

# Social Semantic

Using Semantic MediaWiki queries to introduce elements of networking  
and gamification to wiki profiles

# Lineup

- Drivers
- Extensions used
- Profiles
- Article Ratings/Reviews
- Point System
- Automated Badging

# Drivers

- Provide a standard profile for an enterprise community
- Introduce a process to rate/review articles
- Develop a user point system that rewards participation
- Introduce automated user achievement badges

# Extensions

## Required

- Semantic MediaWiki
- Semantic Forms
- Semantic Extra Special Properties
- Semantic Result Formats

## Optional

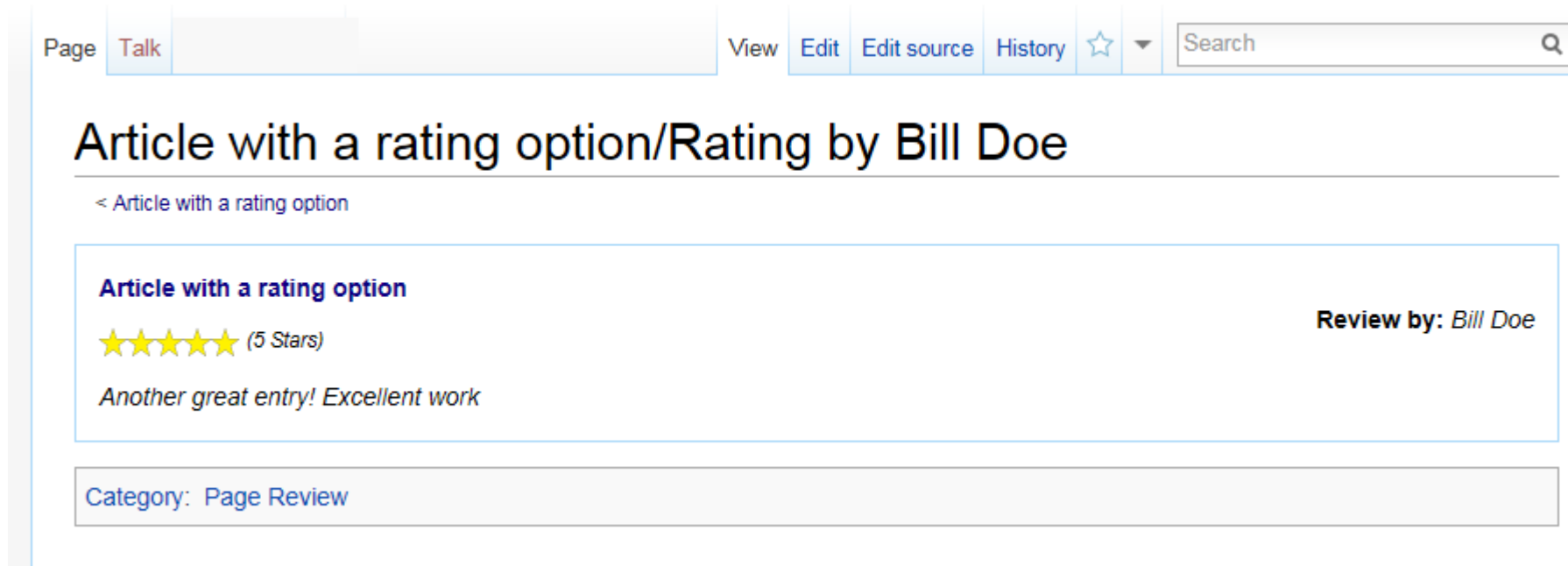
- Semantic Rating
- PageNotice

# Profile Template/Form

- Establish a standard Userpage profile for all wiki users as a Template/Form
- Suggest establishing fields for the following properties at a minimum:
  - Name, Photo, Tags/Skills
- Mandate the user profile
  - *[[Has default form:User form]]* on the *Wiki:User* page.
- Alternately, the PageNotice extension can provide a great opportunity to add a template that hosts your point or badging system through a standard header or footer in the User: namespace.
  - MediaWiki:top-notice-ns-2
  - MediaWiki:bottom-notice-ns-2

# Article Rating Process

- Customer requested a rating and review system for articles similar to Tripadvisor.
- We looked at the Wikipedia Article Feedback Tool (AFT) initiative
- Ultimately elected to go with the Semantic Rating extension to create Reviews entries as subpage that carry a star rating.



The screenshot shows a Wikipedia article page with a review subpage. The top navigation bar includes 'Page', 'Talk', 'View', 'Edit', 'Edit source', 'History', and a search box. The article title is 'Article with a rating option/Rating by Bill Doe'. Below the title, there is a link '< Article with a rating option'. The review subpage is titled 'Article with a rating option' and features a 5-star rating (5 Stars) and the text 'Another great entry! Excellent work'. The reviewer's name is 'Review by: Bill Doe'. The category is 'Page Review'.

Page [Talk](#) [View](#) [Edit](#) [Edit source](#) [History](#) [☆](#)

## Article with a rating option/Rating by Bill Doe

[< Article with a rating option](#)

**Article with a rating option**

★★★★★ (5 Stars)

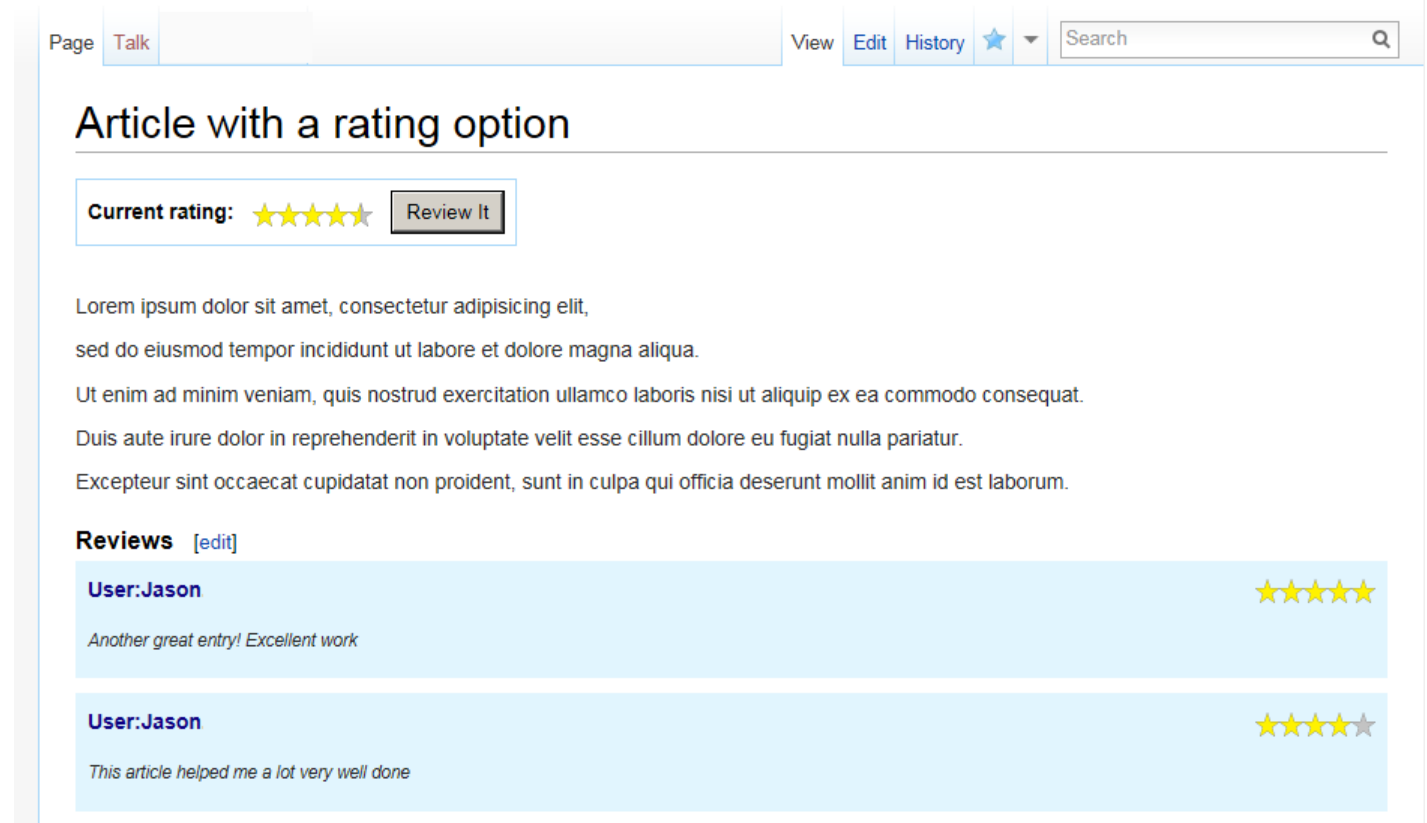
*Another great entry! Excellent work*

**Review by:** *Bill Doe*

Category: [Page Review](#)

