



Kubeflow PR workflow

Weiqiang Zhuang

wzhuang@us.ibm.com

IBM CODAIT

Github id: adrian555



Get ready



- Up to now, you
 - Know what the Kubeflow open source project is about
 - Identify the project/repo/area/code to contribute
 - Have the development environment set up
 - Git, Go tools and IDE
 - Have a cloud cluster to run tests
- And, most important, you should
 - Follow the Kubeflow contributing guide to
 - Sign the Contributor License Agreement (<u>CLA</u>)
 - Join the community
- Move on to create Pull Request (PR)
 - Pull requests let you tell others about changes you've pushed to a branch in a repository on GitHub. Once a pull request is opened, you can discuss and review the potential changes with collaborators and add follow-up commits before your changes are merged into the base branch. --- About pull requests





Kubeflow PR Workflow



 Pull requests are a collection of commits submitted to be merged into the main source repo

- Four step process
 - Find and claim an issue to work on
 - Write codes + tests
 - Submit the patch for review
 - PR is merged



Find an Issue



- Work items in Kubeflow are tracked on Github using issues
 - Each repository in Kubeflow org tracks its own issues, e.g.
 - https://github.com/kubeflow/kubeflow/issues
 - https://github.com/kubeflow/kfctl/issues
- Helpful to attend the Kubeflow community meetings to stay up-to-date on areas to focus on
 - Community call calendar
 - Mailing list
 - Slack workspace
- Read description, look at tag, etc. to find good first issues to start with
 - E.g. issues labeled good first issue, help wanted.
- Open new issues





Find an Issue



⊒ kubeflow / kubeflow													Watch ▼
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Write codes + tests



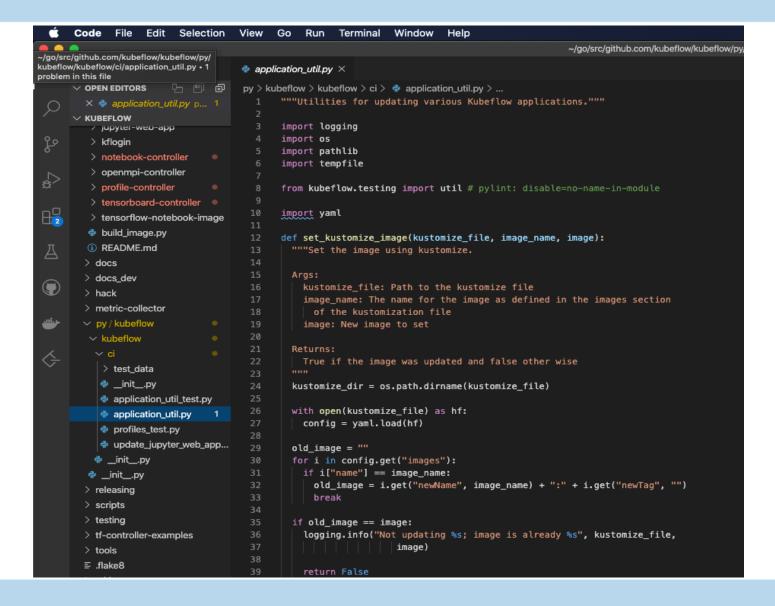
- Fork and Clone
 - Always fork from the master repo
 - Clone
 - Instead of working on master branch, create and checkout a new branch for each issue
- Write codes with favorite IDEs, e.g.
 - Visual studio code, good for Golang, Java, Python and more
 - PyCharm, good for Python
 - Follow contribution guide, pay special attention to code style, conventions etc.
- Tests
 - Write test cases, debug and test
 - New test cases may need to be pushed to the repo as well
 - Follow contribution guide to run other tests before PR submission
 - Eg. make test is common for projects in golang





Write codes + tests







Submit PR



- Commit and push to forked repo
 - Create upstream remote and merge with the latest upstream/master
 - Commit (and sign off) the code changes
 - Push to forked repo
- Open PR against the master repo
 - Create pull request from browser navigating to the forked repo
 - E.g. https://github.com/kubeflow/kfctl/compare/master...adrian555:update-README
 - Refer the issue this PR fixes in the description, if the PR is fixing an issue
- Automated CI pipeline will run test suites against your submitted code
 - Unit tests
 - Integration tests
 - Code style & formatting





PR is merged



- Kubeflow members and contributors review the PR and comment
 - Code quality, Style changes, Functional changes, Correctness etc.
- Address comments
 - Respond to comments
 - Make necessary code changes then commit and push
 - Resolve branch conflict
- Two kinds of reviewers
 - Reviewers
 - Any member of Kubeflow org
 - Add /lgtm label once the reviewers approve
 - Approvers
 - Involved maintainers responsible for the code you're changing
 - Add /approve label once the approver accept





PR is merged



- Merge (automatically)
 - PR must be approved by at least one approver
 - Any branch conflict must be resolved by you
 - Pass all pre-submit test and other checks
 - Once merged, submitted commits will show up in commit history of the master repo
 - New features won't show up until a new release is cut

