

# **Hackathon project «Reference data for Anime and Manga: Semantic Linking and Publishing of Diverse Data-Sets»**

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# A problem and an answer

- Ontology-based integration of engineering data should be transparent for engineers and to logicians. What does it mean? To understand simultaneously plant models, equipment, P&ID diagrams, and classes, properties and inverse properties, inheritance.
  - Few people know both. Even fewer among them use the same terms for objects they probable share.
  - Engineering datasets come from industrial proprietary CAD systems, ontology tools are open-source university apps.
  - Engineering data is guarded behind corporate firewall, ontology research in public.
- We need non-industrial example of engineering ontology work to test and publicize approaches, method and tools. What can it be?

# Anime and manga production as engineering

- Studio, distribution and fandom as **Enabling system** and “inside-anime world” as **System-of-interest** – complexly related.
- Derivative works as Product lines and Custom-tuned models: what is our typical system?
- Complex data with high variety:
  - Unstructured texts, video, picture datasets and also relational production and fandom data.
  - Blurred border between structured and unstructured data (lessons from IBM Watson: ontologies help to answer questions but aren't a primary source of information)

Kill la Kill



Details Reviews

Synopsis

In a high school, Kiryuin Satsuki sword and a sup

(Source: Wikipe

Related Anime

Adaptation: Kill la  
Other: Kill la Kill

Characters & V

- Senketsu Main
- Kiryuun, S Main
- Mankansho Main
- Matoi, Ryu Main

- Add to My List
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- Buy @ RightStuf
- Buy from Amazon
- Buy from Japan-Best



Alternative Titles

English: KILL la KILL  
Synonyms: KLK  
Japanese: キルラキル

Information

Type: TV  
Episodes: 24  
Status: Currently Airing  
Aired: Oct 4, 2013 to ?  
Producers: Aniplex, Kadokawa Shoten, Aniplex of America, Trigger  
Genres: Action, Comedy, School  
Duration: 24 min. per episode  
Rating: R - 17+ (violence & profanity)  
<sup>1</sup> represents licensing company

Statistics

Score: 8.10<sup>1</sup> (scored by 32461 users)  
Ranked: #372<sup>2</sup>  
Popularity: #143  
Members: 98,825  
Favorites: 1,449

<sup>1</sup> indicates a weighted score  
<sup>2</sup> based on the top anime page

Staff

- Imaishi, Hi Director, Ep
- Tachikawa Episode Dir

Review



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# Datasets, datasets,

**AniDB Statistics**

- 8118 Anime
- 143788 Episodes
- 64297 Characters
- 38989 Creators
- 64654 Songs
- 6164 Collections
- 436 Clubs
- 194 Lexicon Entries
- 126946 Cast Credits
- 536432 Staff Credits

**Newest Reviews**

- 24.02 IS: Infinite Stratos 2
- 21.02 Kuroshitsuji
- 13.02 Machine-Doll wa Kizutsukanai
- 03.02 Kakumeiki Valvrave (2013)

entry edit history forum (5 topics) comments (535 posts) previews (2) reviews (0) customise

**Info** [edit anime] - [add/edit titles] - [add/edit resources]

Info Titles Add To My List My Data Contribution

Main Title	Kill La Kill (#9875)
Official Title	Kill la Kill
Official Title	キルラキル
Type	TV Series, 24 episodes
Year	28.09.2013 till ?
Categories	Action, Comedy, Ecchi, Fantasy, High School, School Life, Seinen, Slapstick, Super Power - [similar]
Resources	Allcinema, ANN, Official page (jp), Schedule, Wiki (en), Wiki (jp), [more]
Rating	7.03 (543) (weighted)
Average	7.81 (566)
Stats	35 eps, 399 files, 24 groups
User stats	2465 members, 535 comments, 16 recs

MAIN CAST	
Yuzuki Ryouka	as Kiryuin Satsuki
Koshimizu Ami	as Matoi Ryuuko
Inada Tetsu	as Gamagoori Ira
Tamura Yukari	as Harime Nui
Yoshino Hiroyuki	as Inumuta Houka
Ueda Yuuji	as Iori Shirou
Shintani Mayumi	as Jakuzure Nonon
Konishi Katsuyuki	as Kinagase Tsumugu

