https://github.com/chaoss/wg-diversity-inclusion/pull/251

Documentation Usability

Question**:** What is the usability of documentation from content and structure perspectives?

Description

Documentation usability addresses the critical role of an open source project's documentation by making sure that various users can understand it. Documentation usability contains issues of structure, content, jargon, and readability with the goal to foster understanding for the widest audience of contributors to the project.

Objectives

- ****Technical Jargon**** — Documentation uses an appropriate level of technical jargon and provides an explanation for terminology as necessary to ensure the documentation is understandable for an entry-level contributor to the given project.
- ****Structural Clarity**** — Documentation is easy to follow and structured intuitively.
- ****Readability**** — Documentation uses language that is clear and concise, using common meaning words and short sentences, to ensure the documentation is understandable to people for whom the language is not native or those who may not follow similar shorthand conventions or inference patterns.
- ****Language Inclusion**** — Documentation avoids non-inclusive language (for example, 'brogrammer' language or exclusionary/derogatory language).
- ****Language Diversity**** — Documentation is available in a common vernacular for the intended audience and different languages.

Implementation

Data Collection Strategies

- **Interview** newcomers to determine how documentation helped the contributor to, (a) understand the contribution process, and/or, (b) complete the task.

  Sample interview questions:

    - What is your experience with using the documentation to understand the contribution process?
    - What is your experience with using the documentation when you have a question about doing work in the community?
    - Were you comfortable with the amount of technical terms present here?
    - What suggestions do you have for improving the project's policies, processes, or guidelines available to new contributors?
- Ask questions regarding readability and scannability such as: Does the documentation use organizing constructs, such as:
    - Headings
    - Text and Code Blocks
    - Bullets versus Paragraphs
    - Anchors
- Walkthrough with intended users of the documentation. Observe how they interact and use the documentation and where they get stuck. This can be a video conference session where the user of the documentation shares their screen.
- Ask users of documentation to write a [friction log](https://devrel.net/developer-experience/an-introduction-to-friction-logging) and describe what issues they had with documentation. This gives concrete use cases for documentation editors to understand how to improve the documentation for the specific user.
- Consider if different versions of documentation are available for different audiences. For example, a light-weight version and a very detailed version of the documentation.

Resources

- [W3C Web Content Accessibility Guidelines](https://www.w3.org/WAI/standards-guidelines/wcag/)
- [W3C Web Accessibility Evaluation Tools List](https://www.w3.org/WAI/ER/tools/)
- [Some quick tests to evaluate web accessibility](https://a11yproject.com/#Quick-tests)
- [A group that specializes in Accessibility](https://knowbility.org/services/document-accessibility/)
- [Thoughts on Accessibility metrics](https://www.boia.org/blog/3-times-accessibility-and-disability-stats-matter-and-3-times-they-dont)
- [GNOME on Accessibility](https://wiki.gnome.org/Accessibility)
- [Paypal's list of Guidelines for Accessibility](http://paypal.github.io/a11y/)
- [The Core Infrastructure Initiative: Best Practices Badge](https://bestpractices.coreinfrastructure.org/en)

- [Breaking Down Barriers to Kubernetes Contribution for Neurodivergent Individuals](https://static.sched.com/hosted_files/kcsna2019/05/Breaking%20Down%20Barriers%20to%20Kubernetes%20Contribution%20for%20Neurodivergent%20Individuals%20%282%29.pdf)
- [`documentation_basics`](https://github.com/coreinfrastructure/best-practices-badge/blob/master/doc/criteria.md#documentation_basics)
- [`documentation_interface`](https://github.com/coreinfrastructure/best-practices-badge/blob/master/doc/criteria.md#documentation_interface)
- [Friction Log](https://devrel.net/developer-experience/an-introduction-to-friction-logging)
- [Stanford: Screen Reader Testing](https://soap.stanford.edu/tips/screen-reader-testing)

Documentation Discoverability in the Project

Question**:** What is the discoverability of documentation from a technical accessibility perspective?

Description

Documentation discoverability is critical due to the role it plays in open source projects. Users of documentation have different ways of accessing documentation, requiring it to be offered in different formats to be equally empowering for these different users. Documentation discoverability contains issues of technical accessibility with the goal to ensure reachability, editability, searchability, and overall access for a wide audience.

