons for undo, redo, list, insert, table, and link, along with a "Save page" button. The main text area contains a paragraph about radiation treatment for cancer, with a citation dialog box open over the word "taxanes".

improve the patient's quality of life. Radiation may be used to shrink a variety of local
side effects of the treatment must be considered along with the potential benefits.

nosis, treatment with [taxanes](#) may provide a slight survival benefit.^[5]

herent in a CUP diagnosis

own primary origin have
treatment, typical survival
tatic disease, ranging from
eura, or peritoneal meta
particular source of cancer

Back **Add a citation**

Journal **Insert**

Lee, J.; Hahn, S.; Kim, D.-W.; Kim, J.; Kang, S. N.;
Rha, S. Y.; Lee, K. B.; Kang, J.-H.; Park, B.-J. (Jan 15, 2013).
"Evaluation of survival benefits by platinum and taxanes for an
unfavourable subset of carcinoma of unknown primary: a
systematic review and meta-analysis". *British Journal of Cancer*
108 (1): 39–48. doi:10.1038/bjc.2012.516. ISSN 1532-1827.
PMC 3553519. PMID 23175147. Retrieved 2015-04-02.

MediaWiki Extensions

W | पृष्ठ का अनुवाद करें

← सभी अनुवाद अभी-अभी सहेजा गया। **अनुवाद प्रकाशित करें**

Online learning community

English [पृष्ठ देखें](#)

3 श्रेणियाँ

An **online learning community** is a public or private destination on the **Internet** that addresses the learning needs of its members by facilitating peer-to-peer learning. Through **social networking** and **computer-mediated communication**, or the use of **datagogies** while people work as a community to achieve a shared learning objective. Learning objectives may be proposed by the community owner or may arise out of discussions between participants that reflect personal interests. In an online learning community, people share knowledge via textual discussion (synchronous or asynchronous), audio, video, or other Internet-supported media. **Blogs** blend personal journaling with social networking to create environments with opportunities for reflection.

Online learning community

हिन्दी

कोई श्रेणी नहीं

एक **ऑनलाइन शिक्षण समुदाय** है, एक सार्वजनिक या निजी गंतव्य पर **इंटरनेट** पते के सीखने की जरूरत के द्वारा अपने सदस्यों की सुविधा के लिए सहकर्मी-सहकर्मी सीखने, के माध्यम से सामाजिक नेटवर्किंग और कंप्यूटर की मध्यस्थता संचार, या उपयोग के **datagogies** जबकि लोगों को काम के रूप में एक समुदाय को प्राप्त करने के लिए एक साझा सीखने के उद्देश्य है। सीखने के उद्देश्यों हो सकता है द्वारा प्रस्तावित समुदाय के स्वामी या पैदा हो सकता है बाहर की चर्चाओं के बीच प्रतिभागियों को प्रतिबिंबित कि व्यक्तिगत हितों. में एक ऑनलाइन शिक्षण समुदाय है, लोगों को साझा के माध्यम से ज्ञान का शाब्दिक चर्चा (तुल्यकालिक या अतुल्यकालिक), ऑडियो, वीडियो, या अन्य इंटरनेट-समर्थित मीडिया. **ब्लॉग** मिश्रण व्यक्तिगत journaling के साथ सामाजिक नेटवर्किंग के लिए वातावरण बनाने के लिए अवसरों के साथ प्रतिबिंब. ^[*कृपया उद्धरण जोड़ें*]

एक शब्द खोजें

B I ≡ ≡

स्वतः अनुवाद
Yandex.Translate का उपयोग करें

सामग्री समस्या: Non Devanagari Article Name

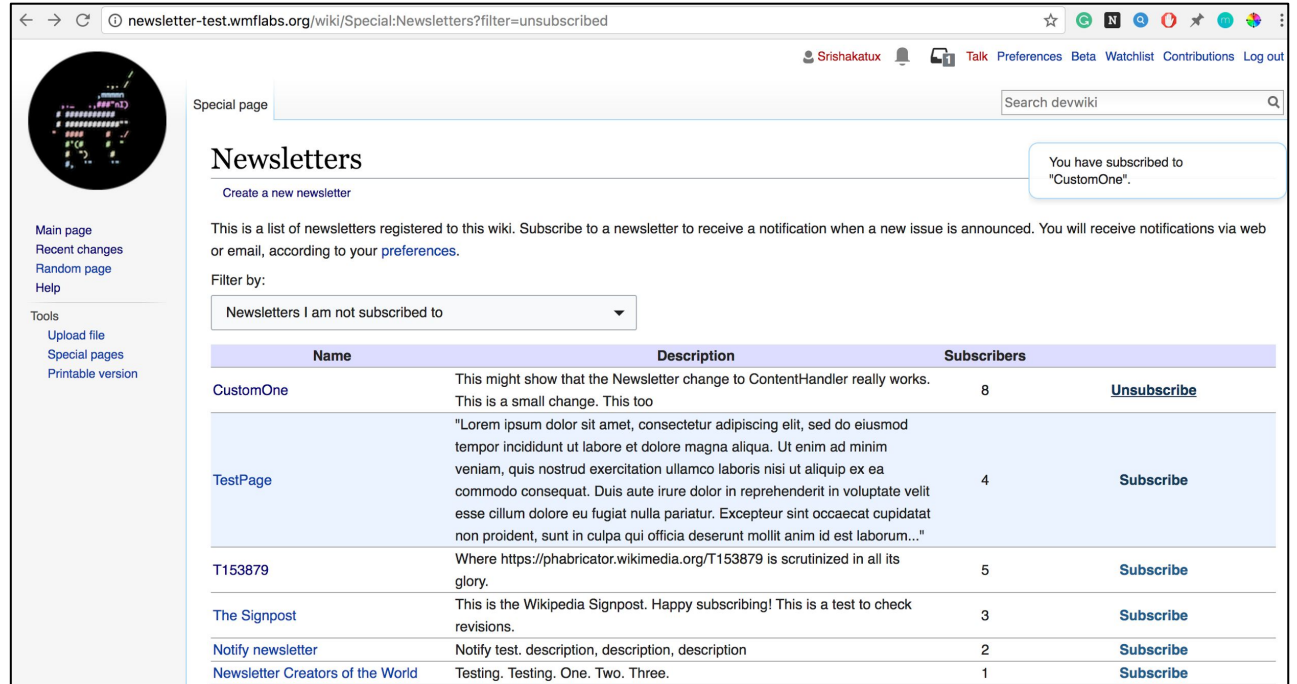
Content not meeting the restrictions set by Wikipedia in हिन्दी found. Please fix the issues before publishing the translation.

[जानकारी देखें](#)

प्रतिक्रिया दें

Content Translation (beta)

MediaWiki Extensions



The screenshot shows a web browser window displaying the 'Special:Newsletters' page on the 'newsletter-test.wmflabs.org' domain. The page is titled 'Newsletters' and includes a search bar, a 'Filter by' dropdown menu set to 'Newsletters I am not subscribed to', and a table of registered newsletters. A notification bubble indicates the user is subscribed to 'CustomOne'.

Special page

Newsletters

[Create a new newsletter](#)

This is a list of newsletters registered to this wiki. Subscribe to a newsletter to receive a notification when a new issue is announced. You will receive notifications via web or email, according to your preferences.

