Department of Computer Engineering Academic Term: First Term 2023-

24

 $Class: T.E \ / Computer \ Sem - V \ / \ Software \ Engineering$

Practical No:	3
Title:	Implementing Project using the KANBAN method on the JIRA Tool
Date of Performance:	09/08/2023
Roll No:	9614
Team Members:	Mudabbir Bhat(9589), Muhammad Batliwala(9588), Nathan Dias(9597), Aqib Firdous(9614)

Rubrics for Evaluation:

Sr. No	Performance Indicator	Excellent	Good	Below Average	Total Score
1	On-time Completion & Submission (01)	01 (On Time)	NA	00 (Not on Time)	
2	Theory Understanding(02)	02(Corr ect)	NA	01 (Tried)	
3	Content Quality (03)	03(All used)	02 (Partial)	01 (rarely followed)	
4	Post Lab Questions (04)	04(done well)	3 (Partiall y Correct)	2(submitted)	

Signature of the Teacher:

Teacher:

Lab Experiment 03

Experiment Name: Implementing Project Using Kanban Method on JIRA Tool in Software Engineering

Objective: The objective of this lab experiment is to introduce students to the Kanban method and its implementation using the JIRA tool. Students will gain practical experience in managing a software project using Kanban principles and learn how to utilize JIRA as a project management tool to visualize workflow, manage work items, and improve team productivity.

Introduction: Kanban is an agile project management method that emphasizes visualizing work, limiting work in progress, and continuously improving the workflow. JIRA is a popular tool that supports Kanban practices, allowing teams to manage their tasks and activities effectively.

Lab Experiment Overview:

- 1. Introduction to Kanban: The lab session begins with an overview of the Kanban method, including the principles of visualizing work, managing flow, and making incremental improvements.
- 2. JIRA Tool Introduction: Students are introduced to the JIRA tool and its features for implementing Kanban. They learn to create boards, swimlanes, and columns, and customize workflows.
- 3. Defining the Project: Students are assigned a sample software project and create a Kanban board in JIRA to visualize their workflow. They set up columns to represent different stages of their development process.
- 4. Creating Work Items: Students create work items (tasks, user stories, or issues) on the Kanban board, representing the work that needs to be done.
- 5. Managing Workflow: Students move work items through the columns on the Kanban board as they progress through their development process. They monitor work-in-progress limits to maintain an efficient workflow.
- 6. Continuous Improvement: Students conduct regular team meetings to discuss the workflow, identify bottlenecks, and make improvements to enhance their efficiency.
- 7. Completion and Review: At the end of the lab experiment, students review their project progress on the Kanban board. They discuss their experiences with implementing the Kanban method on JIRA and share insights on its effectiveness.
- 8. Conclusion and Reflection: Students reflect on their experience with Kanban and JIRA, discussing the benefits and challenges they encountered during the project. They also consider how Kanban principles can be applied to future software development projects.

Learning Outcomes: By the end of this lab experiment, students are expected to:

• Understand the Kanban method and its application in agile project management. • Gain practical experience in using the JIRA tool to implement Kanban boards and workflows. • Learn to visualize work, manage flow, and limit work in progress using Kanban principles.

- Develop team collaboration skills by continuously improving the workflow through regular team meetings.
- Appreciate the importance of visualizing and managing work items for better project management.

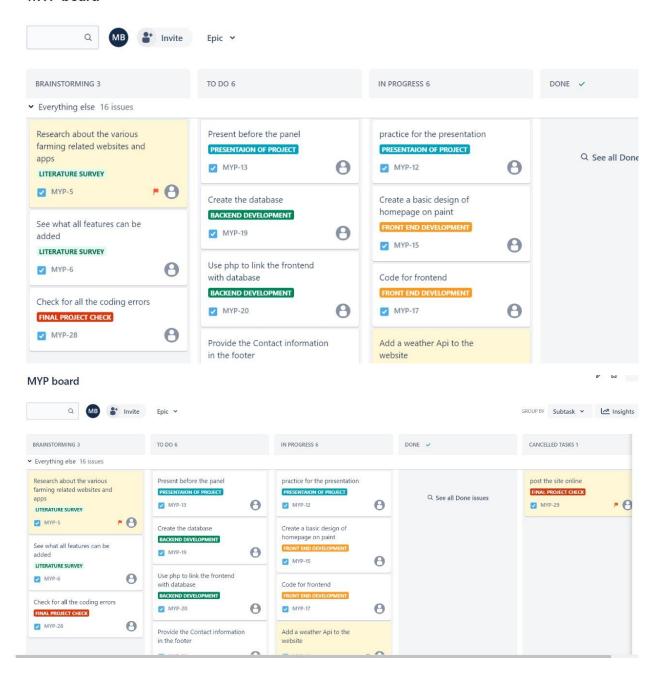
Pre-Lab Preparations: Before the lab session, students should familiarize themselves with the Kanban method and the basics of the JIRA tool. They should review Kanban principles, visualize workflows, and the features of JIRA relevant to Kanban implementation.

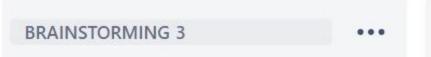
Materials and Resources:

- Computers with internet access for accessing the JIRA tool
- Project brief and details for the sample software project
- Whiteboard or projector for explaining Kanban concepts

Conclusion: The lab experiment on implementing a project using the Kanban method on the JIRA tool provides students with practical insights into agile project management. By applying Kanban principles and utilizing JIRA's capabilities, students learn to visualize their work, manage flow efficiently, and continuously improve their development process. The hands-on experience with Kanban and JIRA fosters teamwork, collaboration, and adaptability, enabling students to effectively manage software projects with a focus on efficiency and quality. The lab experiment encourages students to adopt Kanban's lean principles, promoting a culture of continuous improvement and optimizing their workflow to deliver valuable software products.

MYP board





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