

Sharing Opportunities for New Developers in the Wikipedia Community

Srishti Sethi



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Agenda

- Wikimedia ecosystem
- Technical areas and projects for new developers
- Efforts to onboard new developers



Wikimedia Ecosystem



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This *might* be a bit confusing..



WIKIPEDIA
The Free Encyclopedia



MEDIAWIKI



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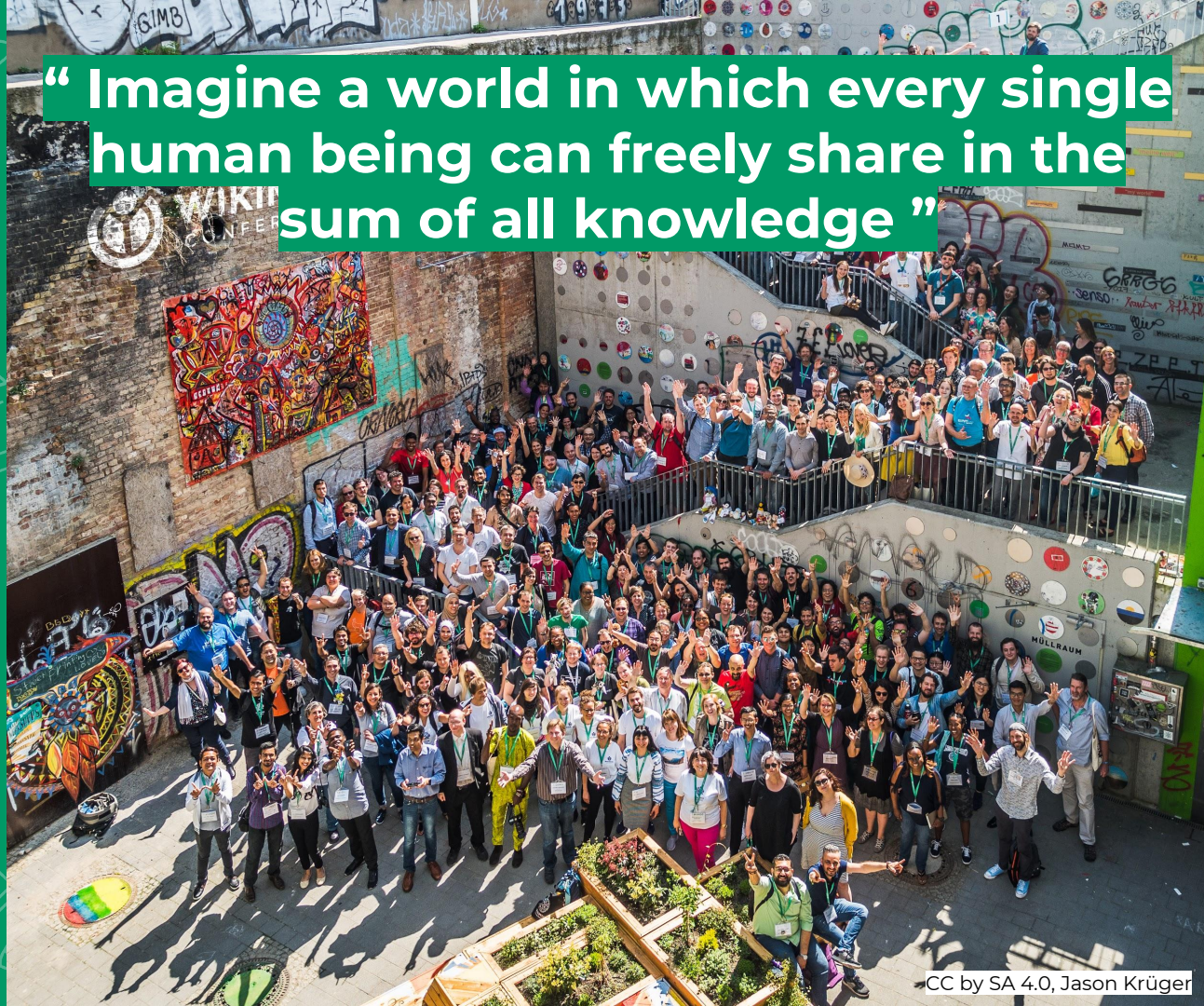


