## Code Review Workflow

### Code Review Definition

Code review is a process to ensure others' code changes are clear for errors, bugs, or deviations from requirements. By applying for code review, we seek to maintain correctness, readability, maintainability, performance, and consistent style of the whole project [1].

# Importance of Code Review

- · Correctness: guarantee the quality of code
- · Readability: other developers could read the code easily
- Maintainability: a way to share knowledge among team members [2]
- Performance: the reviewer could help spot issues
  - · Security: the reviewer could help spot potential vulnerabilities due to personal knowledge limitation
- · Consistent style

# Steps of Code Review

#### 1. Code submission

- a. Code submission should follow workflow and PR templates as in GitHub Workflow
- b. Change the corresponding ticket in Jira to UNDER REVIEW.

#### 2. Reviewer Assign

- a. At least one reviewer should be assigned to PR on GitHub
  - i. Any team member could be assigned, based on coder opinion
  - ii. Default could be scrum master
- b. Add any label, such as "please review", to PR if necessary

#### 3. Notification

- a. When assigned a reviewer in PR, an email will be sent automatically from GitHub
- b. Inform team members in Slack for any potential suggestions or opportunities for learning

#### 4. Code Review

#### a. General Review

- i. Review more about style and function
- ii. Ensure functionalities match the description or video recorded in PR submission

#### b. Code Review

i. Review further on code style or streamlined code.

## 5. Conversation and Issue

- a. The developer should resolve any conversation in the PR
- b. The developer should solve any issue in the PR

#### 6. Approval

a. After all conversations are solved and all issues are fixed, the reviewer could approve for PR

#### 7. Merge

- a. After at least one reviewer approves PR, the developer could merge their branch
- b. After the branch is merged, delete the branch from the remote

#### 8. Jira Related

a. Change the corresponding ticket in Jira to DONE

# Reference

- 1. 6 Steps for a Solid Code Review Process | Wrike
- 2. Code review workflow Beanstalk Guides