

Toolhub, Toolhunt and the Quest to Improve Tool Discoverability



Who am I, and what am I doing here?



- Life-long nerd
- Self-taught developer
- Newcomer to Wikipedia
 - This is my first hackathon, and my first presentation

OUTREACHY

- A diversity initiative of the Software Freedom Conservancy
- The goal: increase diversity in open source
- The method: provide paid internships to members of underrepresented groups.

Two internship rounds per year.

Wikimedia has participated in the program since 2013.

For more information: <https://www.mediawiki.org/wiki/Outreachy>



The Task: develop a web app for editing Toolhub records

- <https://phabricator.wikimedia.org/T324507>

Toolhub, and the Problem of Tool Discoverability

- Toolhub: catalogue of Wikimedia tools (<https://toolhub.wikimedia.org/>)
 - Expansion of Hay's Directory (<https://hay.toolforge.org/directory/>)

The problem remains essentially unchanged since 2014:

With so many tools, how do you find the right one for the job?

Toolinfo record

```
"annotations": {
  "wikidata_qid": "Q15169668",
  "audiences": [],
  "content_types": [],
  "tasks": [],
  "subject_domains": [],
  "deprecated": false,
  "replaced_by": null,
  "experimental": false,
  "for_wikis": [
    "*"
  ],
  "icon": null,
  "available_ui_languages": [],
  "tool_type": "coding framework",
  "repository": null,
  "api_url": null,
  "developer_docs_url": [
```

- Each tool listed on Toolhub has a toolinfo record.
 - Contains information that can be used to describe the tool
- Based on the standard established by Hay's tool directory
- The toolschema was updated in late 2022 to include a new set of fields intended to help with search refinement
 - Taxonomy v2
(<https://phabricator.wikimedia.org/T308030>)
- For more details:
https://meta.wikimedia.org/wiki/Toolhub/Data_model#Toolinfo_schema

The Editing Interface on Toolhub

The screenshot shows the 'Editing toolforge-toolhunt (annotations)' interface. At the top, there is a 'Toolhub' logo, a search bar, and a language selector set to 'ENGLISH'. Below the header, there are 'CANCEL' and 'PUBLISH CHANGES' buttons. The main content area is titled 'Editing toolforge-toolhunt (annotations)' and features a vertical sidebar on the left with various tool-related icons. The main editing area is divided into sections: '1 Basic information', '2 Attributes', '3 Usage', and '4 Contributing'. The 'Basic information' section includes an 'Icon' field with a character limit of 0 / 2047, a 'This tool is:' section with checkboxes for 'Experimental' and 'Deprecated' (each with a descriptive note), and a 'Replaced by' field with a character limit of 0 / 2047.

Toolhub

Search Toolhub

ENGLISH

Editing toolforge-toolhunt (annotations)

CANCEL PUBLISH CHANGES

1 Basic information

✕ Icon 0 / 2047

This tool is:

Experimental
If true, this tool is unstable and can change or go offline at any time.

Deprecated
If true, the use of this tool is officially discouraged. The 'replaced_by' parameter can be used to define a replacement.

↻ Replaced by 0 / 2047

2 Attributes

3 Usage

4 Contributing

Citation Hunt



The Wikipedia snippet below is not backed by a [reliable source](#). Can you find one?

Click **I got this!** to go to Wikipedia and [fix the snippet](#), or **Next!** to see another one. Good luck!

In page [Alexey Pajitnov](#):

Pajitnov created a sequel to *Tetris*, entitled *Welltris*, which has the same principle, but in a three-dimensional environment where the player sees the playing area from above.^[10] *Tetris* was licensed and managed by Soviet company ELORG, which had a monopoly on the import and export of computer hardware and software in the Soviet Union, and advertised with the slogan "*From Russia with Love*" (on NES: "*From Russia with Fun!*"). Because he was employed by the Soviet government, Pajitnov did not receive royalties.^[*citation needed*]

I got this!

Next!

~

[Hey! My source is on GitHub!](#)

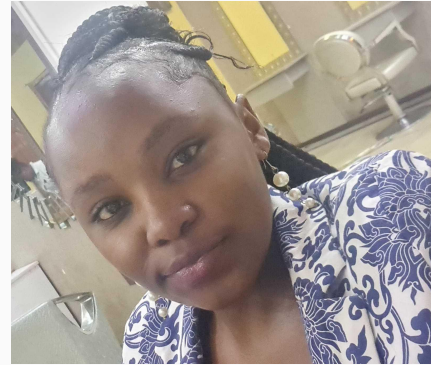
Citation Hunt is made by volunteers, hosted on [Tools Labs](#) and translated via [translatewiki.net](#).

The Team

WMF Mentors



Outreachy Interns





Toolhunt

Currently, many tools in Toolhub have missing or incomplete information.

Please help us add the missing fields and incomplete information

Help us add missing fields

Please click on the **Submit** button to add the missing fields and incomplete information.

You can also click the **Skip to Next** to see if you would prefer to add the next missing field

Tool Name	Contribution size
Tool Description	Calculates how many bytes have you changed on English Wikipedia.
Url	https://fengtools.toolforge.org/contribsize/
Missing Field Name	translate_url

A link to the tool's translation interface.

It's a start, but far from perfect...

- Random collection of tasks
 - What if there's a particular tool you want to edit?
- Fields aren't of equal value
 - Are we wasting time with hard-to-complete and relatively unimportant tasks?
 - E.g., icon and wikidataqid
- Some data simply can't be found
 - No way to indicate this



Welcome to Toolhunt

Many of the tools on Toolhub are missing valuable information. Can you help improve the listings by hunting down links and data? Search for a tool to edit or browse a selection of random tasks.



Tool Name	MediaWiki Thanks
Tool Description	Recognize and thank all the MediaWiki contributors
Url	https://thanks.toolforge.org/

A link to the tool's translation interface.

The cycle never ends...

Search by field type already in the works! What else would be useful?

- A way to flag a task as “unable to be completed”?
- A way to flag tools that have no information?
- Weighting particular task types?
- Additional search options?
- More information?
 - Glossary of terms
 - Improved Dashboard