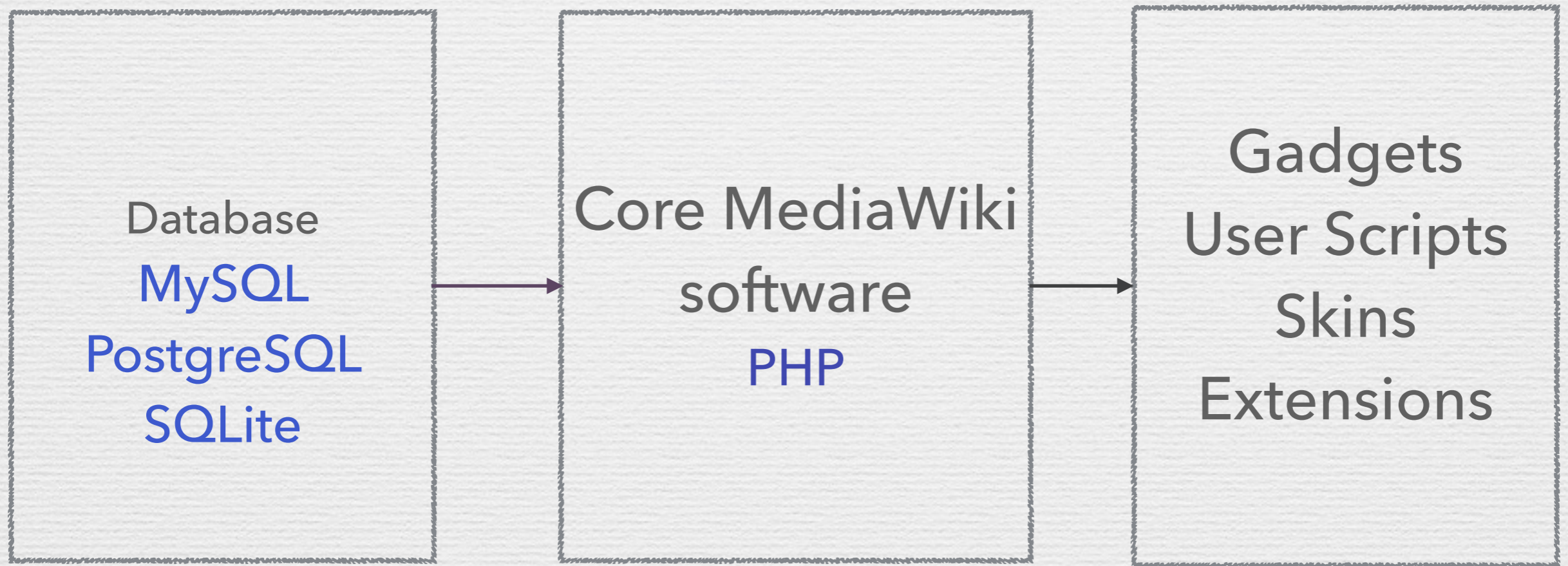# An Introduction to MediaWiki
