

EXPERIMENT NO : 07

Aim: Create Scrum Board for Scrum Master using JIRA Tool.

Theory:

Introduction to Agile Methodology

Agile methodology is an iterative approach to software development that focuses on flexibility, collaboration, and customer feedback. It follows principles from the Agile Manifesto, emphasizing working software, customer collaboration, and responsiveness to change. Agile methodologies include Scrum, Kanban, and Extreme Programming (XP).

Test Case Management in Agile

Test case management in Agile ensures that testing is integrated throughout the development process rather than being a separate phase. JIRA, a widely used project management tool, supports test case management through plugins like Zephyr and Xray. Key aspects include:

- **Creating Test Cases:** Test cases are written in JIRA to verify software functionality.
- **Executing Tests:** Test execution is tracked within sprints to ensure quality assurance.
- **Defect Tracking:** Bugs and defects are logged and linked to user stories.
- **Continuous Integration:** Automated tests can be integrated with JIRA for real-time tracking.

Creating a Scrum Board in JIRA

A Scrum Board in JIRA helps Scrum Masters manage sprint tasks efficiently. The process includes:

1. **Creating a New Scrum Project:** JIRA provides templates for Agile projects.
2. **Defining Backlog Items:** Product backlog items (PBIs) or user stories are added.
3. **Sprint Planning:** Tasks are assigned to sprints, ensuring proper workload distribution.
4. **Tracking Progress:** The board visually represents tasks in "To Do," "In Progress," and "Done" columns.
5. **Sprint Review & Retrospective:** After each sprint, progress is reviewed, and

improvements are discussed.

By utilizing JIRA for Agile project management, teams improve efficiency, collaboration, and project transparency.

Software Engineering & Project Management Lab Experiment No: - 06 & 07

Aim: To Study Agile Methodology and Test case Management using JIRA Tool & To Create Scrum Board for Scrum Master using JIRA Tool.

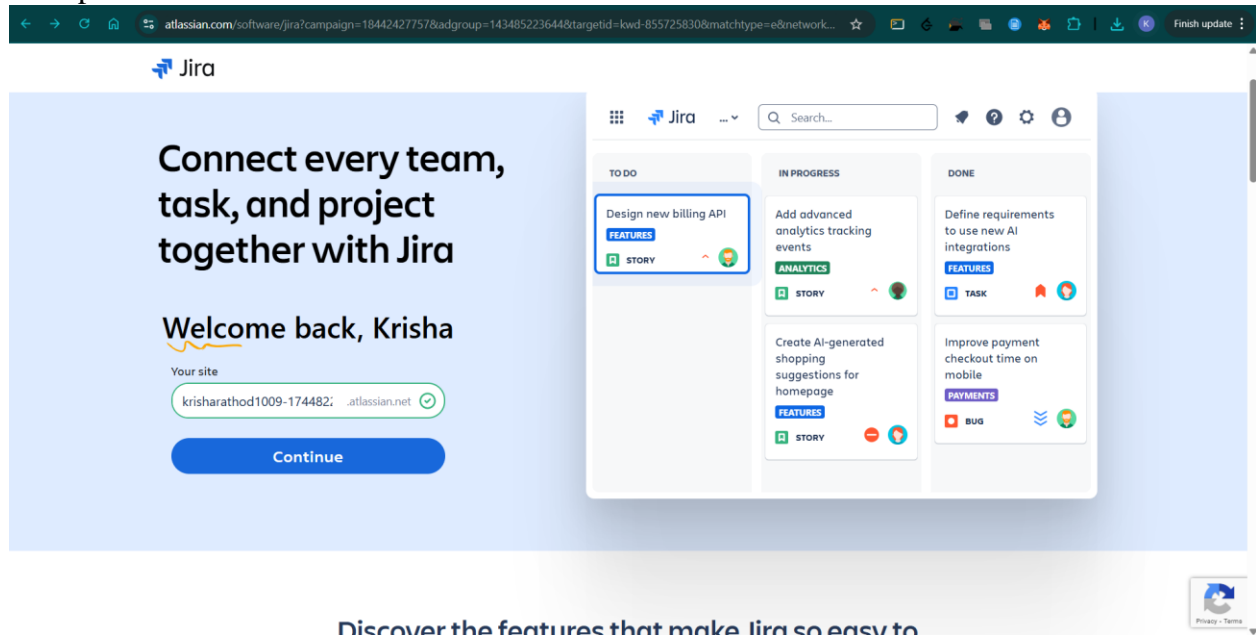
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