



**HYPERLEDGER  
IROHA**

**How to make your first contribution to #iroha?**

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# Agenda

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- Ways of contribution as a user
- Ways of contribution as a developer
- Process of contribution

 **Open the <http://tiny.cc/iroha-contribution> for all related info**

## Ways of contribution as a user

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- Create a feature proposal
- Report bug
- Help with testing and generate reports
- Help us assess and improve documentation for users just like you

## Ways of contribution as a developer

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- Iroha (**C++**)
- Iroha Java Client Library (**Java**): <https://github.com/hyperledger/iroha-java>
- Iroha Python Client Library (**Python**): <https://github.com/hyperledger/iroha-python>
- Iroha Javascript Client Library (**JavaScript**): <https://github.com/hyperledger/iroha-javascript>
- Iroha iOS Client Library (**Swift**): <https://github.com/hyperledger/iroha-ios>

## Roadmap of the Iroha

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- The Hyperledger Iroha have it's own roadmap of development, which describes plans of upcoming changes, fixes and new features in the project. This roadmap is always a subject of change because of different influence, but you can always get an updated version here: <https://iroha.tech/roadmap/>
- Using the roadmap you can understand the priorities for development, and how you can help the community with your skills to improve the Iroha.
- **!NOTE!** Iroha has only an approximate roadmap due to the nature of open-source development process. It can be changed, if the community decides so. Although it is nice to have a roadmap to illustrate where the project is heading at the moment.

## Process of contribution (I)

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1. Get a Linux Foundation account: <https://identity.linuxfoundation.org/>
2. Find a way of improvement of the Iroha according to the roadmap or go to **JIRA** in the aim to find issues or feature requests or contact the community and let us know what you'd be interested in!
  1. For first-time contribution, it is better to try to go through the review process by addressing the issues with a "**good-first-issue**" label.
  2. Fixing or updating documentation can be a good starting point (minimum of risk, possibility to dive into the project and help other users to get information about the Iroha)
  3. We also greatly appreciate help to translate documentation to your native language. Please, join the POEditor project for translation of Hyperledger Iroha if you want to make such contribution.

## Process of contribution (2)

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3. After finding the best point to put your developer's power, carefully read the description and ask questions from the developers using our community communication channels:
  1. RocketChat, #iroha channel: <https://chat.hyperledger.org/channel/iroha>
  2. Telegram chat for Iroha Community: <https://t.me/hyperledgeriroha>
  3. Gitter chat for the Iroha Community: <https://gitter.im/hyperledger-iroha/Lobby>
  4. Mailing list: <https://lists.hyperledger.org/g/iroha>
  5. StackOverflow, using the following tag: <https://stackoverflow.com/questions/tagged/hyperledger-iroha>
  6. Joining out weekly call

## Process of contribution (3)

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4. After discussion of details for the selected issue or feature with maintainers, assign the selected issue to yourself and change the status to "In Progress"
5. Fork the repository to your own account and create a branch, based on the "develop". Please, use a good descriptive name for your branch (you can use just the name of the task, for example: "fix/correct-response-on-getaccountassettransaction" for the "Wrong response on getAccountAssetTransactions query (a non-existing account or asset)" issue in the JIRA).



## Process of contribution (4)

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6. Perform changes to the code or documentation.
  1. In case of changing the code, please be sure to write unit tests, which will cover your updates, or fix existing ones if you changing current behaviour
  2. Please, follow the code guidelines for C++, described in the **CONTRIBUTING.md** in the Iroha GitHub repository
7. Commit all changes to your branch with DCO signature (just add "-s" flag to the every commit command; more info here: <https://github.com/apps/dco>)
8. Update original branch from the original repository

## Process of contribution (5)

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9. Perform a rebase command to your feature/fix branch and fix all merge problems if they appeared.
10. Rebuild the Iroha again and check that everything, which can be broken by your changes, works correctly.
11. Commit all merge changes into the forked branch.



## Process of contribution (6)

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12. Go to the GitHub and open a Pull Request by hitting a “New Pull Request” button from the forked repository page. Select the branch from your forked repository as the source of changes and corresponding branch in the Iroha as a target.
  1. In most cases, you should select the "develop" branch as a target for the Pull Request.
  2. However, there can be also some "trunk/..." branches if maintainers explicitly ask you to do this.
13. Describe the changes which you have made to the project. Please, be careful and descriptive, provide as much information as looks meaningful. Remember, that good coverage of the changes will greatly decrease the time of approving your Pull Request. Important: use English for comments and commit description.

## Process of contribution (6)

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14. Ask maintainers to review and approve (or discard with comments) your Pull Request using the same communication channels as for consultation about issues.
15. In case of any comments (especially of PR rejected) do not panic and try to understand the reasons. In addition, please ask your questions in chats or directly to author of the corresponding comment.



<https://github.com/hyperledger/iroha/>

✨ **Contribute to Iroha** ✨