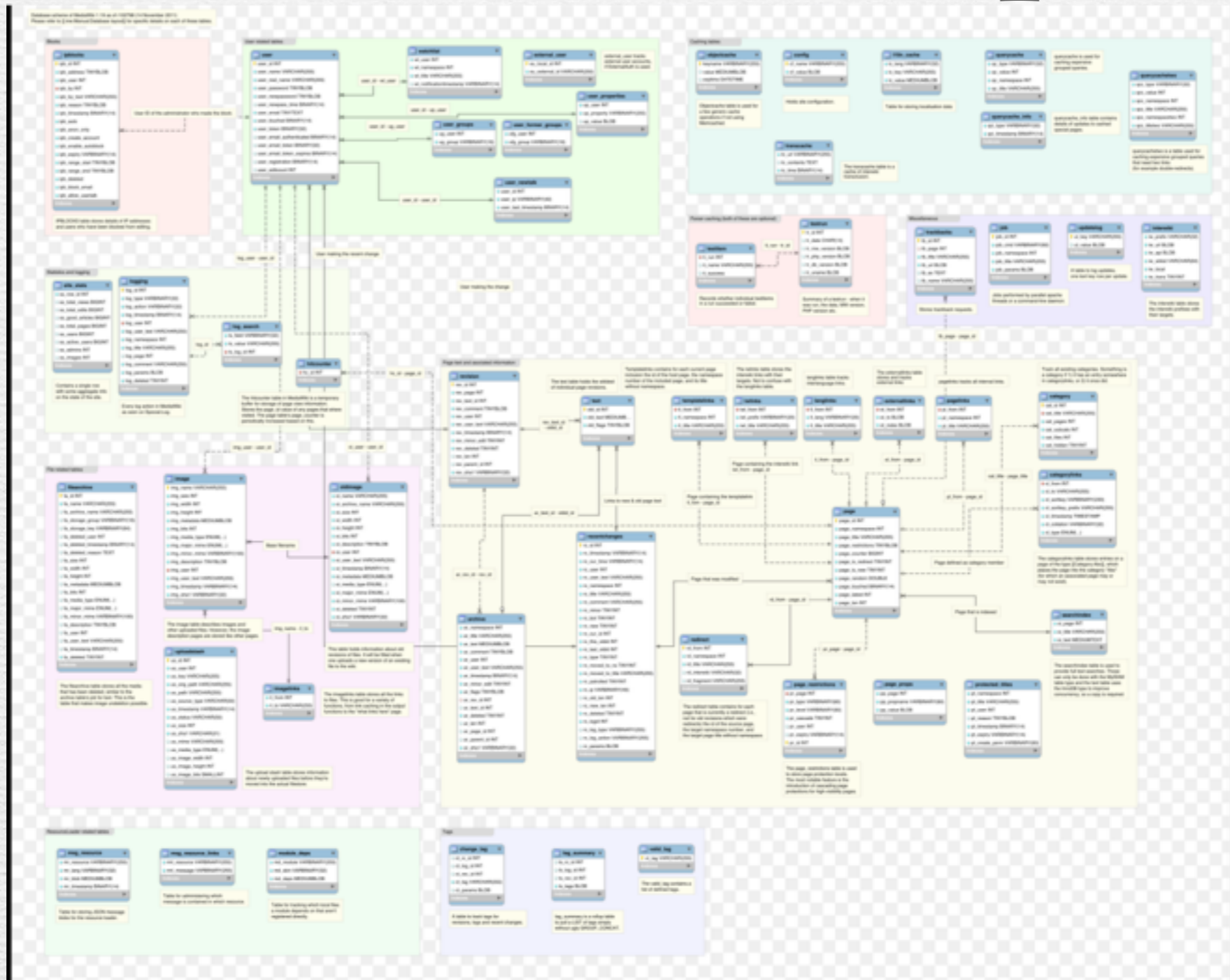
Niharika Kohli

