

Sharing Opportunities for New Developers in the Wikipedia Community

Srishti Sethi



WIKIMEDIA
FOUNDATION

Agenda

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



Wikimedia Ecosystem



This *might* be a bit confusing..



WIKIPEDIA
The Free Encyclopedia



MEDIAWIKI



WIKIMEDIA
FOUNDATION

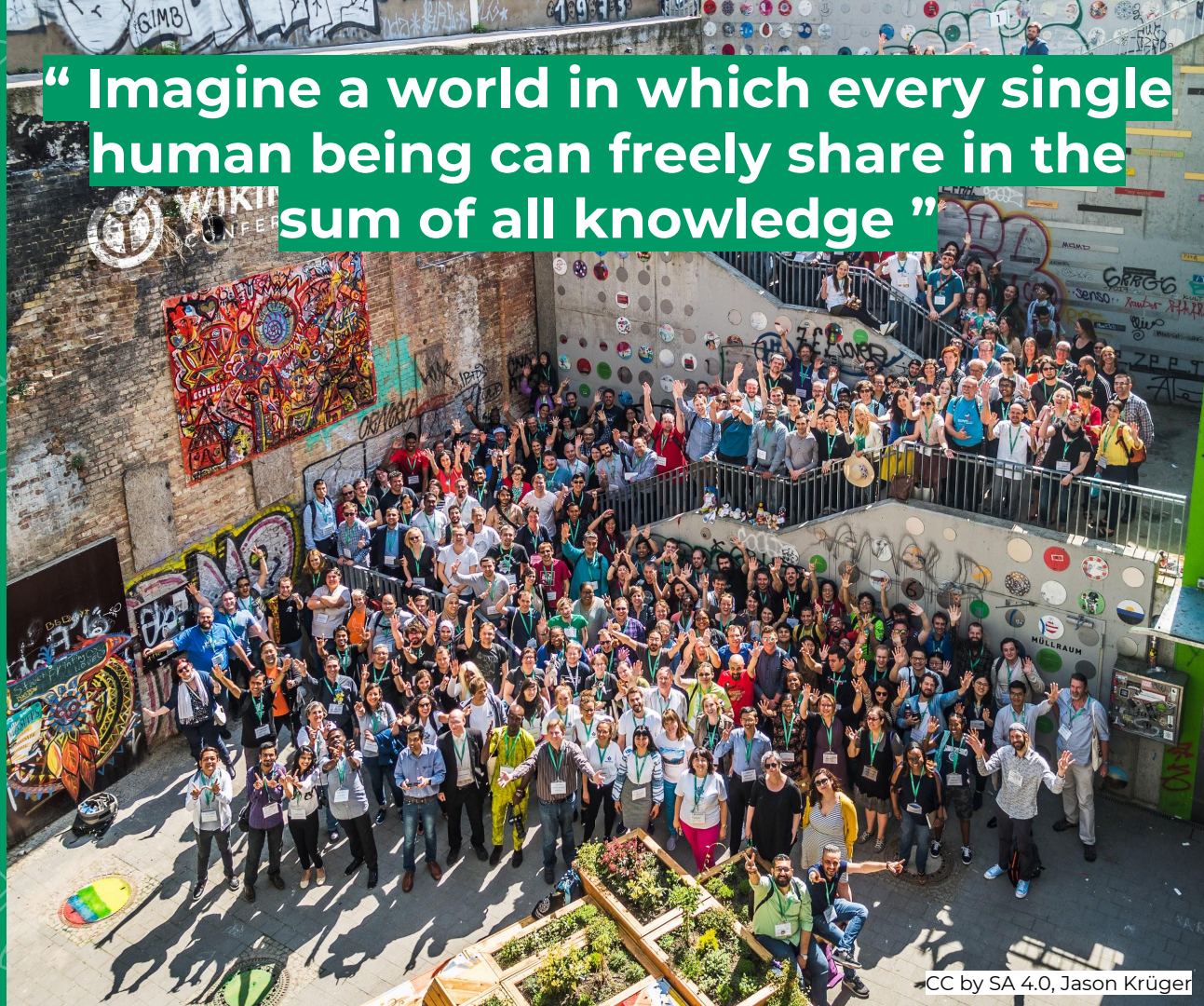


WIKI

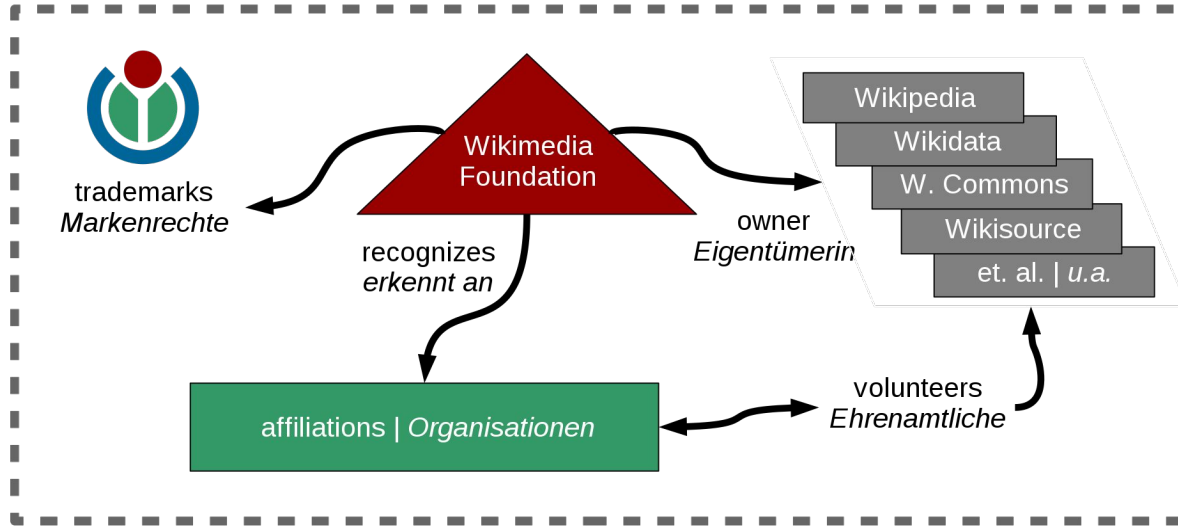


WIKIMEDIA
MOVEMENT

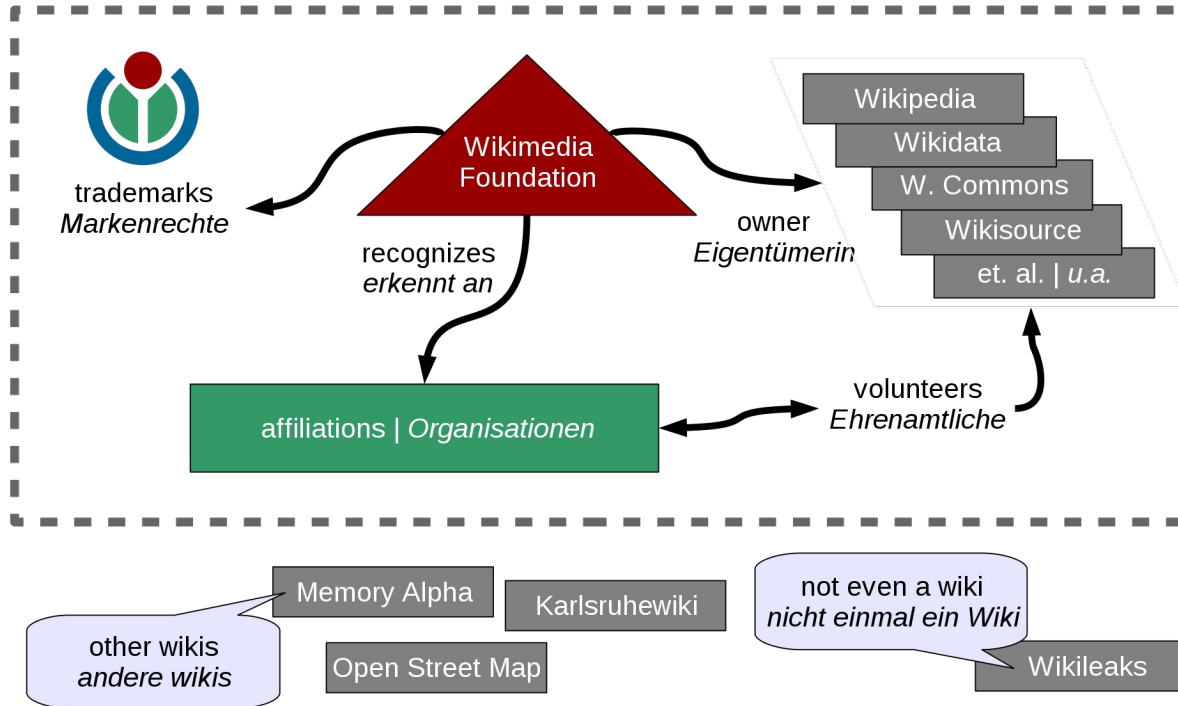
“Imagine a world in which every single human being can freely share in the sum of all knowledge”



