

SECTION TWO

# WORK



*"When you don't create things, you become defined by your tastes rather than ability. Your tastes only narrow and exclude people. So create."*

- \\_Why The Lucky Stiff,  
Iconoclastic Ruby folk hero,  
and performance artist

# Issue cheatsheet

## Cheatsheet:

- How to read and categorize issues
  - Is it a bug? If so, is it regression or unexpected behavior?
  - Is it a feature request? If so, is it a “modification” or an “addition”?
- How to reproduce bugs
  - If it worked: validate the example.
  - If it failed: timebox and ask for extra steps.
  - If no reproduction provided: ask for one.
  - Can you guide the issue to a higher quality reproduction?
- How to debug issues beyond reproductions
  - Did you check to see if the bug is already fixed on the main branch?
  - Can you write an automated test to reproduce the bug?
  - Did you attempt to debug the failure to understand the root cause?
  - For regressions, did you bisect commits?
  - Slow executing and hangs can be debugged with the help of sampling the process or via reflection.
- How to give feedback on a feature request
  - Can you explain the problem being solved in your own words?
  - Did you validate the opportunity?
  - If it's a pull request, do you validate the implementation?
  - Do you have any hesitation, doubt, or dislikes you wish to express?
  - Are you asking for explicit changes?
  - Do you have alternatives you want to ask about?
  - Did you thank, connect with, or validate the poster?
  - The non-violent communication (NVC) framework is observation, emotion, need, request.

# Documentation cheatsheet

## Cheatsheet:

- Format
  - Is it free of grammar or spelling mistakes?
  - Are documentation syntax and formatting features properly used (Such as example code highlighting and method linking)?
- Example(s)
  - Does it contain an example (or several)?
  - Is the code executable? Can it be copied/pasted?
  - Does the example code accomplish a real task (Avoids foo/bar variables)?
- Example prerequisites
  - Is the calling context explicitly stated? (Can a new developer load and run examples?)
- Description
  - Does it explain the purpose? (Why does this code exist?)
  - Does it use common words, phrases, or use cases that people may be searching for?
- Inputs are documented
  - Are all arguments documented (Argument names, expected types, and purpose of arguments)?
  - Are environment variables or other global configurations documented?
- Outputs are documented
  - Are commonly expected exceptions mentioned?
  - Are common failure modes and caveats mentioned (For example, an external website network API is down, what behavior would happen)?

# Pull request cheatsheet

## Cheatsheet:

- Pull request formatting
  - Titles are 50 characters or less and use imperative (commanding) tone. i.e. “fix” instead of “fixing” and include a subject.
  - Descriptions should describe the state of the world before and after the PR. They may discuss alternative implementations.
  - Review any pull request templates.
  - Say thank you to maintainers.
- Automated checks
  - Automated checks might not trigger for your PR due to security or fraud mitigation strategies.
  - Checks didn't run.
    - Run the tests locally to ensure no problems while waiting on a review.
  - Checks failed.
    - Reproduce the failure locally if possible.
    - Investigate the failure to see if it is systemic. Check other PRs, check main.
  - Checks ran and they passed.
    - Celebrate.
- What can you do while waiting for PR comments and feedback?
  - Have you found a short-term workaround (such as making a library)?
  - Have you explored alternative implementations?
  - Can you recruit some meaningful comments from the community or co-workers?
- What do you do when someone comments on your pull request?
  - Did you get a temperature from the commenter on your change?
  - Did the commenter validate your implementation or your opportunity?
  - Did the commenter ask for explicit changes?
  - Disagree productively.

# Familiarity cheatsheet

## Cheatsheet:

- What are ways to get more comfortable contributing to a project?
  - Look for written contribution guides.
  - Observe maintainer actions to absorb unspoken rules.
- What kinds of contributions should you look for?
  - Small changes.
  - Provably correct changes.
  - Housekeeping tasks.
  - Changes with high public demand.
  - Not a refactoring.
- Exercises to build familiarity:
  - Review merged pull requests to understand successful bright spots.
  - Review closed (unmerged) pull requests for patterns to avoid.
  - Review “old” issues for patterns that might prevent successfully closing an issue.
  - Review “new” issues to see which types of changes get the most time and attention from maintainers.
  - Seek out positive role models of the maintainers you would like to emulate.
- COIL framework for contributions:
  - Context: Find problems through observation.
  - Opportunity: Brainstorm ways to solve those problems.
  - Implementation: Write the code, file the issue, or make the change.
  - Loop: Repeat the process until it’s done. Zoom-in or zoom-out as needed.

# HOW TO OPEN SOURCE

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