

Task 1: Explain how to create a new task or user story for the feature.

Answer:

- We can use the same issue tracking systems for the same so using Jira, we have to log in to our account.
- Click on the Create Issue.
- We must select the project or repository that needs a feature. There we have to give a simple summary of the feature in the summary tab. Then in the issue description, we have to give as much information as possible about the requirements(feature).
- Attach any relevant screenshots.
- We can add tags explaining the process and team that needs to be worked on.
- We can assign team members who are the contributors of the project.
- Simply type @followed by the contributor's username or from the dropdown list of usernames.
- Click create-issue so that the issue will get created and the assigned people will get a notification.

Task 2: Describe how to assign the task to a developer and communicate the requirements.

Answer:

- We can assign team members who are the contributors of the project.
- Simply type @followed by the contributor's username or from the dropdown list of usernames.
- The user will receive a notification as an email after their assigning.

Task 3: Outline the steps to integrate the new feature into the CI/CD pipeline, including creating a branch, writing tests, and updating the Jenkins pipeline configuration.

Answer:

- Create a new branch with any name required with command : `git checkout -b abc-branch`.
- Make necessary changes for the abc-branch and write appropriate tests.
- Commit the changes to the branch with command : `git add . git commit -m "Adding new abc"`.
- After that Push to the Branch using the command: `git push origin abc-branch`. Update the Jenkinsfile to include stages for building, testing, and deploying the new feature.

- Add a stage to run the tests for the new feature and Creating a Pull Request (PR): Go to the repository on GitHub , Click on "New Pull Request."
- Choose the base branch (e.g., main) and the compare branch (feature-branch).
- Click "Create pull request." Later you Review and Merge. Team members review the changes in the PR and Address feedback and make additional commits if necessary.
- Once approved, merge the PR into the main branch. By following these steps, a new feature is successfully integrated into the CI/CD pipeline, ensuring a streamlined development process.