Wikimedia Movement

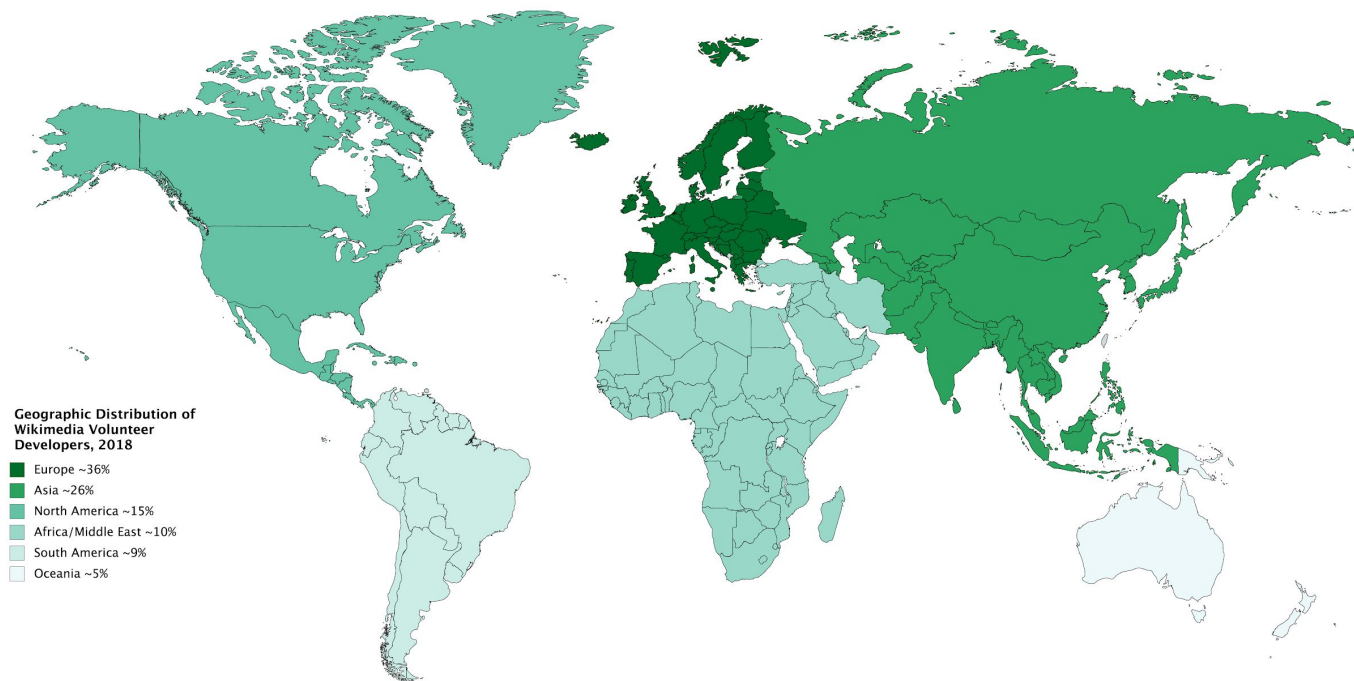


Wikimedia Movement



Who makes technical contributions to Wikipedia community?

Geographic Distribution of Wikimedia Volunteer Developers (2017-18)

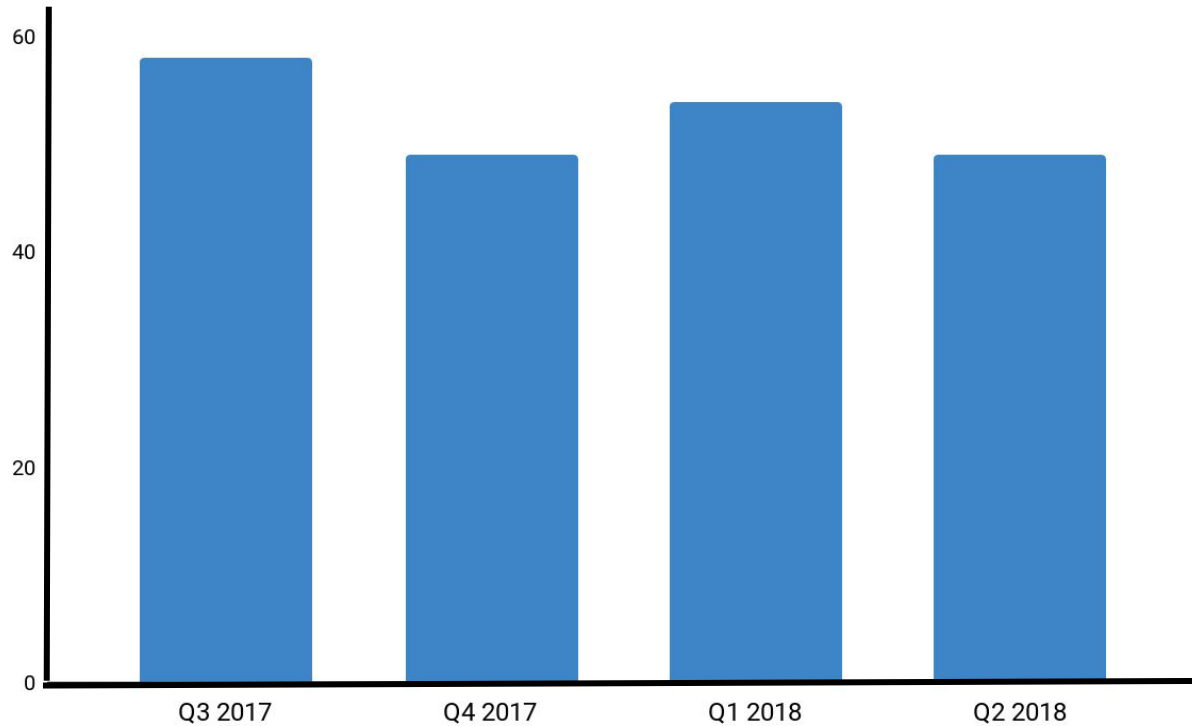


