

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.

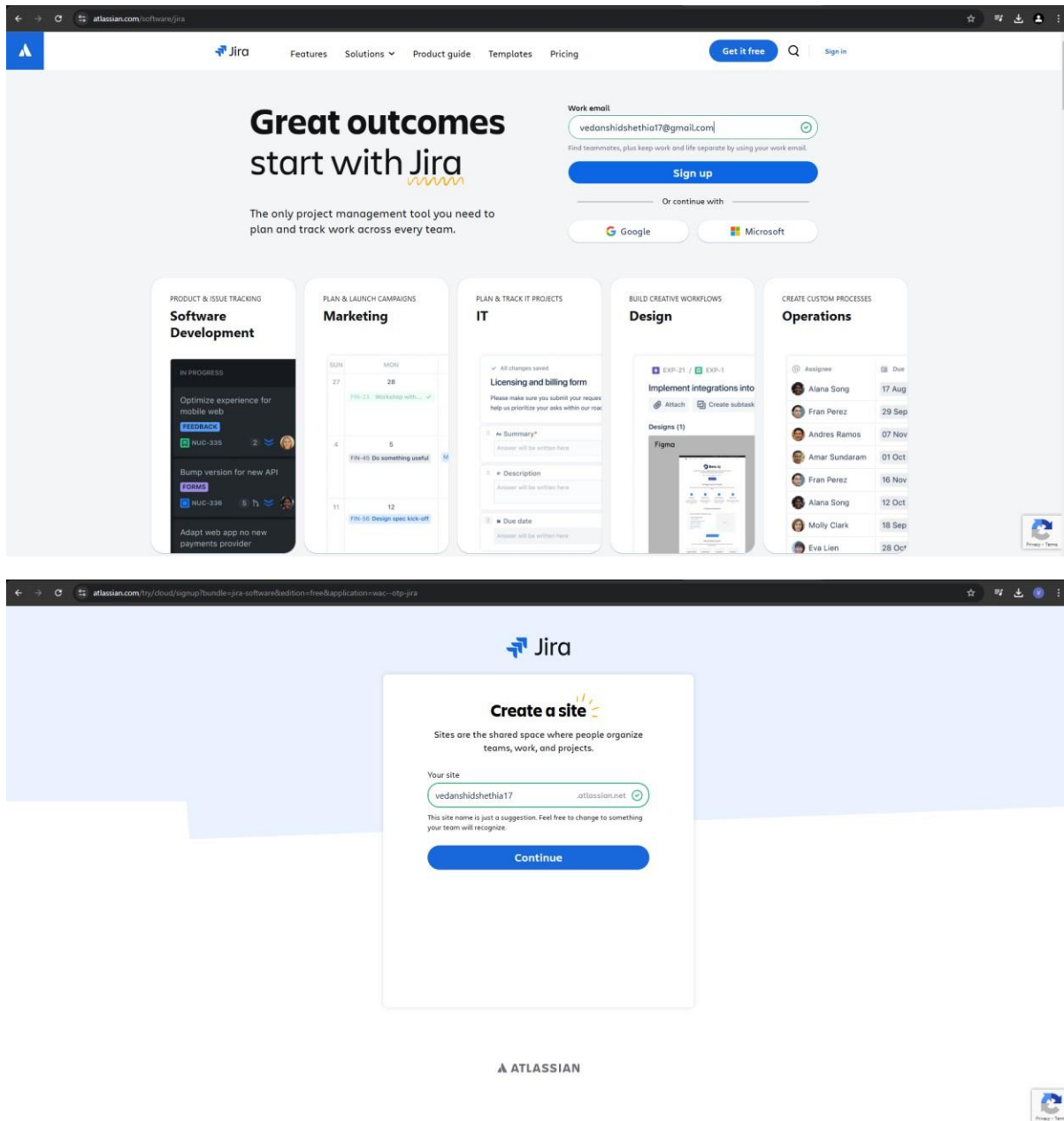
Implementation:

JIRA Account Creation:

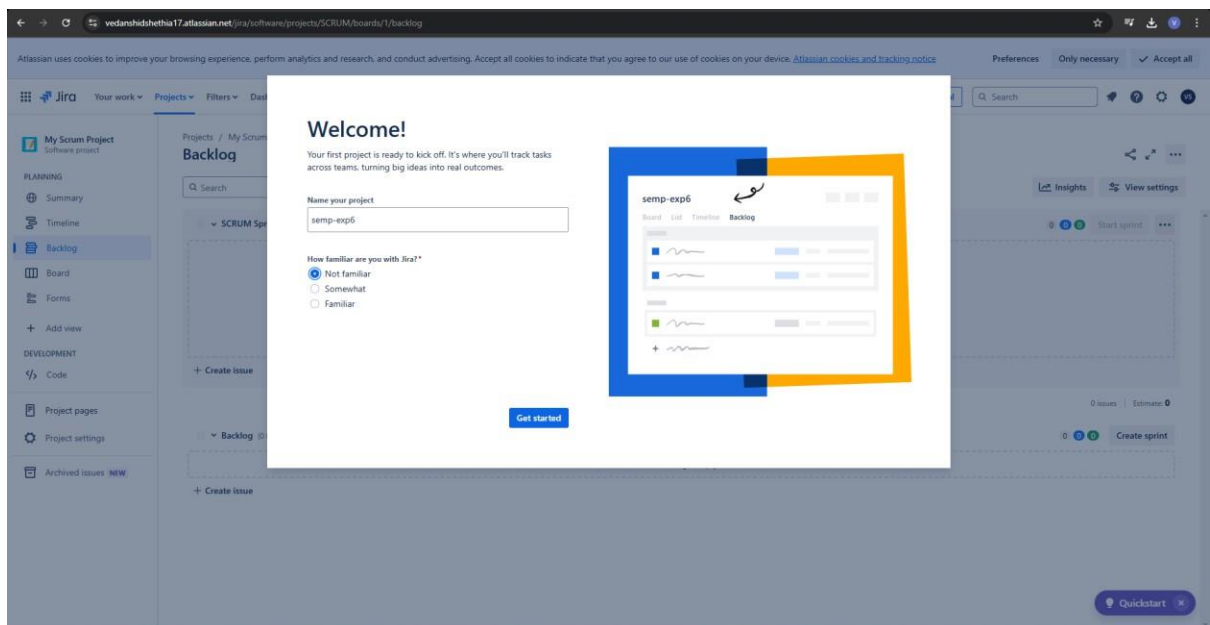
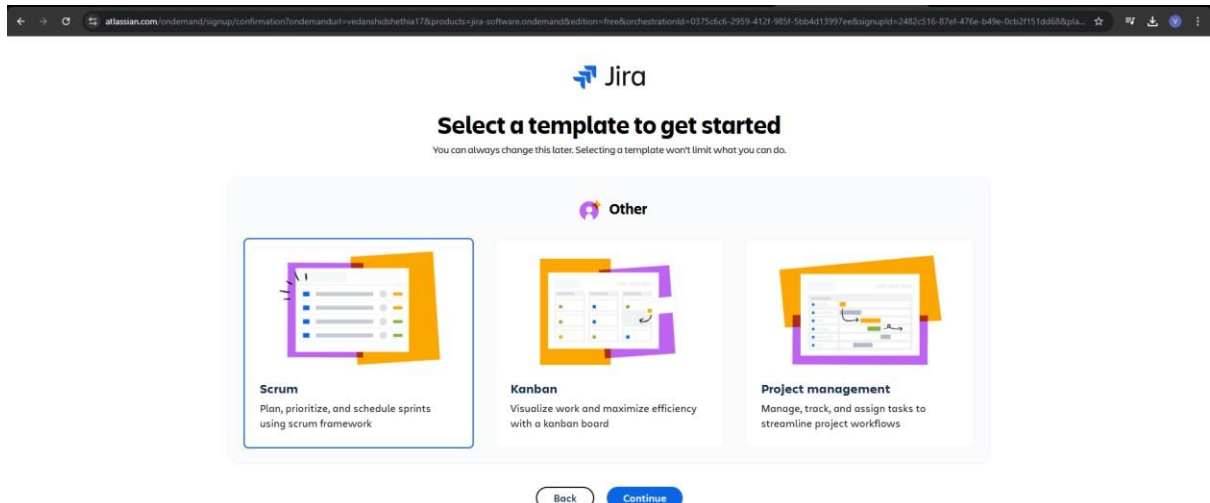
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1. Open atlassian.com webpage
2. Select products and click on Jira Software
3. Click on “Get it free”
4. Select Continue with Google

