

Experiment no. 6: To Study Agile Methodology and Test Case Management using JIRA Tool

Agile Methodology

Agile is a software development approach that emphasizes flexibility, collaboration, and customer feedback. It divides work into small, iterative cycles called sprints, allowing continuous improvement and faster delivery.

Key Principles of Agile:

- Customer Collaboration → Frequent feedback ensures better product development.
- Iterative Development → Work is broken into short development cycles.
- Quick Adaptation → Teams respond to changes efficiently.
- Continuous Improvement → Regular reviews and refinements improve quality.

Popular Agile Frameworks:

1. Scrum → Uses sprints, daily stand-ups, and retrospectives.
2. Kanban → Focuses on visualizing tasks and limiting work in progress.
3. Extreme Programming (XP) → Emphasizes continuous testing and customer involvement.

Test Case Management in JIRA

JIRA is a widely used project management tool developed by Atlassian. It supports Agile methodologies and helps in tracking, managing, and executing test cases efficiently.

Installing & Configuring JIRA

1. Visit [Atlassian JIRA](#) and sign up.
2. Choose a project type (Scrum/Kanban/Basic).
3. Invite team members and configure workflows.

Creating a Test Case in JIRA

1. Navigate to your project and click “Create Issue”.
2. Select Test Case as the issue type.
3. Fill in details:
 - Summary: Short description of the test case.
 - Steps: List the actions to execute.
 - Expected Result: Define the expected outcome.

- Actual Result (After Execution): Capture actual behavior.

4. Assign the test case to a tester and save it.

Executing Test Cases in JIRA

- Navigate to the test case and update the execution status (Pass, Fail, Blocked).
- Attach evidence (screenshots, logs, etc.) if needed.
- Link defects/bugs to the test case for tracking.

JIRA Integrations for Testing

JIRA integrates with tools like Zephyr, Xray, and TestRail to enhance test case management. These plugins provide advanced reporting, automation, and execution tracking.

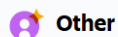
Benefits of Using JIRA for Test Case Management

- Centralized Tracking → Manage test cases, bugs, and development tasks in one place.
- Collaboration → Enables seamless communication between testers, developers, and managers.
- Custom Workflows → Define workflows tailored to project needs.
- Reports & Dashboards → Gain insights into testing progress and quality.



Select a template to get started

You can always change this later. Selecting a template won't limit what you can do.

An icon representing the Scrum template, showing a whiteboard with a list of tasks and a yellow sticky note.

Scrum
Plan, prioritize, and schedule sprints using scrum framework

An icon representing the Kanban template, showing a Kanban board with columns and cards.

Kanban
Visualize work and maximize efficiency with a kanban board

An icon representing the Project management template, showing a Gantt chart and a task list.

Project management
Manage, track, and assign tasks to streamline project workflows