Technical Contributions Overview

(2017-18)

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

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

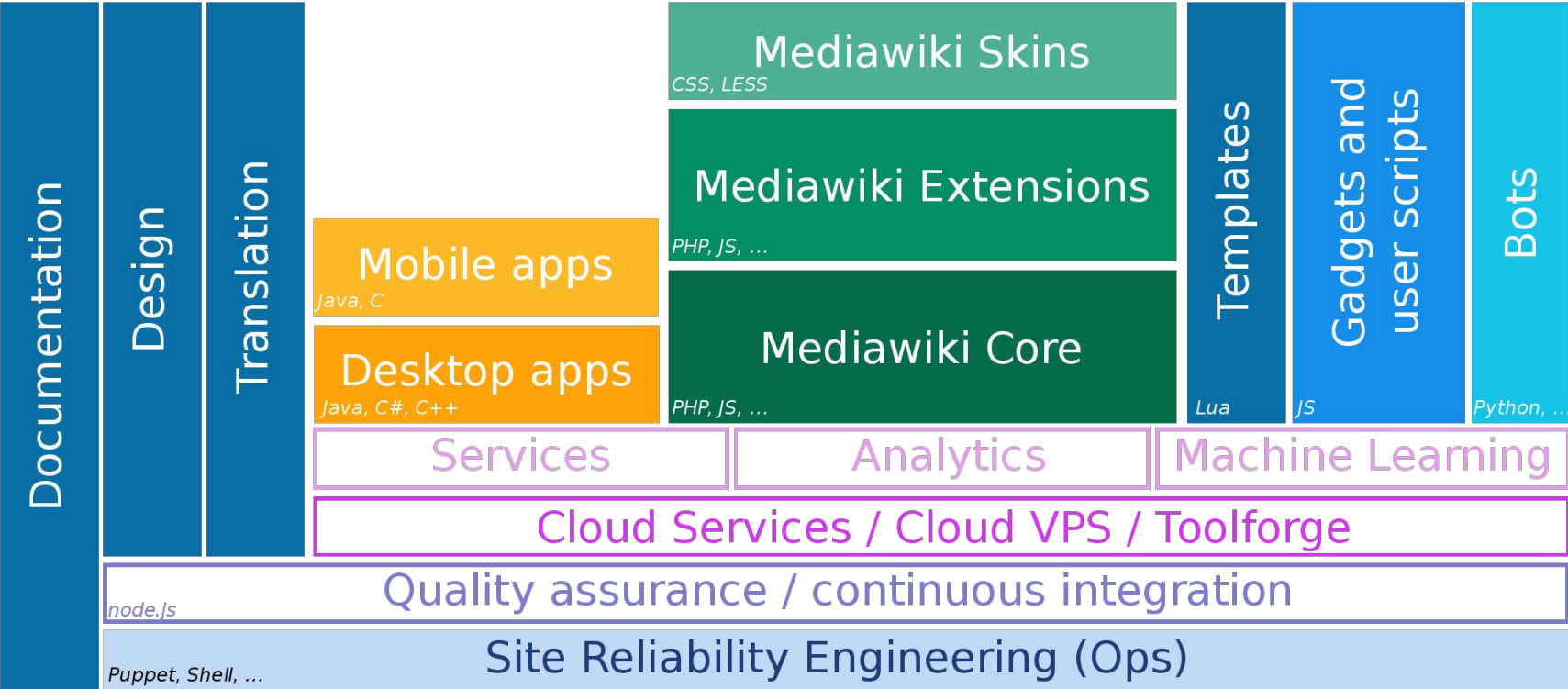
Pick a task related
to a Wikimedia
project or technical
area



