

Internationalize your web applications using Wikimedia i18n libraries



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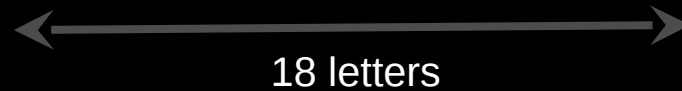
/me

Software Engineer at
the Wikimedia Foundation
Language Engineering team

FOSS developer specialized in Indic language
computing

i18n...?

Internationalizationn



Making an application multilingual and ready for
localizing to other languages

i18n

Externalize all interface strings so that they can be translated to other languages

Also avoid any assumptions that are valid only for English

HTML

```
<span data-i18n='app-name-label'></span>  
<input type='text'></input>
```

Messages

```
{  
  'en': {  
    'app-name-label' : "Enter your name:"  
  },  
  'ml': {  
    'app-name-label' : "നിങ്ങളുടെ പേര്:"  
  }  
}
```

Screen

Enter your name:

നിങ്ങളുടെ പേര്:

- * Many languages have more than 2 plural forms
 - Arabic has 6 plural forms

- * String concatenation assumes English sentence formation syntax

 - Found 6 results

 - 5 परिणाम मिला

- * You know only a few languages

- * Your web application is not a language processing application

Not just plural

Meera changed his/her picture - Wrong

Meera changed her picture

Arun changed his picture

Many languages change the verb based on the
gender of the subject.

E.g. Hindi

Numbers

हिन्दी विकिपीडियाका शुभारम्भ जुलाई २००३ में हुआ ।

Decimal places

De Nederlandstalige Wikipedia telt op dit moment **1.121.894** artikelen

...

jquery.i18n

- JavaScript internationalization library
- Supporting 300+ languages
- Well tested by the Wikimedia community
- Open source
- Developed and maintained by Wikimedia Language engineering team

jquery.i18n features:

- * placeholders (a.k.a. variables or parameters)
- * plural forms
- * gender
- * grammar (custom for every language)
- * digit transformations
- * language fallbacks (Maithili -> Hindi-> English)

Developers

```
<div id='car' data-i18n='app-cars'></div>
```

and in messages

```
'app-car' : "car"
```

Translators

```
ml: { "app-car" : "കാർ" },
```

```
ta: { "app-car" : "கார் " }  
  
...
```

And

```
$(document).i18n();
```

Readers see the page in their preferred language.



Developers

```
<div id= 'car' data-i18n= 'app-cars' > </div>
```

messages(en.json)

```
'app-cars' : "$1{{plural:$1|car|cars}}"
```

Translators

```
ml: { "app-cars" : "$1 {{plural:$1|കാർ|കാറുകൾ}}" },
```

```
ta: { "app-cars" : "$1 {{plural:$1|கார் |கார்கள்}}" },
```

```
he: { "app-cars" : "$1 {{plural:$1|תאוצה|תאוצות}}" }
```

...

```
$(document).i18n();
```

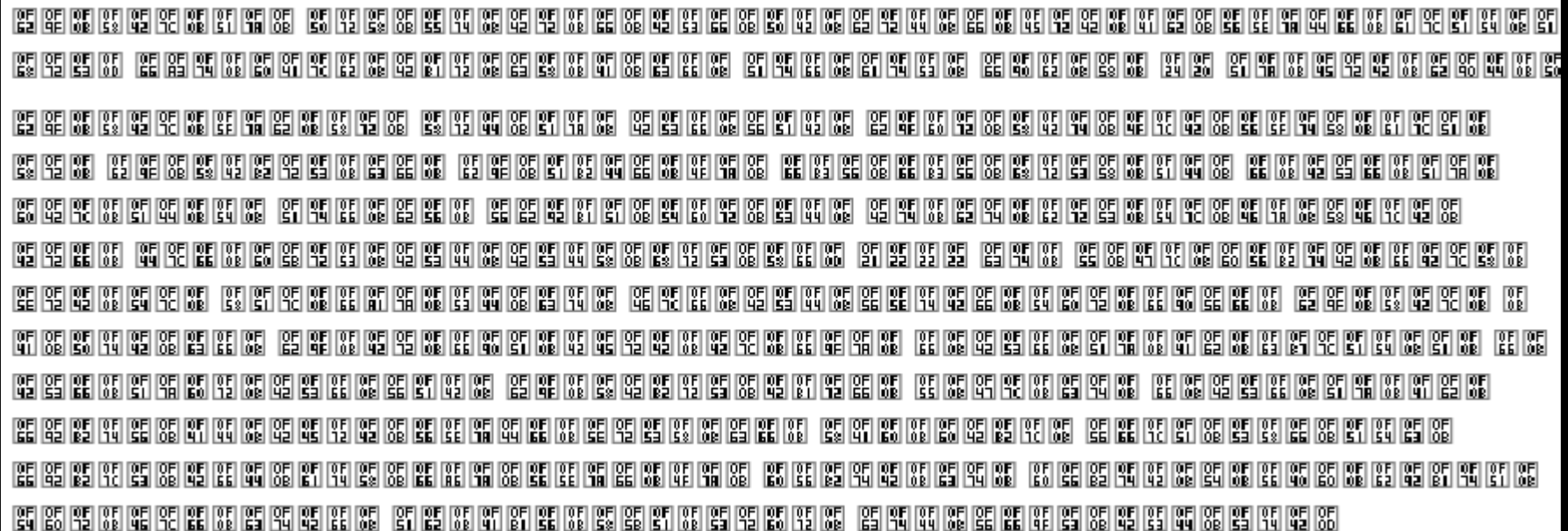
And depending on the page's language, readers get grammatically correct messages.