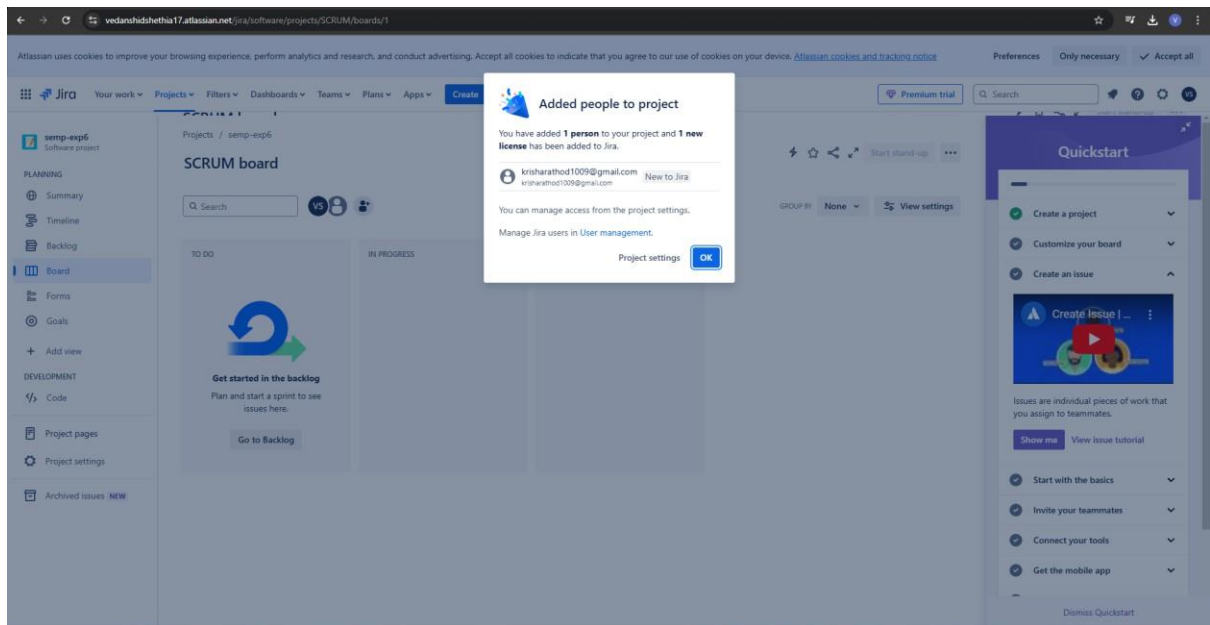
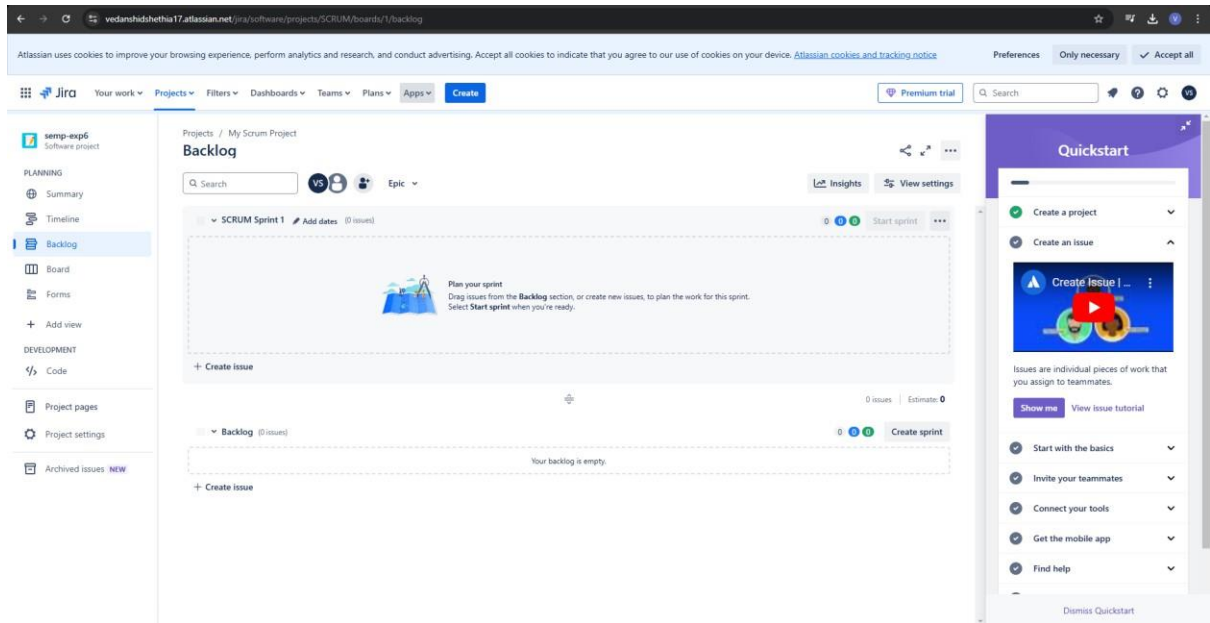
Output:



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The image displays two screenshots from the Jira software interface.

The top screenshot shows the Jira web application. The browser address bar indicates the URL: `vedanshishethia17@atlassian.net/jira/software/projects/SCRUM/board/1`. The page header includes a cookie consent banner, navigation tabs (Your work, Projects, Filters, Dashboards, Teams, Plans, Apps), and a 'Create' button. The left sidebar lists project navigation options: Summary, Timeline, Backlog, Board (selected), Forms, Add view, Code, Project pages, Project settings, and Archived issues. The main content area is titled 'SCRUM board' for project 'semp-exp6'. It features three columns: 'TO DO' with a 'Get started in the backlog' card, 'IN PROGRESS', and 'DONE'. A 'Quickstart' sidebar on the right offers guided actions like 'Create a project', 'Customize your board', and 'Create an issue'.

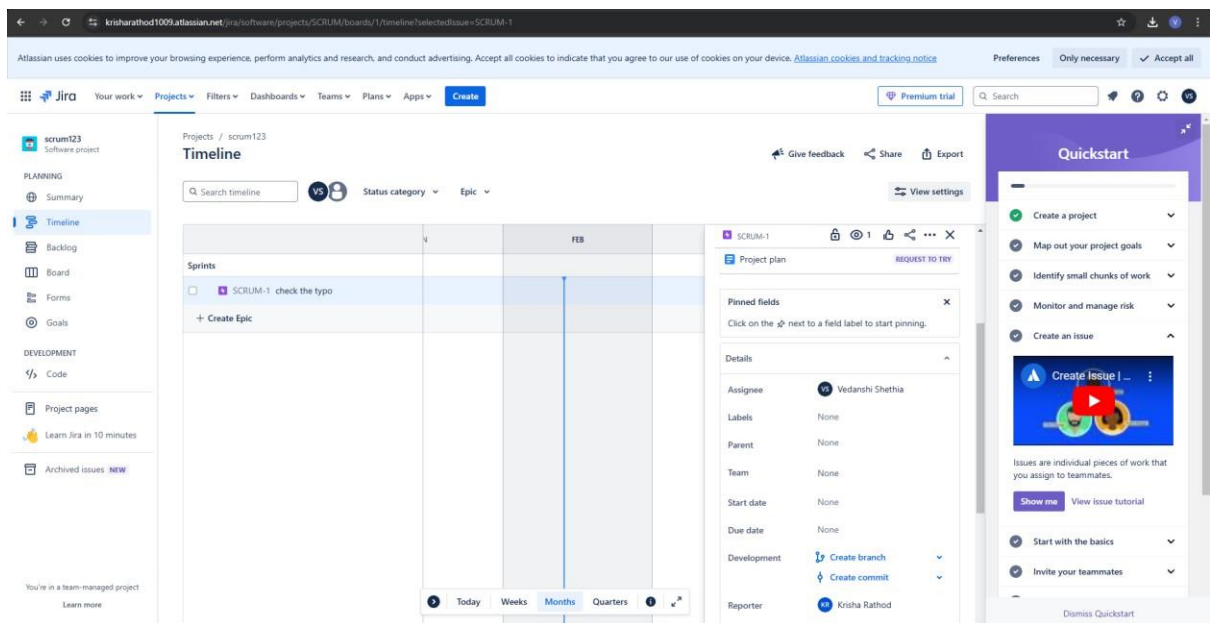
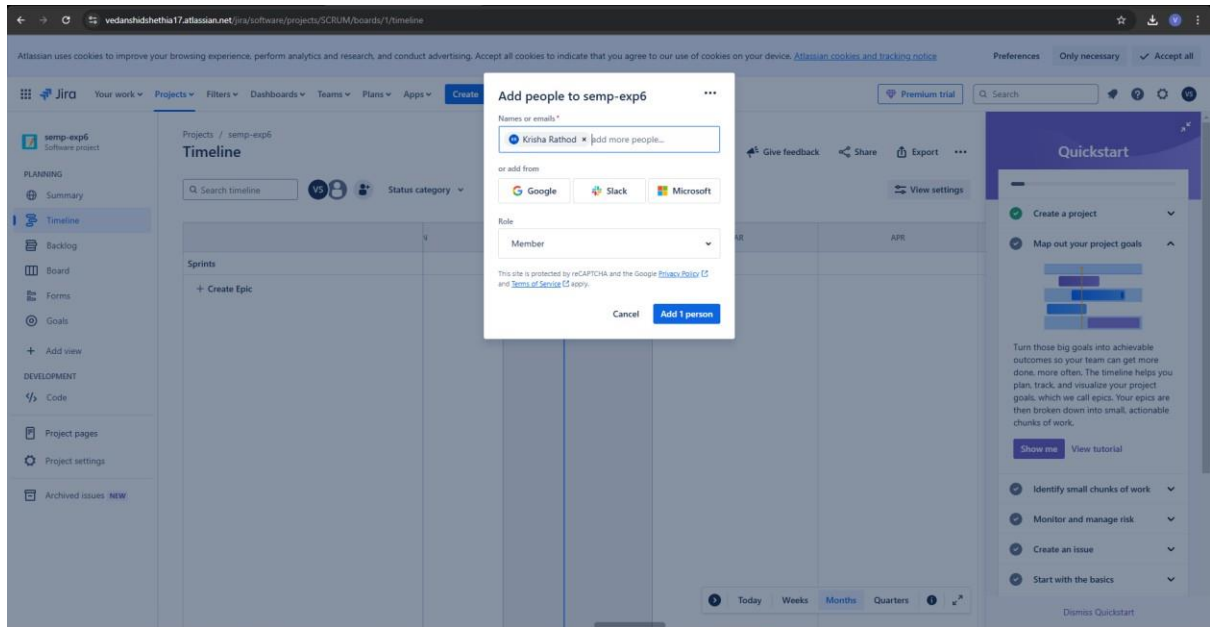
The bottom screenshot is an email invitation from Atlassian. The subject line is 'Admin invited you to join them in Jira'. The email body contains the Jira logo, the heading 'Admin invited you to join them in Jira', and a brief description of Jira as a project and issue tracking tool. A blue 'Accept Invite' button is prominently displayed. The footer of the email states 'This message was sent to you by Atlassian Cloud' and includes the Atlassian logo. The email interface shows the sender as 'Atlassian' and the time as '9:22 AM (1 minute ago)'.

