

# Making the Web Multilingual with Wikipedia

Internationalization Team  
Wikimedia Foundation



## Do you know?

- Wikimedia projects are available in 284 languages
- Wikipedia is the largest multilingual website in the world
- All these wikis get 18 billion page views per month by 500 million unique visits
- Wikimedia Foundation is a non-profit with 100 employees and a budget of 30 million USD
- 1 million micro donations support Wikimedia's budget



# Who are we?

We are the Internationalization team of  
Wikimedia Foundation

We are a global team with fluency in 25  
major languages

We develop and maintain language support  
tools for Wikimedia websites and Mediawiki

Team Members: Alolita Sharma, Siebrand Mazeland, Santhosh Thottingal,  
Niklas Laxstrom, Amir Aharoni, Arun Ganesh, Pau Giner, Srikanth L

# Universal Language Selector

Because there are too many languages to choose from



**How can I search for सितार  
(sitar) with the Hotel public  
PC?**

Rakha, an Indian musician  
visiting Europe

# The process



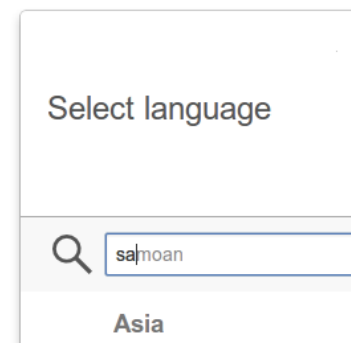
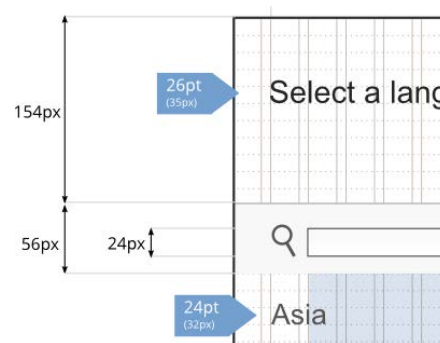
Understand the problem

Explore solutions

Test with users and gather feedback

Detail behavior and visual style

Implementation and testing



# The Universal Language Selector

ULS = Language picker + settings + integration



# The Universal Language Selector

ULS = Language picker + settings + integration





# Language picker

How to find a language with more than 400 options?

The screenshot shows the Wikimedia language picker interface. At the top, it says "Select language". To the right is a world map with a blue square over North America. Below the map are tabs for "Worldwide", "America", "Europe", "Middle east", "Africa", "Asia", and "Pacific". Below the map is a search bar with a magnifying glass icon and the text "Language search". Below the search bar is a list of "Common languages" and "Worldwide" languages. A blue arrow labeled "Language list" points to the list. A blue arrow labeled "Map" points to the world map. A blue arrow labeled "Search" points to the search bar.

Select language

Worldwide America Europe Middle east Africa Asia Pacific

Language search

**Common languages**

asturianu	euskara
català	galego
English	हिन्दी
español	

**Worldwide**

English	Lingua Franca Nova
español	Lojban
Esperanto	Novial
français	português
Ido	Simple English
interlingua	Toki Pona

