

Introduction to Wikimedia Technical Areas



WIKIMEDIA
FOUNDATION

Wikimedia's Mission and Projects

Wikimedia is a global movement whose mission is to bring free, multilingual, and educational content of its wiki-based projects to the world.



Wikipedia

Free encyclopedia



Wikibooks

Free textbooks and manuals



Wikiversity

Free learning tools



Commons

Shared media repository



Wiktionary

Dictionary and thesaurus



Wikiquote

Collection of quotations



Wikivoyage

Free travel guide



Wikidata

Free knowledge base



Wikinews

Free content news source



Wikisource

Free source documents



Wikispecies

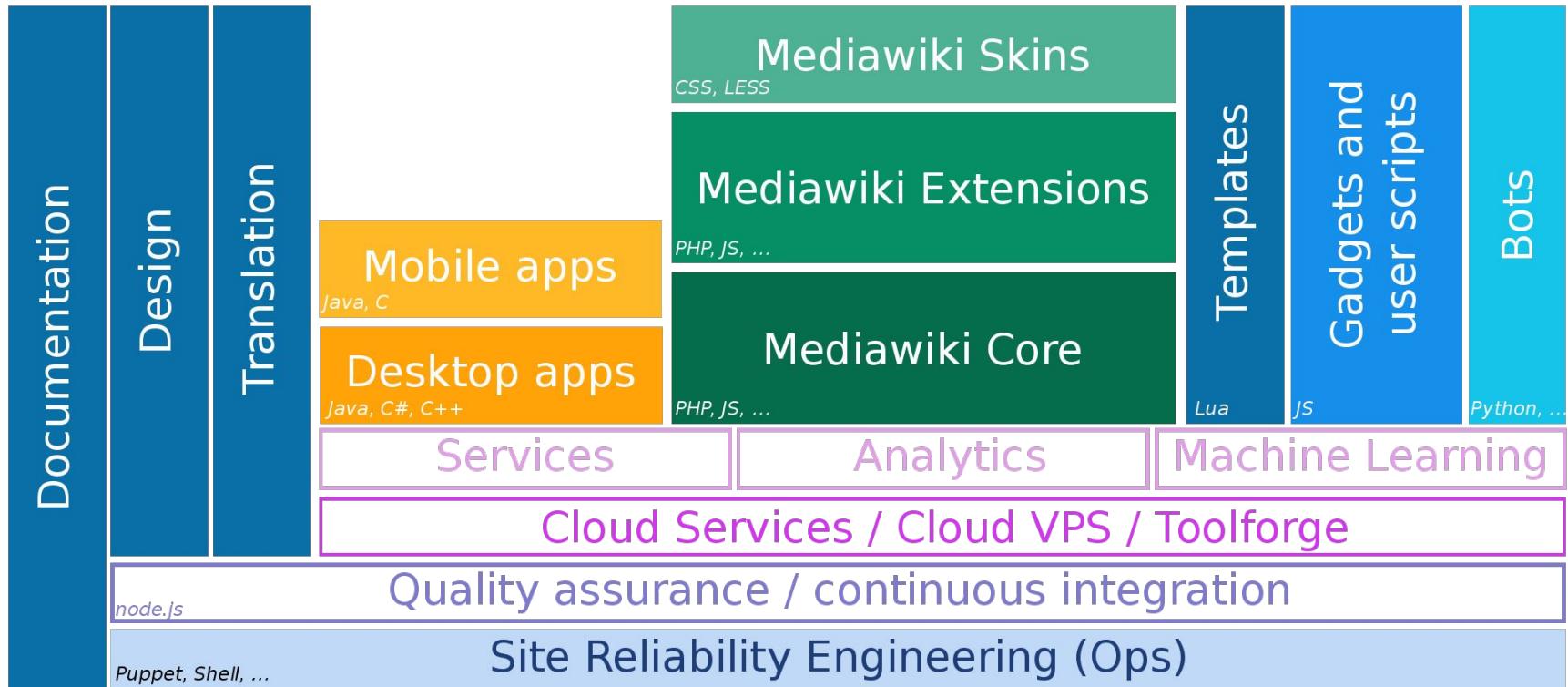
Directory of species



MediaWiki

Free wiki software

Wikimedia Technical Areas



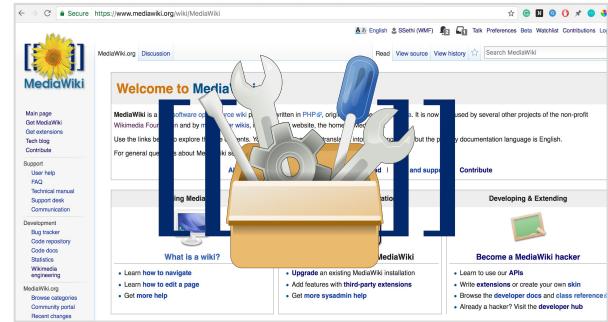
MediaWiki Extensions

What are extensions?

Extends the functionality of MediaWiki software

Extension:Newsletter

- Allows creating, publishing and subscribing to newsletters on a topic of your interest
- Skills required: PHP, Javascript



Screenshot of MediaWiki software

Name	Description	Subscribers
Tech Showcase	Fresh software to Wikipedia caught on the spot. Plans, prototypes, releases... Do you have a scoop? Tell us in the Talk page!	103
