How to read rustdoc output

Rustdoc's HTML output includes a friendly and useful navigation interface which makes it easier for users to navigate and understand your code. This chapter covers the major features of that interface, and is a great starting point for documentation authors and users alike.

Structure

The `rustdoc` output is divided into three sections. Along the left side of each page is a quick navigation bar, which shows contextual information about the current entry. The rest of the page is taken up by the search interface at the top and the documentation for the current item below that.

The Item Documentation

The majority of the screen is taken up with the documentation text for the item currently being viewed. At the top is some at-a-glance info and controls:

- the type and name of the item, such as "Struct `std::time::Duration`",
- a button to copy the item's path to the clipboard, which is a clipboard item
- a button to collapse or expand the top-level documentation for that item (`[+]` or `[-]`),
- a link to the source code (`[src]`), if configured, and present (the source may not be available if the documentation was created with `cargo doc --no-deps`),
- and the version in which the item became stable, if it's a stable item in the standard library.

Below this is the main documentation for the item, including a definition or function signature if appropriate, followed by a list of fields or variants for Rust types. Finally, the page lists associated functions and trait implementations, including automatic and blanket implementations that `rustdoc` knows about.

Navigation

Subheadings, variants, fields, and many other things in this documentation are anchors and can be clicked on and deep-linked to, which is a great way to communicate exactly what you're talking about. The typograpical character "§" appears next to lines with anchors on them when hovered or given keyboard focus.

The Navigation Bar

For example, when looking at documentation for the crate root, it shows all the crates documented in the documentation bundle, and quick links to the

modules, structs, traits, functions, and macros available from the current crate. At the top, it displays a configurable logo alongside the current crate's name and version, or the current item whose documentation is being displayed.

The Theme Picker and Search Interface

When viewing `rustdoc`'s output in a browser with JavaScript enabled, a dynamic interface appears at the top of the page. To the left is the theme picker, denoted with a paint-brush icon, and the search interface, help screen, and options appear to the right of that.

The Theme Picker

Clicking on the theme picker provides a list of themes - by default `ayu`, `light`, and `dark` - which are available for viewing.

The Search Interface

Typing in the search bar instantly searches the available documentation for the string entered with a fuzzy matching algorithm that is tolerant of minor typos.

By default, the search results give are "In Names", meaning that the fuzzy match is made against the names of items. Matching names are shown on the left, and the first few words of their descriptions are given on the right. By clicking an item, you will navigate to its particular documentation.

There are two other sets of results, shown as tabs in the search results pane. "In Parameters" shows matches for the string in the types of parameters to functions, and "In Return Types" shows matches in the return types of functions. Both are very useful when looking for a function whose name you can't quite bring to mind when you know the type you have or want.

When typing in the search bar, you can prefix your search term with a type followed by a colon (such as `mod:`) to restrict the results to just that kind of item. (The available items are listed in the help popup.)

Shortcuts

Pressing `S` while focused elsewhere on the page will move focus to the search bar, and pressing `?` shows the help screen, which includes all these shortcuts and more. Pressing `T` focuses the theme picker.

When the search results are focused, the left and right arrows move between tabs and the up and down arrows move among the results. Pressing the enter or return key opens the highlighted result.

When looking at the documentation for an item, the plus and minus keys expand and collapse all sections in the document.