WIKI

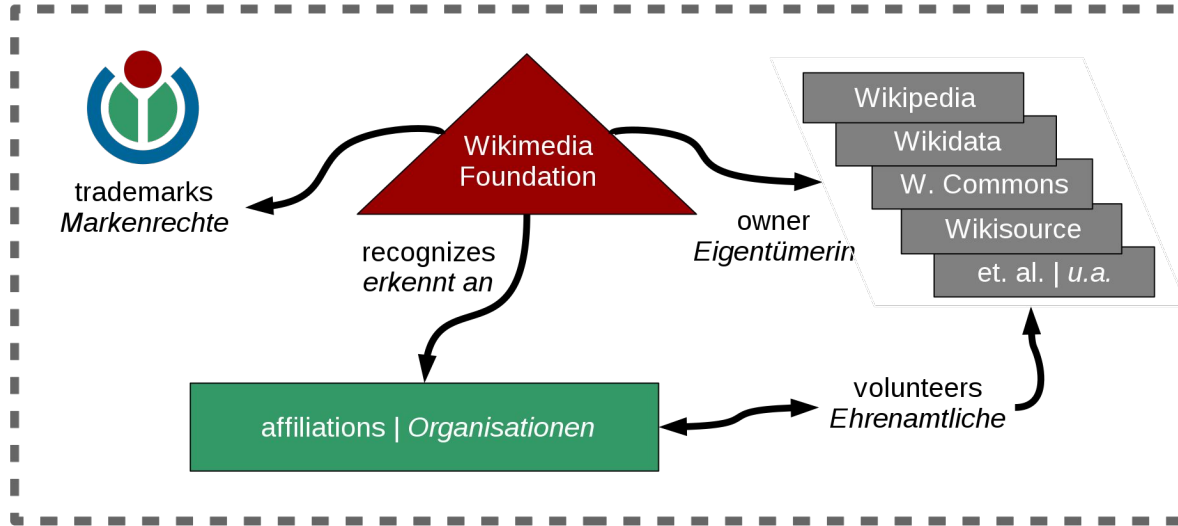


WIKIMEDIA
MOVEMENT

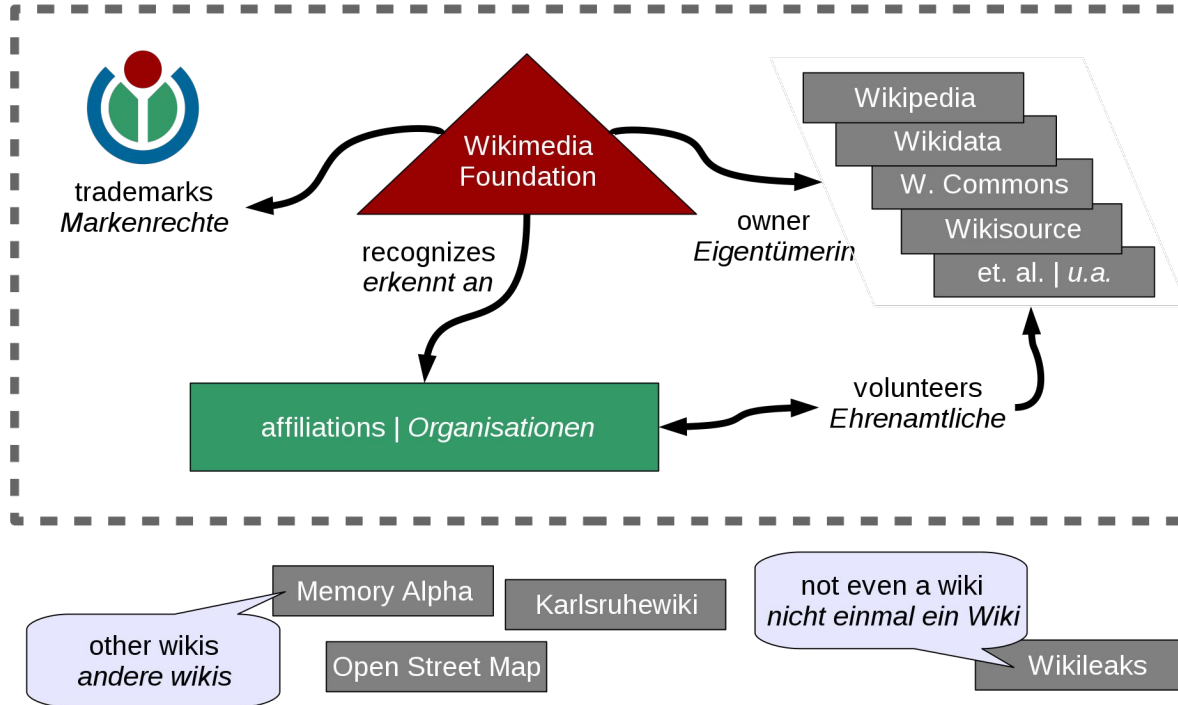
“Imagine a world in which every single human being can freely share in the sum of all knowledge”



Wikimedia Movement

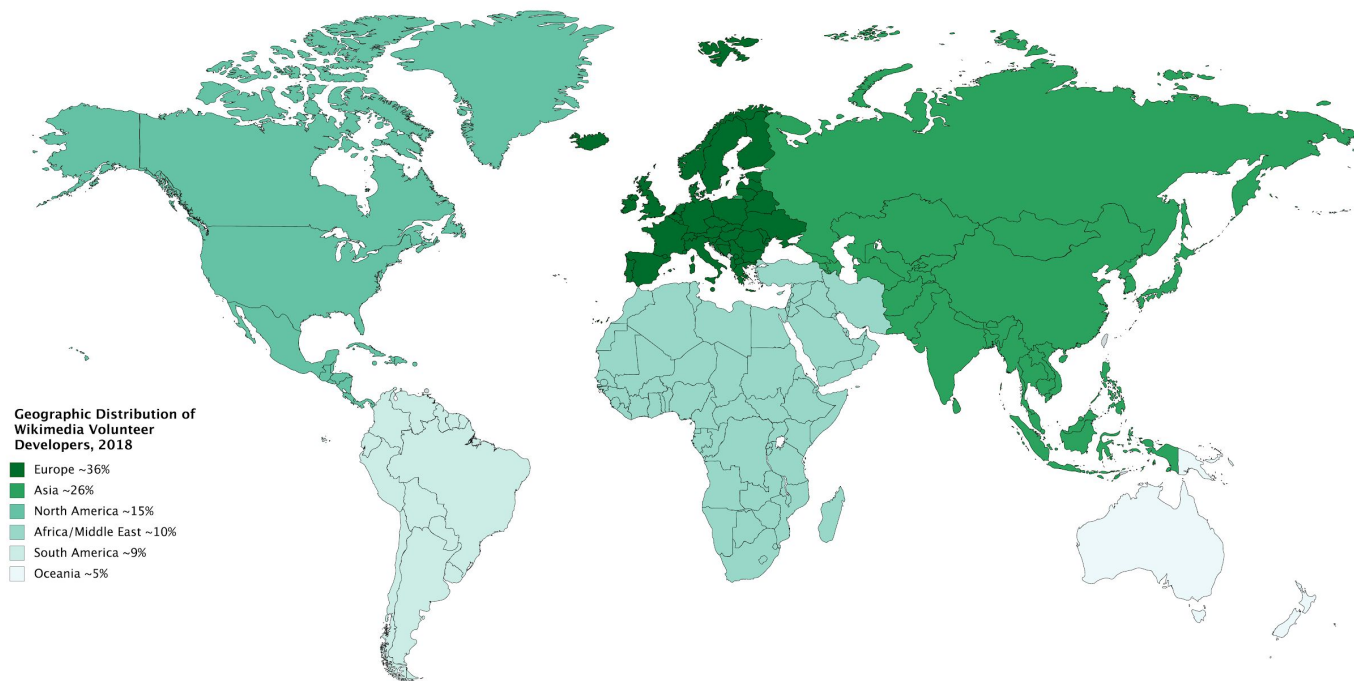


Wikimedia Movement



Who makes technical contributions to Wikipedia community?

Geographic Distribution of Wikimedia Volunteer Developers (2017-18)

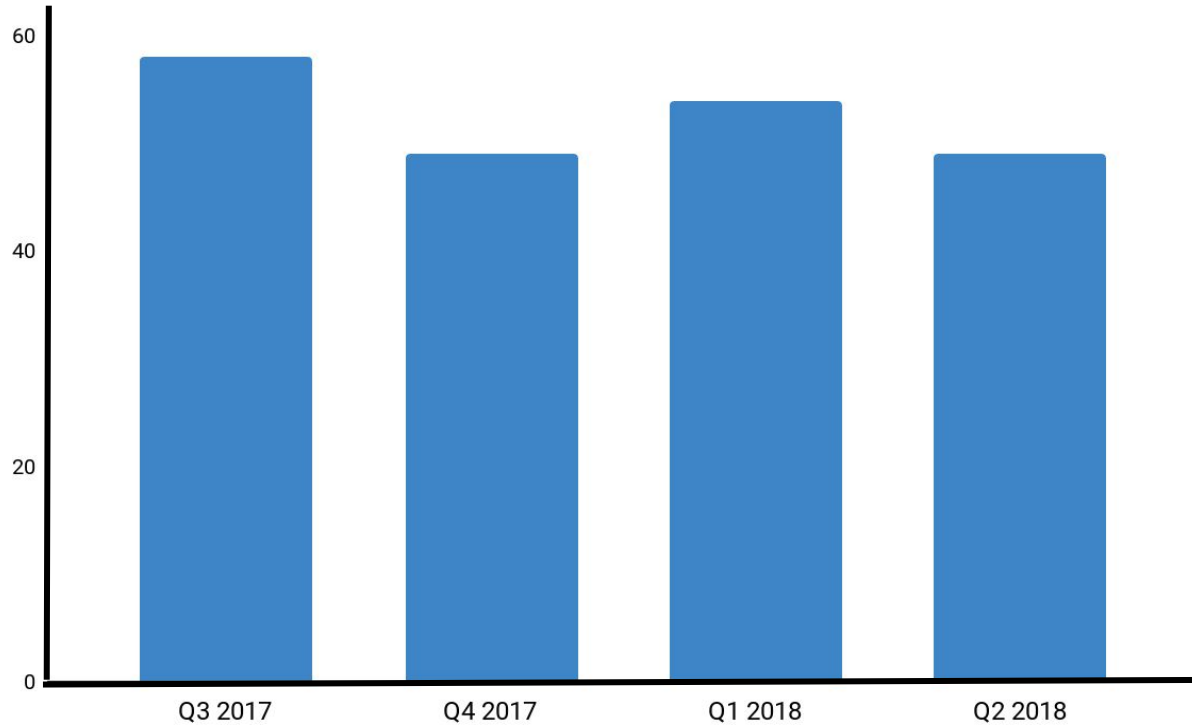


Technical Contributions Overview

(2017-18)