New Developers Quarterly	Updates from activities for new developers in the Wikimedia movement, including metrics, survey analysis, key findings, and lessons learned.	27
Translators	The Translators newsletter informs you about pages that require translation efforts (regular newsletters, particular announcements, etc.). This is an alternative to the Translation mailing list, which you can join if you want to communicate with a direct link to a page to translate. Don't forget to activate [Help:process-wiki notifications cross-wiki notifications] to be informed about a new item.	39
Newsletter ²	The newsletter allows you to receive information about [Extension:Newsletter extension]. Announcements, calls for feedback, and some	25

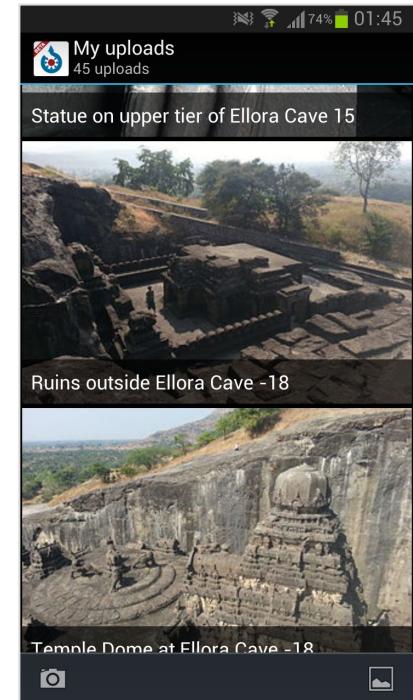
Screenshot of list of Newsletters available on MediaWiki

Mobile Apps

Available for Wikipedia and Wikimedia Commons

Wikimedia Commons App

- Allows uploading pictures to Wikimedia Commons from Android
- Skills required: Objective-C/Swift (IOS), Java (Android)

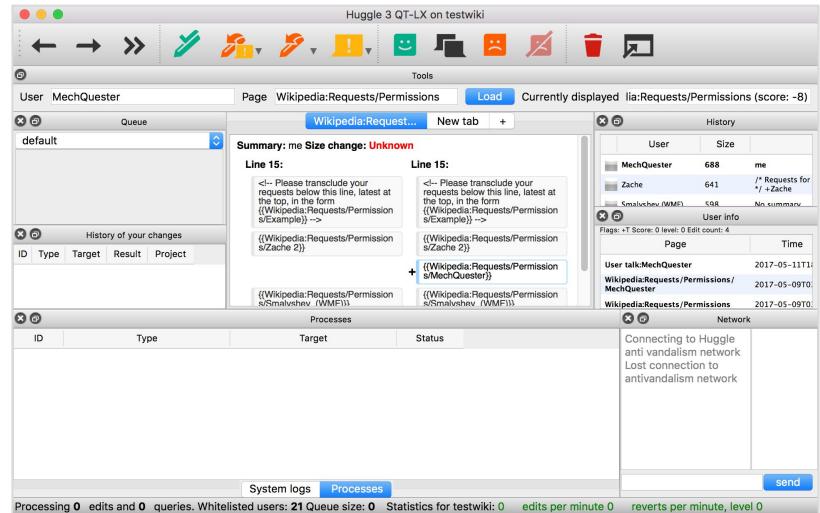


Commons app screenshot
CC BY-SA 3.0 Yuvipanda

Desktop Apps

Huggle

- An anti-vandalism tool that helps revert edits that are problematic
- Skills required: C++ & Qt framework



