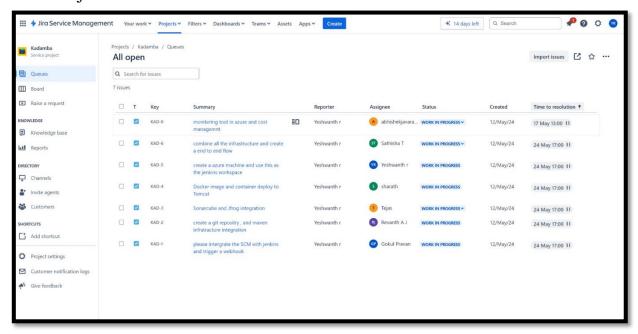
Team: Kadamba

### Team members:

- 1. Abbu Yeshwanth Ramesh
- 2. Abhishek J M
- 3. Gokul Pravan
- 4. Revanth Reddy A J
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- 6. Sharath Kumar B M
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https://github.com/adikarthik/Project.git

Overall, this project will manage the user registration, login, and displaying a welcome page with a list of documents associated with the logged-in user. The registration and login methods use form submission and validation, while the welcome method retrieves and displays user-specific data.

# 1. Version Control System (VCS):

• Ensure your project is hosted on a version control system like Git This allows for collaboration and facilitates CI/CD workflows.

#### 2. Choose a CI/CD Platform:

• Select a CI/CD platform that integrates well with your VCS. Popular options include Jenkins.

## 3. Setup CI Pipeline:

- Create a CI pipeline configuration file (**Jenkinsfile**) in our project repository.
- Define stages and jobs for building, testing, and analyzing our code.
- To analyse the static code, we can use the SonarQube.
- For the given multi-module Java project we can use the below steps.
  - Building the project using Maven.
  - Running static code analysis tools (e.g., SonarQube) for code quality checks.
- Make sure our CI pipeline triggers(webhook) any changes made in the SCM(Git).

### 4. Automate Deployment (CD):

- Configure our CI pipeline to automatically deploy your application after successful testing.
- Deployments can be automated using tools like Ansible, Docker.
- Here we can use Tomcat server to deploy our application.

# 5. Deploy to required environment:

• We can deploy our application to the required environment (e.g., development, QA, production).

# 6. Secrets Management:

 Safely manage sensitive information such as database passwords, API keys, etc., by using a secrets management solution provided by your CI/CD platform or by using encrypted environment variables, RBAC, Azure vaults, IAM.

# 7. Monitoring and Alerting:

- Implement monitoring and alerting for your deployed application using tools like Prometheus, Grafana, or built-in monitoring services provided by cloud platforms.
- Set up alerts for critical metrics (e.g., high CPU usage, memory leaks) By using shell script.