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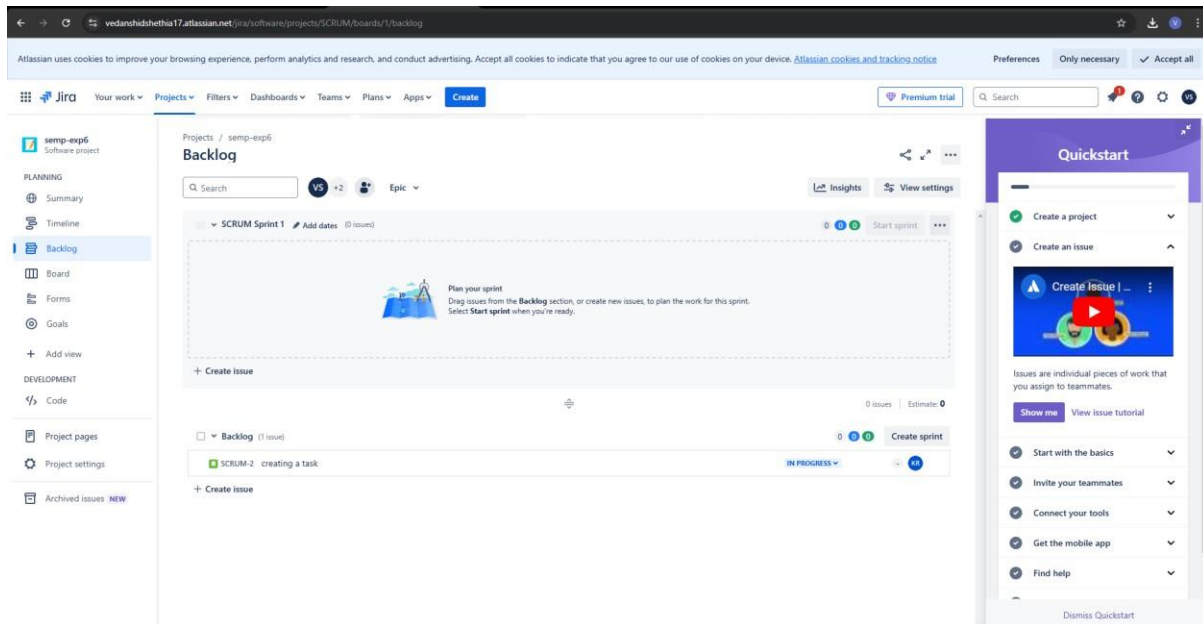
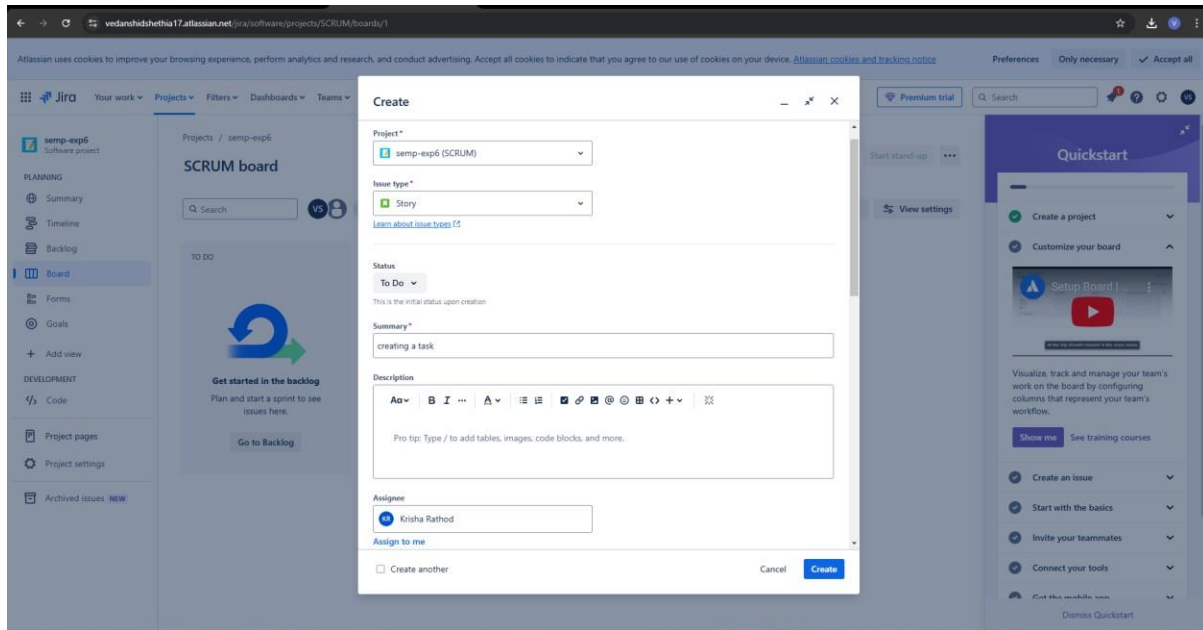
This screenshot shows the Jira SCRUM board for a project named 'scrum123'. The interface includes a left sidebar with navigation options like 'Summary', 'Timeline', 'Backlog', 'Board', 'Forms', 'Goals', 'Code', 'Project pages', and 'Archived issues'. The main area displays the SCRUM board with columns for 'TO DO', 'IN PROGRESS', and 'DONE'. A 'Get started in the backlog' card is visible in the 'TO DO' column. The right sidebar features a 'Quickstart' section with links to 'Create a project', 'Create an issue', 'Start with the basics', 'Invite your teammates', 'Connect your tools', 'Get the mobile app', 'Find help', 'Discover what else is included', and 'Explore Premium features'.

