

EXPERIMENT – 02

Aim: Application of Agile Process Model on the project (JIRA)

Theory:

JIRA is a popular project management and issue-tracking tool developed by Atlassian. Kanban, on the other hand, is a visual workflow management methodology that has gained widespread adoption in software development and various other industries. This theory will explore the concepts, uses, and conventions associated with JIRA and the Kanban board.

Overview

JIRA is a versatile project management tool designed to help teams plan, track, and manage their work effectively. It offers a wide range of features that facilitate issue tracking, project management, and collaboration. JIRA is highly customizable, making it suitable for various industries and team sizes.

Key Features of JIRA

- a. Issue Tracking: JIRA allows users to create, categorise, and track issues, tasks, and user stories.
- b. Custom Workflows: It supports the creation of custom workflows to match your team's unique processes.
- c. Agile and Scrum Support: JIRA integrates seamlessly with Agile and Scrum methodologies, enabling sprint planning, backlog management, and more.
- d. Reporting and Dashboards: Teams can generate reports and create dashboards to monitor project progress and key metrics.
- e. Integration: JIRA integrates with various third-party tools, making it a central hub for project-related activities.

Kanban Board

Overview of Kanban

Kanban is a visual workflow management system that originated in the manufacturing sector but has since been adapted for various industries, including

software development. The Kanban method focuses on visualizing work, limiting work in progress (WIP), and continuously improving the process.

Key Concepts of Kanban

- a. Visual Board: A Kanban board is a visual representation of the workflow, consisting of columns and cards that represent tasks or work items.
- b. Work in Progress (WIP) Limits: Kanban enforces WIP limits on each column to prevent overloading and maintain a smooth flow of work.
- c. Pull System: Work is pulled from one column to the next based on available capacity rather than being pushed onto team members.
- d. Continuous Improvement: Kanban promotes a culture of continuous improvement by regularly reviewing and optimizing the workflow.

Uses and Conventions

1. Combining JIRA and Kanban

Many teams use JIRA and Kanban together to benefit from the strengths of both tools. JIRA can be configured to support Kanban boards, allowing for seamless integration of project management and visual workflow management.

2. Conventions in Kanban Boards:

- a. Columns: Typical columns on a Kanban board include "To Do," "In Progress," "Review," and "Done."
- b. Card Details: Each card should include task details, such as a title, description, assignee, and due date.
- c. WIP Limits: Enforce WIP limits on columns to optimize flow and maintain efficiency.
- d. Daily Stand-ups: Teams often hold daily stand-up meetings to discuss progress, impediments, and potential improvements.

3. Uses of JIRA and Kanban:

- a. Bug Tracking: JIRA is commonly used for tracking and managing software bugs.
- b. Project Management: JIRA helps teams plan and oversee projects, including tasks and milestones.
- c. Continuous Delivery: Kanban boards are instrumental in managing the flow of tasks in continuous delivery pipelines.

Conclusion

JIRA and the Kanban board offer powerful tools for project and visual workflow management, respectively. Combining these two tools can enhance productivity and facilitate effective project planning, tracking, and execution. Adhering to conventions and best practices is crucial for realizing the full potential of JIRA and Kanban in a team's workflow.

Output:

