

School of Computer Science Engineering and Technology

Course- B.Tech
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Course Name: Software Project Management
Semester- ODD

Lab Assignment 09

CO-Mapping

Exp. No.	Name	CO1	CO2	CO3	CO4	CO5
09	Software Project Portfolio				✓	✓

Objective:

This assignment aims to provide students with hands-on experience in managing a software project portfolio using Jira. They will create and prioritize multiple projects, manage resources, handle risks, and track project progress through dashboards and reports.

Set up the Portfolio Environment in Jira:

- Create a **new Jira project** using a **Kanban or Scrum** template.
- Each student will manage **at least 3 software projects** in their portfolio, such as:
 - **Project 1: Develop a Customer Feedback App**
 - **Project 2: Implement an Internal Employee Portal**
 - **Project 3: Launch a Bug Tracking System**

Project 1: Develop a Customer Feedback App

Epic 1: User Feedback Collection System (**High Priority**)

- **Story 1:** Enable users to submit feedback. (**High Priority**)
 - **Task 1:** Design UI for the feedback form.
 - **Task 2:** Implement form validation logic.
- **Story 2:** Store feedback in the database. (**Medium Priority**)
 - **Task 1:** Set up the database schema for feedback.
 - **Task 2:** Implement API to save feedback entries.

Epic 2: Analytics and Reporting for Feedback (**Medium Priority**)

- **Story 1:** Display feedback summary on a dashboard. (**Medium Priority**)
 - **Task 1:** Create a UI for the dashboard.
 - **Task 2:** Integrate API to fetch feedback data.
- **Story 2:** Generate weekly feedback reports. (**Low Priority**)
 - **Task 1:** Implement logic to filter weekly data.
 - **Task 2:** Create an export feature for PDF reports.

Project 2: Implement an Internal Employee Portal

Epic 1: Employee Onboarding Management (**High Priority**)

- **Story 1:** Automate document collection for onboarding. (**High Priority**)
 - **Task 1:** Create upload form for documents.
 - **Task 2:** Validate uploaded documents.
- **Story 2:** Assign onboarding tasks to new employees. (**High Priority**)
 - **Task 1:** Develop a task assignment module.
 - **Task 2:** Notify employees of assigned tasks via email.

Epic 2: Employee Self-Service Portal (**Medium Priority**)

- **Story 1:** Provide access to pay slips and tax forms. (**Medium Priority**)
 - **Task 1:** Develop a secure download section.
 - **Task 2:** Integrate with payroll system.
- **Story 2:** Allow employees to apply for leave. (**Low Priority**)
 - **Task 1:** Create a leave application form.
 - **Task 2:** Implement leave approval workflow.

Project 3: Launch a Bug Tracking System

Epic 1: Bug Reporting Module (High Priority)

- **Story 1:** Enable users to log bugs. (**High Priority**)
 - **Task 1:** Develop the bug submission form.
 - **Task 2:** Add functionality to attach screenshots.
- **Story 2:** Categorize bugs based on severity. (**Medium Priority**)
 - **Task 1:** Add dropdown to select bug severity.
 - **Task 2:** Implement backend logic to sort by severity.

Epic 2: Bug Assignment and Resolution Workflow (High Priority)

- **Story 1:** Assign bugs to developers automatically. (**High Priority**)
 - **Task 1:** Create an auto-assignment algorithm.
 - **Task 2:** Notify developers upon assignment.
- **Story 2:** Track bug resolution status. (**Medium Priority**)
 - **Task 1:** Create a Kanban board for bug status.
 - **Task 2:** Integrate notifications for status updates.

How to Assign Priorities in Jira:

1. Open Backlog View:

- a. Navigate to the **Backlog** of each project.

2. Set Priority:

- b. Click on a **Story or Task** to open the detailed view.
- c. In the **Priority** field, select one of the following:
 - **High**
 - **Medium**
 - **Low**

3. Drag-and-Drop for Backlog Prioritization:

- 1) Use **drag-and-drop** functionality to reorder Stories and Tasks within the Backlog based on priority. Place **High Priority** tasks at the top, followed by **Medium** and **Low** ones.

3) Allocate Resources:

1. Assign Team Members to Tasks:

- In Jira, assign each task or story to a team member to ensure resource tracking.
- Make sure to distribute tasks evenly across team members.

4) Create a Dashboard for Portfolio Overview:

Set Up a Cross-Project Dashboard:

- Go to **Dashboards > Create Dashboard** and name it "Portfolio Overview".

Add the Filter Results Gadget:

Step 1: Create the Saved Filter

1. Navigate to Filters:

- Go to **Filters > Advanced Issue Search**.

2. Write the Filter Query:

- In the JQL (Jira Query Language) box, enter

project in ("Customer Feedback App", "Internal Employee Portal", "Bug Tracking System") ORDER BY priority DESC

This query pulls tasks from all three projects and organizes them by priority, with high-priority items displayed first.

3. Save the Filter:

- Click on **Save As** and give the filter a name, such as "Portfolio High-Priority Tasks."

Step 2: Add the Filter Results Gadget to Your Dashboard

1. Open Your Dashboard:

- Go to **Dashboards** > select your portfolio dashboard or create a new one.

2. Add the Filter Results Gadget:

- Click **Add Gadget** and search for **Filter Results**.
- Click **Add** next to the gadget to include it in your dashboard.

3. Configure the Gadget:

- In the **Filter** field, select the filter you saved ("Portfolio High-Priority Tasks").
- Under **Columns to Display**, select key columns such as **Priority**, **Assignee**, and **Status**.
- Adjust any other settings to fit your needs (e.g., number of issues to show).
- Click **Save** to apply these settings.

Include the Gadgets mentioned for a Project Portfolio Dashboard:

1) Issue Statistics Gadget:

- This gadget lets you group tasks by Priority, Assignee, or Status and By grouping by Assignee.

2) Two-Dimensional Filter Statistics Gadget:

- This gadget allows you to compare two fields (like **Priority** and **Status**) across the portfolio.

3) Pie Chart Gadget

4) Created vs. Resolved Gadget