Back

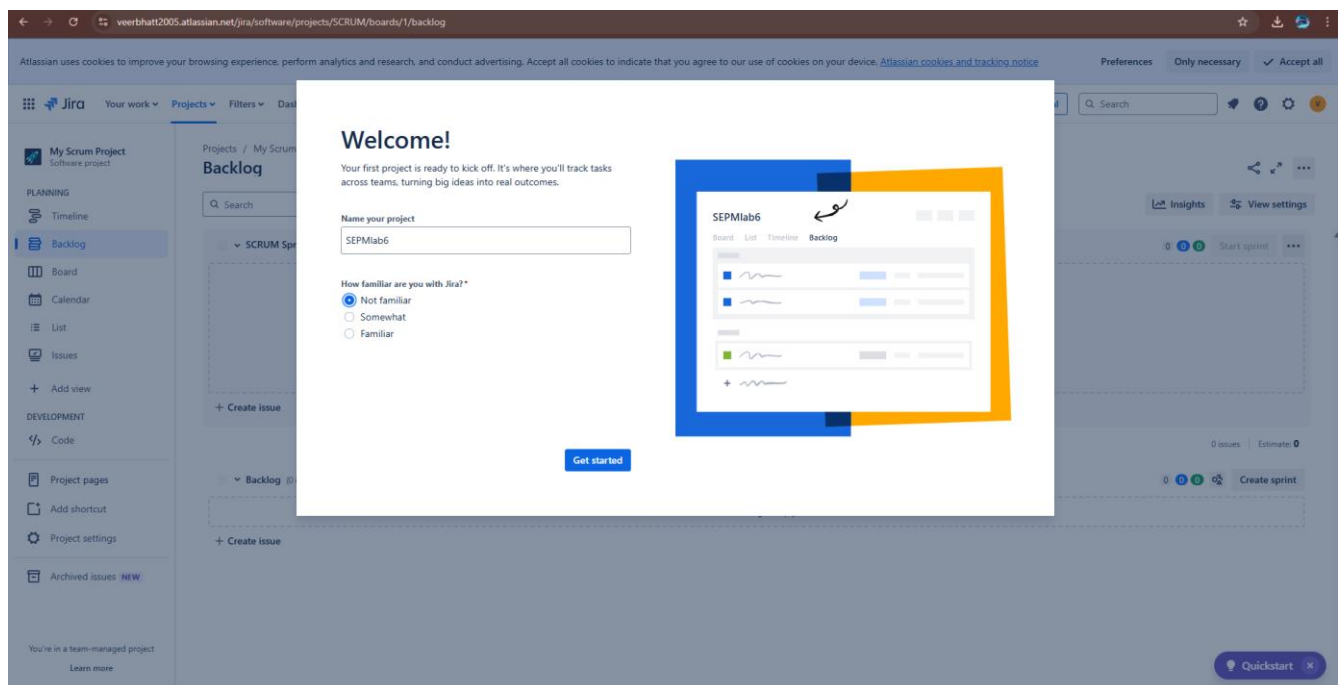
Continue