# Article Rating Process

- The Rating/Review option was added to articles through a template.
- A separate template was offered as an option to display the recent reviews to a page
- Rating values are calculated through a combination of semantic queries and math expressions.



Page [Talk](#)  [View](#) [Edit](#) [History](#) [★](#)

## Article with a rating option

**Current rating:** ★★★★★ [Review It](#)

Lorem ipsum dolor sit amet, consectetur adipiscing elit,  
sed do eiusmod tempor incididunt ut labore et dolore magna aliqua.

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Excepteur sint occaecat cupidatat non proident, sunt in culpa qui officia deserunt mollit anim id est laborum.

### Reviews [\[edit\]](#)

**User:Jason** ★★★★★  
*Another great entry! Excellent work*








**User:Jason** ★★★★★  
*This article helped me a lot very well done*

# Point System

- Introduce elements of gamification to the wiki
- Reward users for making contributions to the wiki
- Reward users for gardening efforts
- Reward users that create articles which encourage others to make contributions to the site

## Our point system requirements

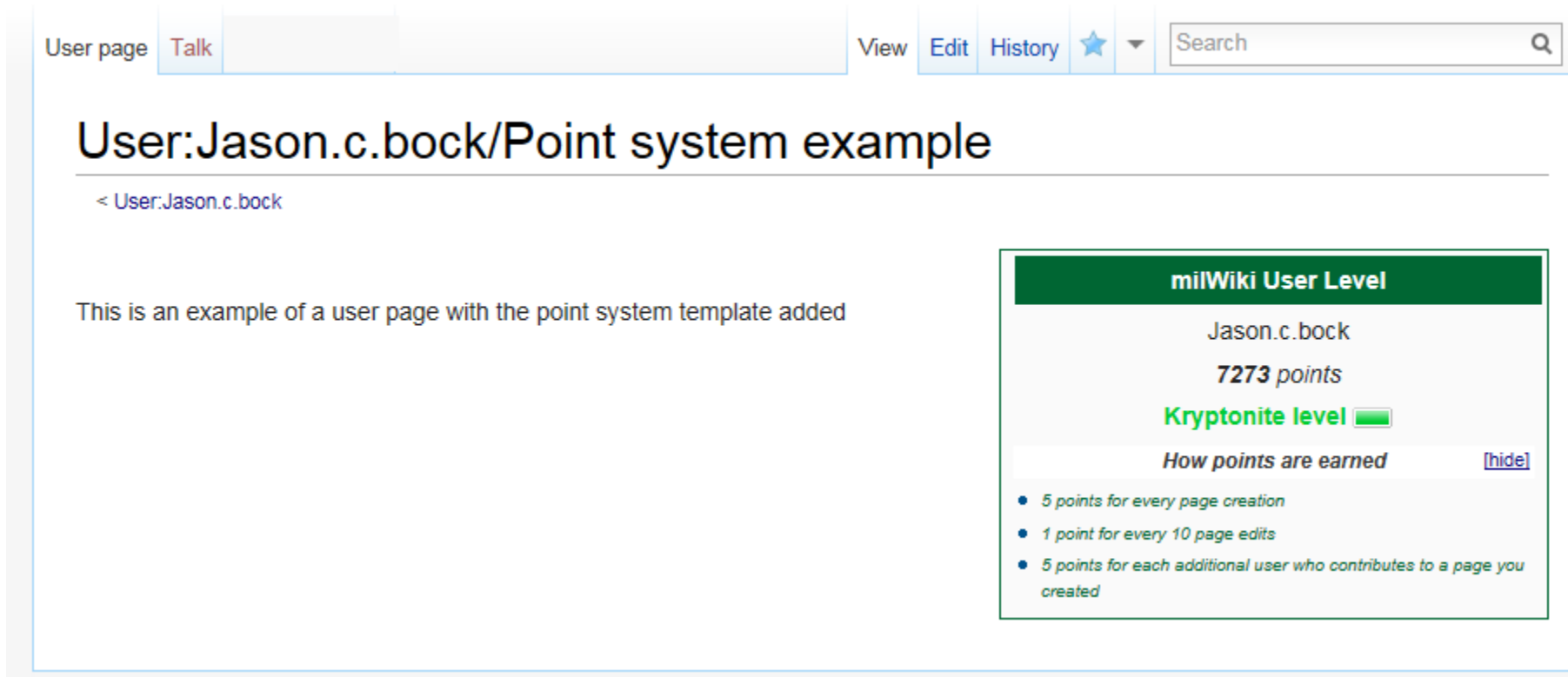
- *5 points are awarded to a user for every Page Creation.*
- *1 point is awarded to a user for every 10 page edits.*
- *5 points are award to a user for each additional author who contributes to a page that user created*