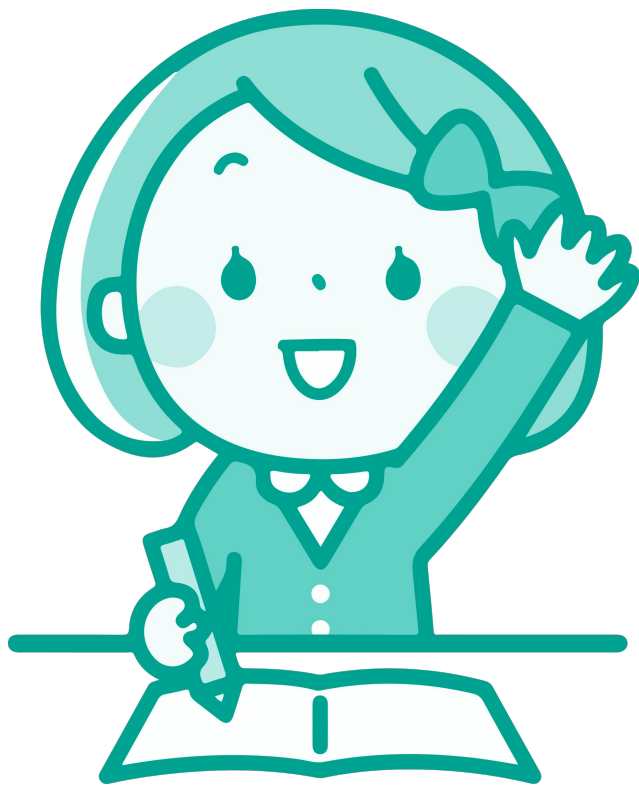
- **413** contributors → **60%** volunteers
- **48,652** commits → **18%** of commits
- **1,363** repositories

New Developers Added in 2017-18



What makes Wikimedia volunteers contribute?





**WIKIPEDIA
NEEDS YOU!**

How to Contribute?

Four-step process

- Pick a task related to a Wikimedia project or technical area
- Set up the development environment
- Choose and solve a task
- Submit your code changes





Step 1

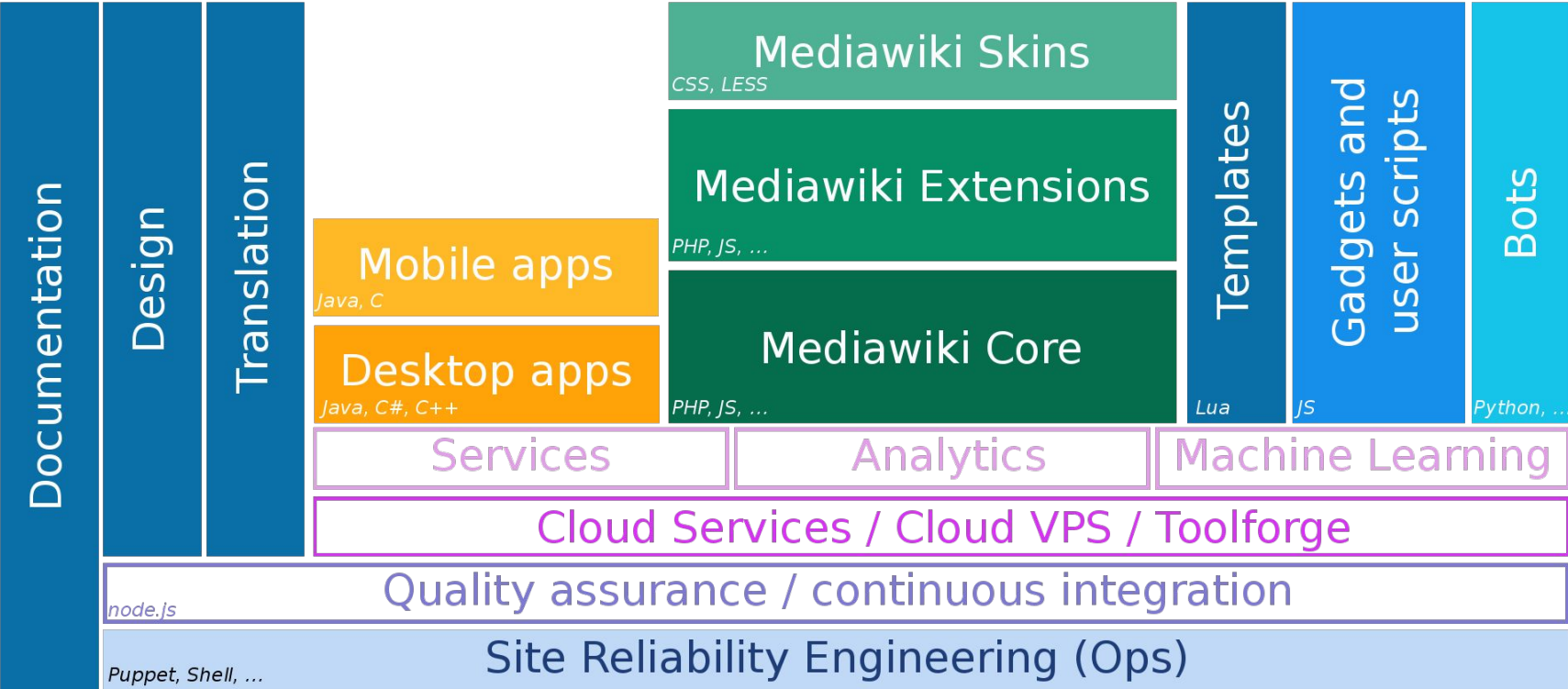
Pick a task related
to a Wikimedia
project or technical
area