Filter by:

Name	Description	Subscribers	
CustomOne	This might show that the Newsletter change to ContentHandler really works. This is a small change. This too	8	Unsubscribe
TestPage	"Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua. Ut enim ad minim veniam, quis nostrud exercitation ullamco laboris nisi ut aliquip ex ea commodo consequat. Duis aute irure dolor in reprehenderit in voluptate velit esse cillum dolore eu fugiat nulla pariatur. Excepteur sint occaecat cupidatat non proident, sunt in culpa qui officia deserunt mollit anim id est laborum..."	4	Subscribe
T153879	Where https://phabricator.wikimedia.org/T153879 is scrutinized in all its glory.	5	Subscribe
The Signpost	This is the Wikipedia Signpost. Happy subscribing! This is a test to check revisions.	3	Subscribe
Notify newsletter	Notify test. description, description, description	2	Subscribe
Newsletter Creators of the World	Testing. Testing. One. Two. Three.	1	Subscribe

Newsletter (experimental)

Technical Areas

MediaWiki Skins

MediaWiki Extensions

MediaWiki Core

MediaWiki Skins



The screenshot shows a MediaWiki user page for editing a CSS file. The page title is "Editing User:SSethi (WMF)/common.css". The user's name is "SSethi (WMF)". The page is in the "Discussion" tab. The page content includes a warning: "Please note: CSS subpages should not contain confidential data as they are viewable by other users." Below the warning is a "Preview" section with a red warning: "Remember that you are only previewing your user CSS. It has not yet been saved! → Go to editing area". The CSS code is as follows:

```
body {
  font-size: larger;
  border: 5px solid #dfdfdf;
  background: #EC5E3D;
}

div#mw-panel div.portal div.body ul li a {
  color: white;
}

div#mw-panel div.portal div.body ul li a:visited {
  color: white;
}
```

The page also features a navigation sidebar on the left with links to various sections: Main page, Get MediaWiki, Get extensions, Tech blog, Contribute, Support, User help, FAQ, Technical manual, Support desk, Communication, Development, Bug tracker, Code repository, Code docs, Statistics, and Wikimedia engineering. The top navigation bar includes links for English, SSethi (WMF), Talk, Preferences, Beta, Watchlist, Contributions, and Log out. A search box is also present in the top right corner.

Technical Areas



Templates

Standard wiki pages
designed to be
embedded inside other
pages.

HTML, Javascript, CSS, Lua

Template:Welcome

Welcome to MediaWiki.org!

Yes, welcome! This site is dedicated to documenting the [MediaWiki software](#), the software behind many wikis, including that of [Wikipedia](#) and the Wikimedia Foundation projects.

Please, take a look at the following pages. They might prove useful to you as a newcomer here:

- [Landing instructions](#)
- [Project:About](#)
- [How does MediaWiki work?](#)
- [Help:Editing pages](#)
- [Frequently asked questions](#)
- [How to contribute](#)
- [Policies](#)

If you have any questions, please ask me on my talk page. Once again, welcome, and I hope you quickly feel comfortable here, and find this site useful documentation of the MediaWiki software.



```
{{:Welcome}}
```

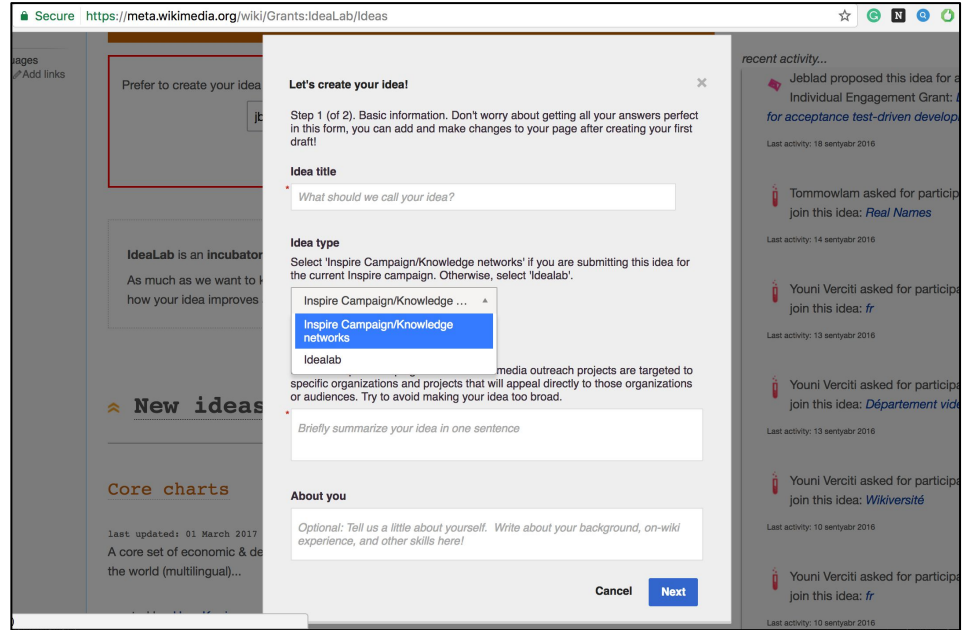
Technical Areas



Gadgets and User Scripts

Standard user scripts that extend the functionality of MediaWiki

Javascript and/or CSS



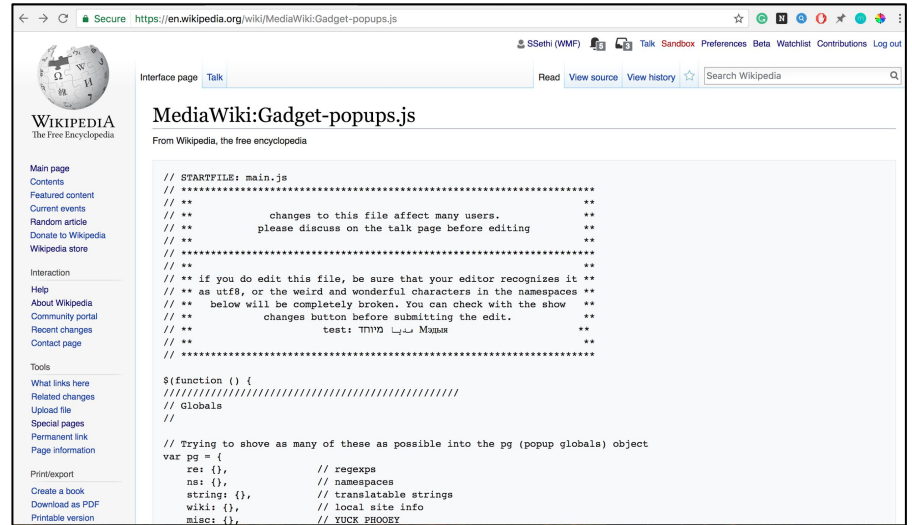
Interface supported by FormWizard (experimental) gadget

Gadgets and User Scripts

Navigation Popups



A screenshot of the Wikipedia page for the Wikimedia Foundation. The page title is "Organizations" with a sub-heading "Wikimedia Foundation". The main article is "Wikimedia Foundation", which is described as a non-profit and charitable organization headquartered in San Francisco, California. It is noted that the foundation was founded in 2003 by Jimmy Wales and its sister projects through non-profit means. The page also mentions that the foundation's 2015 financial statements show a budget of \$72 million USD, spending \$52 million USD on its operation and increasing its reserves to \$82 million USD. There are sections for "Chapters" and "Thematic organizations".