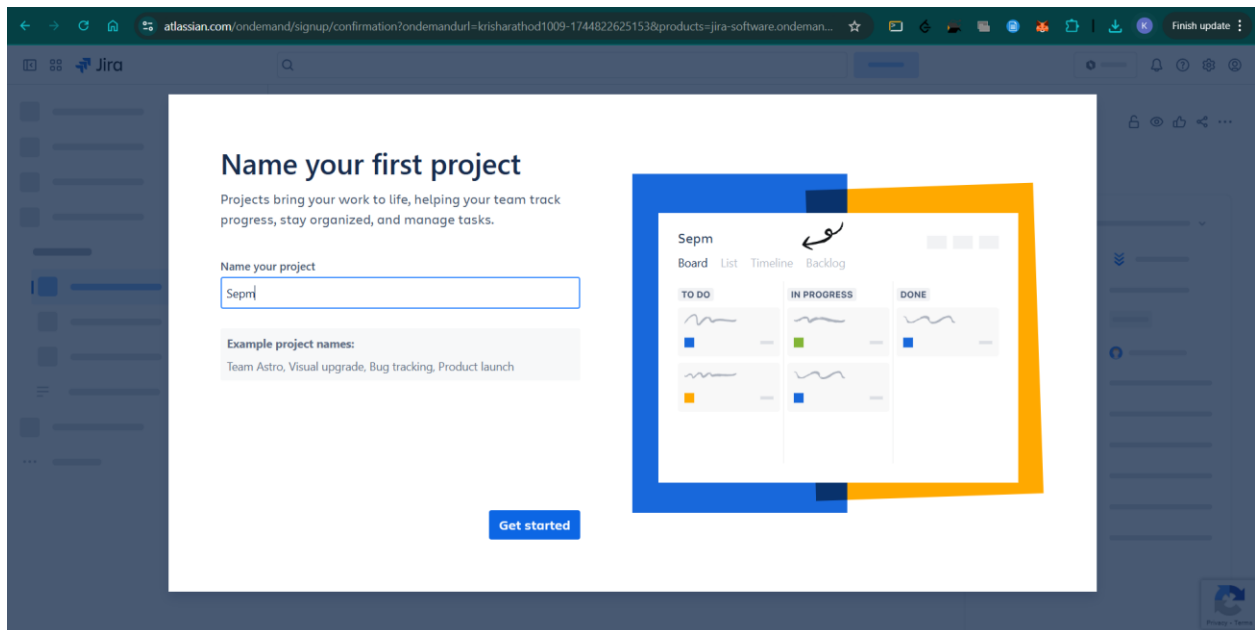
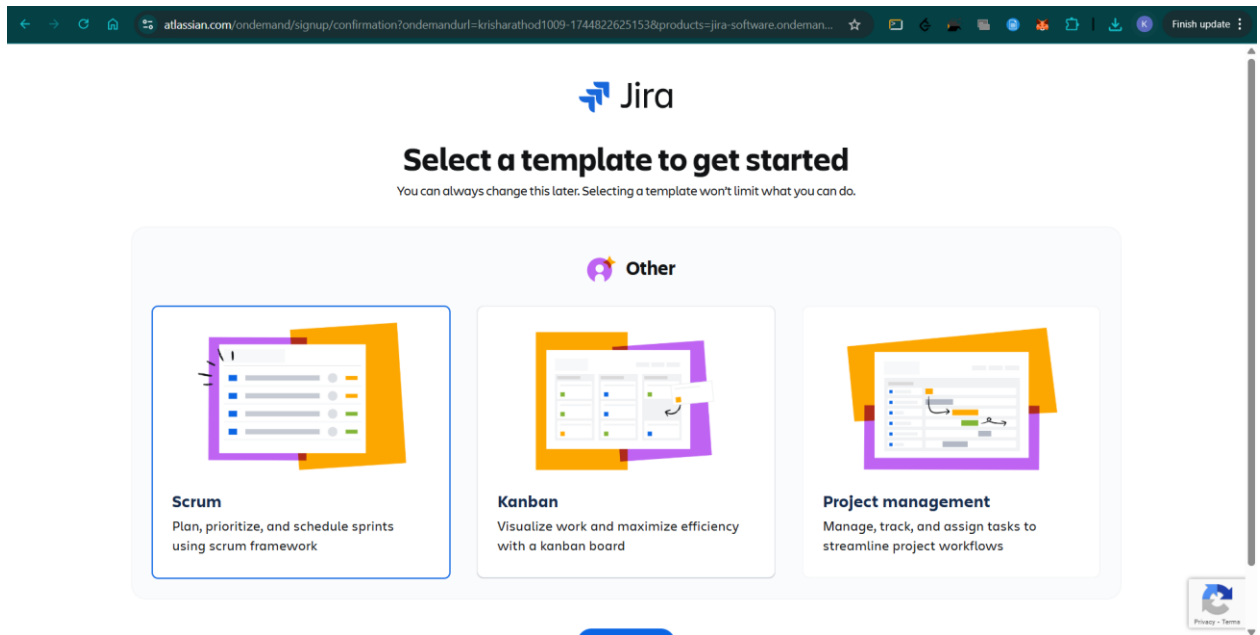
JIRA Account Creation:

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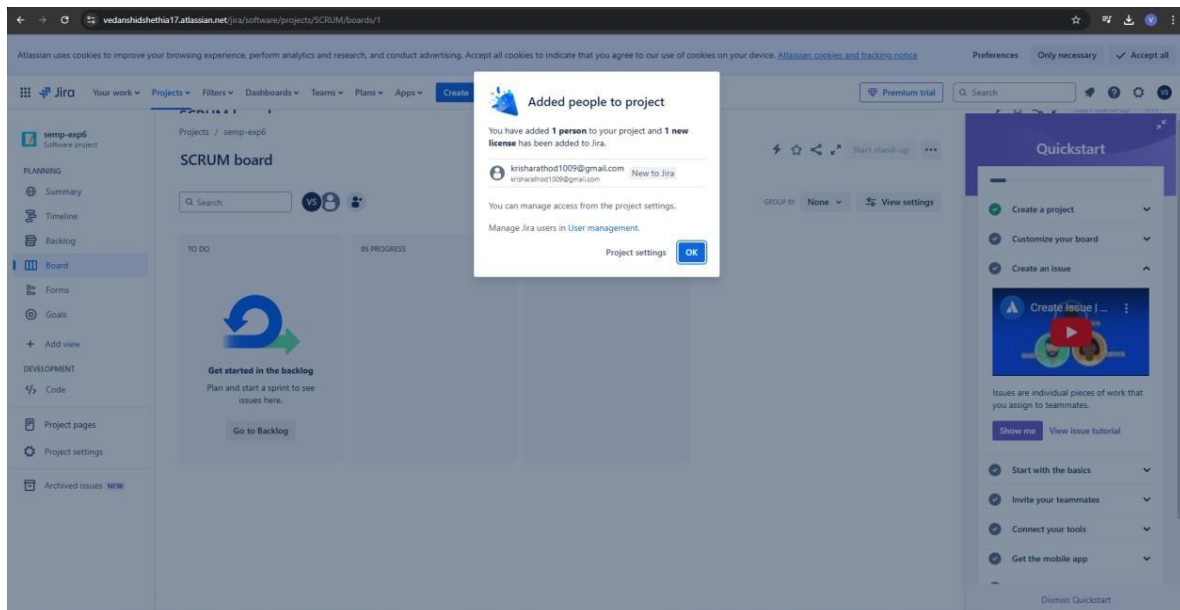
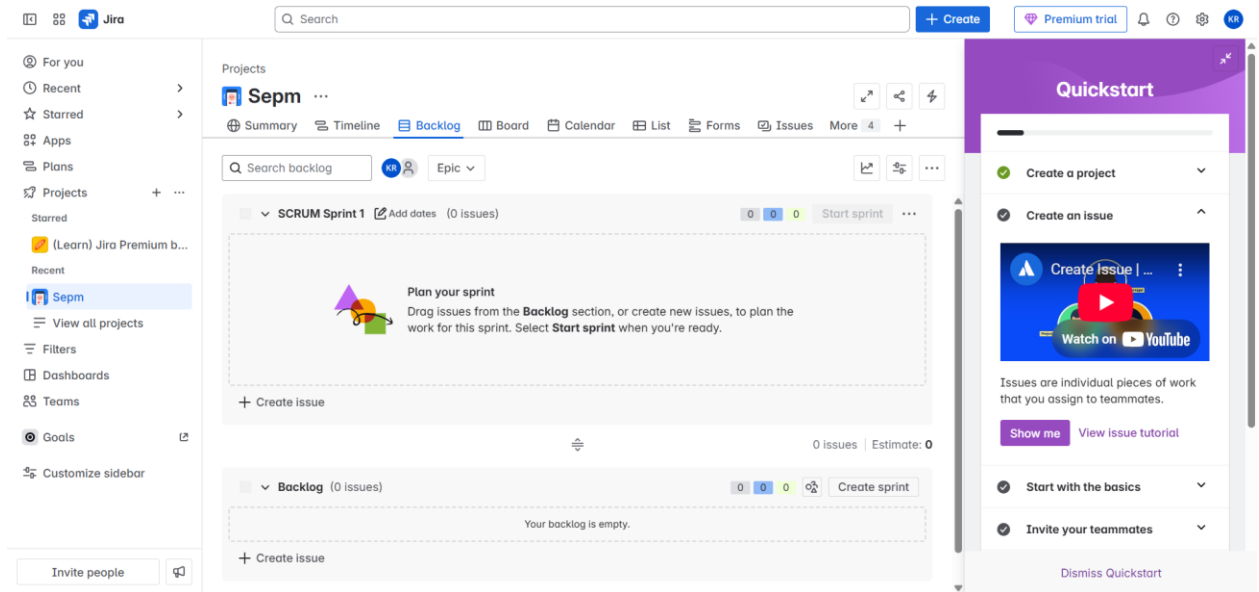
1. Open atlassian.com webpage
2. Select products and click on Jira Software
3. Click on “Get it free”
4. Select Continue with Google

Output:

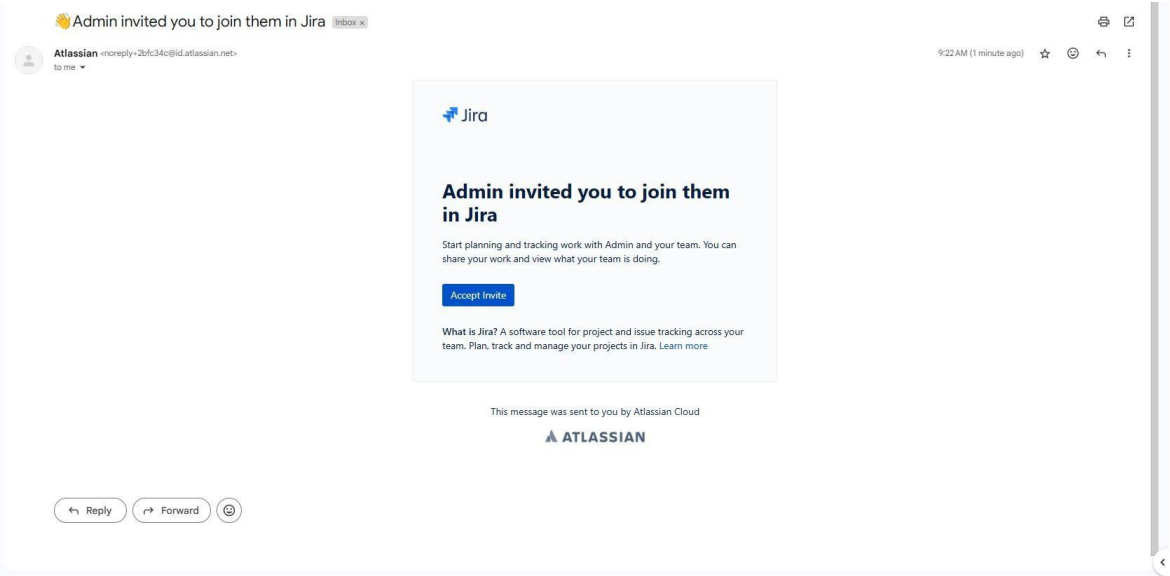
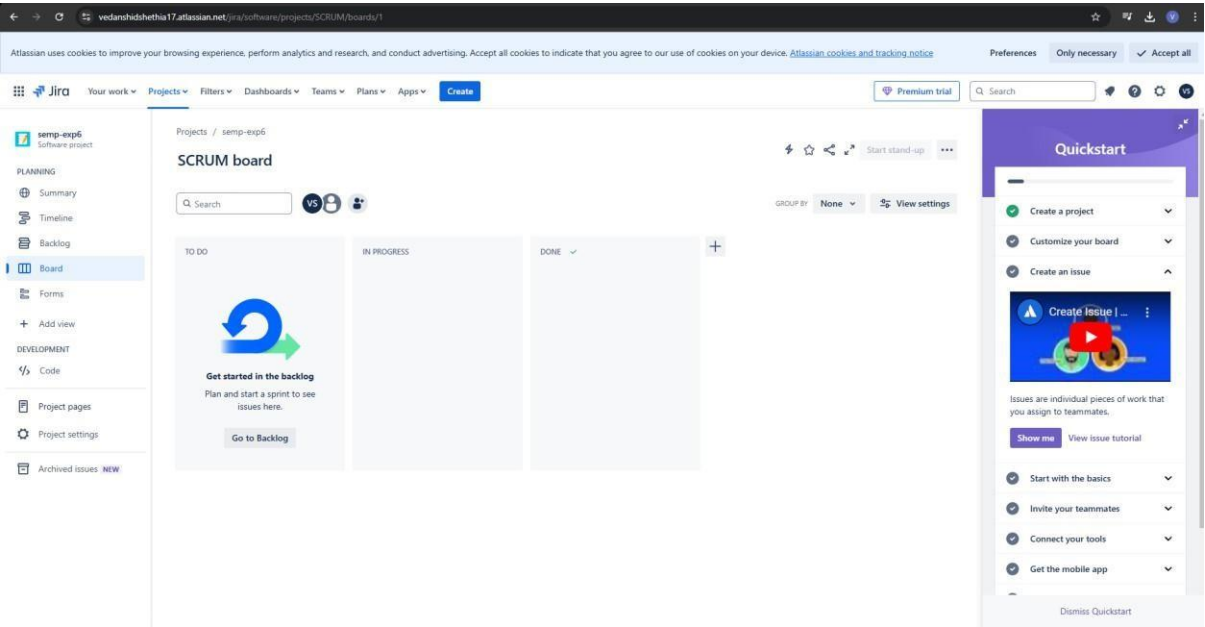