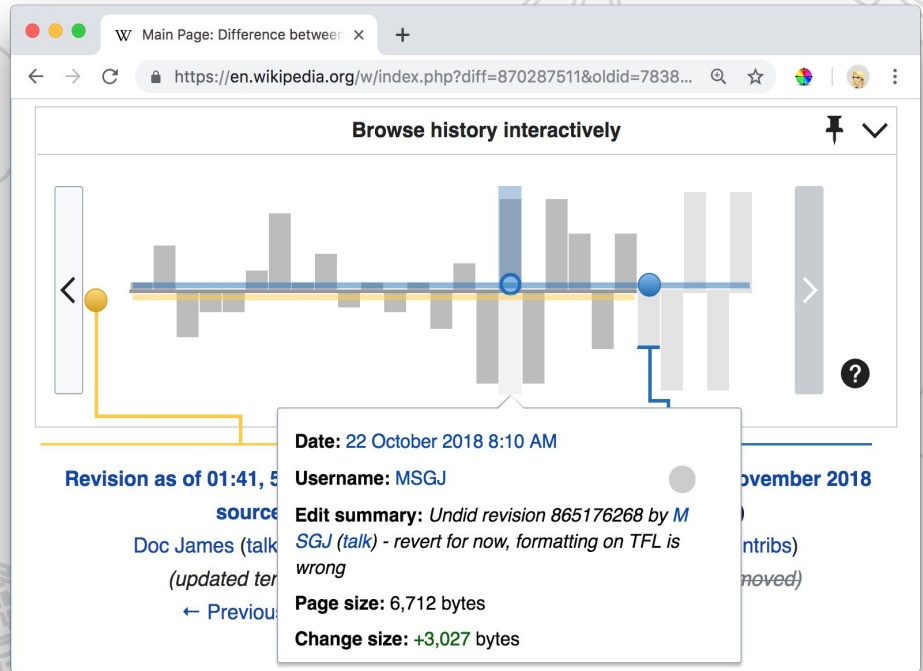
Wikimedia Projects



Technical areas



MediaWiki Extensions



The screenshot shows a web browser window displaying a MediaWiki page titled "Main Page: Difference between". The URL is <https://en.wikipedia.org/w/index.php?diff=870287511&oldid=7838...>. The page features a "Browse history interactively" section with a bar chart showing revision activity over time. A yellow dot on the chart is connected to a detailed view of a specific revision.

Browse history interactively

Revision as of 01:41, 5

source

Doc James (talk

(updated ter

← Previous

Date: 22 October 2018 8:10 AM

Username: MSGJ

Edit summary: *Undid revision 865176268 by M SGJ (talk) - revert for now, formatting on TFL is wrong*

Page size: 6,712 bytes

Change size: +3,027 bytes

November 2018

(ntribs)

(moved)

Screenshot of an Extension: Revision Slider

Desktop Apps

The screenshot shows the Huggle 3 desktop application window. The title bar reads "Huggle 3 QT-LX on enwiki". The interface includes a menu bar (System, Tools, Page, Queue, HAN, User, Help), a toolbar with navigation icons, and a status bar at the bottom. The main content area displays a diff between two versions of a page. The left pane shows the original text, and the right pane shows the edited text. The summary at the top indicates a size change of +104. The diff highlights several changes, including the addition of the text "(with John Stanley) and again in 1985 for 'Words Can".

System logs

Time	Message
Tue Jun 3 19:13:41 2014	Connected to IRC recent changes feed
Tue Jun 3 19:13:31 2014	Loaded in 259ms
Tue Jun 3 19:13:31 2014	Extensions: 0
Tue Jun 3 19:13:31 2014	Loading plugins in /home/petanj/local/share/data/Wikimedia/Huggle/extensions/
Tue Jun 3 19:13:31 2014	Home: /home/petanj/local/share/data/Wikimedia/Huggle/Configuration/

System logs | Processes

Processing 0 edits and 0 queries. Whitelisted users: 15358 Queue size: 13 Statistics: 108 edits per minute 5.65 reverts per minute, level 1.05

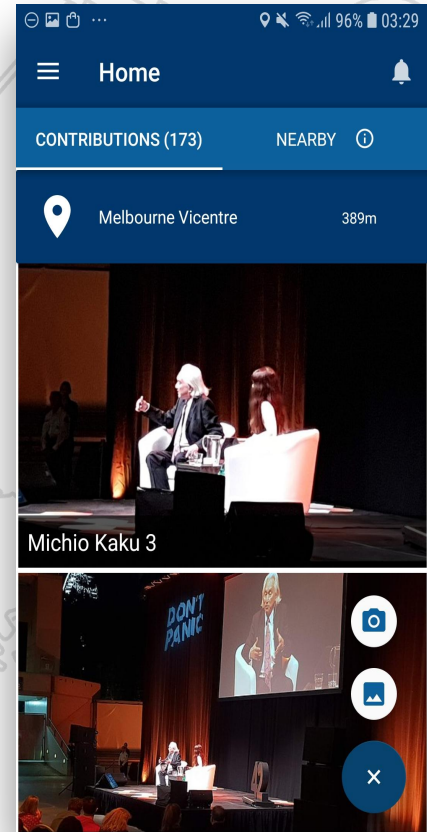
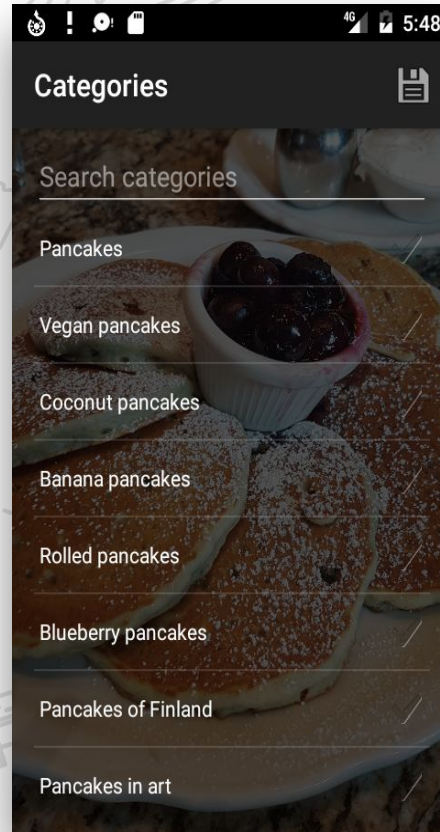
Screenshot of a Desktop app: Huggle

Desktop Apps



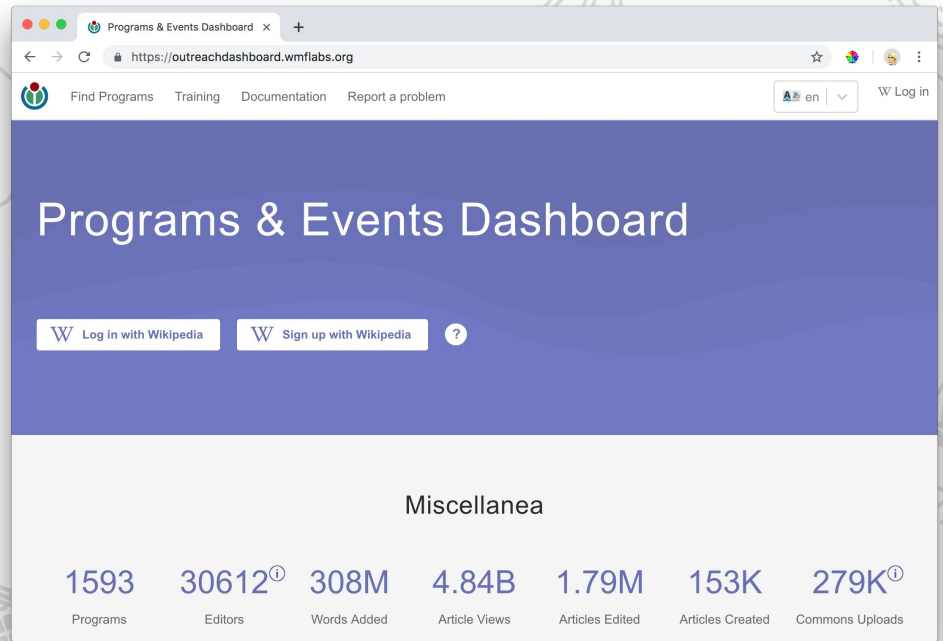
**Screenshot of Kiwix running Wikipedia on an
OLPC laptop**