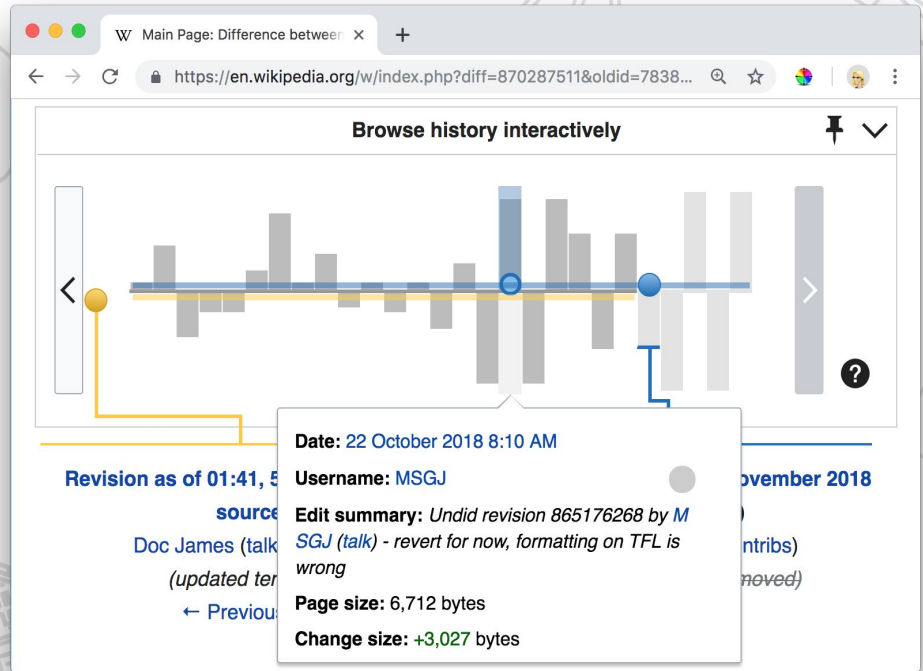
Wikimedia Projects



Technical areas



MediaWiki Extensions



The screenshot shows a web browser window displaying a MediaWiki page with the extension "Revision Slider". The page title is "Main Page: Difference between". The URL is <https://en.wikipedia.org/w/index.php?diff=870287511&oldid=7838...>. The extension interface is titled "Browse history interactively" and features a horizontal bar chart representing the revision history. A yellow dot on the left indicates the current view, and a blue dot on the right indicates the selected revision. A tooltip is displayed over the blue dot, providing details for the selected revision:

- Date:** 22 October 2018 8:10 AM
- Username:** MSGJ
- Edit summary:** *Undid revision 865176268 by MSGJ (talk) - revert for now, formatting on TFL is wrong*
- Page size:** 6,712 bytes
- Change size:** +3,027 bytes

Below the chart, the text "Revision as of 01:41, 5" is visible, along with a "source" link and a "Doc James (talk)" link. A "← Previous" link is also present. The right side of the chart shows the month "November 2018" and a "contribs" link.

Screenshot of an Extension: Revision Slider

Desktop Apps

System Tools Page Queue HAN User Help

Tools

User Bcschipper Page Draft:Kenn Davis Load Currently displayed Diff of page: Draft:Kenn Davis (score: -272)

Queue default

- Kathleen Wynne
- Pancho Arena
- Mariano Andójar
- Lithuanian language
- User:Anasajp/Andy**
- Autosomal dominant retinal v
- Peoples of the Caucasus
- Casock
- Batman v Superman: Dawn of
- 2014-15 Derby County F.C. st
- Voiceless labiodental fricative
- List of shadow holders of the
- Insect euthanasia

History of your changes

ID	Type	Target	Result
----	------	--------	--------

System logs

- 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

Network (5)

You are now connected to huggle antivandalism network. Connecting to huggle anti vandalism network.

