

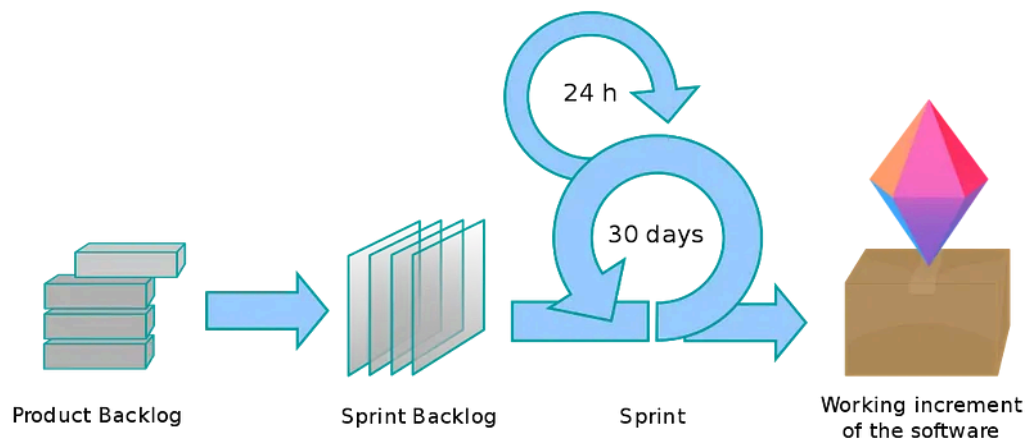
Jira

Jira is a product developed by Atlassian that serves as a powerful tool for project management, issue tracking, and bug tracking.

Agile Software Development

Agile software development is a methodology that emphasizes iterative progress, collaboration, and flexibility in response to changes.

Agile software development includes following key concepts:



1. **Product Backlog** : A dynamic list of features, enhancements, bug fixes, and technical work required for the product.
2. **Sprint Backlog** : A subset of the product backlog selected for implementation during a specific sprint.
3. **Sprint** : A fixed-length time, typically 2-4 weeks, during which a set of work from the sprint backlog is completed.
4. **Scrum** : A meeting at the start of each sprint where the team selects items from the product backlog to include in the sprint backlog.
5. **Daily Scrum** : A short time meeting (usually 15 minutes) held each day of the sprint. Team members discuss what they did yesterday, what they plan to do today, and any issues they are facing.

Components of Jira

1: Project : A project is a collection of issues, and it is the highest level of organization in Jira. Projects can be configured to match the needs of different teams, and each project can have its own workflow.

2: Issues : Issues are the fundamental building blocks of Jira. They represent different types of work items such as tasks, bugs, stories, epics, and sub-tasks.

3: Workflow : Workflows define the lifecycle of an issue, from creation to completion. They represent progress of an issue i.e., started working, in-progress or done.

4: Boards : Jira offers two types of boards (Scrum and Kanban). Boards provide a visual representation of the workflow and help teams manage and visualize their work.

5: Filters : Filters are used to query and retrieve specific sets of issues based on defined criteria. Jira Query Language (JQL) is a powerful tool for creating advanced filters to meet complex search requirements.

6: Dashboards : Dashboards provide a customizable interface for displaying various gadgets and widgets that offer insights into project and issue metrics.

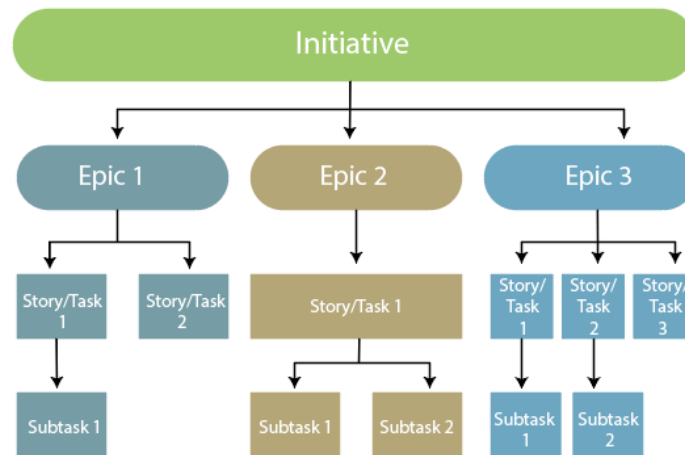
7: Reports : Jira includes a variety of built-in reports that provide insights into project and team performance. Common reports include Burndown Charts, Sprint Reports, Velocity Charts, and Issue Statistics.

8: Roles : Roles in Jira control what users can see and do within the application. Roles can be configured at the project level or issue level to ensure appropriate access and security.

9: User Management : Jira allows administrators to create and manage user accounts, groups, and roles. This ensures proper access control and collaboration.

10: Git Integration : Developers can link Git commits, branches, and pull requests to Jira issues by including issue keys in commit messages. This creates a direct association between code changes and specific tasks or bugs.

Project in Jira



A Project in Jira is a collection of issues, often representing a product or a major long term goal.

Eg : Developing an e-commerce website where users can browse products, add them to their cart, and make purchases. It is generally divided into Epics

Epic:

An Epic is a large body of work that can be broken down into a number of smaller tasks (Story). It is generally is a significant feature or aspect of the project.

Eg : Developing User Authentication for e-commerce website.

Story:

A Story is a small, specific piece of functionality that delivers value to the end user. Stories are often written from the perspective of an end user.

Eg : As a user, one should be able to register to e-commerce website.

Task:

A Task is a piece of work that needs to be done, which is usually more technical or operational.

Eg : Designing Registration Page UI.

Subtask:

A Subtask is a smaller piece of work that is part of a task. It breaks down a task into manageable pieces.

Eg : Creating HTML for Registration Form.

Bug:

A Bug is an issue that signifies a problem or defect in the software that needs to be fixed.

Eg : Password Reset link not working in Sign In Page.

Workflow in Jira

Workflow represents the series of steps or status that an issue (such as a task, bug, or story) goes through from creation to completion.

Common status include :

- **To Do:** The issue is open and ready to be worked on.
- **In Progress:** Work has started on the issue.
- **Done:** The issue has been completed.

Transition between status: Transitions are the actions that move an issue from one status to another. Each transition can have conditions associated with it.

Custom Workflow: Workflows can be changed to meet specific needs of a project or team. These can be created and modified to include custom statuses and transitions.