Mobile Apps



Wikimedia Commons app

Tools & Bots

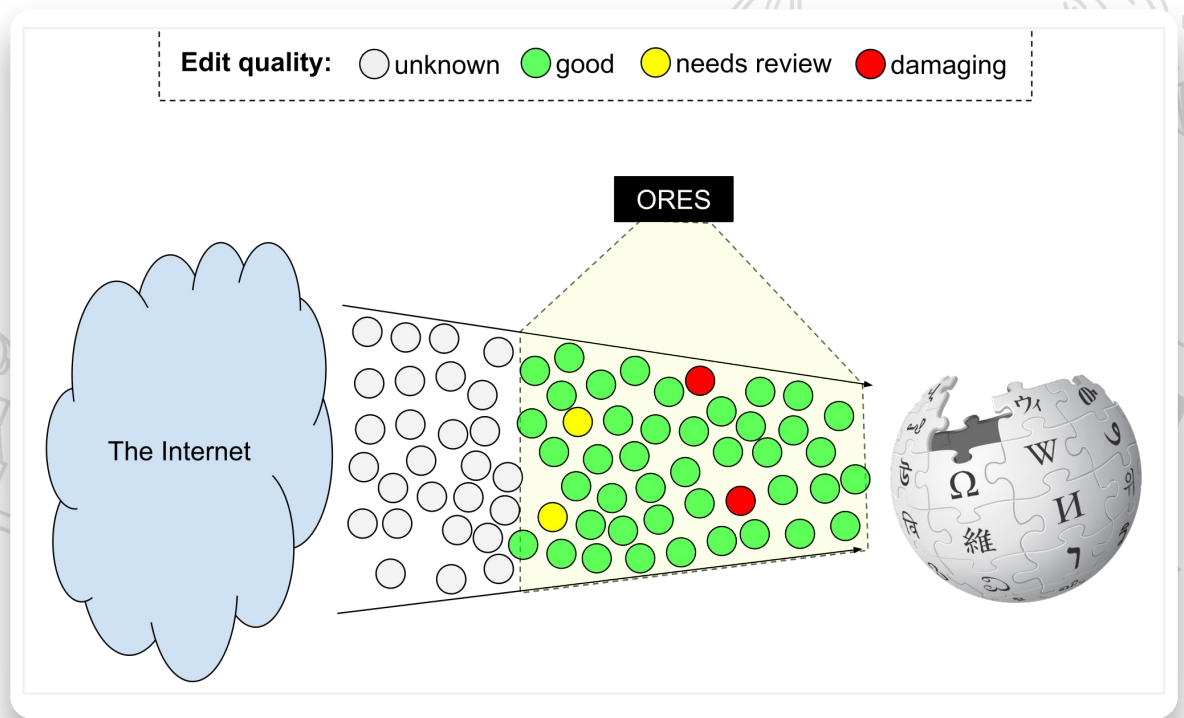


The screenshot shows a web browser window displaying the 'Programs & Events Dashboard' for WMFLabs. The browser's address bar shows the URL 'https://outreachdashboard.wmflabs.org'. The page features a dark blue header with the title 'Programs & Events Dashboard' in white. Below the header, there are two buttons for logging in with Wikipedia: 'Log in with Wikipedia' and 'Sign up with Wikipedia'. The main content area is titled 'Miscellanea' and displays a row of statistics:

Programs	Editors	Words Added	Article Views	Articles Edited	Articles Created	Commons Uploads
1593	30612 [Ⓢ]	308M	4.84B	1.79M	153K	279K [Ⓢ]

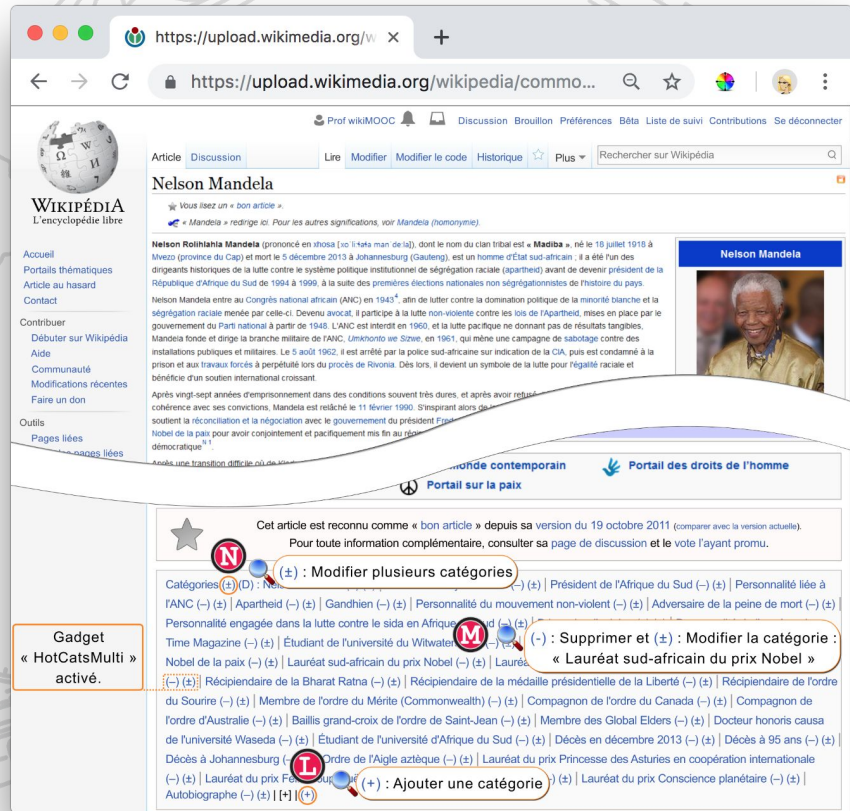
Example of a Tool: Programs & Events Dashboard

Machine Learning



ORES edit quality flow

Gadgets



The screenshot shows the Wikipedia article for Nelson Mandela. The browser address bar displays the URL <https://upload.wikimedia.org/wikipedia/commo...>. The article title is "Nelson Mandela". A notification banner at the top indicates that the article is a "bon article" (good article) since October 19, 2011. The article text begins with "Nelson Rolihlahla Mandela (prononcé en xhosa [no li-ʔala man de la]), dont le nom du clan tribal est « Madiba », né le 18 juillet 1918 à Mvezo (province du Cap) et mort le 5 décembre 2013 à Johannesburg (Sauteng), est un homme d'État sud-africain ; à été l'un des dirigeants historiques de la lutte contre le système politique institutionnel de ségrégation raciale (apartheid) avant de devenir président de la République d'Afrique du Sud de 1994 à 1999, à la suite des premières élections nationales non ségrégationnistes de l'histoire du pays".