Objectives

- ****Editability**** — Documentation is easy to update by any contributor, including instructions about how to make updates.
- ****Searchability**** — Documentation can easily be navigated by users based on their ability, and they can find the relevant information they need through search.
- ****Reachability**** — Documentation is easy to find and reference.
- ****Portability**** — Documentation is easy to move to another format / device.
- ****Geographic Access**** — Documentation can be accessed by users who may be subject to various internet restrictions. This may require use of hosted platforms instead of x-as-a-service platforms, which may be blocked by certain entities or states.
- ****Mobile Access**** — Documentation can be viewed, accessed, and navigated by mobile computing devices.

Implementation

Data Collection Strategies

- Use a **tool** (e.g., screen-readers, braille displays, magnifying software, color-blindness simulator) that evaluates access for the visually impaired to answer the question:
    - How easy can the visually impaired navigate the project's documentation?
    - How easy can the visually impaired use the project's documentation?

    - How easy can the visually impaired find relevant information in the project's documentation?

- **Survey** project members
    - Matrix item: When you need to discover information about a project's processes, policies, or guidelines, which of the following describes your experience?
        - Matrix rows can be: Mailing list communication; IRC communication; Performing code reviews; Process of getting code accepted; Code of conduct; Onboarding newcomers; Licensing, trademark; Add new committers/PMC members; Project releases; Voting process
        - Matrix columns can be: Always easy to find; Easy to find; Difficult to find; Quite difficult to find
    - Multiple choice: Did you experience any challenges related to the discoverability of documentation when you started to participate in the project (e.g., language barriers, or structure of documentation)?
        - Answer options:
            - No challenges
            - A few challenges
            - Several challenges
            - Many challenges
        - Open-ended follow-up question if the answer is not "No challenges":
            - Describe an example of what challenge you experienced and when, how the challenge affected you, and how, if at all, you overcame the challenge.
    - Open-ended follow-up question:
        - What suggestions do you have for improving the project's policies, processes, or guidelines available to new contributors? [5]
- Ask questions regarding readability and scanability such as:
    - Does the documentation use organizing constructs, such as:
        - Headings
        - Text and Code Blocks
        - Bullets versus Paragraphs
        - Anchors
- Ask questions regarding searchability such as:
    - How easily can this documentation be found by the user?
    - How easily can the user find what they require from the documentation?
    - Is the document easy to navigate with a keyboard?
- Provide a quick micro-survey with only one question to readers of the documentation (i.e., bottom-page or popup when leaving page):
    - Yes/No question: Was this documentation page reasonably accessible to you?
    - Likert Scale [1-x]: How accessible was this documentation to you?
    - Short Answer: How do you feel about the accessibility of the documentation?

- Walkthrough with intended users of the documentation. Observe how they interact and use the documentation and where they get stuck. For example, this can be a video conference session where the user of the documentation shares their screen.
- Ask users of documentation to write a friction log to describe what issues they had with documentation. This gives concrete use cases for documentation editors to understand how to improve the documentation for the specific user.
- Consider if different versions of documentation are available for different audiences.
    - For example, a light-weight version and a very detailed version.

Documentation Accessibility

Question**:** What is the accessibility of documentation to accommodate different users?

Description

Documentation accessibility is critical due to the role documentation plays in open source projects. Users of documentation have different abilities, requiring it to be offered in different formats to be equally empowering for these different users. Documentation accessibility contains issues of presentation and alternative versions with the goal to foster understanding for the widest audience of contributors to the project.

Objectives

These objectives help measure whether your documentation is accessible to a broad audience without disproportionately creating or perpetuating artificial debts on certain segments of its intended audiences.

- ****Accessibility Screen Reader**** — Documentation is accessible according to a standard for screen readers.
- ****Learning Flexibility**** — Documentation is accessible to people with various cognitive approaches, sensory differences, and neurodiversity [3]
- ****Blind or Visually Impaired**** — Documentation is accessible for people who mainly read text. Charts and graphics are an example of non-accessible types of documentation.

Implementation

****Note:**** Be attentive to the target audiences for documentation. Due to the broad spectrum of projects and people who may contribute, documentation should address the different requirements of all its audiences. Work should be focused on understanding the ways in which documentation helps in achieving the objectives and goals of the project.