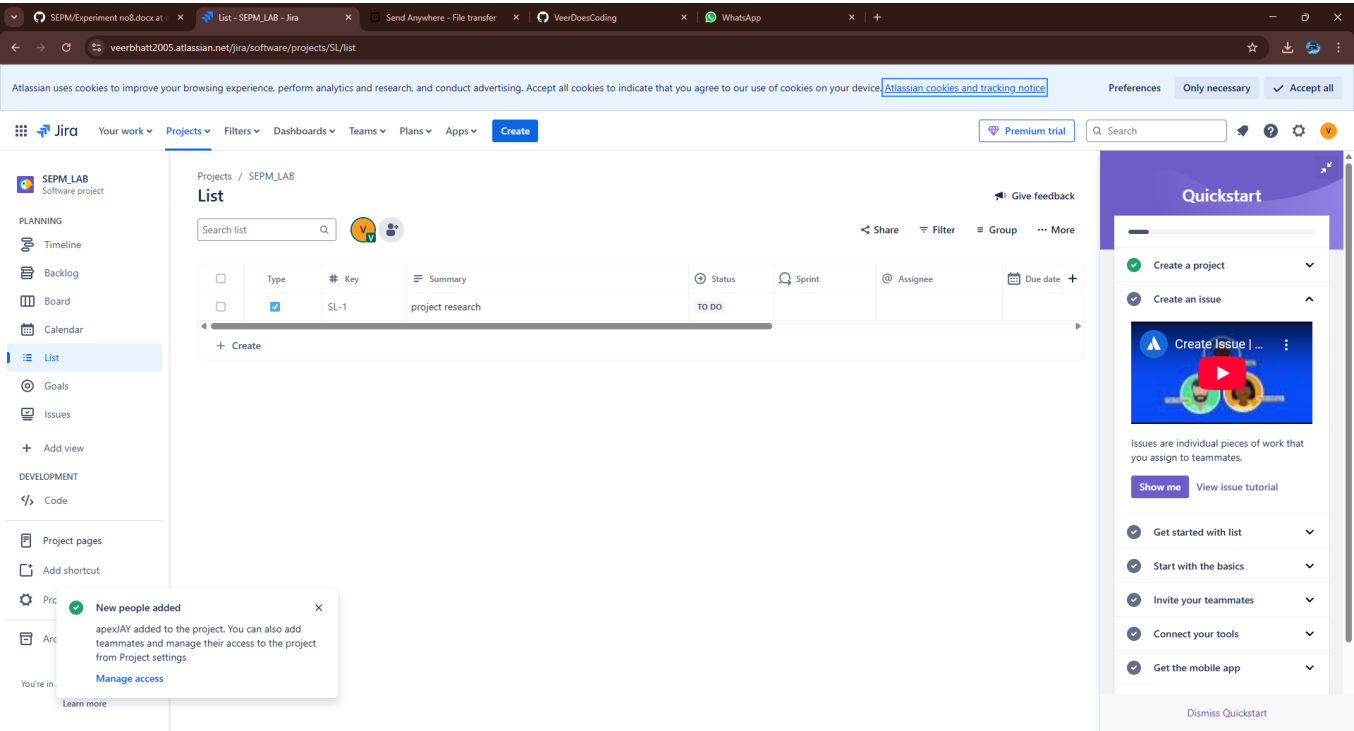
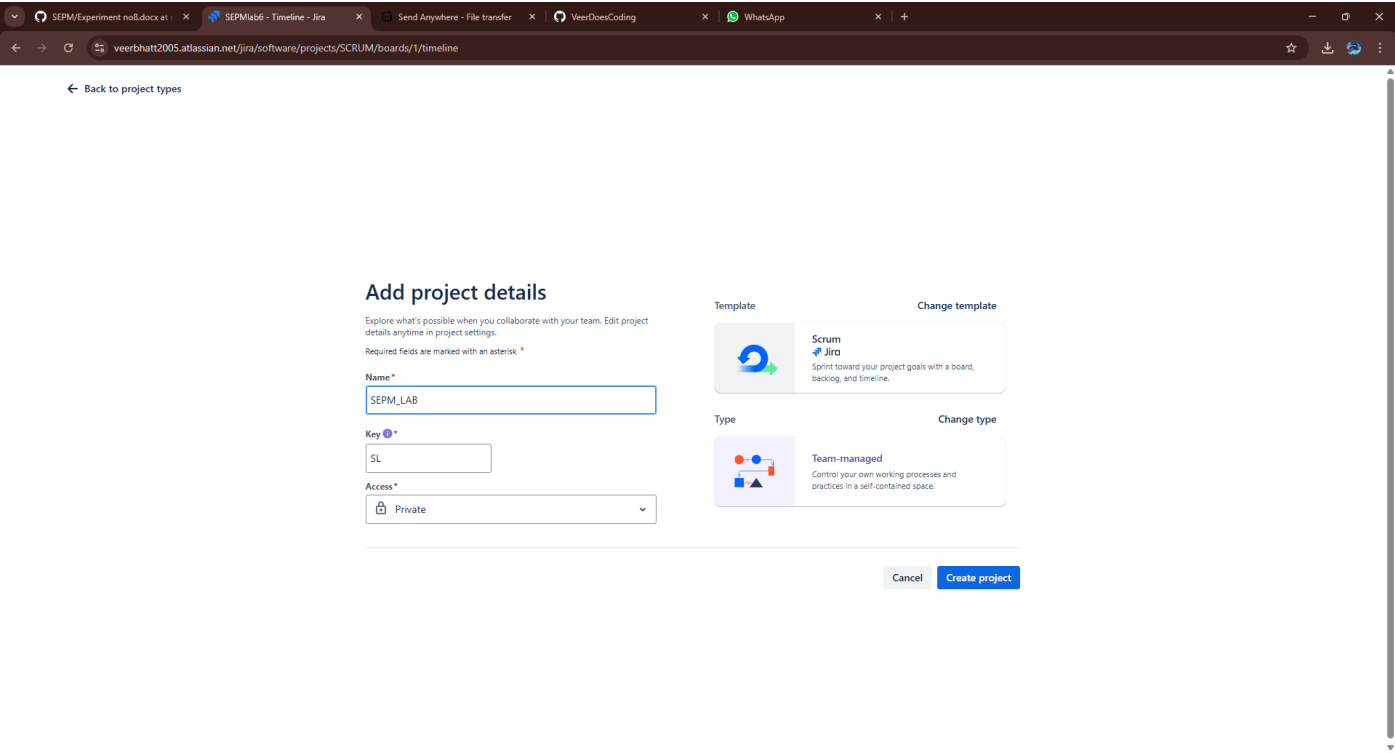