A "HotCat" gadget is overlaid on the article, displaying a list of categories for the article. The categories listed include: "Président de l'Afrique du Sud", "Personnalité liée à l'ANC", "Apartheid", "Gandhien", "Personnalité du mouvement non-violent", "Adversaire de la peine de mort", "Personnalité engagée dans la lutte contre le sida en Afrique", "Membre des Global Elders", "Docteur honoris causa de l'université Waseda", "Étudiant de l'université d'Afrique du Sud", "Décès en décembre 2013", "Décès à 95 ans", "Décès à Johannesburg", "Ordre de l'Aigle aztèque", "Lauréat du prix Princesse des Asturies en coopération internationale", "Lauréat du prix Fernand de Noronha", "Lauréat du prix Princesse des Asturies en coopération internationale", "Lauréat du prix Science planétaire", and "Autobiographe".

Screenshot of a Gadget: HotCat

Other Major Areas



Design



Docs



Translation



Quality
Assurance



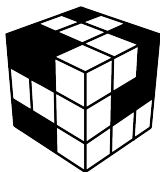
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Step 2

Set up the
development
environment





Step 3

Choose and solve a task



The screenshot shows a web browser window displaying the Phabricator task page for T213202. The page title is "Improve Recent Activity feed(s)". The task is currently "Open, Low" priority and is "Public". The description explains that the current activity feed picks the 5 most recent signups, applications, approvals, and new partners, which can be misleading. It suggests improving the feed to show the most recent objects across categories without subscribing to each. A "good first bug" tag is present, indicating the task is suitable for newcomers. The task was created by Samwalton9 on Jan 8 2019, 10:17 AM. Herald added a subscriber, Aklapper, on Jan 8 2019, 10:17 AM. Samwalton9 triaged the task as "Low" priority on Jan 8 2019, 10:17 AM. The page also shows a list of subscribers: Aklapper and Samwalton9.

<https://phabricator.wikimedia.org/>



Step 4

Submit your code changes



status:open | gerrit.wikimedia.org

https://gerrit.wikimedia.org/r/#/q/status:open

Changes Search Register Sign In

Search for status:open

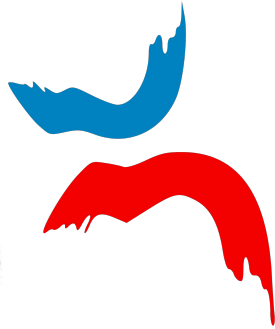
Subject	Status	Owner	Project	Branch	Updated	Size	CF	V
Avoid page table query spam in HistoryPager due to lastLink()		Aaron Schulz	mediawiki/core	master	7:34 PM			✓ ✗
rdbmis: make Database::query() more readable and consistent		Aaron Schulz	mediawiki/core	master	7:33 PM			
rdbmis: improve database connection loss handling		Aaron Schulz	mediawiki/core	master	7:33 PM			
Editor and VisualEditor use onBeforeExit		Jdrobson	mediawiki/extensions/MobileFrontend	master	7:32 PM			
SelectWidget: Allow multiselect mode, add to MenuTagMultiselectWidget		Mooneyoo	oojs/ui	master (selectwidget-multiselect)	7:24 PM			✓
WIP: c_1 ids from the sequence generator		XenoRyet	mediawiki/extensions/DonationInterface	master (sequenceCT-ID)	7:18 PM			✗
Enable ExternalGuidance to all Wikipedias		KartikMistry	operations/mediawiki-config	master (eg-to-all)	7:15 PM			+1 ✓
Reimplement GetMainSearchRequest UDF from refinery-hive		EBernhardson	search/glent	master (495984)	7:05 PM			✗
Method0 WIP		Julia glen	search/glent	master (495984)	7:03 PM			✓
Set blacklist regex		Gergő Tisza	mediawiki/services/chromium-render/deploy	master	6:56 PM			
Avoids to call on('load' if the window is already loaded		Tpt	mediawiki/extensions/ProofreadPage	master (zoom-load)	6:56 PM			+1 ✓
Update OOUl to v0.31.0		Jforrester	mediawiki/core	master (upstream-ooou)	6:16 PM			✓
Update OOUl to v0.31.0		Jforrester	mediawiki/vendor	master (upstream-ooou)	6:13 PM			✓
Update OOUl to v0.31.0		Jforrester	VisualEditor/VisualEditor	master (upstream-ooou)	6:07 PM			✓
Edit summary autoComplete		Esanders	mediawiki/extensions/VisualEditor	master (autocomplete)	6:04 PM			✓
Re-apply "textSelection: Use execocommand to replace text"		Esanders	mediawiki/core	master (execocommand)	6:00 PM			✗ ✓

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

Outreach Programs & Events



Google
Summer of Code



WIKIMANIA



Google Code-in

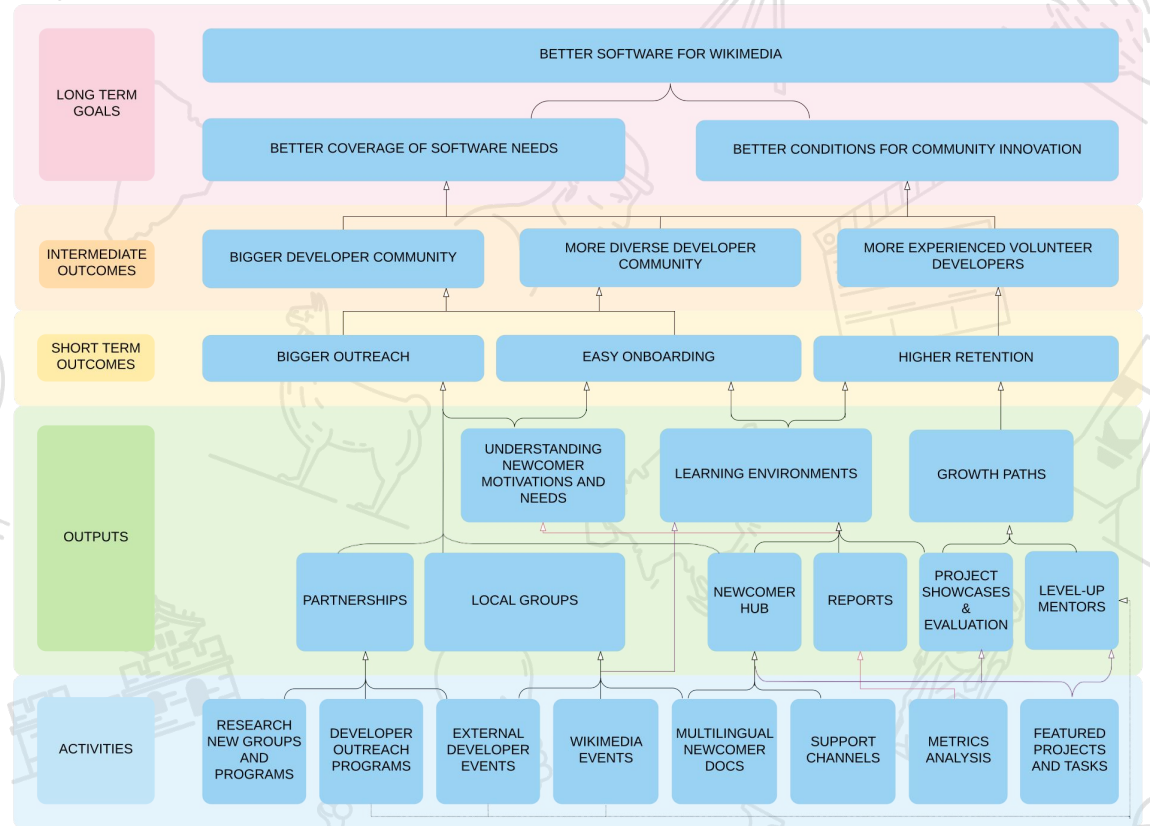


WIKIMEDIA
HACKATHON

Efforts to Onboard New Developers

Onboarding New Developers Program

FY 2017-18



New Developers Guide


Choose a software project [\[edit source \]](#)

