**SOP’s for repositories**

**Repository Structure:**

Organize your repositories logically, with one repository per project or component.

Use subdirectories within repositories for different parts of the project if necessary.

**Branching Strategy:**

Use a branching strategy with three standard branches (Dev, Stage, Prod/Main) and feature branches for task development. Feature branch name should be clear and contains Jira task reference. Pull requests (PRs) should be created to merge code from feature to Dev, Dev to Stage and from Stage to Production.

**Code Push Frequency:**

Developers should push code frequently rather than waiting until the end of a feature.

**Commit Guidelines:**

Write clear and concise commit messages following a standard format (e.g., Conventional Commits).

Make frequent, small commits that focus on specific changes.

Avoid committing large binary files directly into the repository.

**Code Reviews:**

Implemented code will be review by the Team Lead, he will process it himself to maintain code quality and consistency.

Use pull requests (PRs) or merge requests (MRs) to facilitate reviews.

Encourage team members to provide constructive feedback.

**SonarQube/Sonar Cloud Integration:**

**CI/CD Pipeline:**

Set up continuous integration and continuous deployment (CI/CD) pipelines to automate testing, building, and deployment.

Ensure that all tests pass before allowing code to be merged.

**Documentation:**

including README files, code comments, and user documentation.

**By implementing these recommendations, our team can expect the following benefits:**

Improved code quality

Enhanced collaboration and communication.

**Efficient testing and deployment processes:**

Better tracking of changes and project milestones.

Reduced security risks and vulnerabilities.

Faster onboarding for new team members.