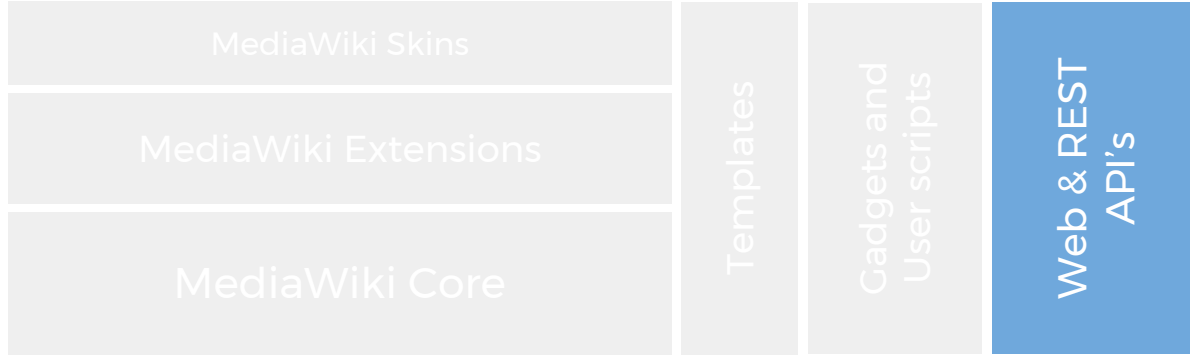
A screenshot of the MediaWiki page for "MediaWiki:Gadget-popups.js". The page title is "MediaWiki:Gadget-popups.js" and it is described as "From Wikipedia, the free encyclopedia". The page content is a JavaScript file named "main.js". The code starts with a comment block: "STARTFILE: main.js" followed by a series of asterisks. The code then defines a function named "pg" which is used to handle various actions like "regepxs", "namespaces", "translatable strings", "local site info", and "YUCK PROOBY".

```
// STARTFILE: main.js
// *****
// **
// ** changes to this file affect many users.
// ** please discuss on the talk page before editing
// **
// *****
// **
// ** if you do edit this file, be sure that your editor recognizes it **
// ** as utf8, or the weird and wonderful characters in the namespaces **
// ** below will be completely broken. You can check with the show **
// ** changes button before submitting the edit.
// ** test: מִיּוֹד לְבַּר מִסָּמָה
// **
// *****
// *****

$(function () {
// *****
// *****

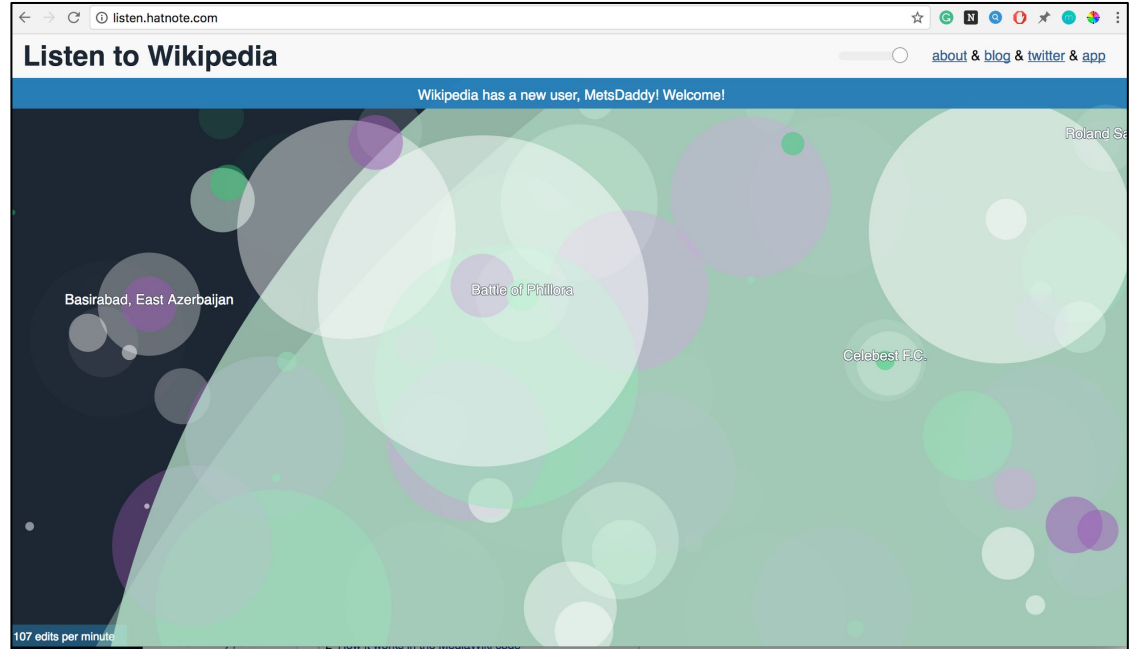
// Trying to shove as many of these as possible into the pg (popup globals) object
var pg = {
re: {}, // regepxs
ns: {}, // namespaces
string: {}, // translatable strings
wiki: {}, // local site info
misc: {}, // YUCK PROOBY
```

Technical Areas



Wikimedia Web & REST API's

Helps developers build
tools using Wikimedia's
data



Listen to Wikipedia: A project developed using the Wikimedia data
and API's

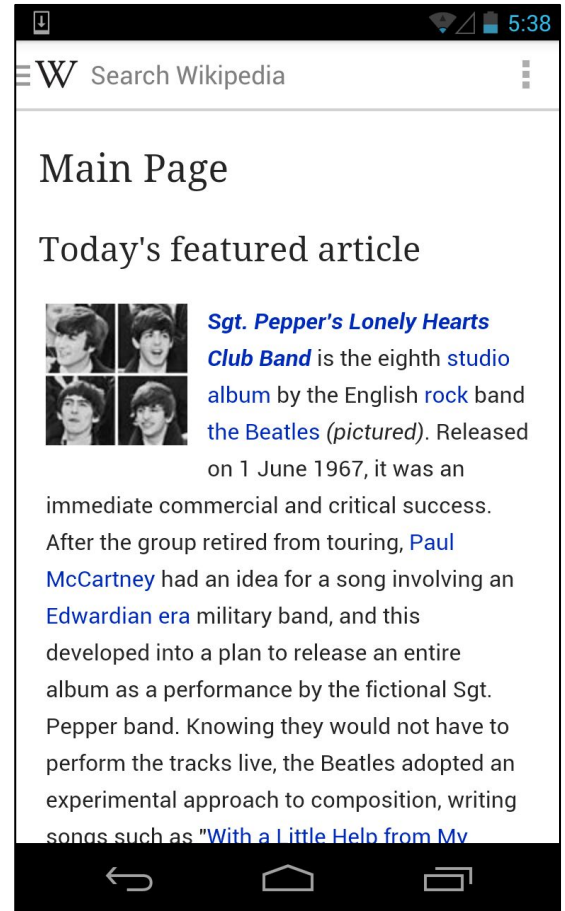
Technical Areas



Mobile Apps

Wikipedia's mobile app is designed to help you find, discover, and explore knowledge on Wikipedia. Features: quick search, featured articles, recommended articles, etc.

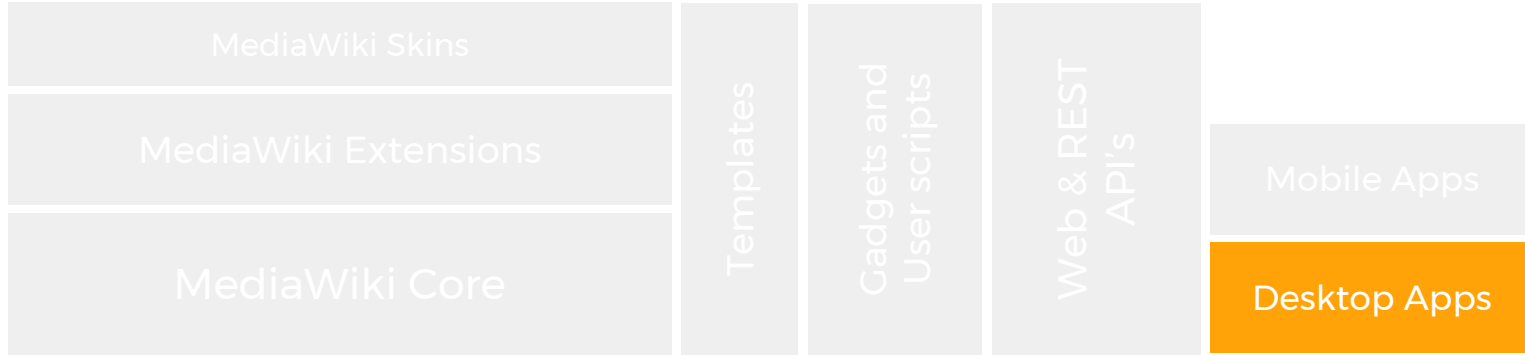
Objective-C (iOS), Java (Android)



Screenshot of Wikipedia mobile app.

CC BY-SA 3.0 Dan Garry

Technical Areas



Desktop Apps

Kiwix is an offline reader for Web content. Enables you to have the offline version of Wikipedia.

C++, Zim (an open file format to store wiki content)

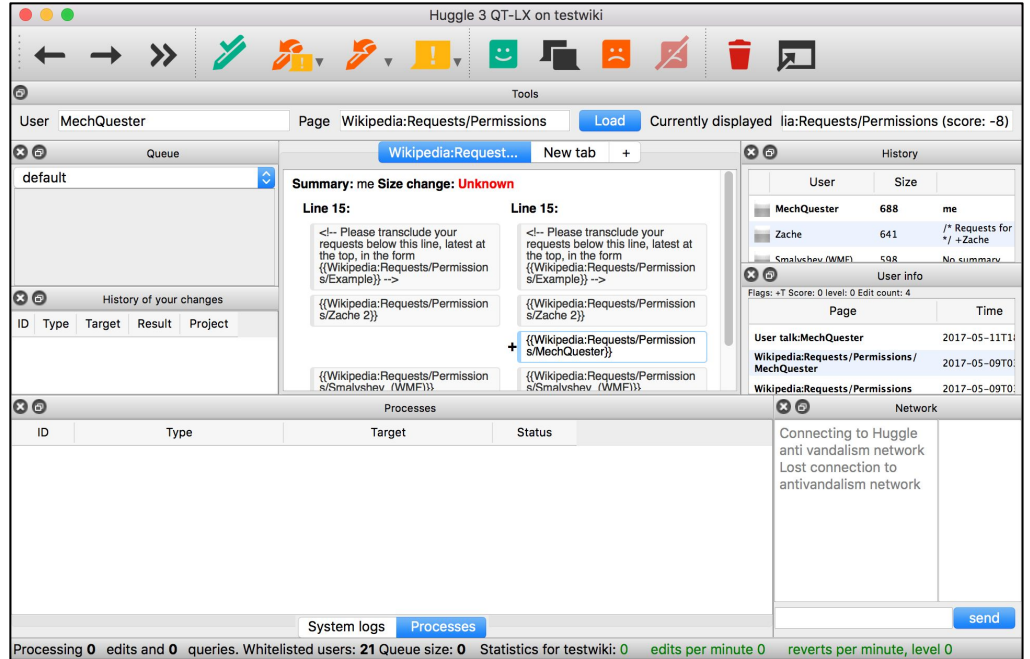


Screenshot of Kiwix running Wikipedia on an OLPC laptop

CC BY-SA 3.0, Victorgrigas

Desktop Apps

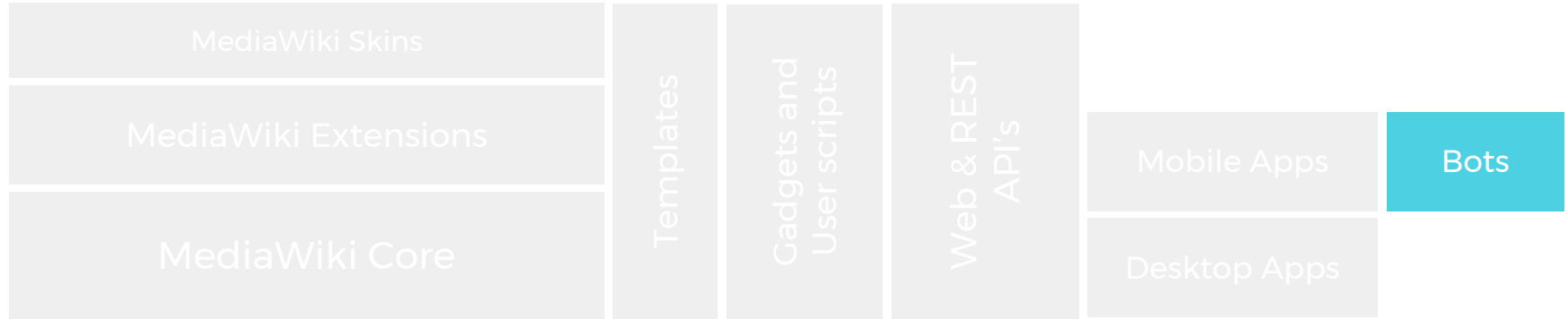
Anti-vandalism tool



Screenshot of desktop application Huggle

C++ (Qt framework)

Technical Areas



Machine Learning

Bots

- Pywikibot Python



Illustration by Mun May Tee, freely licensed under CC BY-SA 4.0.

Machine Learning

ORES: Objective Revision Evaluation Service

The screenshot displays the ORES interface for filtering recent changes. At the top, there are active filters: "May have problems", "Human (not bot)", "Page edits", "Likely have problems", "Very likely have problems", and "Likely bad faith". A search bar allows filtering recent changes. The main section is divided into "Contribution quality predictions" and "User intent predictions".

Contribution quality predictions:

- Very likely good: Highly accurate at finding almost all problem-free edits.
- May have problems: Finds most flawed or damaging edits but with lower accuracy.
- Likely have problems: Finds half of flawed or damaging edits with medium accuracy.
- Very likely have problems: Highly accurate at finding the most obvious 10% of flawed or damaging edits.

User intent predictions:

- Very likely good faith: Highly accurate at finding almost all good-faith edits.
- May be bad faith: Finds most bad-faith edits but with a lower accuracy.
- Likely bad faith: With medium accuracy, finds the most obvious bad or damaging edits.

User registration:

- Registered: Logged-in editors.

A "Select a color" dialog is open, showing a color palette with a red circle selected. The interface also includes a "Highlight results" button, a "Provide feedback on the new (beta) filters" link, and a legend for edit types (r, n, m, b, d, #123).

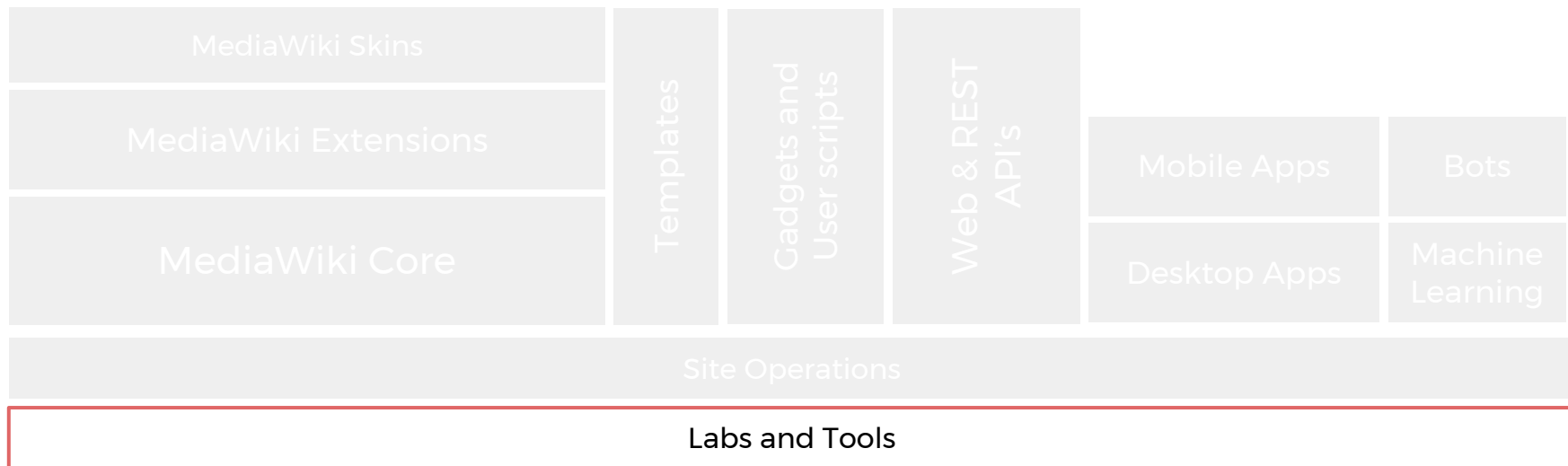
Python, Javascript, CSS, PHP

An example of tool using ORES: New filters for edit reviews beta

Technical Areas

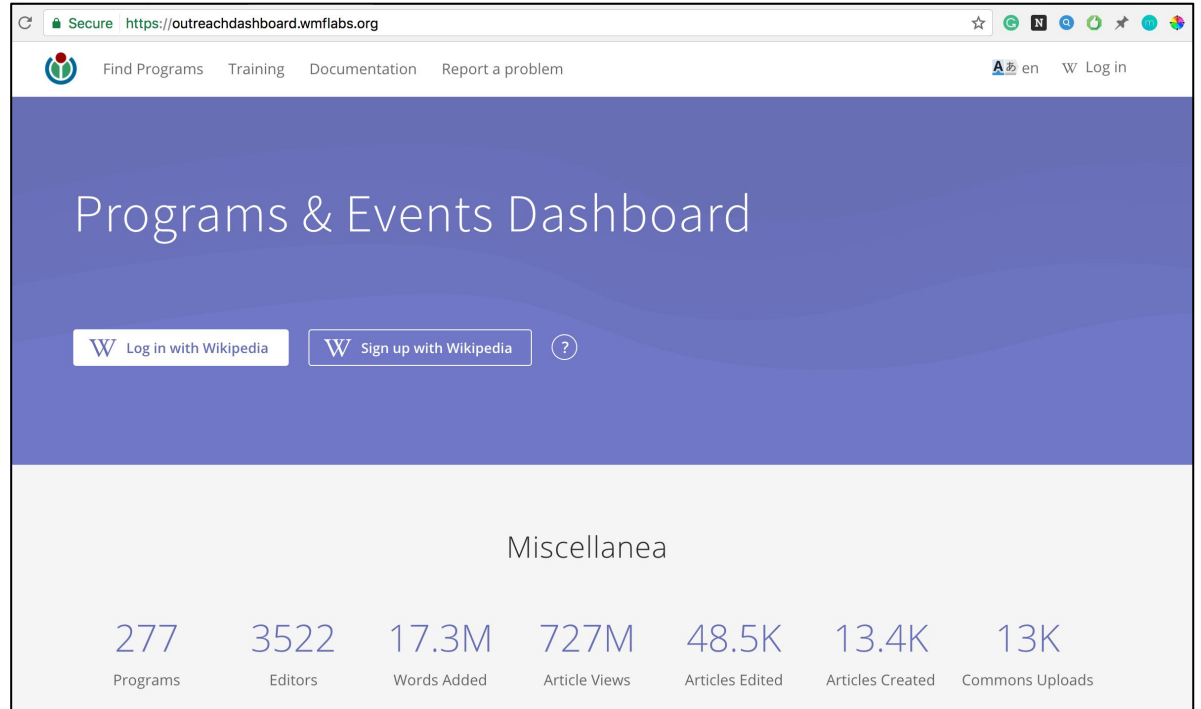


Technical Areas



Tools and Labs

Provides hosting environment for community developers working on tools and bots that add value to our ecosystem.

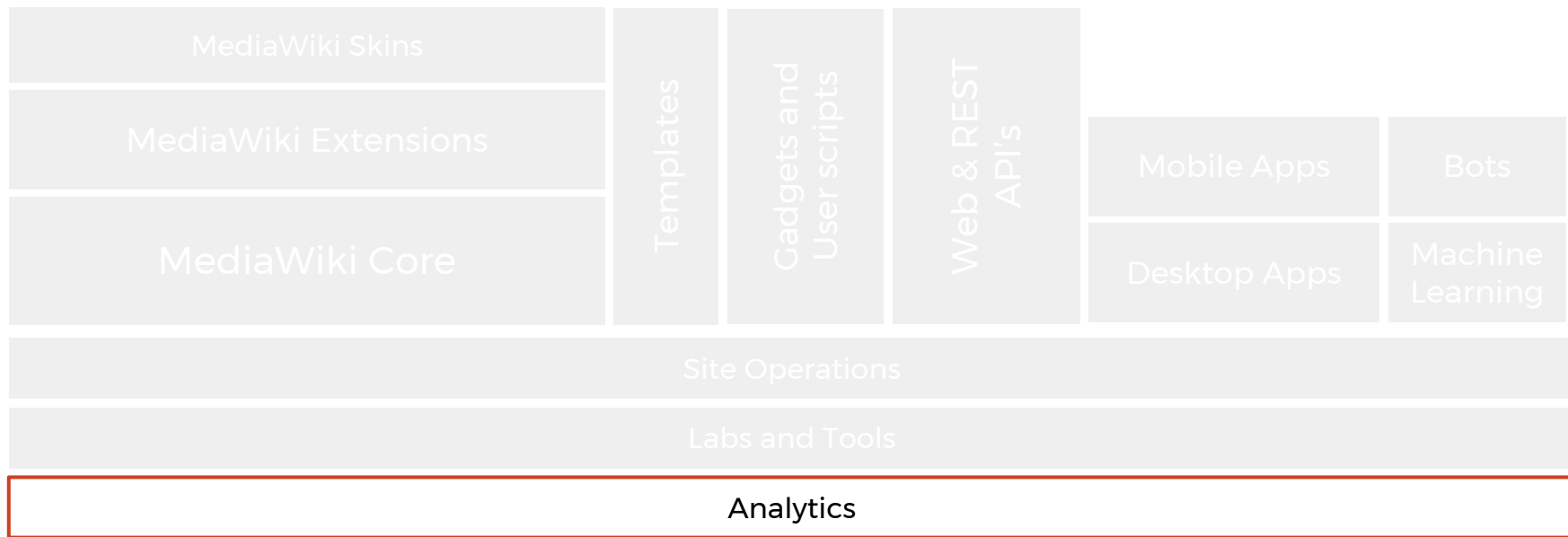


The screenshot shows a web browser displaying the Outreach Dashboard. The address bar shows the URL <https://outreachdashboard.wmflabs.org>. The page features a navigation menu with links for "Find Programs", "Training", "Documentation", and "Report a problem". There are also language and login options. The main heading is "Programs & Events Dashboard". Below this, there are two buttons for logging in with Wikipedia and a help icon. The "Miscellanea" section displays several statistics:

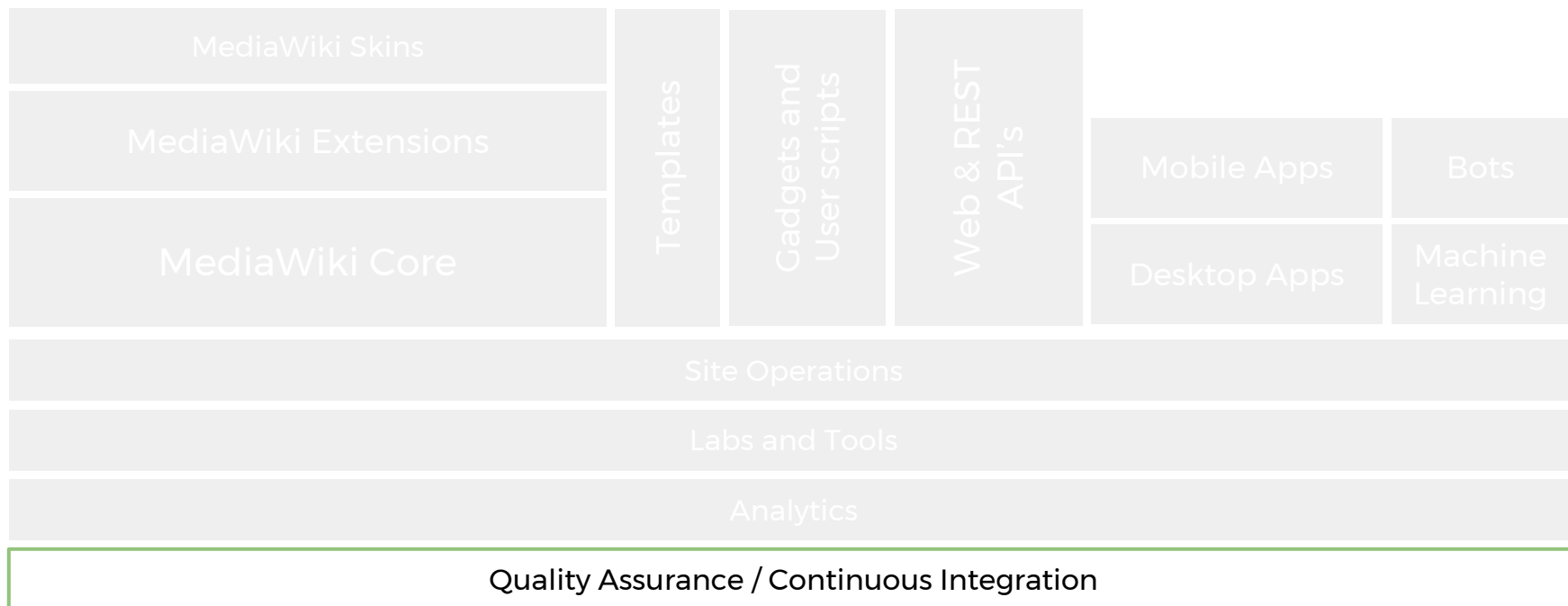
Programs	Editors	Words Added	Article Views	Articles Edited	Articles Created	Commons Uploads
277	3522	17.3M	727M	48.5K	13.4K	13K

Example of a tool hosted on Labs <https://outreachdashboard.wmflabs.org/>

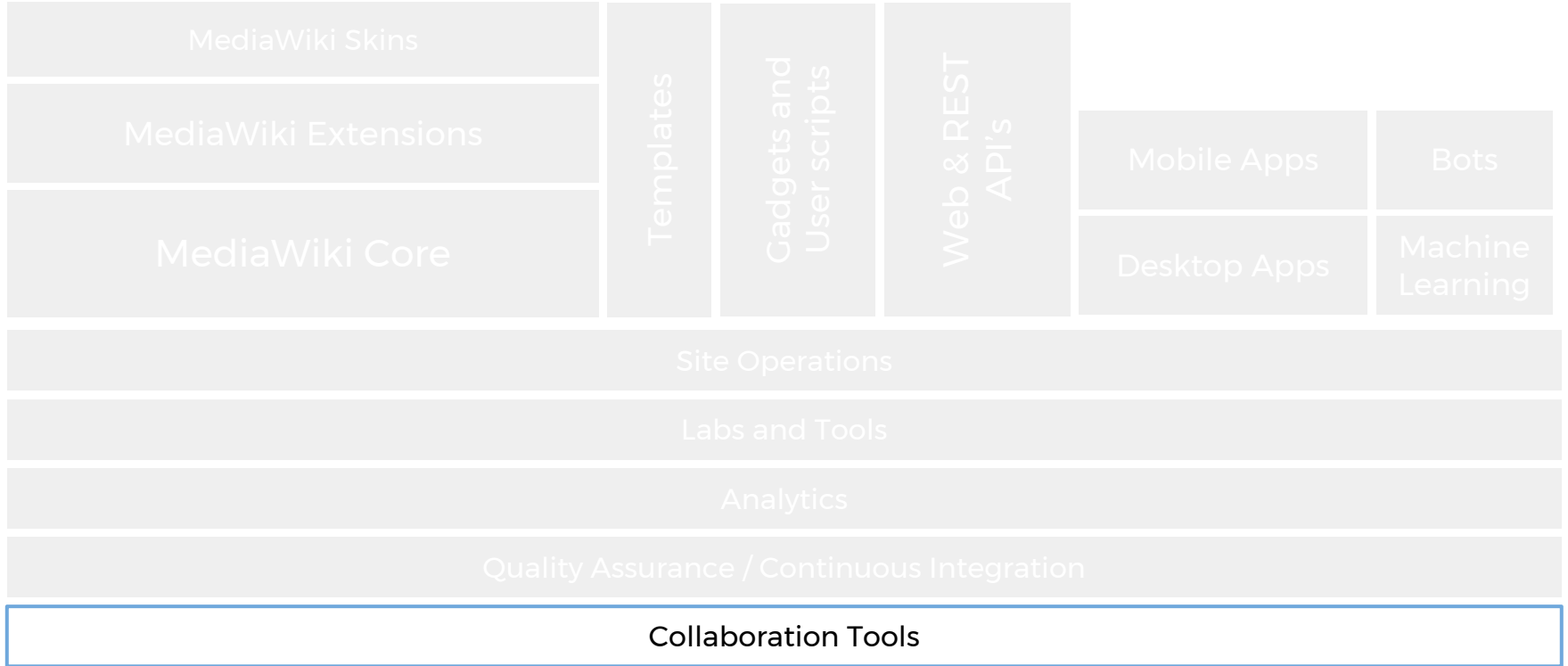
Technical Areas



Technical Areas

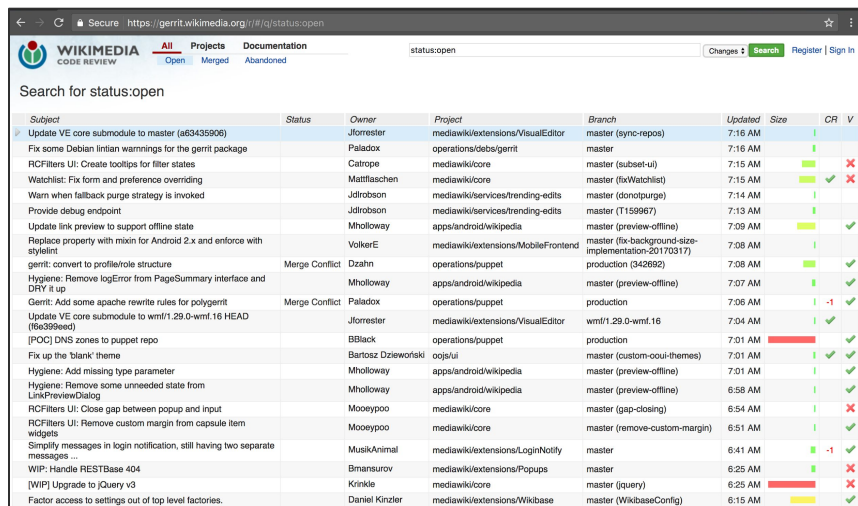


Technical Areas



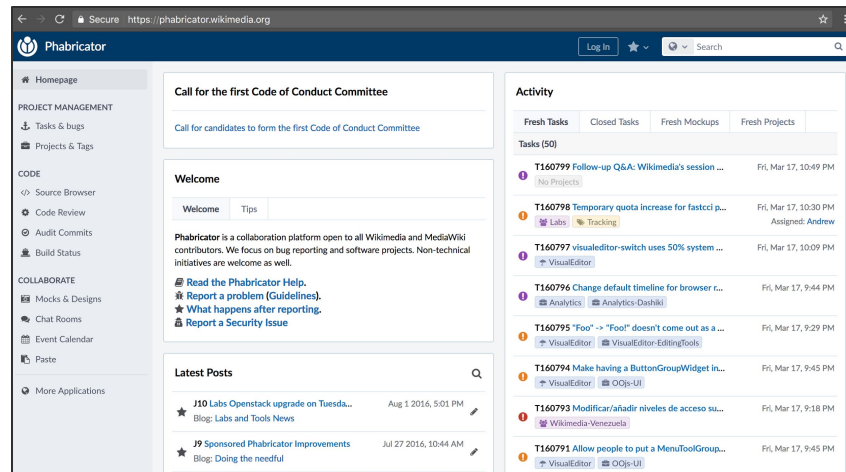
Collaboration Tools

Phabricator >
<http://phabricator.wikimedia.org>



Search for status:open

Subject	Status	Owner	Project	Branch	Updated	Size	CR	V
Update VE core submodule to master (a63435906)		Jlrester	mediawiki/extensions/VisualEditor	master (sync-repos)	7:16 AM			
Fix some Debian lintian warnings for the Gerrit package		Paladox	operations/debs/gerrit	master	7:16 AM			
RCFilters UI: Create tooltips for filter states		Catrope	mediawiki/core	master (subset-UI)	7:15 AM			✗
Watchlist: Fix form and preference overriding		Mattflaschen	mediawiki/core	master (fixWatchlist)	7:15 AM			✓
Warn when fallback purge strategy is invoked		Jdrobson	mediawiki/services/trending-edits	master (donotpurge)	7:14 AM			
Provide debug endpoint		Jdrobson	mediawiki/services/trending-edits	master (T159967)	7:13 AM			
Update link preview to support offline state		Mholloway	apps/android/wikipedia	master (preview-offline)	7:09 AM			✓
Replace property with mixin for Android 2.x and enforce with stylelint		VolkerE	mediawiki/extensions/MobileFrontend	master (fix-background-size-implementation-20170317)	7:08 AM			
gerrit: convert to profile/role structure	Merge Conflict	Dzahn	operations/puppet	production (342692)	7:08 AM			✓
Hygiene: Remove logError from Page/Summary interface and DRY it up		Mholloway	apps/android/wikipedia	master (preview-offline)	7:07 AM			✓
Gerrit: Add some apache rewrite rules for polygerrit (R6099ed)	Merge Conflict	Paladox	operations/puppet	production	7:06 AM			-1
Update VE core submodule to wmf/1.29.0-wmf.16 HEAD (R6099ed)		Jlrester	mediawiki/extensions/VisualEditor	wmf/1.29.0-wmf.16	7:04 AM			✓
[POC] DNS zones to puppet repo		BBlack	operations/puppet	production	7:01 AM			✓
Fix up the 'blank' theme		Bartosz Dzielowski	ojs/ul	master (custom-ooi-themes)	7:01 AM			✓
Hygiene: Add missing type parameter		Mholloway	apps/android/wikipedia	master (preview-offline)	7:01 AM			✓
Hygiene: Remove some unneeded state from LinkPreviewDialog		Mholloway	apps/android/wikipedia	master (preview-offline)	6:58 AM			✓
RCFilters UI: Close gap between popup and input		Mooneyoo	mediawiki/core	master (gap-closing)	6:54 AM			✗
RCFilters UI: Remove custom margin from capsule item widgets		Mooneyoo	mediawiki/core	master (remove-custom-margin)	6:51 AM			✓
Simplify messages in login notification, still having two separate messages		MusikAnimal	mediawiki/extensions/LoginNotify	master	6:41 AM			-1
WP: Handle RESTBase 404		Bmansurov	mediawiki/extensions/Popups	master	6:25 AM			✗
[WIP] Upgrade to jQuery v3		Krinkle	mediawiki/core	master (jquery)	6:25 AM			✗
Factor access to settings out of top level factories.		Daniel Kinzler	mediawiki/extensions/Wikibase	master (WikibaseConfig)	6:15 AM			✓



Phabricator

Call for the first Code of Conduct Committee

Call for candidates to form the first Code of Conduct Committee

Welcome

Phabricator is a collaboration platform open to all Wikimedia and MediaWiki contributors. We focus on bug reporting and software projects. Non-technical initiatives are welcome as well.

- Read the Phabricator Help.
- Report a problem (Guidelines).
- What happens after reporting.
- Report a Security Issue

Latest Posts

- J10 Labs Openstack upgrade on Tuesda... Aug 1 2016, 5:01 PM
- J9 Sponsored Phabricator Improvements Jul 27 2016, 10:44 AM

Activity

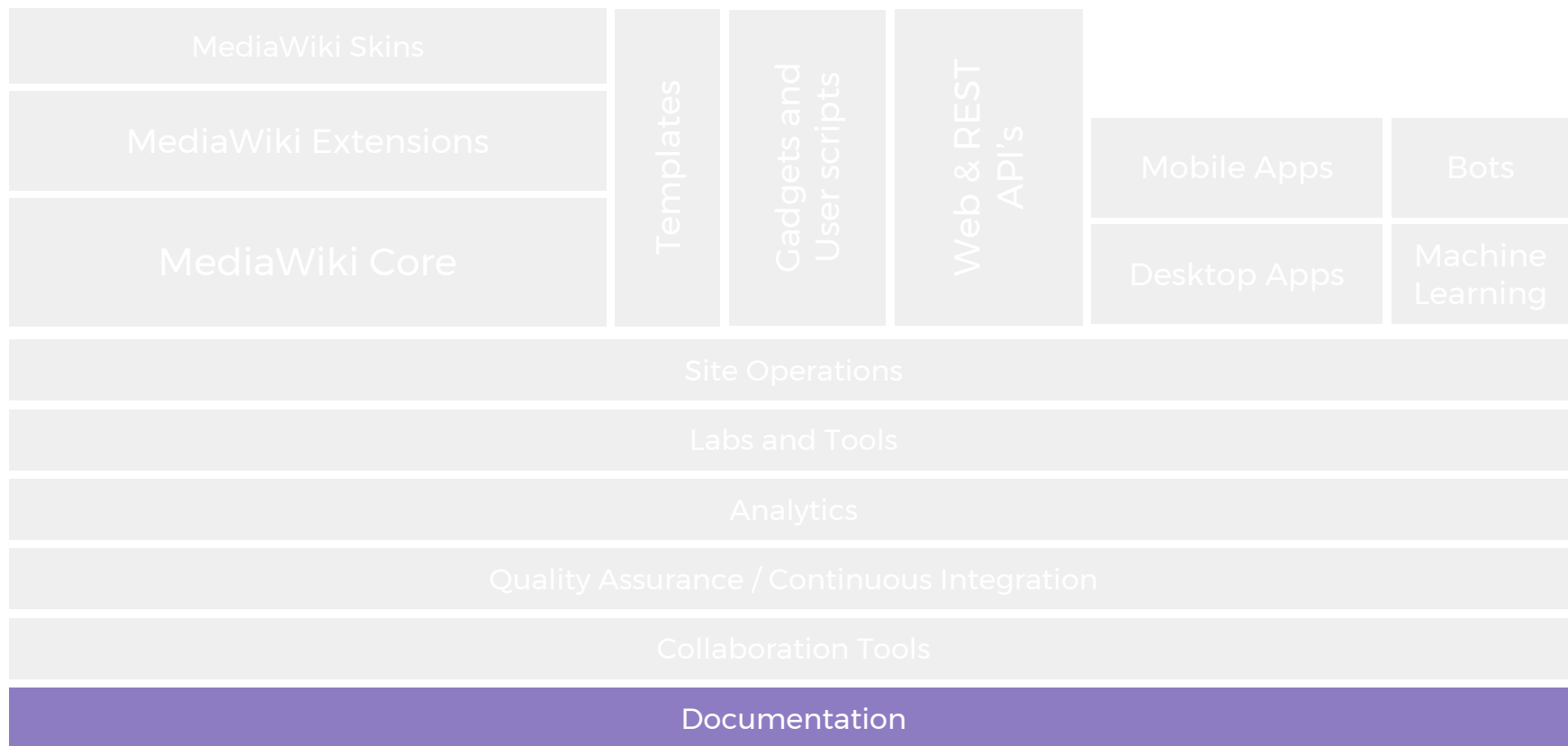
Fresh Tasks Closed Tasks Fresh Mockups Fresh Projects

Tasks (50)