This is the recommended way to start. Choose one of the following projects and follow the project's documentation to set up your development environment, choose a task to work on, solve the task, and submit your code changes for review:

Huggle

An anti-vandalism desktop application for Wikimedia projects


- Skills required: C++ with Qt
- Get in touch: [Mailing list](#) / Chat in [#huggle](#) connect on irc.freenode.net
- Get the source code: [GitHub](#)
- Read the [user](#) and [programmer](#) documentation
- Check the recommended tasks to work on: [Phabricator](#)
- Mentor(s): [Peter Bena](#)



KIWI

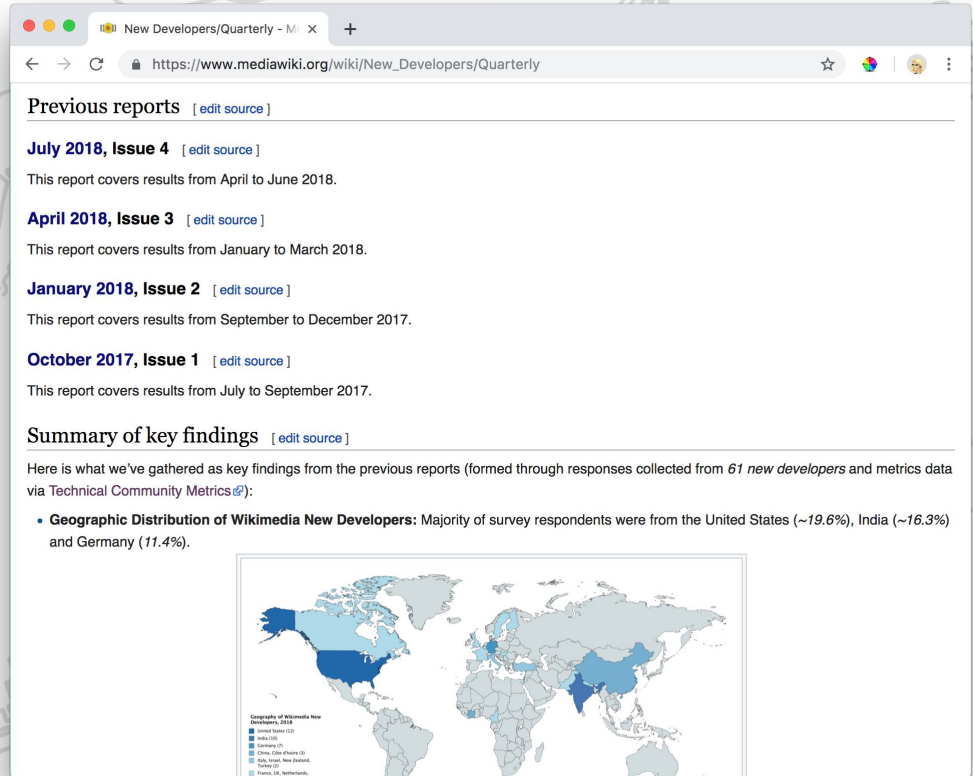
An offline reader for Wikipedia web content

- Skills required: Java (Android app), Swift (iOS app)
- Get in touch: [Mailing list](#) / Chat in [#kiwix](#) connect on irc.freenode.net
- Get the source code: [GitHub](#)
- Read the [general documentation](#) and the README.md file of the corresponding project
- Check the recommended tasks to work on: [Android](#), [iOS](#), [JS](#) on GitHub
- Mentor(s): [Matthieu Gauthier](#), [Emmanuel Engelhart](#), [Stephane Coillet-Matillon](#)



https://www.mediawiki.org/wiki/New_Developers

Quarterly Surveys and Reports



Previous reports [[edit source](#)]

July 2018, Issue 4 [[edit source](#)]
This report covers results from April to June 2018.

April 2018, Issue 3 [[edit source](#)]
This report covers results from January to March 2018.

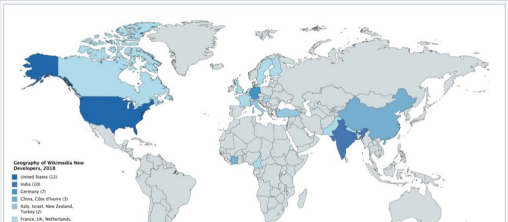
January 2018, Issue 2 [[edit source](#)]
This report covers results from September to December 2017.

October 2017, Issue 1 [[edit source](#)]
This report covers results from July to September 2017.

Summary of key findings [[edit source](#)]

Here is what we've gathered as key findings from the previous reports (formed through responses collected from *61 new developers* and metrics data via Technical Community Metrics):

- **Geographic Distribution of Wikimedia New Developers:** Majority of survey respondents were from the United States (~19.6%), India (~16.3%) and Germany (11.4%).



Geography of Wikimedia New Developers, 2018

- United States (19.6%)
- India (16.3%)
- Germany (11.4%)
- China, CN (9.8%)
- UK, GB (8.5%)
- France (7.1%)
- Spain (5.7%)
- Italy (4.6%)
- Japan (3.9%)
- Canada (3.2%)
- Other (11.4%)

https://www.mediawiki.org/wiki/New_Developers/Quarterly

Hackathon Mentoring Program



[https://www.mediawiki.org/wiki/Hackathons/Handbook/
Mentoring_program](https://www.mediawiki.org/wiki/Hackathons/Handbook/Mentoring_program)

Collaboration with OSSN & POSSE

Wikimedia Foundation collaborat... x +

← → ↻ 🔒 <https://wikimediafoundation.org/2018/10/12/wiki...> ☆ 🌈 👤 ⋮

← NEWS

Wikimedia Foundation collaborates with two initiatives: Mozilla's OSSN and TeachingOpenSource's POSSE

By [Srishti Sethi](#) and [Sarah Rodlund](#)