What kind of work do you do?

This helps us suggest templates that help your team do their best work.

 Software development	 Product management
 Marketing	 Design
 Project management	 Operations
 IT support	 Human resources
 Customer service	 Legal
 Finance	 Sales
 Data science	 Other





SEPM_LAB

Software project

PLANNING

Timeline

Backlog

Board

Calendar

List

Goals

Issues

+ Add view

DEVELOPMENT

Code

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Project settings

Archived issues

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Projects / SEPM_LAB

List

Search list

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Y

Share

Filter

Group

More

<input type="checkbox"/>	Type	#	Key	Summary	Status	Sprint	Assignee	Due date
<input type="checkbox"/>	<input checked="" type="checkbox"/>	SL-1		project research	TO DO	SL Sprint 1	Veer	Mar 24, 2025
<input type="checkbox"/>	<input checked="" type="checkbox"/>	SL-2		research week 1	TO DO	SL Sprint 1	apexJAY	Mar 26, 2025
<input type="checkbox"/>	<input checked="" type="checkbox"/>	SL-3		finish coding	TO DO	SL Sprint 1	apexJAY	Mar 26, 2025
<input type="checkbox"/>	<input checked="" type="checkbox"/>	SL-4		complete gui	TO DO	SL Sprint 1	Veer	Mar 30, 2025

+ Create

You've created "SL-2" issue

[View issue](#) · [Copy link](#)

Learn more

Quickstart

Create a project

Create an issue

Create Issue | ...

Issues are individual pieces of work that you assign to teammates.

Show me · View issue tutorial

Get started with list

Start with the basics

Invite your teammates

Connect your tools

Get the mobile app

Dismiss Quickstart

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Type

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Save filter

Created

complete gui

SL-4

finish coding

SL-3

research week 1

SL-2

project research

SL-1

complete gui

+ Add

Apps

Description

Add a description...

Activity

Show: All · Comments · History · Work log

Summarize

Newest first

Add a comment...

Can I get more info...? · Status update... · Thanks...

Pro tip: press M to comment

Share

Export

Go to all issues

LIST VIEW

DETAIL VIEW

BASIC

JQL

1 of 4

To Do

Actions

Improve issue

Pinned fields

Click on the ⌵ next to a field label to start pinning.