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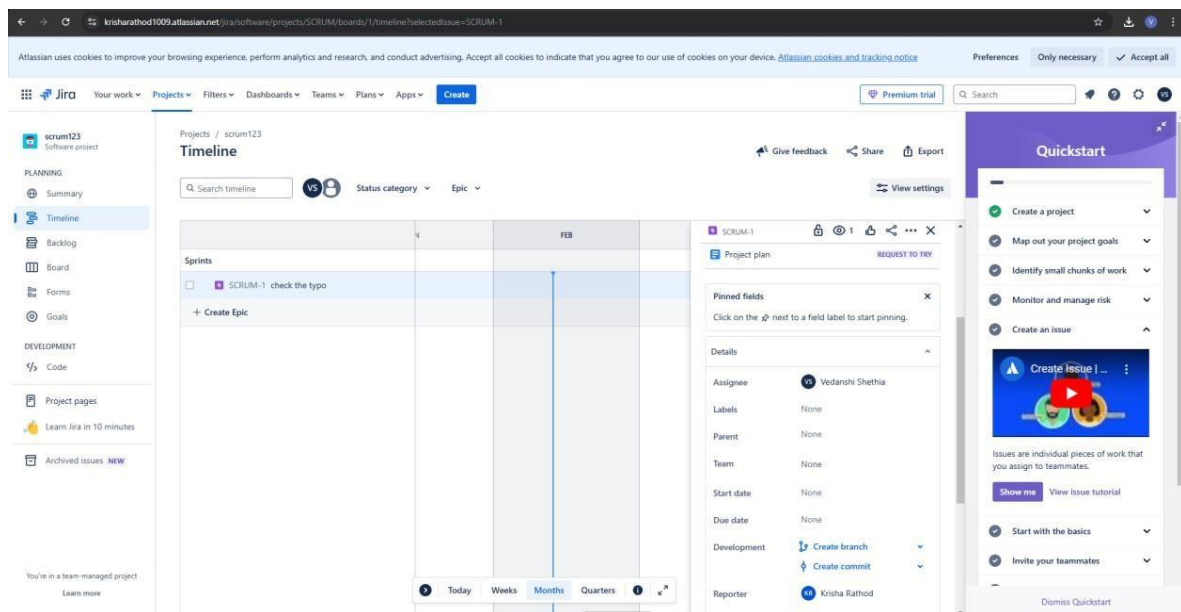
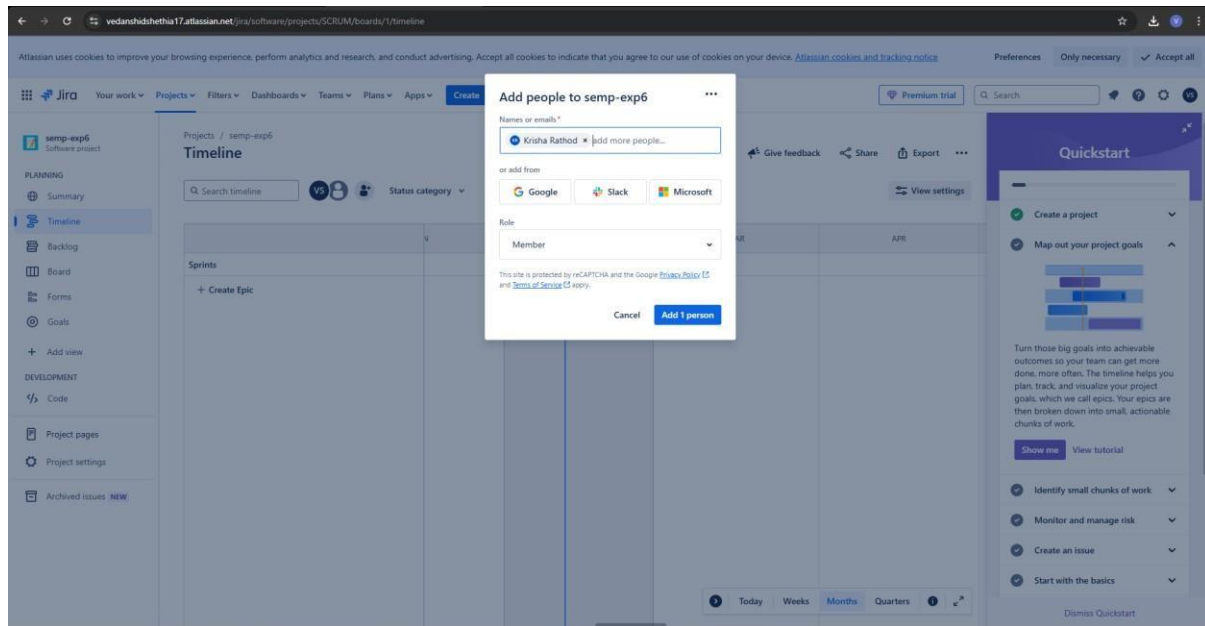


