

Wanikani Stats

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Topic Area: Web Development

The website, Wanikani, is a resource for learning Kanji for folks attempting to learn Japanese. It uses a spaced repetition system and fun mnemonics to aid in learning up to ~1700 Kanji and ~5000 words. It is free to use for the first 3 levels (enough to get you hooked) and then requires a subscription or lifetime access purchase to continue progressing. The website itself is not super complete in terms of user information. For example, do you want to know how many days you've been active or what percentage of the time you get answers right or even something as basic as how many total Kanji have I 'learned'? This information is kind of annoying to figure out on the website itself or just not available. There is a free resource that I've been using to get some of this information called wkStats.com, but I'm not sure how maintained it is, it doesn't have all the information that I want, and sometimes it just randomly stops working. I found a repo that I believe is where the website comes from, and its last update was from 9 years ago. I would say the website falls into the category of something I think I could do better or at least make more feature-complete.

Wanikani, itself, I think is aware of some of its limitations and provides a very robust REST API to get any information about your own account. I would like to use Rust to make API calls, perhaps cache some of this information so I'm not making a million calls, and serve some basic HTML templates with the user related information I want to display. At a minimum, I want to display the user's current level, total count of Kanji/vocab/radicals that are at 'Guru' level and above, and overall percentages like how often I get readings or meanings correct. Additionally, nice to have features would be a sortable list of stuff I've learned with my overall percentage listed next to them.

I want to be conservative with my overall goals because I think it will be a relatively large task just to learn how to make an API call, cache that information, and then present it in Rust. I have taken Intro to Web Dev and Frontend Web Technologies here at Portland State, and I also have done a 6 month internship doing web development so I believe I have a solid enough foundation to make parts of this achievable. I also think this is something I could easily expand after taking the next Rust course in web development.

Another consideration that might ease the difficulty of this project, is instead of making it as a web application, I could make it a console application that accepts an API key as an argument, makes api calls to gather relevant information and then present that just in the terminal.

Finally, I believe my current love of Wanikani will make this project fun and help maintain my interest throughout the quarter. wkStats is something I check like every week so If I could make something better I'd get a fair bit of use out of it.

The name I am going with for now is 'wanikaniStats' and can be found at this [github repo](#).