Stroppo
ChanServ
ClueBot
Petr
MuskAnimal

Screenshot of a Desktop app: Huggle

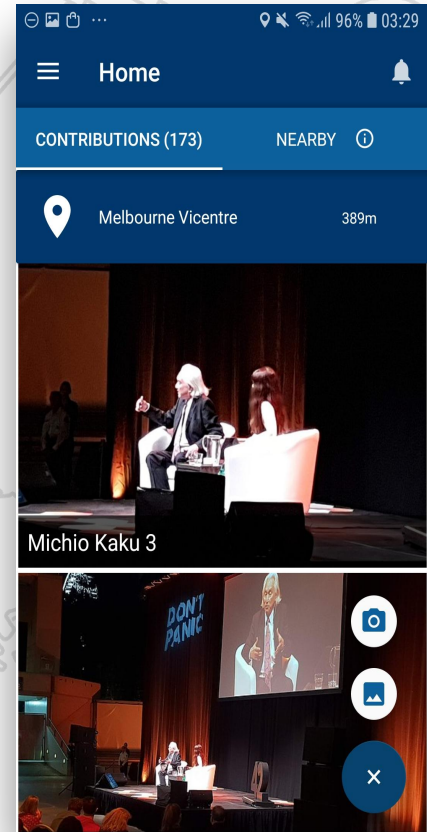
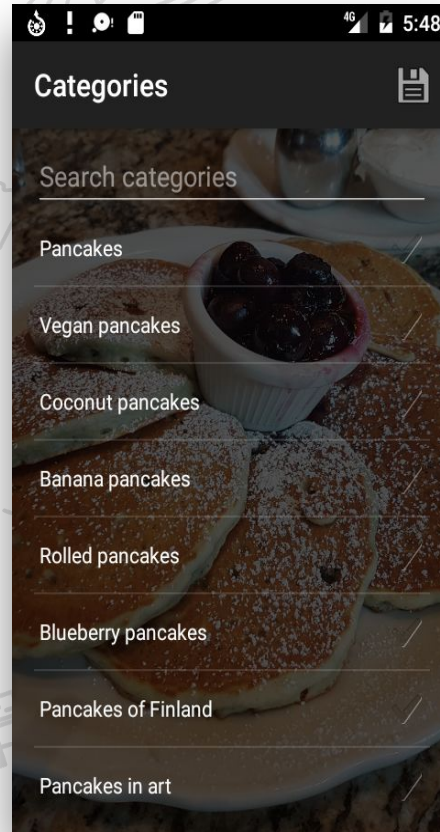
CC by SA 3.0, Petr