Details

Assignee

Veer

Labels

None

Parent

None

Team

None

Sprint

SL Sprint 1

Story point estimate

None

Due date

Mar 30, 2025

Development

Create branch

Create commit

veerbhatt2005.atlassian.net/jira/software/projects/SL/list

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Projects / SEPM_LAB

List

Search list

Share Filter Group More

	Type	# Key	Summary	Status	Sprint	Assignee	Due date
<input type="checkbox"/>	<input checked="" type="checkbox"/>	SL-1	project research	DONE	SL Sprint 1	Veer	Mar 24, 2025
<input type="checkbox"/>	<input checked="" type="checkbox"/>	SL-2	research week 1	IN PROGRESS	SL Sprint 1	apexJAY	Mar 26, 2025
<input type="checkbox"/>	<input checked="" type="checkbox"/>	SL-3	finish coding	DONE	SL Sprint 1	apexJAY	Mar 26, 2025
<input type="checkbox"/>	<input checked="" type="checkbox"/>	SL-4	complete gui	TO DO	SL Sprint 1	Veer	Mar 30, 2025
<input type="checkbox"/>	<input checked="" type="checkbox"/>	SL-5	scrum 1	DONE	SL Sprint 1	apexJAY	Apr 6, 2025
<input type="checkbox"/>	<input checked="" type="checkbox"/>	SL-6	scrum 2	DONE	SL Sprint 1	apexJAY	Apr 6, 2025
<input type="checkbox"/>	<input checked="" type="checkbox"/>	SL-7	scrum 3	DONE	SL Sprint 1	Veer	Apr 7, 2025
<input type="checkbox"/>	<input checked="" type="checkbox"/>	SL-8	scrum 4	IN PROGRESS	SL Sprint 1	Veer	Apr 29, 2025

+ Create

PLANNING

- Timeline
- Backlog
- Board
- Calendar
- List
- Goals
- Issues
- + Add view

DEVELOPMENT

- Code
- Project pages
- Add shortcut
- Project settings
- Archived issues [NEW](#)

You're in a team-managed project [Learn more](#)

Quickstart

- Create a project
- Create an issue
- Create Issue | ...
- Issues are individual pieces of work that you assign to teammates.
- Show me View issue tutorial
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- Invite your teammates
- Connect your tools
- Get the mobile app

Dismiss Quickstart

The image displays two screenshots of the Jira web interface for a project named 'SEPM_LAB'.

Top Screenshot: Timeline View

- URL:** `veerbhatt2005.atlassian.net/jira/software/projects/SL/boards/2/timeline`
- Navigation:** Jira logo, 'Your work', 'Projects', 'Filters', 'Dashboards', 'Teams', 'Plans', 'Apps', and a 'Create' button.
- Left Sidebar:** Planning (Timeline, Backlog, Board, Calendar, List, Goals, Issues, Add view), Development (Code, Project pages, Add shortcut, Project settings, Archived issues), and a note 'You're in a team-managed project'.
- Header:** 'Projects / SEPM_LAB', 'Timeline', 'Give feedback', 'Share', 'Export', 'View settings', and a search bar.
- Main Content:** A timeline grid showing sprints from February to June. Sprints listed include 'SL-5 scrum 1', 'SL-6 scrum 2', 'SL-7 scrum 3', and 'SL-8 scrum 4'. A vertical blue line indicates the current date in March.
- Bottom:** View toggles for 'Today', 'Weeks', 'Months', 'Quarters', and a 'Quickstart' button.

Bottom Screenshot: Issues View

- URL:** `veerbhatt2005.atlassian.net/jira/software/projects/SL/issues/?jql=project%20%3D%20%20SL%20ORDER%20BY%20created%20DESC`
- Navigation:** Similar to the top screenshot.
- Left Sidebar:** Similar to the top screenshot.
- Header:** 'Projects / SEPM_LAB', 'Issues', 'Share', 'Export', 'Go to all issues', 'LIST VIEW', 'DETAIL VIEW', and a search bar.
- Main Content:** A list of issues on the left and a detailed view of 'scrum 4' on the right. The issue list includes 'scrum 4', 'SL-8', 'scrum 3', 'SL-7', 'scrum 2', 'SL-6', 'scrum 1', 'SL-5', 'complete gui', 'SL-4', 'finish coding', 'SL-3', 'research week 1', 'SL-2', 'project research', and 'SL-1'. The detailed view for 'scrum 4' shows a description, confluence content, activity, and a comment section.
- Right Sidebar:** 'In Progress' status, 'Pinned fields', 'Details' (Assignee: Veer, Labels: None, Parent: None, Team: None, Start date: None, Due date: Apr 29, 2025, Sprint: SL Sprint 1, Development: Create branch, Create commit).

Conclusion: Thus, we have successfully studied agile methodology and test case management using jira tool