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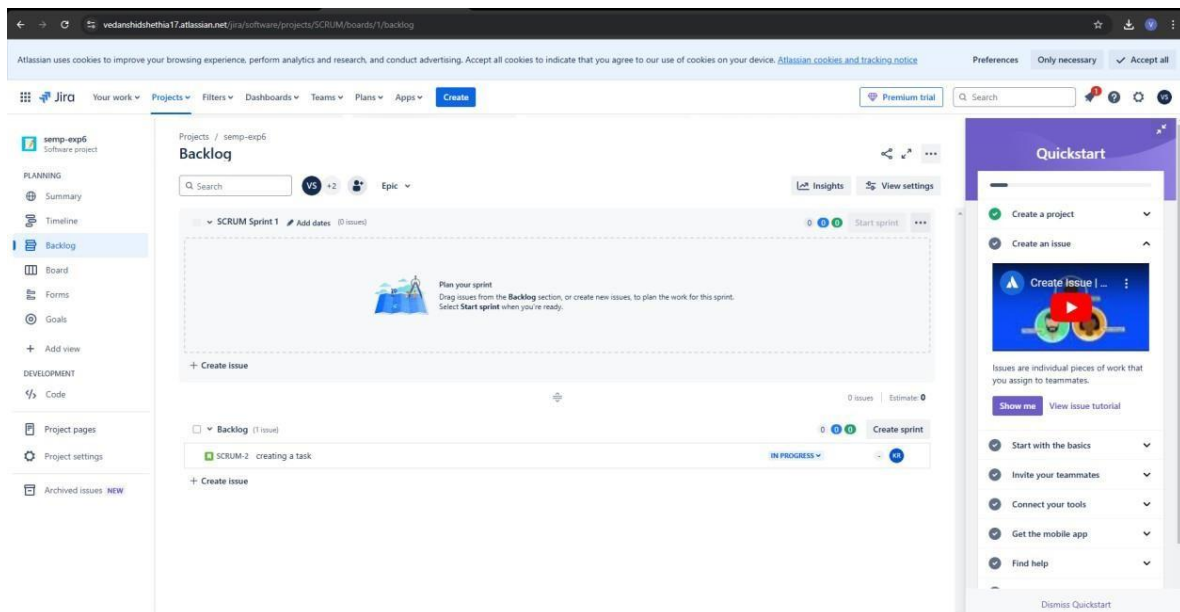
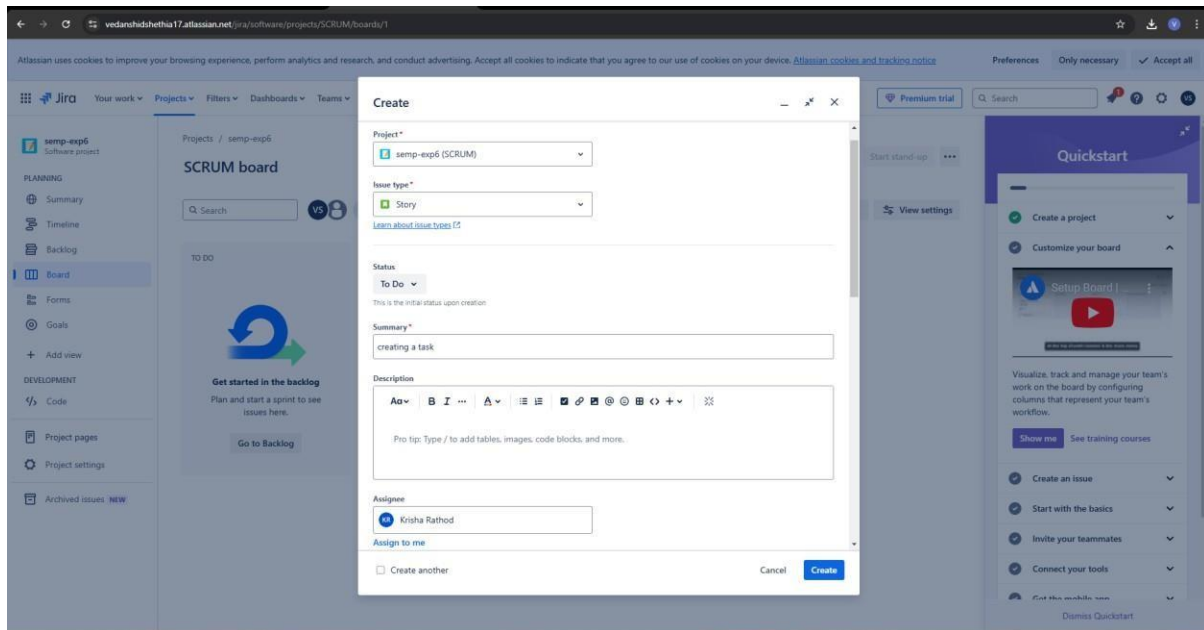
This screenshot shows the Jira interface for a project named 'scrum123'. The main view is the 'SCRUM board', which displays three columns: 'TO DO', 'IN PROGRESS', and 'DONE'. The 'TO DO' column contains a card with a circular arrow icon and the text 'Get started in the backlog'. The left sidebar shows the project navigation menu with options like 'Summary', 'Timeline', 'Backlog', 'Board', 'Forms', 'Goals', 'Code', 'Project pages', and 'Archived issues'. The right sidebar features a 'Quickstart' panel with steps such as 'Create a project', 'Create an issue', 'Start with the basics', and 'Invite your teammates'. The top navigation bar includes links for 'Your work', 'Projects', 'Filters', 'Dashboards', 'Teams', 'Plans', 'Apps', and a 'Create' button.