Disambiguation!

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MediaWiki Architecture Overview

Database MySQL PostgreSQL SQLite	→	Core MediaWiki software PHP	→	Gadgets User Scripts Skins Extensions

Database for Wikipedia

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Where is the code?

- All code is hosted on Gerrit (which we will become friends with in a bit)

- The code is mirrored over to GitHub: _____ wikimedia/mediawiki

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Phabricator

- MediaWiki's bug reporting & tracking system

- Replaced Bugzilla last year

- Possibly a future Code-review system

Maniphest 21
Tasks and Bugs

Diffusion
Host and Browse Repositories

Audit
Browse and Audit Commits

Projects
Get Organized

Paste
Share Text Snippets

Flags 2
Personal Bookmarks

Applications
Explore More Applications

Customize Menu....

Assigned To Me

Needs Triage (6)

T96880 Allow users to disable account and remove email in Grants review app
🏷 Patch-For-Review 💼 Wikimedia-IEG-grant-review
Jun 24 2015, 11:30 AM
Assigned: NiharikaKohli

T103854 Create a documentation page on mediawiki.org about Grants Review app
💼 Wikimedia-IEG-grant-review
Jun 25 2015, 8:38 PM
Assigned: NiharikaKohli

T108636 [AOI] Investigation: Can we improve navigation popups?
👥 Community-Tech
Thu, Aug 20, 10:05 AM
Assigned: NiharikaKohli

T108628 [AOI] Investigation: Can we improve spell checking capabilities on Wikipedia?
👥 Community-Tech
Sat, Aug 22, 12:40 AM
Assigned: NiharikaKohli

T108425 [AOI] Investigation: Can we improve page stats?
👥 Community-Tech
Fri, Aug 21, 9:36 AM
Assigned: NiharikaKohli

T108282 Tracking: Update broken gadgets on WMF wikis
👥 Community-Tech 🏷 Tracking 🏷 JavaScript 💼 Wikimedia-General-or-Unknown
Fri, Aug 21, 6:40 AM
Assigned: NiharikaKohli

High (1)

T86509 "Add Proposal" does not port form errors back to view
💼 Wikimedia-IEG-grant-review
Apr 22 2015, 11:15 PM
Assigned: NiharikaKohli

Normal (3)

T95119 Let proposals be disabled
🏷 Patch-For-Review 💼 Wikimedia-IEG-grant-review
Apr 29 2015, 10:34 AM
Assigned: NiharikaKohli

T93248 Allow campaigns to specify wikitext report template
🏷 Patch-For-Review 💼 Wikimedia-IEG-grant-review
Jun 7 2015, 8:48 PM
Assigned: NiharikaKohli

My Bookmarks

🚩 **T101100:** Engineering Community quarterly g...
Create task

🚩 **T7309:** Localize captcha images
Interesting

Subscribed

Unbreak Now! (1)

T109306 End-term evaluation for "Unified Language pro...
💼 VisualEditor-LanguageTool ✅ ECT-September-2015
✅ ECT-August-2015 ✅ ECT-July-2015 ...

Needs Triage (12)

T48522 Multilingual SemanticMediaWiki
💼 Possible-Tech-Projects ✅ MediaWiki-extensions-
Semantic-MediaWiki

T94160 Linguistic Version Control for Polygraphia
💼 Possible-Tech-Projects 🏷 I18n

T92818 The "Compact Language Link" is cut in Korean ...
💼 ULS-CompactLinks 💼 MediaWiki-extensions-
UniversalLanguageSelector

T91655 Editor-focused dashboard extension
👥 Community-Tech 👥 Editing-Department 💼
Possible-Tech-Projects

PHABRICATOR

Wikimedia-IEG-grant-review 🌐 Public

Backlog (Default)   12 ▼

T108597 Confirmation box on removal of reviewers who have filed reviews for a campaign

T89454 Let users see only those past campaigns which they were a part of, in the Reports section.

T89452 Start and end campaign automatically at specified time

T86509 "Add Proposal" does not port form errors back to view
NiharikaKohli

T92800 Add form validation for multidimensional array in PHP

T92799 Update Controllers\Admin\Campaign.php to input multidimensional array instead of separate arrays for question title, body and footer

T91253 Group related mass DB transactions into a single one

T88807 Change vhost name to "grantreview.wikimedia.org"

T87088 Prevent server side session cleanup due to inactivity

T86968 Convert monolog to log directly to logstash

Must have   3 ▼

T96882 Update privacy policy to meet the requirements from Legal

T108591 Links from per reviewer proposal report to proposals broken, campaign id not populated

T107310 Update production grant review app with latest code and schema
bd808

In Dev/Progress   3 ▼

T88809 Ensure that legal has reviewed longer term data retention
NiharikaKohli

T103854 Create a documentation page on mediawiki.org about Grants Review app
NiharikaKohli