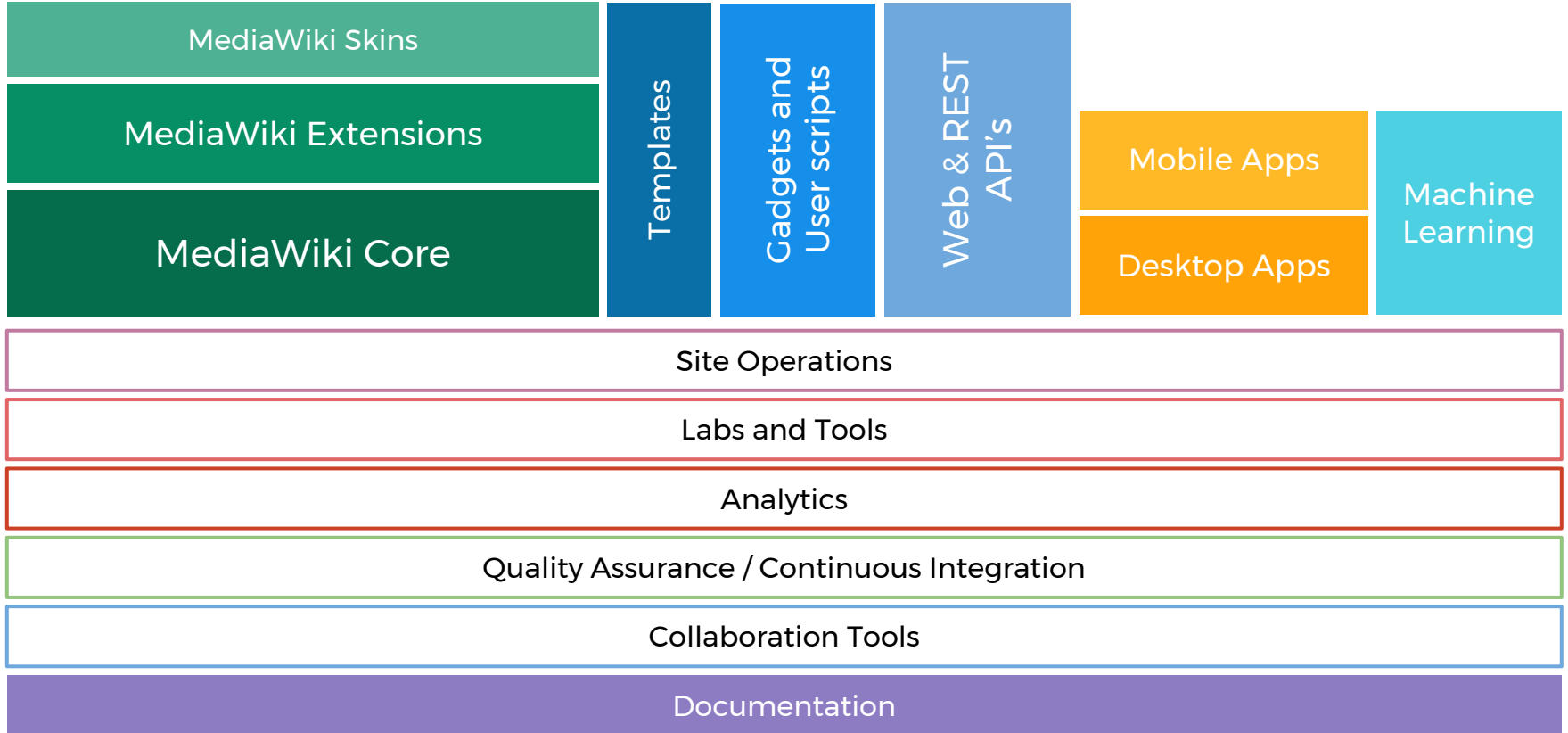
- T160799 Follow-up Q&A: Wikimedia's session ... Fri, Mar 17, 10:49 PM
- T160798 Temporary quotas increase for fastcc... Fri, Mar 17, 10:30 PM
- T160797 visualEditor-switch uses 50% system ... Fri, Mar 17, 10:09 PM
- T160796 Change default timeline for browser ... Fri, Mar 17, 9:44 PM
- T160795 'Foo' -> 'Foo' doesn't come out as a ... Fri, Mar 17, 9:29 PM
- T160794 Make having a ButtonGroupWidget in... Fri, Mar 17, 9:45 PM
- T160793 Modificar/añadir niveles de acceso su... Fri, Mar 17, 9:18 PM
- T160791 Allow people to put a Menu/ToolGroup... Fri, Mar 17, 9:45 PM

< Gerrit
<https://gerrit.wikimedia.org/>

Technical Areas



Technical Areas



Featured Tasks

Task title	Skills & additional details	Point of contact	Interested member(s)	Status
Increment user_editcount during page moves <small>#small #newcomer-friendly</small>	Familiarity with MediaWiki in general, PHP, Javascript	Kaldari		
Add page indicator to show that the page being viewed is protected <small>#small #newcomer-friendly</small>	CSS, PHP, Familiarity with MediaWiki interface Note: A day long task for experienced contributor. When this task is done, check with Technical Collaboration team about announcements.	matmarex		
Add new inverted filters options to Special:Contributions <small>#small #newcomer-friendly</small>	PHP, Javascript, Familiarity with MediaWiki in general Note: See JS file linked in the task.			
Use quotes instead of bolding in email subjects <small>#small #newcomer-friendly</small>	Familiarity with MediaWiki in general, PHP, Javascript	Catrope		
Make it easy to filter notifications by type <small>#small #newcomer-friendly</small>	Familiarity with MediaWiki in general, PHP, Javascript	Catrope		
Escape round parentheses so they properly show in the 'To' field of an email <small>#small #newcomer-friendly</small>	Familiarity with MediaWiki in general, PHP, Javascript Note: 6, 7 & 8 are related tasks	Catrope		
User rights change notification email does not specify in body which account was affected <small>#small #newcomer-friendly</small>	Familiarity with MediaWiki in general, PHP, Javascript Note: 6, 7 & 8 are related tasks	Catrope		

https://www.mediawiki.org/wiki/Wikimedia_Hackathon_2017/Featured_Tasks

Resources

- MediaWiki extensions <https://www.mediawiki.org/wiki/Manual:Extensions>
 - Visual Editor <https://www.mediawiki.org/wiki/Extension:VisualEditor>
 - Citoid <https://www.mediawiki.org/wiki/Citoid>
 - Content translation <https://www.mediawiki.org/wiki/Extension:ContentTranslation>
 - Newsletter extension <https://www.mediawiki.org/wiki/Extension:Newsletter>
- MediaWiki skins <https://www.mediawiki.org/wiki/Manual:Skins>
- Templates <https://www.mediawiki.org/wiki/Help:Templates>
- Gadgets https://www.mediawiki.org/wiki/Gadget_kitchen
 - Navigation Popups
 - i. https://en.wikipedia.org/wiki/Wikipedia:Tools/Navigation_popups
 - ii. <https://en.wikipedia.org/wiki/MediaWiki:Gadget-popups.js>
- WebAPI and Rest API https://www.mediawiki.org/wiki/API:Main_page
 - Example <http://listen.hatnote.com>
- Mobile applications: https://www.mediawiki.org/wiki/Wikimedia_Apps

Resources

- Desktop applications
 - Huggle <https://meta.wikimedia.org/wiki/Huggle>
 - Kiwix <http://www.kiwix.org/>
- Bots
 - <https://www.mediawiki.org/wiki/Manual:Bots>
 - <https://www.mediawiki.org/wiki/Manual:Pywikibot>
- ORES
 - <https://www.mediawiki.org/wiki/ORES>
 - Applied here: https://www.mediawiki.org/wiki/Edit_Review_Improvements/New_filters_for_edit_review
- Tools and Labs
 - https://wikitech.wikimedia.org/wiki/Help:Tool_Labs
 - <https://tools.wmflabs.org/>
 - Outreach Dashboard <http://github.com/WikiEducationFoundation/WikiEduDashboard>
- Quality Assurance https://www.mediawiki.org/wiki/Quality_Assurance
- Site operations https://wikitech.wikimedia.org/wiki/Puppet_coding

Follow-up

Friday May 19th, 2017 (Room Wiaschtl)

16:00 - 17:00 Skillshare: Setup MediaWiki development environment

17:00 - 18:00 Introduction to Wikimedia Phabricator

Follow-up

- Email ssethi@wikimedia.org
- Twitter [@srish_aka_tux](https://twitter.com/srish_aka_tux)
- IRC [#wikimedia-devrel](https://freenode.net) on freenode

Thank you!



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