Screenshot of desktop application Huggle

Machine Learning

Objective Revision Evaluation Service (ORES)

- Machine learning web service & API, allows scoring and evaluating an edit
- Skills required: HTML, JS, CSS, Python, Redis, Postgres, Python Scikit-learn, PHP (MediaWiki), MariaDB

More info:

<https://www.mediawiki.org/wiki/ORES>



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Cloud Services

Empowers the work of technical contributors

- Provides a hosting environment for running bots and tools
- Support the operation, creation, and maintenance of these tools
- 1000+ tools hosted via these services

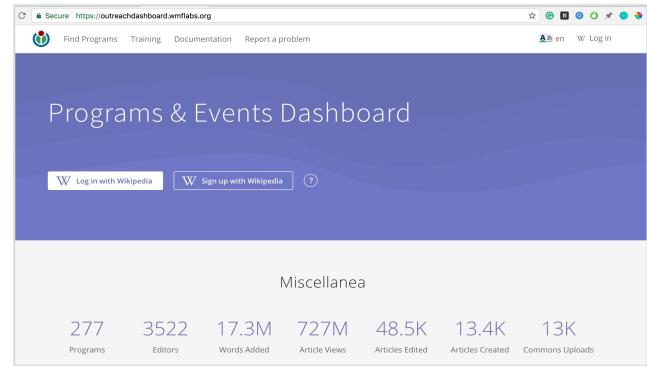


CC BY-SA 4.0, Brandon Harris

Cloud Services

Wiki Edu Dashboard

- Web application that supports course instructors in running training and event organizers in edit-a-thons around Wikipedia
- Skills required: Ruby on Rails, JavaScript, React.js and Redux, User interface design, etc



Screenshot of WikiEd's Program and Events Dashboard

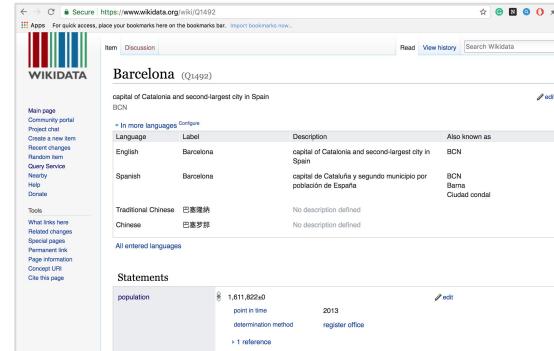
Structured Data

What is Structured Data?

Organization of data in a structured format that makes data easily editable, searchable and re-usable

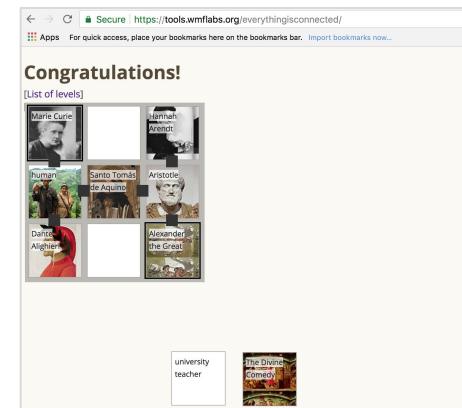
Wikidata

- Central repository of structured data for all Wikimedia sites
- Skills required: PHP, Javascript



A screenshot of a web browser displaying the Wikidata item for 'Barcelona' (Q1492). The page shows basic information about the city, including its name in multiple languages (English, Spanish, Traditional Chinese, Chinese), its label (Barcelona), and its description (capital of Catalonia and second-largest city in Spain). Below this, there is a section for 'Statements' showing data about the population: 'population' is stated to be 1,611,822±0, with a 'point in time' of 2013 and a 'determination method' of 'register office'. There is also a note indicating '+ 1 reference'.