Desktop Apps



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

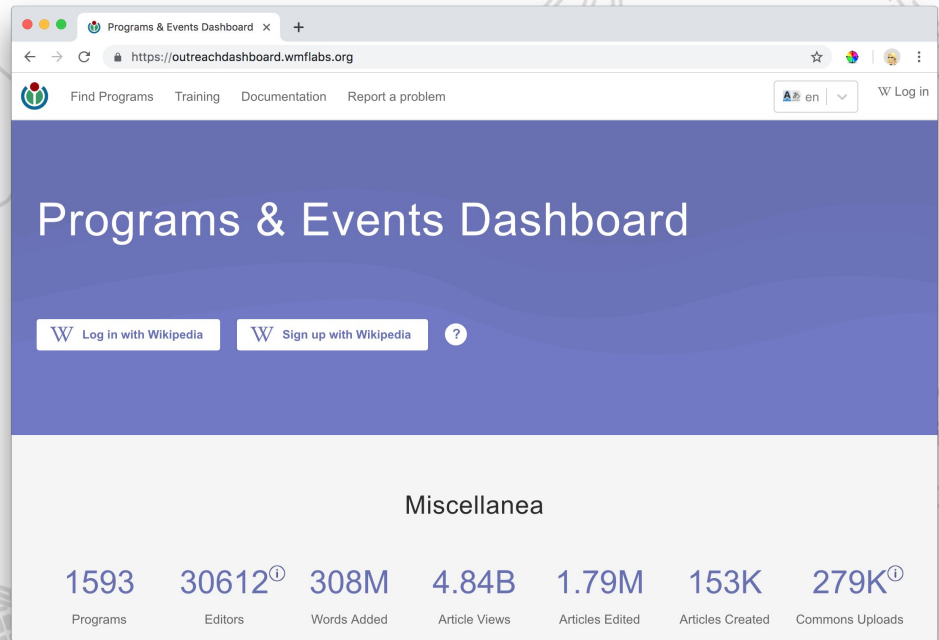
Mobile Apps



Wikimedia Commons app

CC by SA 4.0, Misachan2

Tools & Bots

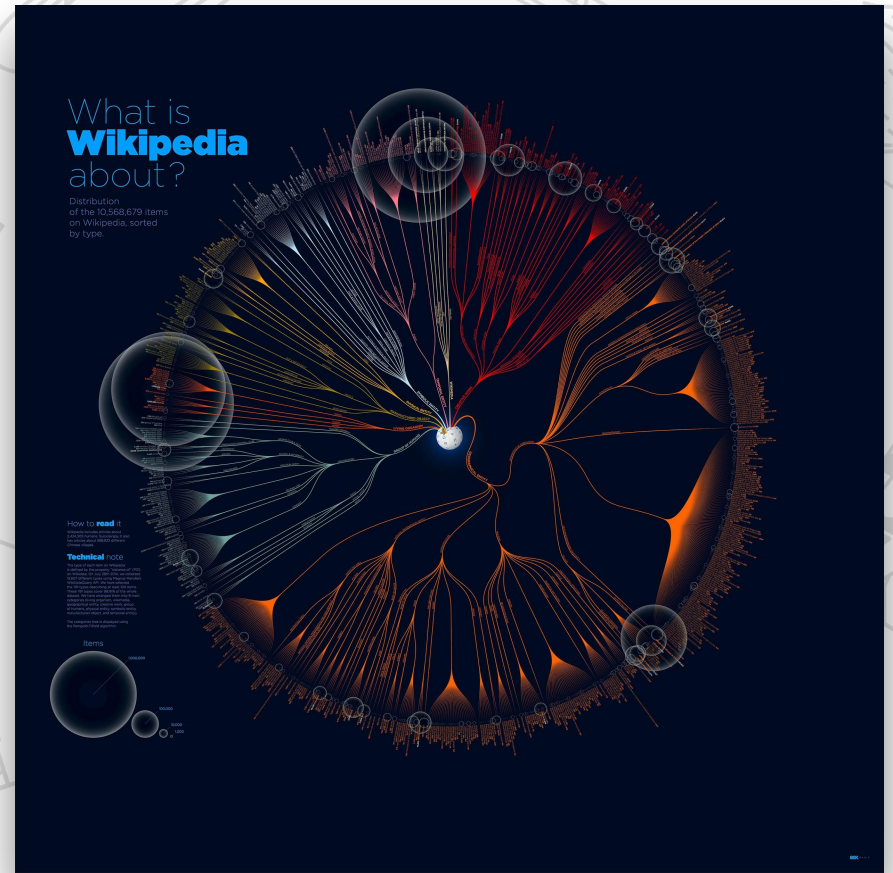


The screenshot shows a web browser window displaying the 'Programs & Events Dashboard' for WMFLabs. The browser's address bar shows the URL 'https://outreachdashboard.wmflabs.org'. The page features a dark blue header with the title 'Programs & Events Dashboard' in white. Below the header, there are 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 [Ⓢ]

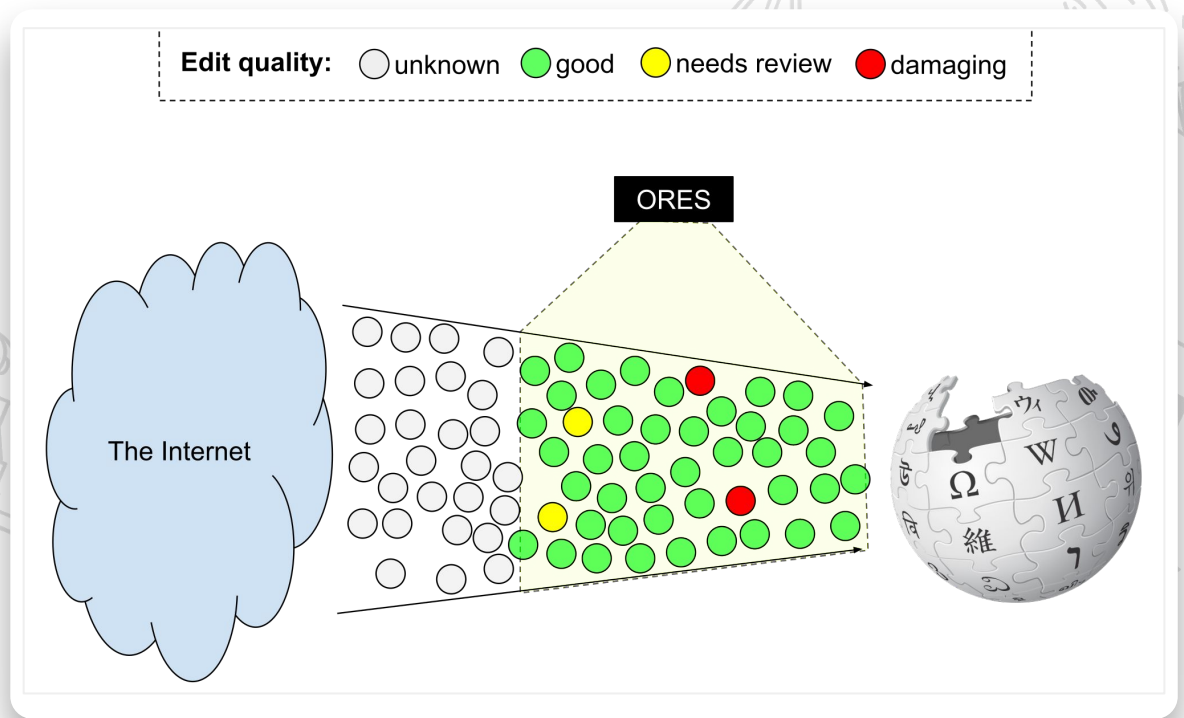
Example of a Tool: Programs & Events Dashboard

Analytics



<http://seealso.org/>

Machine Learning



ORES edit quality flow

Gadgets

The screenshot shows a web browser displaying the French Wikipedia article for Nelson Mandela. The browser's address bar shows the URL <https://upload.wikimedia.org/wikipedia/commo...>. The article title is "Nelson Mandela".

On the left side of the article, there is a sidebar with navigation options: Accueil, Portails thématiques, Article au hasard, Contact, Contribuer, Débuter sur Wikipédia, Aide, Communauté, Modifications récentes, Faire un don, Outils, and Pages liées.

The main content area of the article includes a summary of Nelson Mandela's life, mentioning his birth on July 18, 1918, in Mvezo, and his death on December 5, 2013, in Johannesburg. It also mentions his role in the anti-apartheid struggle and his Nobel Peace Prize.

At the bottom of the article, there is a section titled "Cet article est reconnu comme « bon article » depuis sa version du 19 octobre 2011". Below this, there is a list of categories and subcategories for the article, such as "Président de l'Afrique du Sud", "Personnalité liée à l'ANC", and "Lauréat sud-africain du prix Nobel".

Overlaid on the bottom left of the screenshot is a red-bordered box containing the text: "Gadget « HotCatsMulti » activé." This box is positioned over the "Gadgets" section of the article.