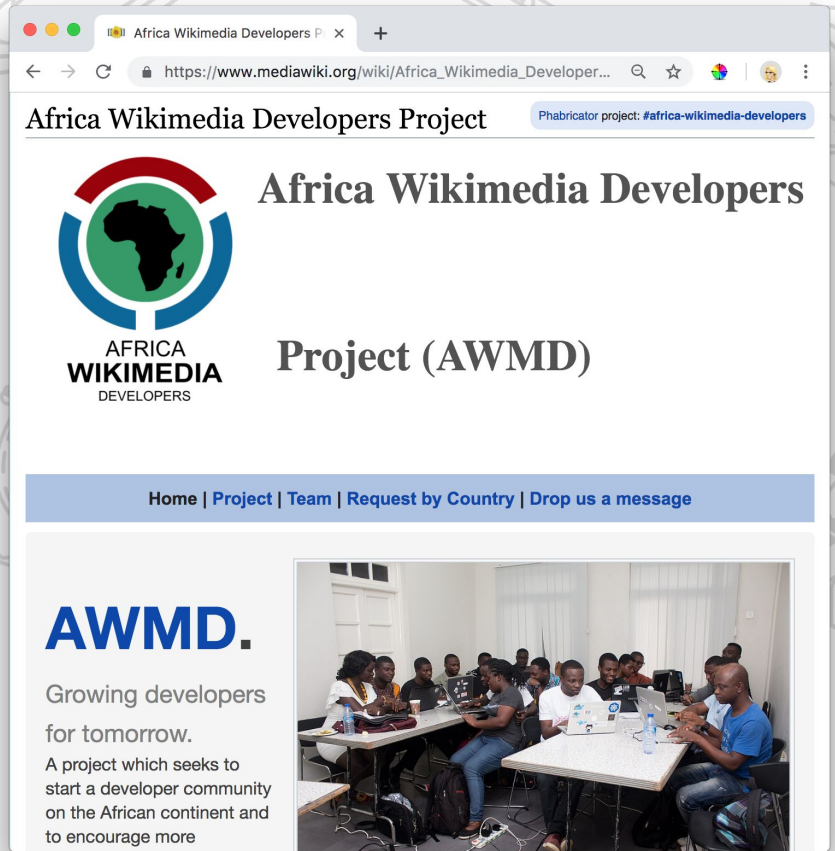
12 October 2018

SH  




New developers at one of the mentoring sessions at the 2018 Wikimedia

Africa Wikimedia Developers Project



Africa Wikimedia Developers Project Phabricator project: #africa-wikimedia-developers



Africa Wikimedia Developers


Project (AWMD)

[Home](#) | [Project](#) | [Team](#) | [Request by Country](#) | [Drop us a message](#)

AWMD.

Growing developers
for tomorrow.

A project which seeks to
start a developer community
on the African continent and
to encourage more



https://www.mediawiki.org/wiki/Africa_Wikimedia_Developers_Project

Gerrit Newcomer Bot

The screenshot shows a Gerrit code review interface. At the top, it displays 'Change 451565 - Merged' with a description: 'Replace loading bar of revision slider with three moving bubbles'. Below this, it lists the bug ID 'T161640' and the change ID 'I949bce945def25de561c0ae0df971c3f609586ce'. The author is 'srish <srishakatum@gmail.com>' and the commit is 'dd4310aeece6098805ce26a7510f038dbf0e898b'. The commit message is 'Welcome, new contributor!'. The patch set is '1' and it is 'Merged'. The review is by 'SrishtiSethi' and 'WMDE-Fisch'. The files table shows 'Commit Message' (74 comments), 'modules/ext.RevisionSlider.lazy.less' (9 comments), and 'src/RevisionSliderHooks.php' (+80, -3 comments). The history shows the patch set was uploaded by 'SrishtiSethi' on 'Aug 8 8:54 PM'. A green box highlights the welcome message: 'Welcome, new contributor! Patch Set 1: Thank you for making your first contribution to Wikimedia! :) To learn how to get your code changes reviewed faster and more likely to get accepted, read https://www.mediawiki.org/wiki/Gerrit/Code_review/Getting_reviews. To explore more newcomer friendly projects, read https://www.mediawiki.org/wiki/New_Developers. We look forward to your next patch submission in Gerrit!'. The background features various line-art icons including a map of Africa, the Eiffel Tower, a hand holding a pen, a planet Saturn, a telescope, a film strip, a pyramid, a sphinx, a globe, a satellite, a person's head, a film strip, a person's head, and a person's head.

Change 451565 - Merged

Replace loading bar of revision slider with three moving bubbles

Using rawElement function to generate a new html element for loading spinner. This replaces the progress bar widget.

Bug: T161640
Change-Id: I949bce945def25de561c0ae0df971c3f609586ce

Owner SrishtiSethi
Uploader WMDE-Fisch
Assignee
Reviewers Welcome, new contributor! Addshore
Andrew-WMDE Gopavasanth Tobias Gritschacher
WMDE-Fisch Wassan.anmol jenkins-bot
Project mediawiki/extensions/RevisionSlider
Branch master
Topic loading-bar
Updated 5 weeks ago
Hashtags

Cherry Pick Revert Follow-Up Mark Reviewed

Code-Review +2 WMDE-Fisch
+1 Gopavasanth
Verified +2 jenkins-bot

Files Open All Diff against: Base

File Path	Comments	Size
Commit Message	74	
modules/ext.RevisionSlider.lazy.less	9	
src/RevisionSliderHooks.php	+80, -3	

History Expand All Hide tagged comments

SrishtiSethi Uploaded patch set 1. Aug 8 8:54 PM

Welcome, new contributor!
Patch Set 1:
Thank you for making your first contribution to Wikimedia! :) To learn how to get your code changes reviewed faster and more likely to get accepted, read https://www.mediawiki.org/wiki/Gerrit/Code_review/Getting_reviews. To explore more newcomer friendly projects, read https://www.mediawiki.org/wiki/New_Developers. We look forward to your next patch submission in Gerrit!

Screenshot of welcome message added by
newcomer bot

Support Channels



Outcomes & Lessons Learned



THANK YOU

Srishti Sethi

✉ ssethi@wikimedia.org

🐦 @srish_aka_tux



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References

→ Wikimedia Ecosystem

- ◆ Technical contributions overview source

<https://wikimedia.biterg.io/goto/b6b44987ee5deec0becd728a8a655870>

→ Technical areas and projects for new developers

- ◆ Complete list of Wikimedia projects <https://www.wikimedia.org/>
- ◆ How to contribute https://www.mediawiki.org/wiki/How_to_contribute
- ◆ New developers guide https://www.mediawiki.org/wiki/New_Developers
- ◆ Extension:RevisionSlider <https://www.mediawiki.org/wiki/Extension:RevisionSlider>
- ◆ Programs and events dashboard <https://outreachdashboard.wmflabs.org/>
- ◆ Gadgets https://www.mediawiki.org/wiki/Gadget_kitchen

References

→ Onboarding new developers

- ◆ How technical collaboration is bringing new developers into Wikimedia
<https://blog.wikimedia.org/2017/10/05/technical-collaboration-new-developers/>
- ◆ Wikimedia Foundation collaborates with two initiatives
<https://wikimediafoundation.org/2018/10/12/wikimedia-foundation-collaboration-os-sn-posse/>
- ◆ Gerrit newcomer bot
https://medium.com/@Srish_Aka_Tux/gerrit-newcomer-bot-one-small-step-to-welcoming-new-developers-and-tracking-their-patches-50cc6eebf34d
- ◆ Support channels
 - <https://discourse-mediawiki.wmflabs.org>
 - <https://wikimedia.zulipchat.com/>

Credits

- [Wikimedia Developer Advocacy](#) team
- [Wikimedia Austria](#) chapter for their work on the [Hackathon Mentoring Program](#)
- [Africa Wikimedia Developers Project](#) for coordinating outreach efforts in Africa
- Friends and colleagues: Suchakra Sharma, Sarah Rodlund, Andre Klapper, Bryan Davis, Rachel Farrand, Quim Gil



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