T90086 Create a framework library from the common components of Wikimania Scholarships and Grants review app
bd808

Confirmation box on removal of reviewers who have filed reviews for a campaign

ⓘ Open   ⊕ Public

Assigned To	*None*	✎	Edit Task
Priority	Normal	⚔	Merge Duplicates In
Author	NiharikaKohli	↴	Create Subtask
Subscribers	NiharikaKohli, Aklapper	⚲	Edit 'Blocked By' Tasks
Projects	⌂ Wikimedia-IEG-grant-review (Backlog)	⚙	Edit Differential Revisions
		▣	Edit Pholio Mocks
		⊖	Unsubscribe
		🏆	Award Token
		⚑	Flag For Later

≡ **DESCRIPTION**

- Confirmation box if reviewer has filed reviews
- Delete reviews if confirmed removal of reviewer

NiharikaKohli created this task.   Via Web · Mon, Aug 10, 10:52 PM

NiharikaKohli added a project: **Wikimedia-IEG-grant-review**.

NiharikaKohli moved this task to **Backlog** on the **Wikimedia-IEG-grant-review** workboard.

NiharikaKohli added a subscriber: **NiharikaKohli**.

Herald added a subscriber: **Aklapper**. · View Herald Transcript   Via Herald · Mon, Aug 10, 10:52 PM

Add Comment

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What is Git?

- Git is, in a nutshell, a Versioning Control System (VCS).

- You have probably seen Git at work before - in Google Docs.

- Git stores comprehensive revision history.

- Git stores who made which changes and when.

- Online code repository hosting services like GitHub and BitBucket use Git.

What is Gerrit?

- **Gerrit**

- Software developers in a team can review each other's modifications on their source code using a Web browser and approve or reject those changes.

- It integrates closely with Git, a distributed version control system.

MoodBar.php

☑ Reviewe

Patch Set **Base** 1 2 3 4 5 6 7 8   Patch Set **1** 2 3 4 5 6 7 8

```php
1  <?php
2  /**
3   * MoodBar extension
4   * Allows specified users to send their "mood" back to the site operator.
5   */
6
7  $wgExtensionCredits['other'][] = array(
8  »        'author' => array( 'Andrew Garrett', 'Timo Tijhof' ),
9  »        'descriptionmsg' => 'moodbar-desc',
10 »        'name' => 'MoodBar',
11 »        'url' => 'https://www.mediawiki.org/wiki/MoodBar',
12 »        'version' => '0.3.0',
13 »        'path' => __FILE__,
14 );
15
16 $moodBarDir = __DIR__ . '/';
17
18 // Object model
19 $wgAutoloadClasses['MBFeedbackItem'] = $moodBarDir . 'FeedbackItem.php';
20 $wgAutoloadClasses['MBFeedbackResponseItem'] = $moodBarDir . 'FeedbackResponseItem.php';
21 $wgAutoloadClasses['MWFeedbackResponseItemPropertyException'] = $moodBarDir . 'FeedbackResponseItem.php';
22 $wgAutoloadClasses['MoodBarFormatter'] = $moodBarDir . 'Formatter.php';
23 $wgAutoloadClasses['MoodBarHTMLEmailNotification'] = $moodBarDir . 'include/MoodBarHTMLEmailNotification.php';
24 $wgAutoloadClasses['MoodBarHTMLMailerJob'] = $moodBarDir . 'include/MoodBarHTMLMailerJob.php';
25 $wgAutoloadClasses['MoodBarUtil'] = $moodBarDir . 'include/MoodBarUtil.php';
26
27 // API
28 $wgAutoloadClasses['ApiMoodBar'] = $moodBarDir . 'ApiMoodBar.php';
29 $wgAPIModules['moodbar'] = 'ApiMoodBar';
30 $wgAutoloadClasses['ApiQueryMoodBarComments'] = $moodBarDir . 'ApiQueryMoodBarComments.php';
31 $wgAPIListModules['moodbarcomments'] = 'ApiQueryMoodBarComments';
32 $wgAutoloadClasses['ApiFeedbackDashboard'] = $moodBarDir . 'ApiFeedbackDashboard.php';
33 $wgAPIModules['feedbackdashboard'] = 'ApiFeedbackDashboard';
34 $wgAutoloadClasses['ApiFeedbackDashboardResponse'] = $moodBarDir . 'ApiFeedbackDashboardResponse.php';
35 $wgAPIModules['feedbackdashboardresponse'] = 'ApiFeedbackDashboardResponse';
36 $wgAutoloadClasses['ApiMoodBarSetUserEmail'] = $moodBarDir . 'ApiMoodBarSetUserEmail.php';
37 $wgAutoloadClasses['MWApiMoodBarSetUserEmailInvalidActionException'] = $moodBarDir . 'ApiMoodBarSetUserEmail.php';
38 $wgAPIModules['moodbarsetuseremail'] = 'ApiMoodBarSetUserEmail';
39
```

