## **Introduction to Jira**

#### What is Jira?

Jira is a **project management and issue tracking tool** developed by Atlassian, widely used in software development, IT service management, and business process tracking. It's popular for:

- Agile Project Management (Scrum, Kanban)
- Bug & Issue Tracking
- Workflow Customization
- Team Collaboration

#### **Key Features:**

- Supports custom workflows
- Integration with **CI/CD tools** (Jenkins, GitHub, Bitbucket)
- Dashboards and Reports
- Permissions and Roles for secure project management

# 2. Key Jira Concepts

## 2.1 Project

- A **Project** in Jira is a collection of issues, workflows, and settings grouped for a team or goal.
- Projects can be:
  - o **Team-managed** (simpler, managed by the team itself)
  - o **Company-managed** (more control by Jira Admins)

### **Example:**

- **Project Name:** "E-Commerce Platform Development"
- Key: ECP
- Contains issues like ECP-1 (Setup Database), ECP-2 (Create Login Page).

#### 2.2 Workflow

A Workflow defines the life cycle of an issue — the steps it goes through from creation to completion.

#### **Basic Workflow Example (Software Development):**

```
To Do \rightarrow In Progress \rightarrow In Review \rightarrow Done
```

#### **Advanced Workflow Example:**

```
\texttt{Backlog} \to \texttt{Ready for Development} \to \texttt{In Development} \to \texttt{Code Review} \to \texttt{Testing} \to \texttt{Done}
```

Each step in the workflow is called a **Status**, and transitions define how you move from one status to another.

#### 2.3 Issues

An **Issue** in Jira is a task, bug, story, or epic you track in a project.

### **Types of Issues:**

- **Story** A user requirement.
- **Bug** A defect to fix.
- **Task** A work item.
- **Epic** Large work item containing multiple stories.
- **Sub-task** Smaller task within a larger task.

#### **Example:**

- Story: "As a user, I want to log in with Google so that I can sign in quickly."
- Bug: "Login with Google fails when using Firefox."

## 3. Creating Projects and Users

## **Step 1: Create a Project**

- 1. Log in as Jira Admin.
- 2. Go to **Projects**  $\rightarrow$  Create Project.
- 3. Choose a template (e.g., Scrum, Kanban, Bug Tracking).
- 4. Name your project (e.g., School Management System).
- 5. Assign a project key (e.g., SMS).
- 6. Choose **Team-managed** or **Company-managed**.
- 7. Click Create.

#### Live Scenario:

A software company starts a new project for "Online Banking App".
They create a Jira project named BankingApp with Scrum template for agile sprint management.

## **Step 2: Create Users**

- 1. Go to Jira Administration  $\rightarrow$  User Management.
- 2. Click Invite Users.
- 3. Enter their email addresses.
- 4. Assign roles (e.g., Administrator, Developer, Tester).
- 5. Click **Send Invitation**.

#### Live Scenario:

- Invite:
  - Product Owner (access to backlog and reports)
  - o Developers (can transition issues, log work)
  - QA Testers (can update bug statuses)

## 4. Creating Issues in Jira

### **Step 1: Create an Issue**

- 1. Open your project.
- 2. Click **Create** (top navigation).
- 3. Select **Issue Type** (Story, Bug, Task, Epic).
- 4. Fill in:
  - o **Summary:** "Implement Student Registration Form"
  - o **Description:** "Create a form with fields: Name, Age, Class, Email."
  - o **Assignee:** Developer's name.
  - o **Priority:** High.
- 5. Click Create.

#### Live Scenario:

In the School Management System project,

#### Create:

- Story: SMS-101 "Implement Student Registration Form"
- **Bug:** SMS-102 "Form submission fails when Email is missing"

## 5. Creating Subtasks

Subtasks break an issue into smaller pieces.

#### **Step-by-step:**

- 1. Open an existing **Story** or **Task**.
- 2. Click More  $\rightarrow$  Create Sub-task.
- 3. Fill:
  - o **Summary:** "Design Registration Form UI"
  - o **Assignee:** Frontend Developer.
- 4. Create other subtasks:
  - "Validate Form Fields" (assigned to QA)
  - o "Connect Form to Backend API" (assigned to Backend Dev)

#### **Example:**

Main Story: SMS-101 — Implement Student Registration Form

- Subtask 1: SMS-101-1 Design UI
- Subtask 2: SMS-101-2 Form Validation
- Subtask 3: SMS-101-3 API Integration

# 6. Live Project Example

Let's take a **real-world example** for clarity.

Project: E-Commerce Website Development (ECOM)

Workflow:

 $Backlog \rightarrow In Progress \rightarrow Testing \rightarrow Done$ 

#### **Issues Created:**

Key	Туре	Summary	Status
ECOM-1	Epic	User Authentication Module	Backlog
ECOM-2	Story	Login Page UI	In Progress
ECOM-3	Bug	Fix password reset issue	Testing
ECOM-4	Task	Configure Payment Gateway	Backlog
ECOM-5	Story	Implement Product Search	Backlog

#### **Subtasks Example:**

- For ECOM-2 (Login Page UI):
  - o ECOM-2-1 Create HTML/CSS Design (Frontend Dev)
  - o ECOM-2-2 Integrate with Backend API (Backend Dev)
  - o ECOM-2-3 Testing (QA)