This screenshot shows the Jira interface for the same project 'scrum123', but the view is set to 'Timeline'. The main view displays a timeline for the issue 'check the typo' (SCRUM-1), which is marked as 'DONE'. The timeline shows the issue's progress across different sprints. The left sidebar is identical to the previous screenshot. The right sidebar shows a 'Quickstart' panel with steps like 'Map out your project goals', 'Identify small chunks of work', 'Monitor and manage risk', and 'Create an issue'. The top navigation bar is also consistent with the previous screenshot.

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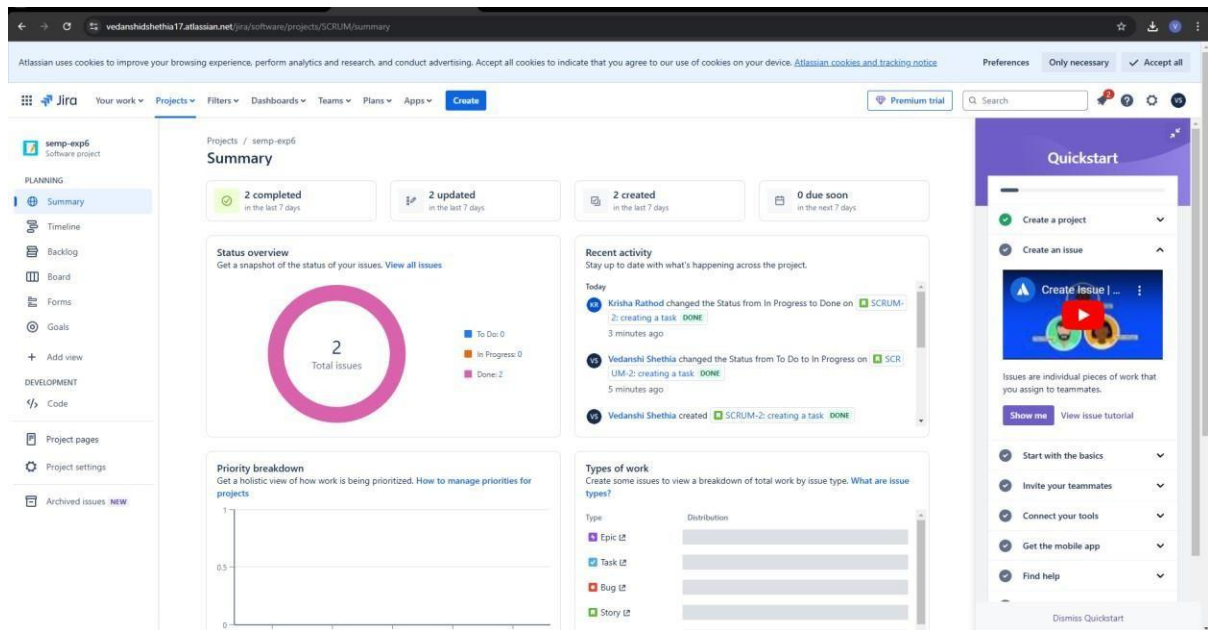


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This screenshot shows the Jira Backlog for project 'semp-exp6'. The interface includes a left sidebar with navigation options like Summary, Timeline, Backlog, Board, Forms, Goals, Code, and Project pages. The main area displays the 'Backlog' for 'SCRUM Sprint 1', which is currently empty. A 'creating a task' sidebar is open on the right, showing fields for 'Add epic', 'Description', 'Confluence content', and 'Pinned fields'. The 'Assignee' field is set to 'Krishna Rathod'.

This screenshot shows the Jira Summary view for project 'scrum123'. The interface includes a left sidebar with navigation options like Summary, Timeline, Backlog, Board, Forms, Goals, Code, and Project pages. The main area displays the 'Summary' for 'scrum123', which includes a 'Status overview' section showing 2 completed issues, 2 updated issues, 2 created issues, and 0 due soon issues. A 'Recent activity' section shows a list of recent changes. A 'Priority breakdown' section shows a bar chart of issue priorities. A 'Types of work' section shows a table of issue types and their distribution. A 'Quickstart' sidebar is open on the right, showing a 'Create a project' button and a 'Create an issue' button.

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Conclusion

Jira is a powerful, flexible, and highly customizable project management tool that has become the go-to solution for Agile teams, particularly in software development. With its support for Scrum, Kanban, and other methodologies, Jira enables teams to organize, prioritize, and track work efficiently. Through its rich set of features, customizable workflows, and seamless integrations with other tools, Jira helps teams improve collaboration, streamline processes, and deliver high-quality projects on time.