GSOD 2020 Project Proposal

Project : Reorganize/rewrite configuration documentation

Abstract

Most applications nowadays work upon more than one technology and the codebase is overwhelming to engulf at first sight. It is documentation that is supposed to help a new developer in a project, and its existence in most of the cases defines the metrics of how beginner-friendly the community is. However, in today's hectic world, where we all are surrounded by deadlines, developers have a lot to do like writing the code in the first place, code reviews, unit tests, and whatnot, and in this hustle most of the time, documentation simply goes out of the equation. Sadly, it is the least thought about detail which can make great changes in the future.

A good documentation not only helps a new developer but even the ones working on the project itself in various ways like debugging or feature extension, helps keep track of all aspects of an application and it improves on the quality of a software product. It lowers the support cost significantly and depicts the healthiness of an organization.

Fortunately, ESLint has documentation, but still, there's a lot of scope for its improvement. The Community also wants this project to improve its user documentation to enable end users to have a seamless experience when using ESLint for their code.

Why ESLint?

Long story short, because I absolutely love ESLint. Being a MERN stack developer myself, I understand how difficult it is to debug a code of a loosely typed language like JavaScript, and that's where a software like this comes to the rescue. Also, the importance of code structuring and refactoring is of prime importance when working in a team/group project. I find this software so good, that I think it is a must-have utility for every JavaScript developer out there, and one way to attract more and more developers towards it is to have a welcoming and a good documentation.

Current State

- Good documentation is like a good block of code. Short, simple, and easy to understand. Though the current documentation is concise, it lacks proper explanation and hence is not easy to understand.
- It looks very cluttered and finding the exact thing one's looking for feels analogous to finding a needle in a haystack!
- Documentation of files is absent i.e. there should be a detailed explanation of the "eslintrc" file.
- There is no detailed explanation of 'rules'.
- No navbar for navigating through the page.
- Lacks philosophy and the idea behind.
- It is not compelling enough, as to why one must use it.

Due to the above mentioned points, the documentation needs serious restructuring, and even re-writing wherever necessary.

Proposed Deliverables

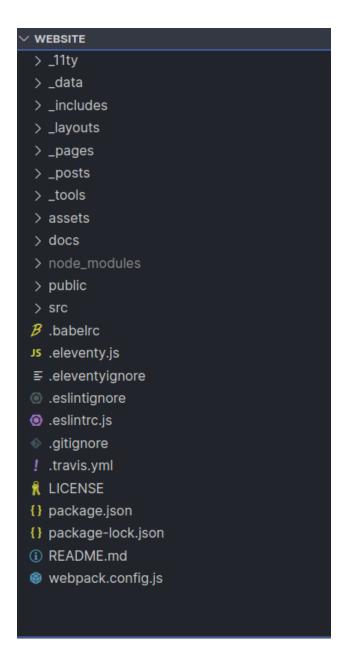
- Split the configuration page into 2 sub-pages. The first page shall be
 like a tour of the utility. The features and all the important aspects of
 ESLint would be explained via making a basic walkthrough of linting a
 code and embedding ESLint into it. Motive of the first page shall be
 that no developer has to google anything or read any article about
 how to use ESLint except for the documentation.
- An explanation would be provided at each and every step with proper images to guide a new developer like a 5-year-old. Explanations would be provided keeping in mind that even a new-comer could understand, with hyperlinks to all the necessary syntaxes like YAML etc. Also focus would be maintained as to why ESLint will make your life easier, pointing out the importance of code structuring.
- The second page shall take a deeper dive in all the configurations available, at this point we could expect the developer to be more technically sound as she/he has been through the first page and now knows about the basic structure of the program. This would be the point where we will talk about what different options he has to keep his configurations, how he can override rules etc.
- Re-iterate over all the 'rules' and provide a separate page for proper explanation of whichever necessary with embedded images depicting the correct and incorrect usage of it.
- Re-write and re-structure the current documentation wherever deemed necessary.
- Embed the documentation with helpful hyperlinks, for the topics which go out of scope for explanation here.
- Attach a side-nav in both the pages for better and quick navigating.
- Attach images wherever necessary for better explanation.

Implementation details

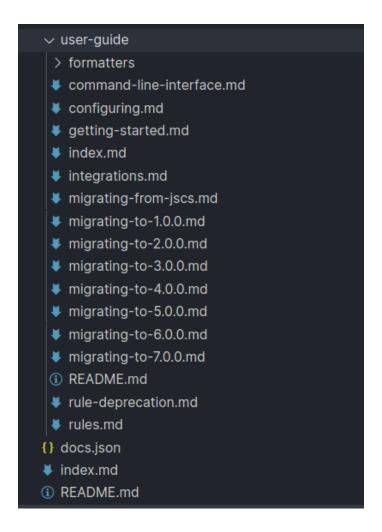
Presently the website of ESLint works upon Eleventy, with liquid as it's templating engine, which makes them the prime dependency for its build.

For splitting the configurations page:

Eleventy is a static site generator, the directory structure of the website is as follows:



As per the working structure of Eleventy, there's a folder for every route and a markdown-down file for every webpage, hence the documentation pages live inside the docs folder with folder structure as follows:



Note: only user guide sub folder is shown.

As it's evident that, to split the configuration page into 2 sub-modules, we would have to add 2 mark-down files with the relevant content and we would be ready to go.

For adding the navbar:

Plugin 'eleventy-navigation' can be used to render side-nav on the configuration pages. Official documentation can be found here:

https://www.11ty.dev/docs/plugins/navigation/

Why is your proposed user documentation an improvement over the current one?