MAIN STAFF	
Original Work:	Trigger, Nakashima Kazuki
Direction:	Imaishi Hiroyuki
Series Composition:	Nakashima Kazuki
Character Design:	Sushio
Chief Animation Direction:	Sushio
Music:	Sawano Hiroyuki
Animation Work:	Trigger

Episode list

All of the episode ti

No.	
1	"If Only I "Azami no

Ryuko Matoi trans  
who wear powerf

father's murder, Ryuko confronts the student council president, Satsuki Kiryuin, saying she is looking for the owner of the other half of a giant scissor blade she wields. She is beaten by the school's boxing club captain, Takaharu Fukuroda, using the power of his Two-Star Goku Uniform. Fleeing to her ruined home nearby and lamenting her defeat, Ryuko is dropped down a trapdoor by her homeroom teacher, Aikuro Mikisugi. She lands in a basement and discovers a living sailor uniform that forcibly puts itself on her. The next day, Takaharu prepares to execute Ryuko's friend and classmate Mako Mankanshoku for treason. Ryuko arrives to rescue her and confront Takaharu again, this time using her new uniform's powers to defeat him and destroy his Goku Uniform. Afterwards, Ryuko questions Satsuki again about the wielder of the other scissor blade, who is allegedly the one who killed her father.

2	"So Sexy She Might Pass Out" "Kizetsu Suru Hodo Nayamashii" (気絶するほど悩ましい)	October 10, 2013
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Ryuko is fatigued after her battle and flees, passing out and ending up in the care of Mako's family. That night, Ryuko recalls how she was introduced to the uniform, which she decides to name Senketsu, who was created by her father, Isshin. The next day, Ryuko comes across the tennis club captain, Omiko

# A) The Rererence Data


- We hold firm ontology commitments, grounded in ISO 15926 4D extensional ontology (self-education reading sequence: <http://levenchuk.com/2012/10/01/iso-15926-self-education-sequence/> ).
- We want to be a part of federated Reference Data Libraries (RDL).
- We prefer to link to PCA reference data wherever possible: (<http://rds.posccaesar.org/downloads/PCA-RDL.owl.zip> or <http://posccaesar.org/endpoint/sparql> ).
- We will try to develop domain ontology (classes and templates – n-ary relations) rich enough to map a sensible selection of anime-manga online resources.
- We will evaluate reuse of other ontologies (look at BBC Programmes ontology <http://www.bbc.co.uk/ontologies/programmes/2009-09-07.shtml>, Schema.org for TV and Radio markup <http://blog.schema.org/2013/12/schemaorg-for-tv-and-radio-markup.html> )

Results: published anime-manga domain RDL (OWL file and probable SPARQL endpoint)

# b) The Semantization of Datasets

- We will develop patterns for anime-manga semantic data structures (bases on classes and templates of domain RDL).
- We will program adapters to access selected datasets and map native data model to developed patterns.
- We will run adapters and create semantic data from anime-manga sources in ISO 15926-8 RDF.
- Datasets:
  - <http://anidb.net> (API: <http://wiki.anidb.net/w/API>)
  - <http://myanimelist.net> (API: <http://myanimelist.net/modules.php?go=api>)
  - IMDB (how to get it: <http://blog.teamtreehouse.com/coding-a-dynamic-imdb-webapp-using-my-movie-api>)
  - Wikipedia
  - ...
- Documentation for .15926 Editor patterns and mapping: <http://techinvestlab.ru/V4>

# c) The Linked Data

- We will attempt to use  webframework (<http://flask.pocoo.org/>) to **publish our semantic data in human readable form.**
- We will use the same patterns used for mapping to guide human representation.
- We will attempt to enhance Linked Data pages with more semantic mark-up (schema.org?).

Result: published human readable Linked Data pages for anime-manga semantic data.

# Whom do we need?

- Otaku (anime and manga fans) to understand data and engineers to build ontology.
- Data modelers to develop patterns.
- Python programmers to access native APIs of online resources and encode mappings.
- Web designers to develop concept pages.
- Semantic markup (schema.org anyone?) specialists to develop and embed semantic markup.



# Thank you

Contacts:

Team lead: Victor Agroskin, vic5784@gmail.com

.15926 Editor 1.4 freeware:

<http://techinvestlab.ru/dot15926Editor>

(documentation:

<http://techinvestlab.ru/15926EditorDocumentation>)