Screenshot of a Gadget: HotCat

Other Major Areas



Design



Docs



Translation



Quality
Assurance



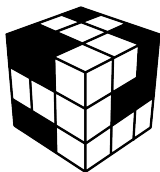
WIKIMEDIA
FOUNDATION



Step 2

Set up the
development
environment





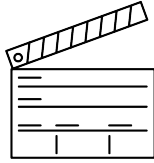
Step 3

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 the current activity feed logic and the goal to improve it. A "good first bug" tag is applied to the task. The task was created by Samwalton9 on Jan 8 2019. Herald added a subscriber, Aklapper, on Jan 8 2019. Samwalton9 triaged the task as Low priority on Jan 8 2019. 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

Search for status:open

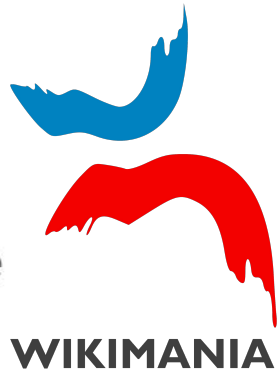
Subject	Status	Owner	Project	Branch	Updated	Size	CF	V
Avoid page table query spam in HistoryPager due to lastLink()		Aaron Schulz	mediawiki/core	master	7:34 PM			✓ ✗
rdbmis: make Database::query() more readable and consistent		Aaron Schulz	mediawiki/core	master	7:33 PM			
rdbmis: improve database connection 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		XenoRyiet	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

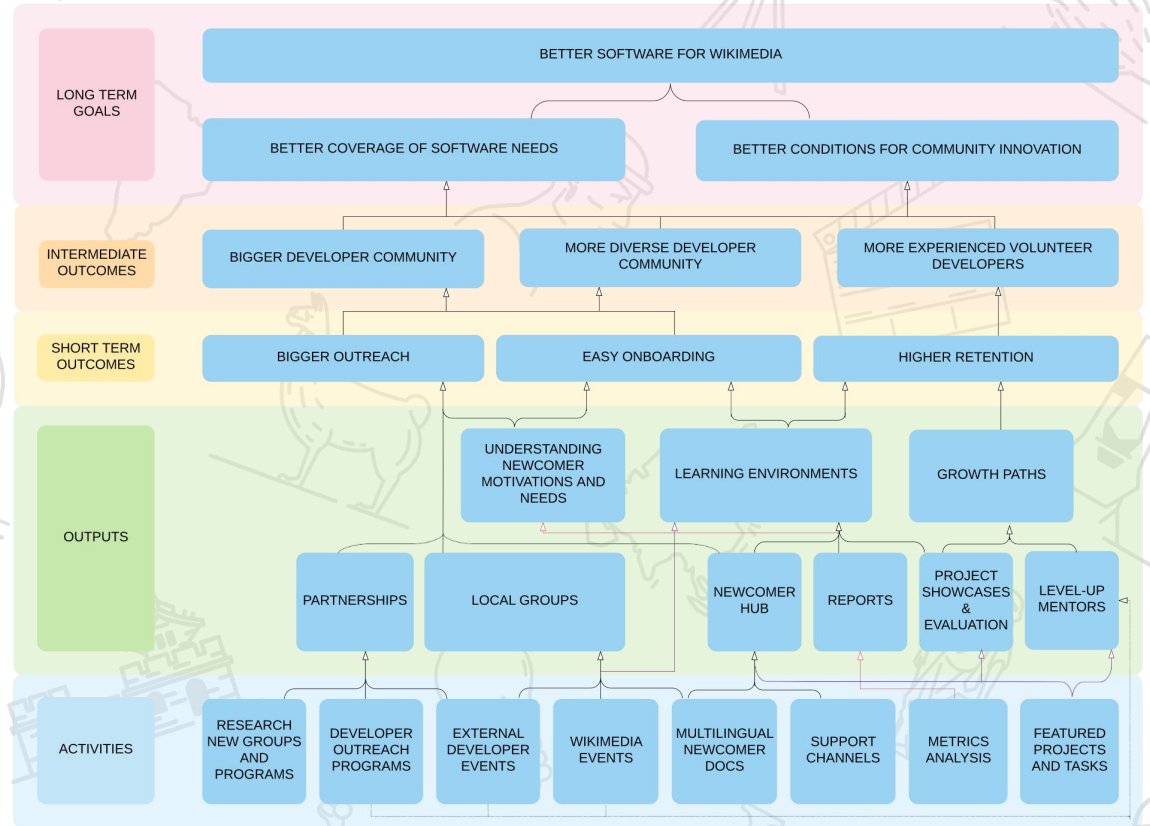


WIKIMEDIA
HACKATHON

Efforts to Onboard New Developers

Onboarding New Developers Program

FY 2017-18



New Developers Guide

New Developers - MediaWiki × +

← → ↻ https://www.mediawiki.org/wiki/New_Developers 🌈 👤 ⋮


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

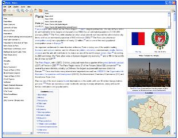
- Skills required: C++ with Qt
- Get in touch: [Mailing list](#) / Chat in [#huggle](#) connect on irc.freenode.net
- Get the source code: [GitHub](#)
- Read the [user](#) and [programmer](#) documentation
- Check the recommended tasks to work on: [Phabricator](#)
- Mentor(s): [Peter Bena](#)