This screenshot shows the Jira Timeline view for the same project 'scrum123'. The left sidebar is similar to the SCRUM board view. The main area displays a timeline view with a 'Sprints' section showing a sprint named 'SERUM-1 check the typo' in a 'DONE' status. The right sidebar features a 'Quickstart' section with links to 'Create a project', 'Map out your project goals', 'Identify small chunks of work', 'Monitor and manage risk', 'Create an issue', 'Start with the basics', and 'Invite your teammates'. A detailed view of the issue 'check the typo' is shown on the right, including fields for 'Description', 'Confluence content', 'Pinned fields', 'Details', and 'Assignee' (Vedanshi Shethia).

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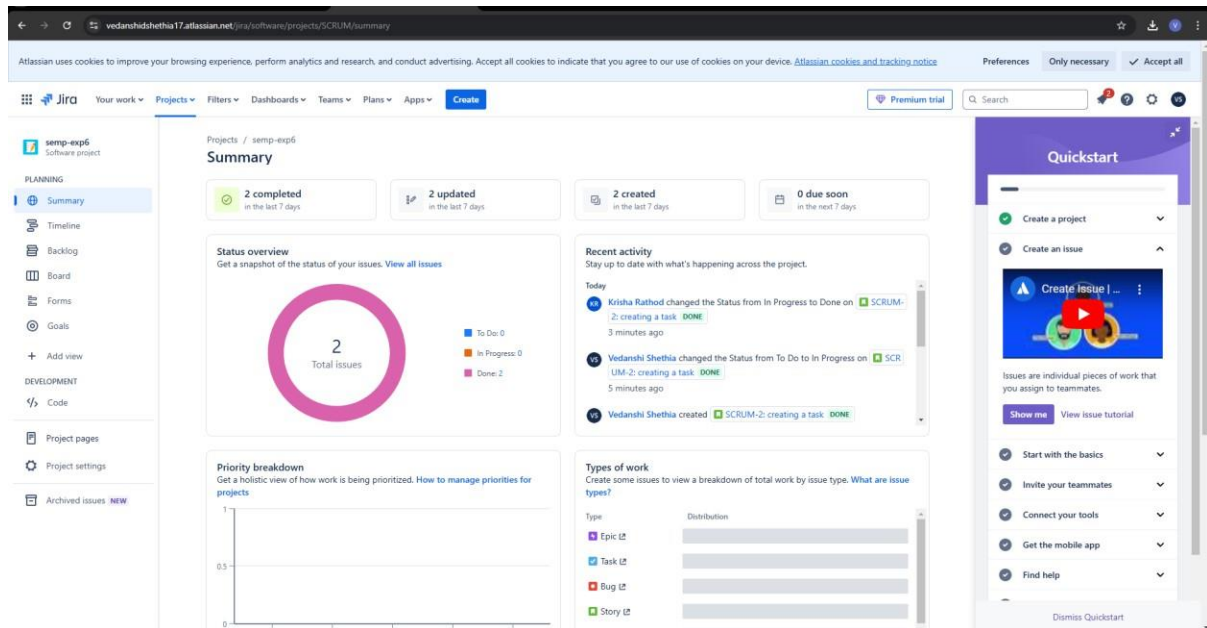
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This screenshot shows the Jira Backlog for project 'semp-exp6'. The left sidebar contains navigation options: Planning (Summary, Timeline, Backlog, Board, Forms, Goals), Development (Code), and Project pages (Archived issues). The main area displays the 'SCRUM Sprint 1' backlog with a 'creating a task' issue. A right-hand panel titled 'creating a task' includes fields for 'Add epic', 'Done', 'Improve issue', 'Description', 'Confluence content', 'Pinned fields', and 'Details' (Assignee: Krishna Rathod).

This screenshot shows the Jira Summary view for project 'scrum123'. The left sidebar is identical to the previous view. The main area features a 'Summary' section with statistics: 2 completed, 2 updated, 2 created, and 0 due soon. It includes a 'Status overview' donut chart showing 2 total issues (To Do: 0, In Progress: 0, Done: 2), a 'Recent activity' feed, a 'Priority breakdown' chart, and a 'Types of work' section. A 'Quickstart' panel on the right offers guides for creating projects, issues, and using Jira features.



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.