Points	User status	Icon
0-15	Lead	
16-100	Copper	
101-500	Bronze	
501-1500	Silver	
1501-3000	Gold	
3001-5000	Platinum	
5001-unbounded	Kryptonite	



# Point System

- Template was design to hold the point calculations and present it a stylized Side box.



The screenshot shows a user page on milWiki. At the top, there are navigation tabs for "User page" and "Talk", and a search bar. The main heading is "User:Jason.c.bock/Point system example". Below the heading, there is a link "< User:Jason.c.bock". The main content area contains the text "This is an example of a user page with the point system template added". On the right side, there is a stylized side box titled "milWiki User Level".

User page [Talk](#)  View [Edit](#) [History](#) [★](#)

## User:Jason.c.bock/Point system example


[< User:Jason.c.bock](#)

This is an example of a user page with the point system template added

### milWiki User Level

Jason.c.bock

**7273 points**

**Kryptonite level** 

*How points are earned* [\[hide\]](#)

- 5 points for every page creation
- 1 point for every 10 page edits
- 5 points for each additional user who contributes to a page you created

# User Badges

- Very few users took advantage of manual badges we offered.
- Our intent was to develop an automated badging system to reward overall participation and provide additional badge attention to specific projects.
- We wanted to reward contributions, especially work in specific topic areas.
- Identify Subject Matter Experts through their levels of contribution.
- Influences: Foursquare, ProjectNoah.

# User Badges


- Use semantic query [[Page creator::User]] counts to create standard participation badges for number of page creations or edits
- Expand the [[Page creator::User]] query to add a [[Property::Foo]] or [[Category:Foo]] element to establish badges for user contributing to specific projects
- Tap into our Semantic Ratings effort to reward users who receive positive reviews on articles

User page [Talk](#) [View](#) [Edit](#) [History](#) [★](#)

## User:Jason.c.bock/Badge examples

[< User:Jason.c.bock](#)

### Your badges




*Creating a profile!*   *Business card*   *Getting hot!*   *Bronze level*   *Silver level*   *Gold level*   *Great job!*   *New reviews*   *Join a project*   *5-star review!*   *10 reviews!*

**milWiki User Level**

Jason.c.bock

7278 points

**Kryptonite level** 

*How points are earned* [\[show\]](#)

Backup slides with example code

# Article Recommendations on profiles

- Using tag information from articles to suggest additional pages
  - Place a query on the Userpage to generate a list of most used tags by a user for a certain set of articles
  - Use the information from that query in a nested query on the result format page, to match against all other pages on the wiki
  - Design a result format to display the results

Place this on the Userpage

```
{{#ask: [[Property name::+]] [[Page creator::User{{BASEPAGENAME}}]]
|?Tag
|format=valuerank
|link=none
|min=1
|maxtags=3
|template=Query Format Recommends
|userparam={{BASEPAGENAME}}
|liststyle=none
}}
```

Place this in the Template:Query Format Recommends page

```
{{#ask: [[Tag::{{{1}}}}] [[Page creator::!User{{userparam}}]]
|?Tag
|format=valuerank
|link=none
|min=1
|maxtags=3
|template=Query Format Recommends Results
|userparam={{BASEPAGENAME}}
|liststyle=none
}}
```