KIWI

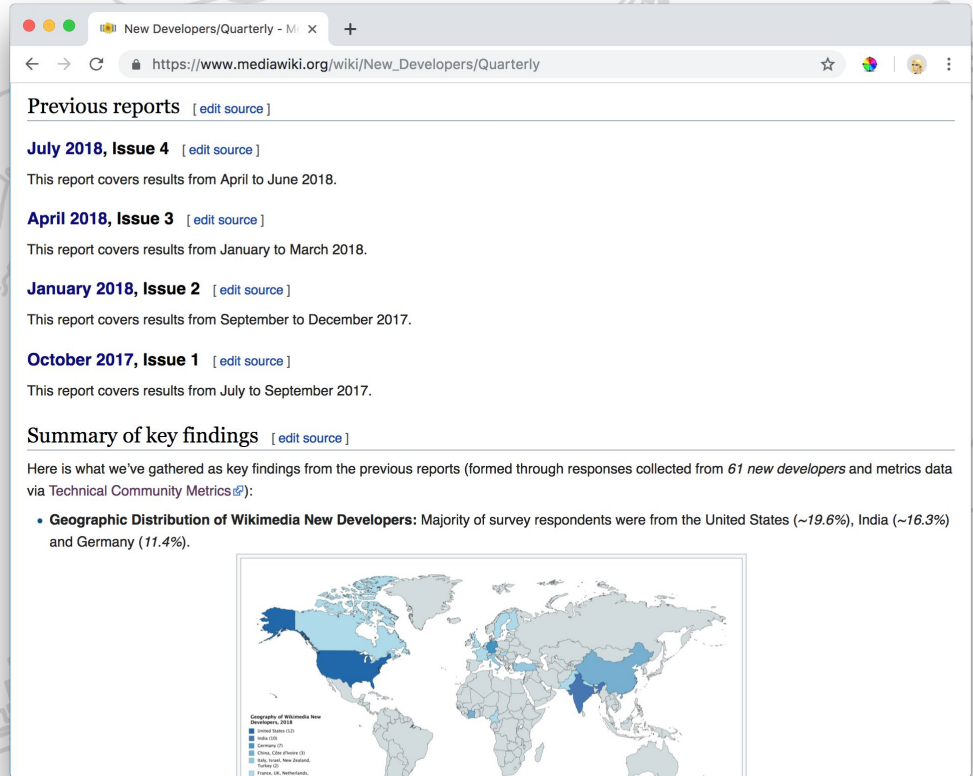
An offline reader for Wikipedia web content

- 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.

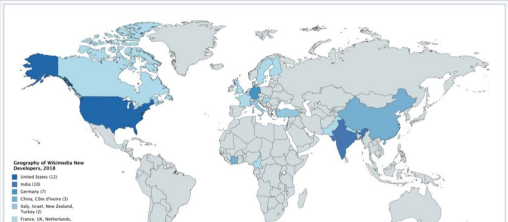
January 2018, Issue 2 [[edit source](#)]
This report covers results from September to December 2017.

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](#)

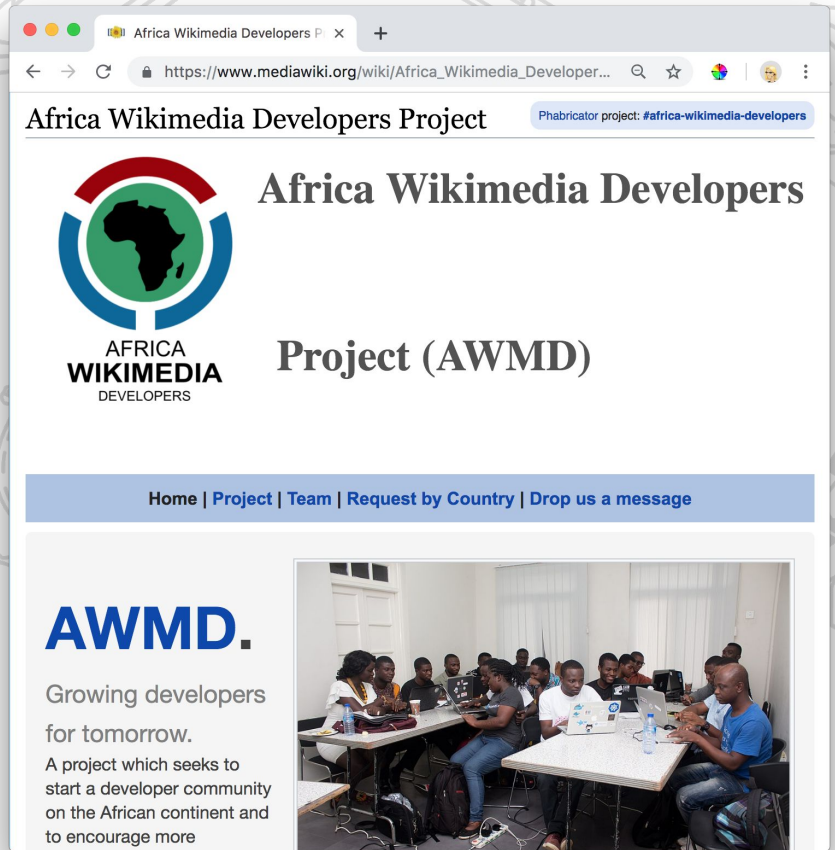
12 October 2018

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 displays a Gerrit code review interface. At the top, it shows the change ID '451565 - Merged' and the commit message: 'Replace loading bar of revision slider with three moving bubbles'. Below this, it lists the author 'srish <srishakatum@gmail.com>' and the commit hash 'dd4310aeece6098805ce26a7510f038dbf0e898b'. The review is currently 'Merged'.

The 'Files' section shows the following changes:

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

The 'History' section shows a message from 'SrishtiSethi' at 'Aug 8 8:54 PM' with the subject 'Welcome, new contributor!'. The message content is:

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



WIKIMEDIA
FOUNDATION

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, Nick Wilson, Quim Gil



Copyright © 2019, [Srishti Sethi](#) and the [Wikimedia Foundation](#).

This work is licensed under a [Creative Commons Attribution-ShareAlike 4.0 International License](#).