Right side (Patch Set 1):

```php
1  <?php
2  /**
3   * MoodBar extension
4   * Allows specified users to send their "mood" back to the site operator.
5   */
6
   if ( function_exists( 'wfLoadExtension' ) ) {
   »        wfLoadExtension( 'MoodBar' );
   »        // Keep i18n globals so mergeMessageFileList.php doesn't break
   »        $wgMessagesDirs['MoodBar'] = __DIR__ . '/i18n';
   »        $wgExtensionMessagesFiles['MoodBarAliases'] = __DIR__ . '/MoodBar.alias.php'
   »
   »        /* wfWarn(
   »        'Deprecated PHP entry point used for Renameuser extension. Please use wfLoad
   d, ' .
   »        'see https://www.mediawiki.org/wiki/Extension_registration for more details.
   »        ); */
   »        return true;
   } else {
   »        die( 'This version of the MoodBar extension requires MediaWiki 1.25+' );
   }
```

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What is Mediawiki-Vagrant?

- **MediaWiki-Vagrant**
  It consists of a set of configuration scripts for
  that automate the creation of a virtual machine that runs MediaWiki.

- The virtual machine that MediaWiki-Vagrant creates makes it easy to learn about, modify, and improve MediaWiki's code: useful debugging information is displayed by default, and various developer tools are set up specifically for inspecting and interacting with MediaWiki code, including a powerful debugger and an interactive interpreter.

- Provides a bunch of different roles - for all the different things you can do with MediaWiki!

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Internet Relay Chat

- One stop help source!

- Clients: Pidgin, textual, HexChat, mIRC, IRCCloud, KiwiIRC etc.

- Always remember: "Be nice, be respectful."

- A good time to ask for help is after ~9 pm IST.

- Channels for help on MediaWiki Development: #mediawiki and #wikimedia-dev

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MediaWiki API

- API: Application Programming Interface

- Access to (nearly) all of Wikipedia's data!

- The possibilities are endless: Generate reports, active editors, active wikis, number of edits.

- Used by Facebook/Google for traffic information

- Used by bots and gadget scripts

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MediaWiki Extensions

- MediaWiki extensions are used to extend upon the default functionality provided by the MediaWiki software.

- You can do nearly everything you can imagine with an extension.

- Extensions are a lot like gadgets - but the code is a lot more organized and can be easily added for all users in a wiki, along with better support for internationalizing content.

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Google Summer of Code

- Internship program for university students to participate in Open Source projects during the summer break.

- Students are mentored by open source organizations such as Wikimedia Foundation, Mozilla, GNOME etc.

- Google provides students with $5500 stipend and a certificate, if the student successfully passes all evaluations by mentors.

Outreachy

- A special internship program run by GNOME for women only.

- Runs twice a year: During May-August and December-March.

- Anybody can participate (no University restriction).

- Same stipend as GSoC.

Questions?

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