# Point System Variables

- PAGES CREATED  
`{{#vardefine:pagecreations|{{#ask: [[Page creator::User:{{BASEPAGENAME}}]] |format=count}}}}`
- DEFINING PAGE EDITS / 10  
`{{#vardefine:pageedits|{{#expr: {{formatnum:{{#show: User:{{BASEPAGENAME}} |?User edit count}}|R}} / 10}}}}`
- NUMBER OF CONTRIBUTORS  
`{{#vardefine:pagecontributors|{{#ask: [[Page creator::User:{{BASEPAGENAME}}]] [[Page author::!User:{{BASEPAGENAME}}]] |format=count}}}}`
- EDIT COUNT BY CONTRIBUTORS  
`{{#vardefine:contributorcounts|{{#ask: [[Page creator::User:{{BASEPAGENAME}}]] [[Page author::!User:{{BASEPAGENAME}}]] |?Page author |format=valuerank |link=none |headers=hide |mainlabel=- |template=Template:Query Format/Author count |introtemplate=Template:Query Format/Author count intro |outrotemplate=Template:Query Format/Author count outro |liststyle=none}}}}`

Full details on result Template formats is shared here: [http://smw.referata.com/wiki/Semantic\\_Point\\_System](http://smw.referata.com/wiki/Semantic_Point_System)

# Point system author counts

- The following 3 templates are used to determine the edit count for users other than the current profile, on all pages created by the profile in question (see slide 7)
- I establish a variable with a value of 0 with the intro then I call the *rank* which is the number from the valuerank format, add it to the variable and then loop that with the template each time through so the number keeps adding by the rank

1. Template:Query Format/Author count intro

```
{{#vardefine:finalcount|0}}
```

2. Template:Query Format/Author count

```
{{#vardefine:finalcount|{{#expr: {{#var:finalcount}} + {{{rank}}}} }}}}
```

3. Template:Query Format/Author count outro

```
{{var: finalcount}}
```

# Point system calculations

- ASSIGNING 5 POINTS PER PAGE CREATION  
`{{#vardefine:creationpoints |{{#expr: {{#var: pagecreations}} * 5}}}}`
- ASSIGNING POINTS FOR PAGE EDITS  
`{{#vardefine:editpoints |{{#expr: trunc {{#var: pageedits}} }}}}`
- ASSIGNING 5 POINT PER ADDITIONAL AUTHORS CONTRIBUTING TO PAGES  
`{{#vardefine:contributorpoints |{{#expr: ({{#var: finalcount}}-{{#var: pagecontributors}})*5}}}}`
- ADDING UP THE POINTS  
`{{#vardefine:finalpoints |{{#expr: {{#var: creationpoints}} + {{#var: editpoints}} + {{#var: contributorpoints}} }}}}`
- DETERMING THE STATUS LEVEL  
`{{#ifexpr: {{#var: finalpoints}} < 16 | "'Lead level"' [[File:Status-lead.png]]  
| {{#ifexpr: {{#var: finalpoints}} < 50 | "'Copper level"' [[File:Status-copper.png]]  
| etc.  
| You have no points  
}}`

Full details on result Template formats is shared here: [http://smw.referata.com/wiki/Semantic\\_Point\\_System](http://smw.referata.com/wiki/Semantic_Point_System)



# Establishing Rating as a Semantic Property

- Subpage where the review is written captures the subject of the rating  
`[[Rating subject::{{BASEPAGENAME}}]]`
- And the Rating assigned through that review  
`{{#if:{{{Rating|}}} | [[Rating::{{{Rating|}}}]] | }}`
- The article being rated collects all its reviews and calculates an average rating score  
`{{#ask: [[Rating subject::{{FULLPAGENAME}}]] |?Rating | format=average}}`
- When a rating exists a Has rating property is declared for the article based on the current calculation  
`{{#set:Has rating={{#ask: [[Rating subject::{{FULLPAGENAME}}]] |?Rating | format=average}}`

# Using Ratings on Profiles

- Ratings can then be used on profiles to calculate when users receive reviews on their articles  
`{{#ifexpr: {{#ask: [[Has rating::+]] [[-Subpage.Page creator::User:{{ROOTPAGENAME}}]] |format=count}} > 0`
- To note when a perfect score has been received  
`{{#if: {{#ask: [[Has rating::+]] [[-Subpage.Page creator::User:{{ROOTPAGENAME}}]] [[Rating::5]]}}`