

**Department of Computer Engineering**

**Academic Term: First Term 2023-24**

**Class: T.E /Computer Sem – V / Software Engineering**

<b>Practical No:</b>	<b>2</b>
<b>Title:</b>	<b>Implementing Project using SCRUM method on JIRA Tool</b>
<b>Date of Performance:</b>	<b>02/08/2023</b>
<b>Roll No:</b>	<b>9614</b>
<b>Team Members:</b>	<b>Mudabbir(9589),Muhammad(9588),Nathan(9597)</b>

**Rubrics for Evaluation:**

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

**Signature of the Teacher:**

**Department of Computer Engineering**

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## Experiment 02

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

**Objective:** This lab experiment aims to introduce students to the Scrum framework and its implementation using the JIRA tool. Students will gain practical experience in managing a software project using Scrum principles and learn how to utilize JIRA as a project management tool to track and organize tasks, sprints, and team collaboration.

**Introduction:** Scrum is an agile project management methodology that promotes iterative development, collaboration, and continuous improvement. JIRA is a widely used tool that supports

Scrum practices, provide teams with features to plan, track, and manage software projects effectively.

### **Lab Experiment Overview:**

**1. Introduction to Scrum:** The lab session begins with an overview of the Scrum framework, including its roles (Product Owner, Scrum Master, and Development Team), events (Sprint Planning, Daily Standup, Sprint Review, and Sprint Retrospective), and artifacts (Product Backlog, Sprint Backlog, and Increment).

**2. JIRA Tool Introduction:** Students are introduced to the JIRA tool and its capabilities in supporting Scrum project management. They learn to create projects, epics, user stories, tasks, and sub-tasks in JIRA.

**3. Defining the Project:** Students are assigned a sample software project and create a Product Backlog, listing all the required features, user stories, and tasks for the project.

**4. Sprint Planning:** Students organize the Product Backlog into Sprints, selecting user stories and tasks for the first Sprint. They estimate the effort required for each task using story points.

**5. Implementation in JIRA:** Students use the JIRA tool to create a Sprint Backlog, add the selected user stories and tasks, and assign them to team members.

**6. Daily Standup:** Students conduct a simulated Daily Standup meeting, where they update the progress of their tasks and discuss any impediments they are facing.

**7. Sprint Review and Retrospective:** At the end of the Sprint, students review the completed tasks, demonstrate the implemented features, and gather feedback from their peers. They also conduct a Sprint Retrospective to identify areas of improvement for the next Sprint.

**8. Continuous Iteration:** Students continue implementing subsequent Sprints, repeating the Sprint Planning, Daily Standup, Sprint Review, and retrospective events.

**9. Conclusion and Reflection:** At the end of the lab experiment, students reflect on

their experience with Scrum and JIRA, discussing the advantages and challenges they encountered during the project.

**Learning Outcomes:** By the end of this lab experiment, students are expected to:  
Understand the Scrum framework and its principles in agile project management.  
Gain practical experience in using the JIRA tool for project management in a Scrum environment.

Learn to create and manage Product Backlogs, Sprint Backlogs, and track progress using JIRA.

Develop collaborative skills through Daily Standup meetings and Sprint Reviews.

Gain insights into the iterative nature of software development and the importance of continuous improvement.

**Pre-Lab Preparations:** Before the lab session, students should familiarize themselves with the

Scrum framework and the basics of the JIRA tool. They should review Scrum roles, events, artifacts, and the features of JIRA relevant to Scrum 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 Scrum concepts

**Conclusion:** The lab experiment on implementing a project using Scrum on the JIRA tool offers students hands-on experience in agile project management. By utilizing Scrum principles and JIRA's capabilities, students learn to collaborate effectively, manage tasks efficiently, and adapt to changing requirements. The practical exposure to Scrum and JIRA enhances their understanding of agile methodologies, equipping them with valuable skills for real-world software development projects. The lab experiment encourages students to embrace the agile mindset, promoting continuous improvement and customer-centric software development practices.

As the topic we had for our mini project was the farmer helper site we tried it by taking issues that can be present and tried to resolve them with the help of scrum.

As we know with the help of Jira we can assign a particular issue to a particular person, therefore it is a very important software tool. Some of the issues are mentioned below:

And I have tried resolving some issues and resolved some of these issues and others are in progress.

Jira Software

Your work

Projects

Filters

Dashboards

Teams

Apps

Create

Q Search

AF

farmerhelper

Software project

PLANNING

Timeline

Board

DEVELOPMENT

Code

Project pages

Add shortcut

Project settings

You're in a team-managed project

Learn more

Projects / farmerhelper

FAR board

Q

AF

Label

GROUP BY 

None

Insights

TO DO 1

There is issue in accessing the images of the products?

✓

FAR-8

AF

+ Create issue

IN PROGRESS 1

Farmer is unable to modify the items in cart?

inprogress

✓

FAR-7

AF

DONE 4 ✓

there is a problem in the html of the site?

done

✓

FAR-1

AF

internet banking not working correctly?

done

✓

FAR-4

AF

there is issue in database?

done

✓

FAR-5

AF

Quickstart

X

Jira Software

Your work

Projects

Filters

Dashboards

Teams

Apps

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Projects / farmerhelper

Timeline

Give feedback

Share

Export

...

Q

AF

Status category

Epic

Label

View settings

FAR-9 Resolve the issues?

FAR-10 resolve first one today?

+ Create Epic

inprogress

SEP

OCT

Today

Weeks

Months

Quarters

Jira Software

Your work

Projects

Filters





Dashboards


Teams

Apps

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Projects / farmerhelper

Issues

Search issues

Project: farmerhelper

Type

Status

Assignee

Status Category: Done

More

Reset

Save filter

BASIC

JQL

Created

api is not working properly?

FAR-6

there is issue in database?

FAR-5

internet banking not working correctly?

FAR-4

there is a problem in the html of the site?

1-4 of 4

Give feedback

Add epic / FAR-6

api is not working properly?

Attach

Add a child issue

Link issue

Description

Add a description...

Activity

Show: All Comments History

Newest first

Add a comment...

Pro tip: press M to comment

Done

Done

Actions

Your pinned fields

Labels

done

Details

Assignee

Aqib Firdous

Reporter

Aqib Firdous

Jira Software

Your work

Projects

Filters





Dashboards


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Projects / farmerhelper

Issues

Search issues

Project: farmerhelper

Type

Status

Assignee: Current User

Status Category: To Do

More

Reset

Save filter

BASIC

JQL

Created

resolve first one today?

FAR-10

Resolve the issues?

FAR-9

There is issue in accessing the images of the products?

FAR-8

1-4 of 4

Give feedback

FAR-10

resolve first one today?

Attach

Add a child issue

Link issue

Description

reviewing the code?

Activity

Show: All Comments History

Newest first

Add a comment...

Pro tip: press M to comment

Actions

Your pinned fields

Labels

inprogress

Details

Assignee

Aqib Firdous

Start date

Aug 06, 2023