Live example

Internationalized, but...

Are we sure that the readers have all the needed fonts on their machines?



jquery.webfonts

A webfonts library with a focus on non-Latin text readability and accessibility

Largest open licensed font repository

70+ fonts in 20+ scripts

1..2..3

1 . Annotate your HTML elements with lang attributes

```
<div lang="hi" class="container">...</div>
```

2 .Apply webfonts to the document

```
$(document).webfonts();
```

3 .jquery.webfonts make sure that readers get the content with webfonts for the marked language.

No more squares or question marks with missing fonts

I can read, now how can I write?

Typing in non-Latin languages is difficult for users.

Their systems might not have input methods or be properly configured.

Do you know how to type in your mother tongue?

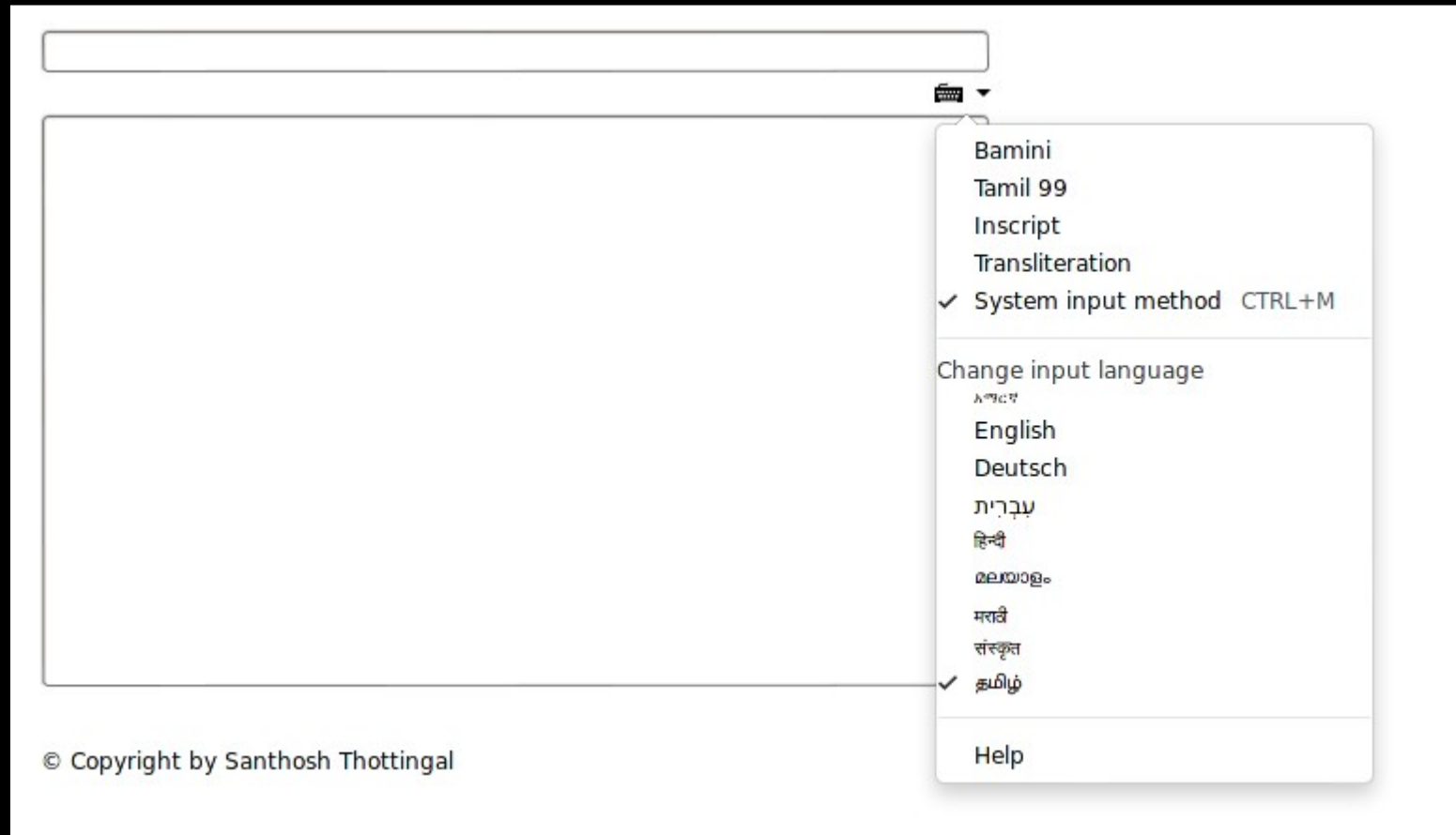
jquery.ime

- * A library to power web applications with input methods
- * Over 140+ input methods in many languages
- * Deployed and tested in many wikis

jquery.ime

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```
$( 'input' ).ime();
```



Selecting language

... is a problem when your use case requires selection from ~50+ languages

Wikimedia is introducing a new language selector - Universal Language Selector

Available as general purpose open source jQuery library



Select Language



Display settings
Set language used for
menus and fonts.



Language search

Common languages

Cymraeg

italiano

हिन्दी

தமிழ்

Deutsch

اردو

বাংলা

இலங்கை

eesti

भोजपुरी

ગુજરાતી

ಕನ್ನಡ

English

मराठी

ଓଡ଼ିଆ

മലയാളം

Worldwide

English

Lingua Franca No...

español

Lojban

Esperanto

Novial



Use, Fork, Improve
github.com/wikimedia

We are hiring!
<http://wikimediafoundation.org/wiki/Jobs>

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