Language list

Map

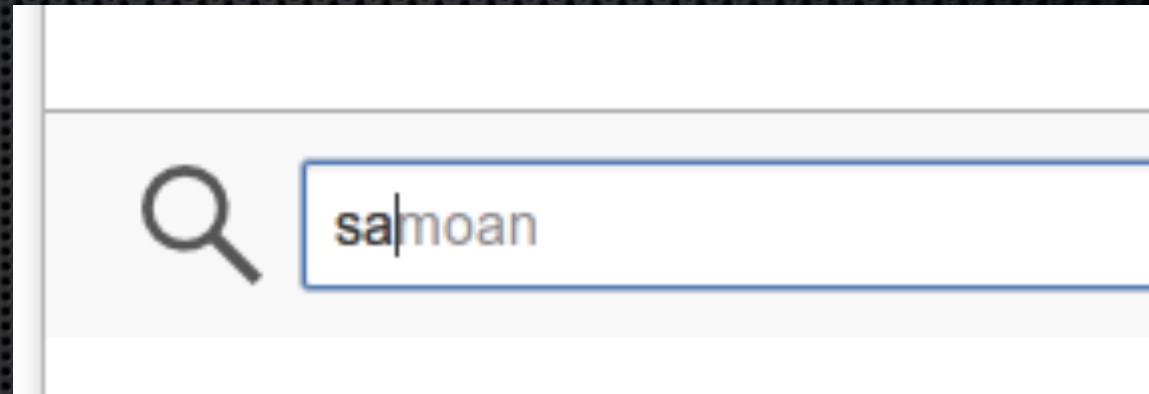
Search

# Language picker: Search

## Search is flexible

### Autocompletion

Type language name in another language



### Cross-language

Language names in another language

### Typos allowed

For users typing fast

### ISO codes

For advanced users

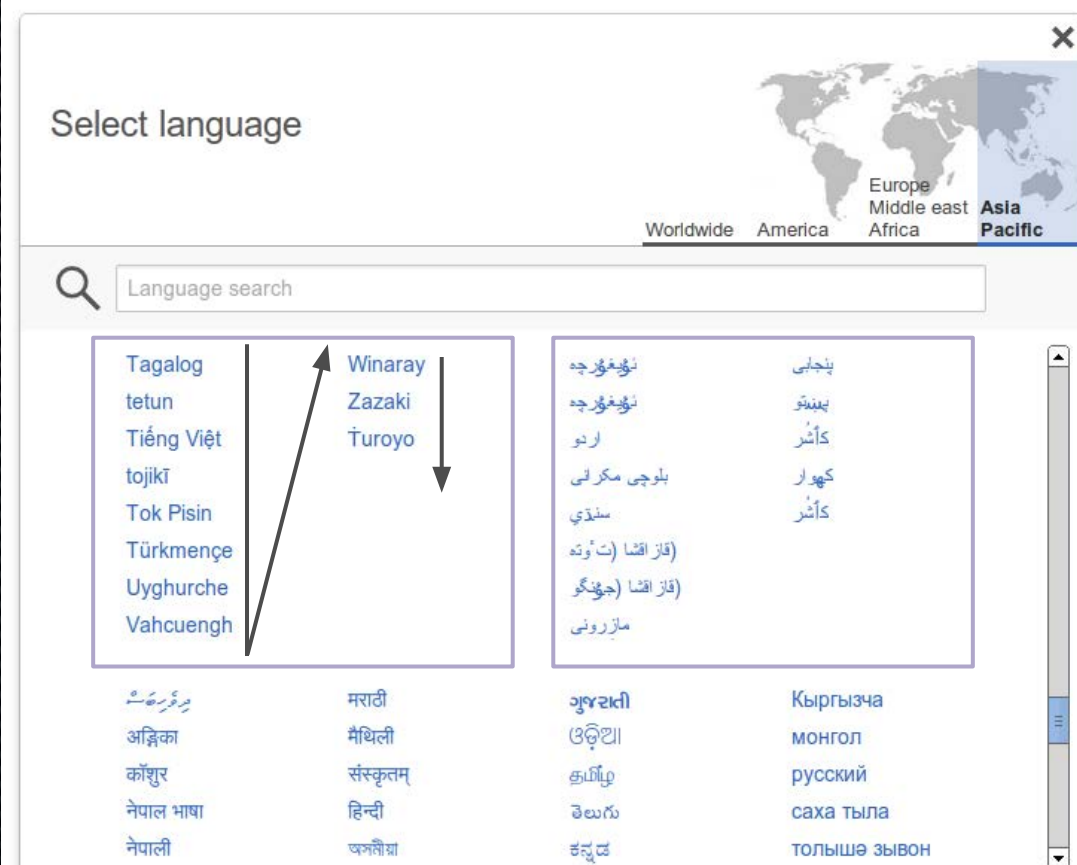
# Language picker: List

## Make a long list easier to scan

A small map as an index

4 columns 8 rows

Grouped by region and script



The screenshot shows a language picker interface with the following elements:

- Select language** header
- Worldwide** | **America** | **Africa** | **Asia Pacific** navigation tabs
- Language search** input field
- Language list** with 4 columns and 8 rows, grouped by region and script. The first two columns are highlighted with a box and arrows indicating a vertical scroll.

Region	Script	Language
Asia Pacific	Latin	Tagalog
		tetun
		Tiếng Việt
		tojikī
	Arabic	Tok Pisin
		Türkmençe
		Uyghurche
		Vahcuengh
Latin	Winaray	
	Zazaki	
	Turoyo	
	ئۇيغۇرچە	
Arabic	پنجابی	
	پښتو	
	کاشُر	
	کھوار	
Arabic	سنڌي	
	قازاقشا (توتە)	
	قازاقشا (جۇڭگو)	
	ماڭروني	
Arabic	مراٽي	
	मैथिली	
	संस्कृतम्	
	हिन्दी	
Arabic	फनमैश	
	ગુજરાતી	
	ଓଡ଼ିଆ	
	ಕನ್ನಡ	
Cyrillic	Кыргызча	
	монгол	
	русский	
	саха тыла	
Cyrillic	толышә зывон	

# The Universal Language Selector

ULS = Language picker + **settings** + integration



# Settings: Display

## Language settings

**Aa Display**  
Set the language of menus and fonts.

**Input**  
Writing in a different language?

## Display settings

### Language used for menus

English Español Avañe'ë ...

### Font settings

Download fonts automatically when needed. Web fonts will be downloaded when text in special scripts is displayed.  
[More information](#)

#### Set your preferred fonts to use

**Font for English**  
Used for content and menus  
Font 2

**Font for हिन्दी**  
Used for input  
[Change input language](#)  
Font 3

Cancel Apply changes

Settings menu

Short list of languages

Font settings (if needed for the languages)

# Settings: Input

**Language settings**

**Display**  
Set the language of menus and fonts.

**Input**  
Writing in a different language?

**Input settings**

**Language used for input**

English Español Avañe'ë ...

**Input methods supported for English**

- Phonetic input.** Type words as they sound. [More information](#)
- Transliteration.** Use keyboard shortcuts to generate the desired characters. When available, a virtual keyboard will show the keyboard mapping. [More information](#)
- Disabled.** Text is displayed according to system defined settings. [More information](#)

Cancel Apply changes

Settings menu

Short list of languages

Input methods available for each language

# The Universal Language Selector

ULS = Language picker + settings + integration

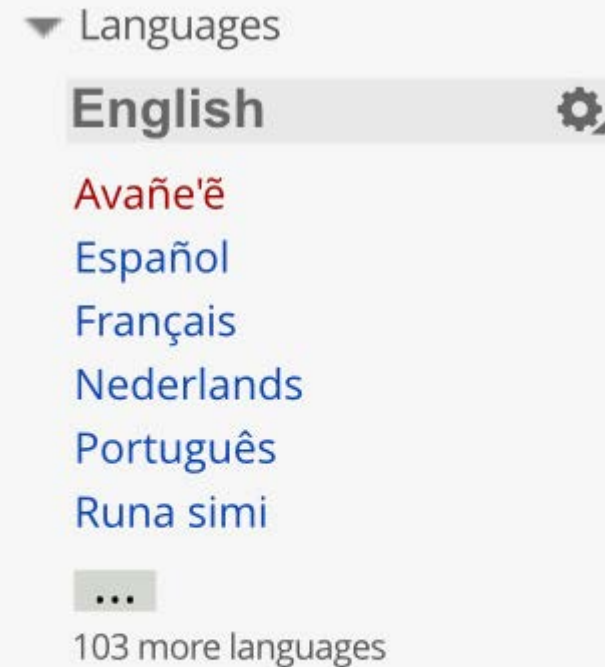
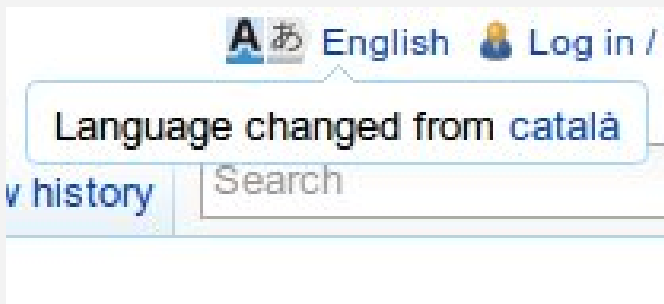


# Integration

translatewiki.net

Wikidata

More to come...





# The testing process: testing prototypes



## 20 Languages.

Hindi, Tamil, Marathi, Gujarati, English, Hebrew, Dutch, French, German, Macedonian, Russian, Catalan, Luxembourgish, Tetum, Spanish, Latin, Breton, Italian, Nepali and Esperanto.

