Name of student: Abhay Omprakash Prajapati			
Roll no: 41		Tutorial No: 1	
Title of LAB Assignment: Study of AGILE JIRA tool			
DOP: 25-09-2023		DOS:02-10-2023	
CO Mapped: Co1,Co2	PO Mapped: PO3 ,PO6		Signature:

Aim: Study of Agile Jira Tool.

Description:

Introduction to Jira:

JIRA tutorial provides basic and advanced concepts of JIRA tool. Our JIRA tutorial is designed for beginners and professionals. JIRA is one of the most widely used open-source testing tool used in manual testing. Our JIRA tutorial includes all topics of a testing tool such as Features, installation, issues, workflows, components, reports, etc.

JIRA is a software testing tool developed by the Australian Company Atlassian. It is a bug tracking tool that reports all the issues related to your software or mobile apps. The word JIRA comes from the Japanese word, i.e., "Gojira" which means Godzilla.

JIRA is based on the Agile methodology and the current version of the Jira is 6.

Key Features

1. Project and Workflow Management

Project Creation Flexibility: Agile JIRA allows you to create projects, each with its unique set of tasks, boards, and configurations.

Tailored Workflows: Customize workflows in JIRA to align perfectly with your team's processes, ensuring smooth progress through each work stage.

2. Issue Tracking

Multiple Issue Types: JIRA supports various issue types, including user stories, tasks, and bugs, making it effective for tracking work items within your project.

Issue Prioritization: Easily prioritize issues, assign them to team members, and establish ownership and accountability for each task.

3. Agile Boards

Scrum Boards: Scrum boards in JIRA enable teams to plan and manage their work in time-bound iterations known as sprints, offering features like sprint planning, burndown charts, and sprint retrospectives.

Kanban Boards: Utilize Kanban boards in JIRA to visualize and optimize your team's processes using columns and swimlanes.

4. Backlog Management

Product Backlog: JIRA can maintain a product backlog that includes user stories and features, ensuring a well-defined and prioritized task list for your project.

Linking Epics and Stories: Seamlessly link issues such as epics and user stories to effectively manage requirements.

5. Sprint Planning

Creating Sprints: Agile teams can create sprints and populate them with tasks from the backlog. JIRA provides tools for capacity estimation and handling during sprint planning.

6. Customization

Custom Fields: You have the option to create custom fields tailored to your project's requirements.

Issue Screens: Customize issue screens to capture and display data for different issue types.

7. Automation Rules

Automation: JIRA offers automation rules that streamline tasks and processes, reducing the need for manual effort.

Following are the useful aspects provided by the jira:

- Projects: It is used to manage the defects very effectively.
- o **Issue:** It is used to track and manage the defects/issues.
- Workflow: Processes the Issue/Defect life cycle. Suppose we have a business requirement, we create the technical design and from the technical design, we create the test cases. After creating the test cases, coding is done, and then testing is performed on the project. This design workflow is possible by using Jira.
- Search: Find with ease. Suppose we have done with a project at the beginning of the December and its version is 1.0. Now, we move to version 1.1 and completed at the end of December. What we are doing is that we are adding new versions. Through Jira, we can get to know that what

happened in the earlier versions, how many defects occurred in the earlier projects and the learning we achieve from the earlier projects.

Dashboards: Dashboard is a display which you see when you log in to the Jira. You can create multiple dashboards for multiple projects. You can create the personal dashboard and can add the gadgets in a dashboard so that you can keep track of the assignments and issues that you are working on.

JIRA tool is a valuable asset for the following reasons:

1. Efficient Project Management:

JIRA serves as a versatile bug-tracking and project management tool. It allows teams to organize, prioritize, and track various tasks within software projects. These tasks encompass a wide range, including bug fixes, the introduction of new features, improvements, and documentation tasks.

2. Meeting Deadlines:

As software release dates approach, developers can concentrate on resolving remaining issues. It helps in maintaining focus on the most critical tasks. Furthermore, it aids in the organization and tracking of technical documentation, ensuring nothing gets overlooked.

3. Information Hub:

JIRA is the central source of information for upcoming software releases. It facilitates collaborative planning for new features and bug fixes. Additionally, it streamlines the process of technical documentation creation, allowing the QA team to stay informed about the status of new features and plan their documentation accordingly.

4. Documentation Organization:

JIRA simplifies the organization of documentation tasks. By utilizing the component functionality, you can categorize multiple tasks and create a

structured framework for documentation.

5. Progress Tracking:

JIRA is an excellent tool for monitoring documentation progress. It includes a pie chart macro that visualizes task status, such as open, closed, and resolved tasks.

6. Deadline Adherence:

It enables the setting of specific due dates for documentation releases and configuring notifications to ensure that documentation is completed on time.

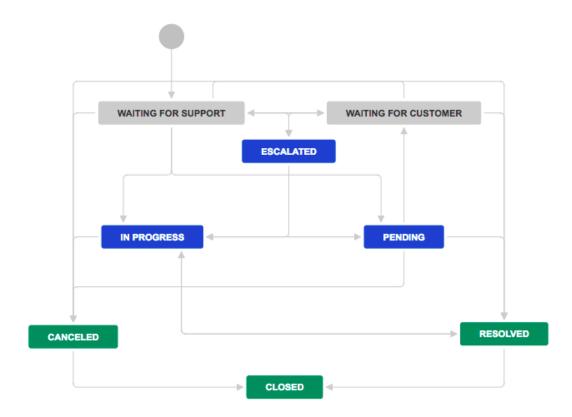
7. Time Tracking:

While JIRA lacks native time tracking functionality, it can be integrated with Tempo Timesheets, which provides accurate measurements of time spent on documentation tasks.

8. Fast Feedback:

JIRA seamlessly connects with Confluence pages, allowing quick access to related issues. When updates are needed, you can create new issues directly from Confluence, streamlining the feedback process.

Jira Workflow:



Advantages of Jira

- 1. Integration is available in this Jira. That means the issue and project tracking software integrated with several third-parties Software's.
- 2. Jira is suitable for different types of users like developers, project managers, engineers, non-technical professionals and so on.
- 3. Supports the roadmap requirement.
- 4. Jira enables users to create any kind of issue.

Disadvantages of Jira

- 1. Limited file size upload.
- 2. Reports are not reusable.
- 3. Confusing User-Interface.

Conclusion:

In conclusion, Jira stands as a testament to adaptability and evolution in the realm of project management and issue tracking. What began as a humble bug tracker has transformed into a comprehensive solution that empowers teams across various industries to embrace agile methodologies, promote collaboration, and harness the power of customization. While it does present certain challenges, including a learning curve and potential costs, when wielded effectively, Jira becomes an invaluable asset for organizations navigating the complexities of modern project management and issue tracking.