Data Collection Strategies

- Use a **tool** that evaluates screen-reader friendliness [4] [6] to answer the question of: Is the documentation screen-reader friendly?
- **Interview** newcomers to figure out how documentation helped with, (a) understand the contribution process, and/or, (b) help complete the task.

Sample interview question:
    - What is your experience with using the documentation to understand the contribution process?
    - What is your experience with consulting the documentation when you have a question about doing work in the community?
    - Were you comfortable with the amount of technical terms present here?
- **Survey** project members
    - Matrix item: When you need to locate information about this project's processes, policies, or guidelines, which of the following describes your experience? [5]
        - Matrix rows can be: Mailing list communication; IRC communication; Performing code reviews; Process of getting code accepted; Code of conduct; Onboarding newcomers; Licensing, trademark; Add new committers/PMC members; Project releases; Voting process
        - Matrix columns can be: Always easy to find; Easy to find; Difficult to find; Quite difficult to find
    - Multiple choice: Did you face any challenges related to the accessibility of documentation when you started to participate in the project (e.g., language barriers, discoverability of documentation, structure of documentation, etc)? [5]
        - Answer options: No challenges; A Few challenges; Several challenges; Many challenges
        - Open-ended follow-up question if the answer is not "No challenges": Describe an example of when you experienced the challenge, how the challenge affected you, and how, if at all, you overcame the challenge.
    - Open-ended question: What suggestions do you have for improving the project's policies, processes, or guidelines available to new contributors? [5]
- Ask questions regarding readability and scannability such as: Does the documentation use organizing constructs, such as:
    - Headings?
    - Text and Code Blocks?
    - Bullets versus Paragraphs?
    - Anchors?
- Ask questions regarding searchability such as:
    - How easily can this documentation be found by the user?
    - How easily can the user find what they require from the documentation?
    - Is the document easy to navigate with a keyboard?
- Provide a quick micro-survey with only one question to readers of the documentation (i.e., bottom-page or popup when leaving page):
    - Yes/No question: Was this documentation page accessible to you?
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    - Short Answer: How do you feel about the accessibility of the documentation?

- Walkthrough with intended users of the documentation. Observe how they interact and use the documentation and where they get stuck. This can be a video conference session where the user of the documentation shares their screen.
- Ask users of documentation to write a friction log and describe what issues they had with documentation. This gives concrete use cases for documentation editors to understand how to improve the documentation for the specific user.
- Consider if different versions of documentation are available for different audiences? For example, a light-weight version and a very detailed version.

Resources

1. [The Core Infrastructure Initiative: Best Practices Badge](https://bestpractices.coreinfrastructure.org/en) has criteria pertaining to documentation:
    - [`documentation_basics`](https://github.com/coreinfrastructure/best-practices-badge/blob/master/doc/criteria.md#documentation_basics)
    - [`documentation_interface`](https://github.com/coreinfrastructure/best-practices-badge/blob/master/doc/criteria.md#documentation_interface)
2. [W3C Web Content Accessibility Guidelines](https://www.w3.org/WAI/standards-guidelines/wcag/)
3. [Breaking Down Barriers to Kubernetes Contribution for Neurodivergent Individuals](https://static.sched.com/hosted_files/kcsna2019/05/Breaking%20Down%20Barriers%20to%20Kubernetes%20Contribution%20for%20Neurodivergent%20Individuals%20%282%29.pdf)
1. —
2. —
3. --
4. [W3C Web Accessibility Evaluation Tools List](https://www.w3.org/WAI/ER/tools/)
5. [GNOME Accessibility Team](https://wiki.gnome.org/Accessibility)
6. [Some quick tests to evaluate web accessibility](https://a11yproject.com/#Quick-tests)
7. [Knowability - a group that specializes in Accessibility](https://knowbility.org/services/document-accessibility/)
8. [Thoughts on Accessibility metrics](https://www.boia.org/blog/3-times-accessibility-and-disability-stats-matter-and-3-times-they-dont)
9. ~~[GNOME on Accessibility](https://wiki.gnome.org/Accessibility)~~
10. [Paypal's list of Guidelines for Accessibility](http://paypal.github.io/a11y/)
11. [Universal Design](http://shop.oreilly.com/product/9780596518745.do)