It goes without saying that a newcomer is not expected to know much of the coding part, hence the documentation shall be a helping guide to both, the newcomers and the researchers with the 'how-to' knowledge at sight and the advanced further down. The newly structured documentation is surely to bring peace of mind to its audience. Prime focus would be given, not only to the quality of content, but also to how accessible and navigable the topics are. The main motive behind the new documentation is that no developer has to search for anything outside the documents, at least for understanding and setting up ESLint on his machine. It would be well structured and well organized in the end.

Brief Timeline

Community bonding: August 17 - September 13, 2020

Docs development: September 14 - November 30, 2020

Project finalization: November 30 - December 5, 2020

Tentative Project Timeline

Before August 17

- Make some contributions to the organization.
- Getting more familiar with how the website works, and digging deep into eleventy.
- Getting more familiar with the present documentation.
- Learn new techniques, ideas and required skills which could be applied to make the documentation even better.

Community Bonding period (August 17 - September 13)

Majorly, I would utilize this time period fine tuning the milestones of my deliverables and getting more clear about the project implementation with the help of my mentors. Other things are :

- Setting up a proper development environment and a proper time (due to time difference).
- Actively participate in discussions on the discord channel and catch up with all the important threads.
- Understanding the working environment, ethics and culture of the organization and getting familiar with people.
- Discuss and explore other areas and issues where I can contribute to the organization.

Docs Development (September 14 - November 30, 2020)

I'll divide my docs development in 3 phases, which would span the whole time in respective months. Approximately, **there are 301 'rules'**, hence Iterating through the 'rules' and expanding their documentation would be one thing that will be common in all the 3 phases. Further division is as follows:

Phase 1:

Week 1 & 2 :

- ➤ This time would be spent upon discussing with the mentor and finalizing the template in which we will structure the 'first page' (intended for a new-comer).
- ➤ I will start its implementation, probably before the beginning of the second week. This time would also be utilized for further discussion upon the proposal and how it can be made better.

Week 3 and 4:

- ➤ Finalize the 'First page', probably by the mid of third week and start implementation of the second-page.
- > Finish with the docs of explanation of the 'eslintrc' file.
- > Finish with the docs of local installation of the software by the end of 3rd week.
- ➤ Week 4 would be spend iterating over 1/3rd of the 'rules' and providing their explanation page

Phase 2:

Week 5 and 6:

- ➤ I am keeping week 5 as a buffer week to complete any unfortunate backlogs (if any) and to catch up.
- ➤ Restructuring of the 'Second-page' (Supposed to be advanced configurations).
- > Extend the CLI interface docs.

Week 7 and 8:

- > Start the implementation of the nav-bar for proper navigation.
- ➤ Iterating over the other 1/3rd of 'rules' and providing a separate page for those rules deemed necessary with proper images embedded.
- ➤ Reiterating over the whole documentation and providing hyperlinks for the topics which go out of the scope of explanation here, e.g. Eleventy, Liquid, YAML etc.
- > Finish with the implementation of the navigators.

Phase 3:

• Week 9 and 10:

- Catch up with any backlogs(if any) and finalize the 'Second page'.
- ➤ Iterating over the other 1/3rd of 'rules' and providing a separate page for those rules deemed necessary with proper images embedded.
- > Proof-reading the whole documentation for any typos/errors.
- > Giving a final touch to the docs.

Project Finalization:

November 30 - December 5 :

> Prepare a project report and submit it for evaluation.

• December 5 - 10 :

> Submit evaluations of the success of the projects and my experience working with the mentors.

Personal Details

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Links: GitHub, LinkedIn

About me

I am a pre final year student at Indian Institute of Information Technology, Lucknow. I am a product of 2 worlds, i.e. programming and literature. Programming has always amused me, because the power it gives you to create while the world of literature has always been close to my heart, simply because of its beauty. Though i personally believe that literature and programming are strongly correlated, as in both cases, you have to start with nothing, but a blank canvass, where you splash your colors of creativity and create amazing things.

My primary field of interest is web development and I use MERN stack for it. I try to write clean, descriptive code.

I am comfortable with Linux, have worked with different IDEs, and have a good command over git.

I recently got introduced to the world of open source, and have never

looked back ever since, I completely love the idea of open source and

eagerly want to contribute even more to it.

Below are some of my **projects** which showcase my work.

Loan Management application

Github link: https://github.com/damn-dvlpr/loanApp

Created a full fledged Loan management application for a small business

using Nodejs and Mongodb. It stores the data of all the customers and

generates a loan amount on the same. Also it maintains the stocks of the

shop.

Polling Application:

Created a polling app used to hold voting for various activities in student

clubs. The application extensively uses cookies and has a lot of moving

tokens.

Github link: https://github.com/damn-dvlpr/pollingApp

Website of Entrepreneurship cell of college

Netlify hosting: https://ecelliiitl.netlify.app/

GitHub repo: https://github.com/eCell-IIITL

Major contributor in building the website of Entrepreneurship cell of my

college in 3rd semester.

Website of Developer Students club of college

Netlify hosted: https://dsciiitl.netlify.app

Github repo: https://github.com/DSC-IIITL

Major contributor in building the website of Google's Developer students club of my college in 4rd semester.

Writing

• Writer in "The Startup" publication, Medium

Link: https://medium.com/swlh

Writer in "Level Up Coding" publication, Medium

Link: https://levelup.gitconnected.com

- Article got medium's curation: Why you should use 'Node.js' over Django.
- Head of content writers in E-Cell, IIIT Lucknow.

Post GSOD plans

As discussed with the mentor of the project, Kai Cataldo, I would work upon how to have support for different languages in the documentations page.

Also I would continue to give my contributions to this beautiful organization and remain in touch.

I will definitely try to make my juniors and batch mates in college aware about open source and encourage them to start contributing as well.