Screenshot of Wikidata item on Barcelona



A screenshot of a web browser displaying a Wikidata puzzle game titled 'Congratulations! [List of levels]'. The interface features a grid of cards with various historical figures and concepts, such as Marie Curie, Hermann Arentz, Human, Santo Tomás de Aquino, Aristotle, Dantes Alighieri, Alexander the Great, university teacher, and The Divine Comedy. The cards are arranged in a 4x4 grid, with some cards partially visible or overlapping.

Screenshot of Wikidata puzzle game

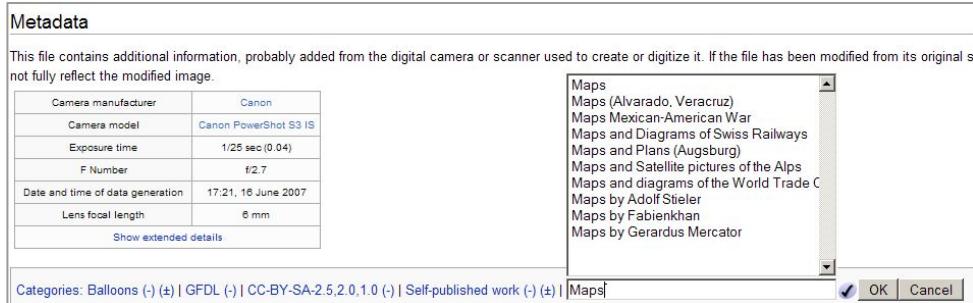
Gadgets and User scripts

What are Gadgets?

Standard, on-wiki user scripts that extend the functionality of MediaWiki

HotCat

- Helps registered users easily remove, change, and add categories to Wikipedia pages



Screenshot of Gadget: HotCat

Bots

- Automated tools that help perform tedious or repetitive tasks related to a wiki (e.g. spell check, revert vandalism)
- Skills required: Familiarity with Python and Pywikibot

More info:

<https://www.mediawiki.org/wiki/Manual:Bots>



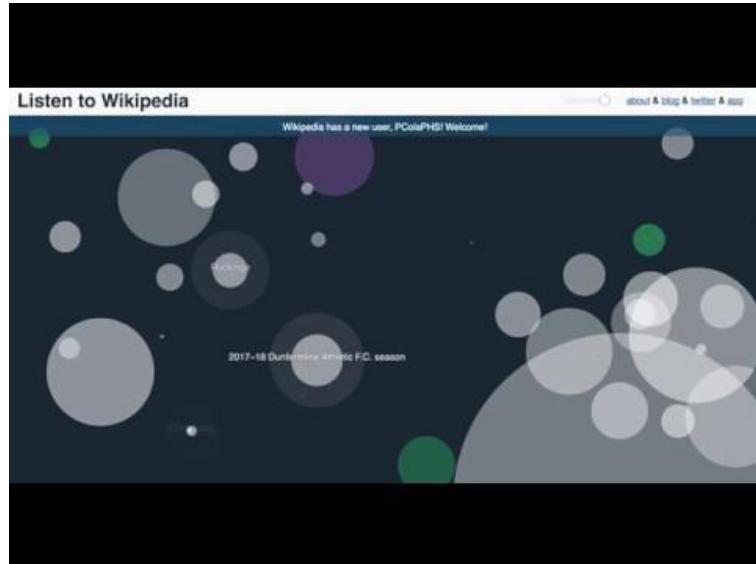
Analytics

Use data from Wikimedia sites along with our Web and REST API's to create visualizations, make data informed decisions and have fun!

More info:

<https://wikitech.wikimedia.org/wiki/Analytics>

Listen to Wikipedia >



Design, Documentation, Translation & Quality Assurance

- Help apply Wikimedia design principles in projects looking for UX feedback (*design*)
- If you are fluent in a language other than English you can join the effort by translating MediaWiki site and the software (*translation*)
- Help improve user/technical documentation on Wikidata, Cloud Services, MediaWiki, and other projects (*documentation*)
- Help write tests in Javascript / Node.js (*quality assurance*)

Outreach Programs



Google
Summer of Code



Google Code-in



Rails Girls
Summer of Code



Resources

1. How to contribute

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

2. New Developers

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

Thank you!



WIKIMEDIA
FOUNDATION

Confused about the differences between **Wikipedia**, **Wikimedia**, **MediaWiki** and **Wiki**?