## 12 Locations.

India, USA, UK, Nepal, Netherlands, Israel, France, New Zealand, Luxembourg, Germany, Canada and Spain

# Technical details

- ULS is a jquery plug-in
- Modular
- Supports all languages defined by Unicode
- Open source

[https://www.mediawiki.org/wiki/Universal\\_Language\\_Selector](https://www.mediawiki.org/wiki/Universal_Language_Selector)

# Use, Fork, Improve

<https://github.com/wikimedia/jquery.uls>

# Internationalization Library

Because internationalizing applications  
should be easy and you shouldn't reinvent  
the wheel

# Internationalization Library

- **General-purpose internationalization library**
- **Written in jQuery**
- **Open source - MIT, GPL Licensed**
- **Messaging, Plural, Gender, Grammar support**

# Use, Fork, Improve

<https://github.com/wikimedia/jquery.i18n>

# Webfonts

Because locating and installing fonts for non-Latin scripts is too hard

# Webfonts

- Delivers fonts to the browsers from server
- CSS3 technology
- Large repository of freely licensed fonts
- 44 fonts for 20 scripts



# jQuery.webfonts

- General purpose webfonts library
- Focus on making fonts available for all parts of a multilingual website
- Flexible repository configuration

# Use, Fork, Improve

<https://github.com/wikimedia/jquery.webfonts>

Are you a typographer?  
Talk to us!

# Typing tools

Because there are challenges in typing in  
non-Latin scripts

Do you know how to type in your mother  
tongue?

## Mediawiki Input tool - Narayam

- Provides 60 input methods in 34 languages
- Community contributed and tested input methods
- Widely deployed in many WMF wiki projects
- Soon available as open source jquery library (jquery.ime)

# translatewiki.net

Because translating applications to any language should be easy

- Siebrand Mazeland
- Product Manager, Localisation
- Community Manager [translatewiki.net](https://translatewiki.net)
- Wikipedia volunteer
- Language aficionado





## translatewiki.net

Facilitate and support software localisation in all classified languages

- 4,000+ translators
- 300 languages
- 20 open source products
  - MediaWiki
  - OpenStreetMap
  - Encyclopedia of Life
  - StatusNet



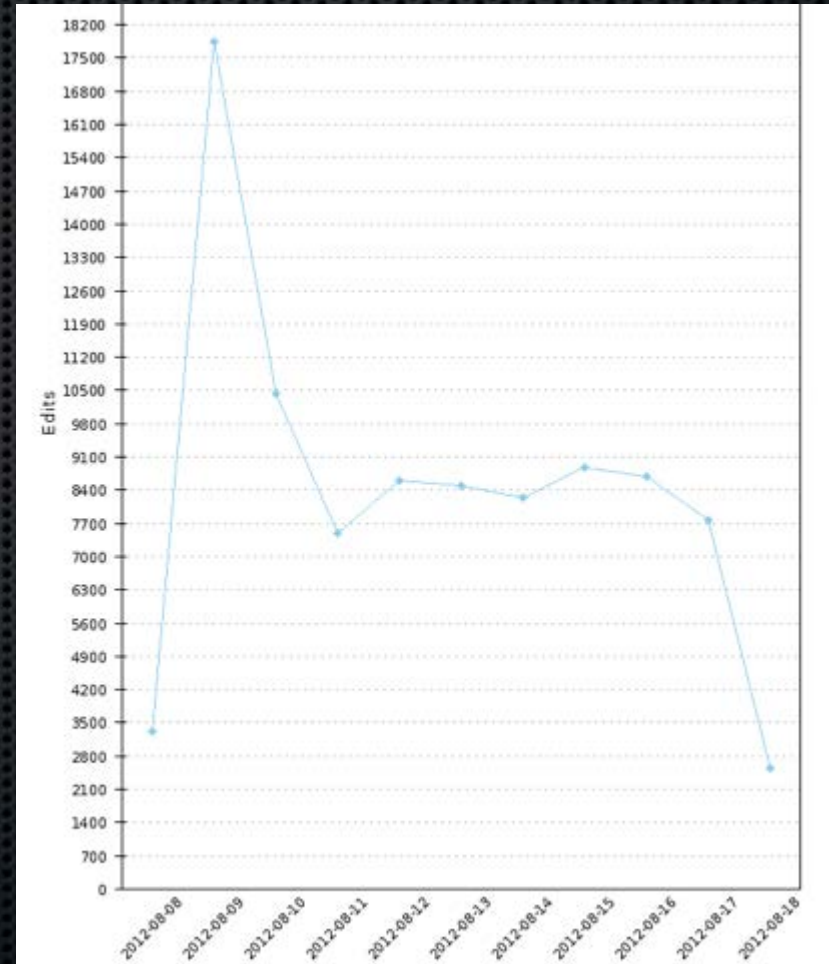
## translatewiki.net

- Crowd sourcing (all social media, talks, Wikimedia wiki's, blogs, ...)
- Assume good faith (give access liberally)
- Develop to the user's needs
- Community building in a wiki
- Few formal processes (do-ocracy)
- Translation hints (TM, MT)
- Multiple contribution methods

# translatewiki.net

## Incentivise users

- Pledge to share USD 1,000
- See traffic quadruple
- 66,000 translations in 9 days
- Need more sponsors :)



# The path to

Guiding a user to become a translator



## UX Design Improvement for Translators - Process

Multilingual prototypes and screens

Live user testing with multilingual users

Transparent and participative design process

Regular wiki documentation of progress

The Goal:

Make users feel valuable while contributing translations



# Translate

- Platform
- Modularity
- APIs, VCS integration
- Translation aids
- External service integration

## Translate platform

- A MediaWiki extension for localization
  - User management, version control, talk pages for free
  - Easy to install
- Written in PHP, JavaScript
- Open Source
- Documentation not only for users, but also for developers

## Translate modularity

Supports many localization file formats:

- Gettext, AndroidXML, Java properties...

Supports multiple content types

- Software, wiki pages, SVG files...

Not supported? Write a PHP class!

# Translate integration

## Web accessible APIs

- Pull translation statistics
- Pull latest translations
- Or write a new translation interface
- We are making more functionality available via API

Tools to pull and push translations directly into version control systems



TM

MT

Message docs

Suggestions from translation memories and machine translation

↓ Mukautukset

| 100.00% match •

↓ Muutettu

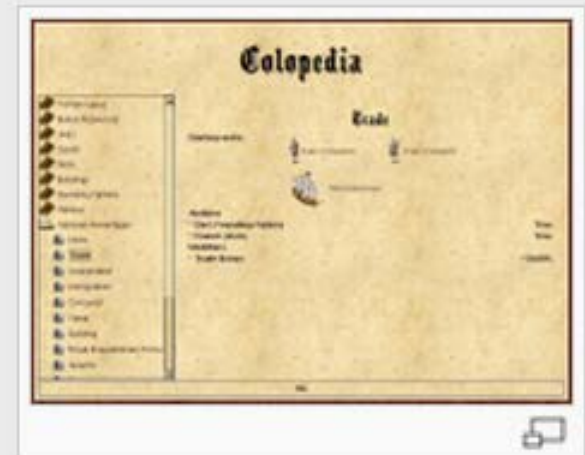
| 77.50% match •••

↓ Valitsimet

| Microsoft

Information about message ([contribute](#))

A **modifier** as a game concept is an element that modifies the way an ability is used.



Message definition ([FreeCol](#))

↓ Modifiers

Mukautukset

Summary: |

Save (a)

Save and open next (s)

Skip to next (d)

Ask question

Translation history (h)

# Get involved!



# Wikipedia is written by people just like you

- Press the "edit" button
- Write your changes
- There's no step three

# Translate!

- Know languages?
- Help complete and proofread translations of MediaWiki and related products:
- <https://www.translatewiki.net>

# Coding an open source project?

- You *want* to localize your project:
- More users, more bug reports, more opportunities
- Plus, it's easy!
- Just put your project for translation at [translatewiki.net](http://translatewiki.net)
- Let volunteers translate (just be sure to listen to issues that they report)

# Use our open source i18n libraries

- Add them to your site:
- [jquery.uls](#) - easy language selection
- [jquery.ime](#) - easy typing
- [jquery.webfonts](#) - easy font loading

# Report problems in our websites!

- Having a technical issue with Wikipedia or any of our other sites, or in your own MediaWiki installation?
- Report it!
- <https://bugzilla.wikimedia.org>

# Code!

- Know PHP or JavaScript?
- (Or want to learn?)
- Clone the MediaWiki Git repo and submit patches

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



## Contact us

Mailing list: <https://lists.wikimedia.org/mailman/listinfo/mediawiki-i18n>

IRC:  
#mediawiki-i18n at freenode.net

Work with us:  
<http://wikimediafoundation.org/wiki/Jobs>

