

**Department of Computer Engineering**

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

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

<b>Practical No:</b>	2
<b>Title:</b>	<b>Implementing Project Using Scrum method on JIRA Tool</b>
<b>Date of Performance:</b>	01-08-23
<b>Roll No:</b>	9639
<b>Team Members:</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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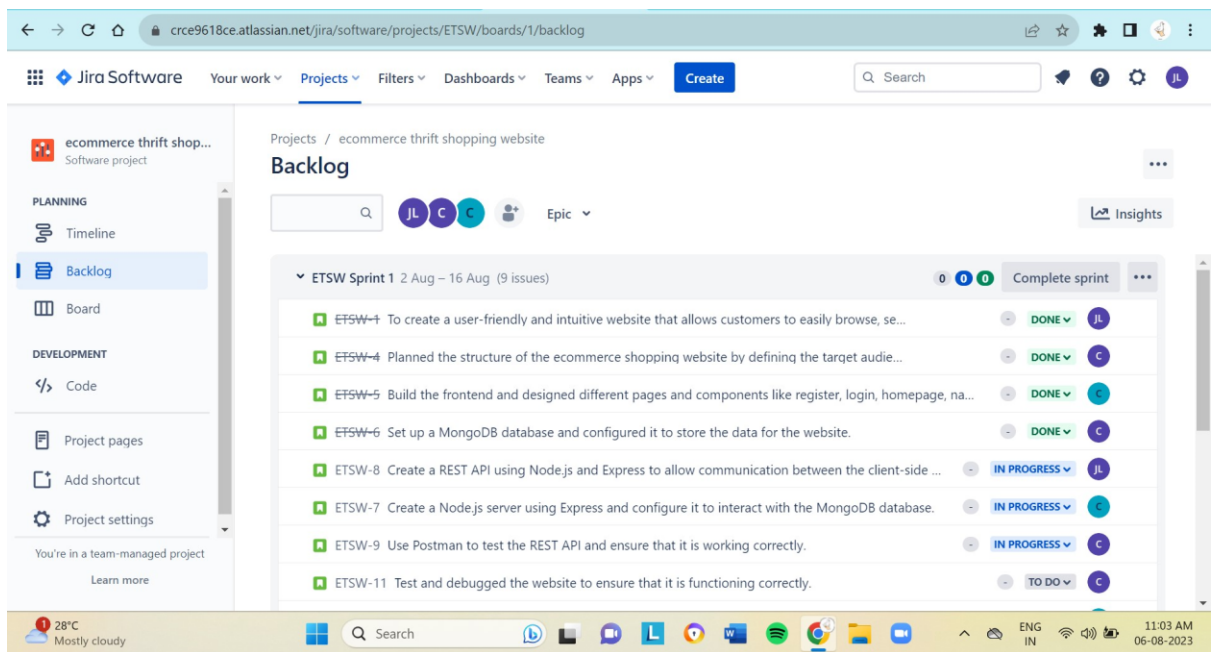
**Signature of the Teacher:**

1) Users in the project:

## Backlog

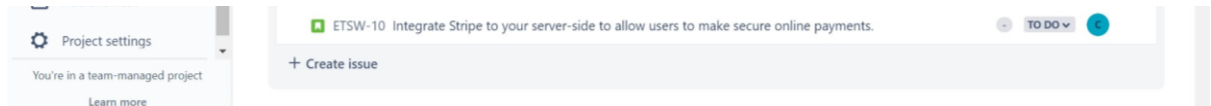


2) Issues:

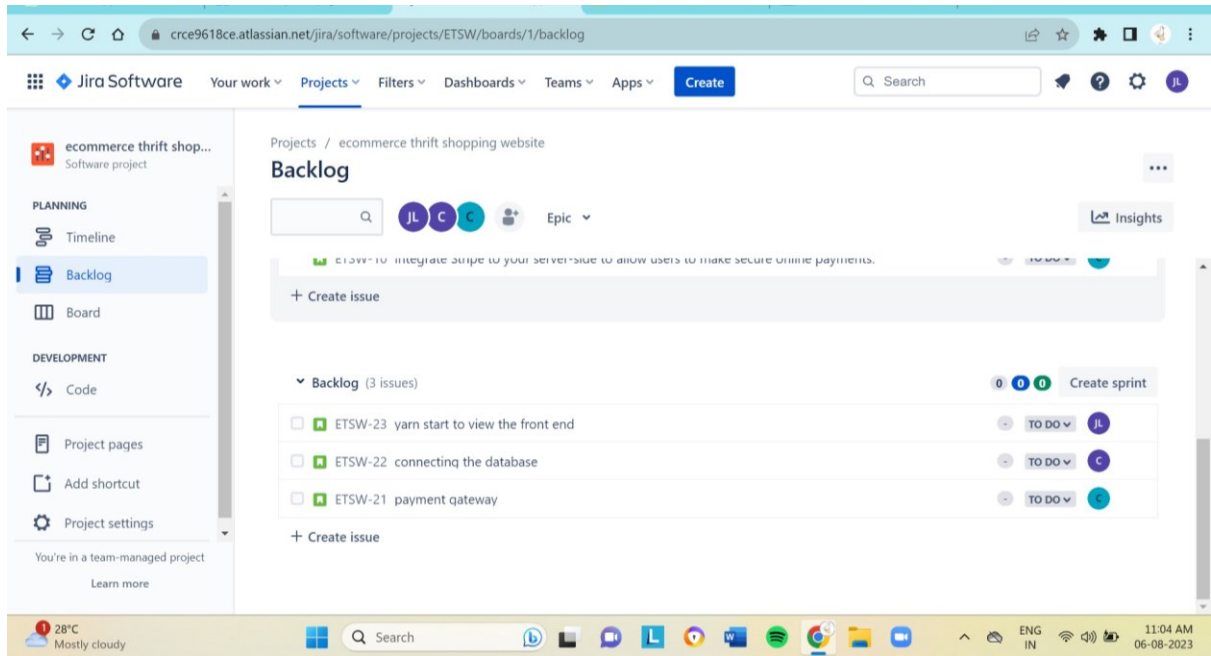


The screenshot displays the Jira Software interface for a project named 'ecommerce thrift shopping website'. The 'Backlog' view is active, showing a list of issues for 'ETSW Sprint 1' (Aug 2 - 16 Aug) with 9 issues. The issues are categorized by status: DONE, IN PROGRESS, and TO DO. The issues are assigned to users JL, C, and C.

Issue ID	Description	Status	Assignee
ETSW-3	To create a user-friendly and intuitive website that allows customers to easily browse, se...	DONE	JL
ETSW-4	Planned the structure of the ecommerce shopping website by defining the target audie...	DONE	C
ETSW-5	Build the frontend and designed different pages and components like register, login, homepage, na...	DONE	C
ETSW-6	Set up a MongoDB database and configured it to store the data for the website.	DONE	C
ETSW-8	Create a REST API using Node.js and Express to allow communication between the client-side ...	IN PROGRESS	JL
ETSW-7	Create a Node.js server using Express and configure it to interact with the MongoDB database.	IN PROGRESS	C
ETSW-9	Use Postman to test the REST API and ensure that it is working correctly.	IN PROGRESS	C
ETSW-11	Test and debugged the website to ensure that it is functioning correctly.	TO DO	C



### 3) Backlog:



### 4) Epic:

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Jira Software Your work Projects Filters Dashboards Teams Apps Create Search

ecommerce thrift shop... Software project

PLANNING Timeline Backlog Board

DEVELOPMENT Code Project pages Add shortcut Project settings

You're in a team-managed project Learn more

Projects / ecommerce thrift shopping website

Backlog

Epic

Issues without epic

- Create a Node.js server using Express and configure it to interact with the MongoDB database.
- Create a REST API using Node.js and Express to allow communication between the client-side and

+ Create epic

ETSW Sprint 1 2 Aug - 16 Aug (9 issues) 0 0 0 Complete sprint

- ETSW-1 To create a user-friendly and intuitive website that allo... DONE JL
- ETSW-4 Planned the structure of the ecommerce shopping web... DONE C
- ETSW-5 Build the frontend and designed different pages and c... DONE C
- ETSW-6 Set up a MongoDB database and configured it to store... DONE C
- ETSW-8 Create a REST API using Node.js and Express to ... IN PROGRESS JL
- ETSW-7 Create a Node.js server using Express and config... IN PROGRESS C
- ETSW-9 Use Postman to test the REST API and ensure th... IN PROGRESS C
- ETSW-11 Test and debugged the website to ensure that it is fu... TO DO C

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Backlog

Epic

Issues without epic

- Create a REST API using Node.js and Express to allow communication between the client-side and server-side of the application.
- Integrate Stripe to your server-side to allow users to make secure online payments.

+ Create epic

ETSW Sprint 1 2 Aug - 16 Aug (9 issues) 0 0 0 Complete sprint

- ETSW-1 To create a user-friendly and intuitive website that allo... DONE JL
- ETSW-4 Planned the structure of the ecommerce shopping web... DONE C
- ETSW-5 Build the frontend and designed different pages and c... DONE C
- ETSW-6 Set up a MongoDB database and configured it to store... DONE C
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- ETSW-7 Create a Node.js server using Express and config... IN PROGRESS C
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- ETSW-11 Test and debugged the website to ensure that it is fu... TO DO C

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5) Board:

Assigned to user1:

crce9618ce.atlassian.net/jira/software/projects/ETSW/boards/1

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ETSW Sprint 1

7 days remaining Complete sprint

GROUP BY Assignee Insights

TO DO 2 IN PROGRESS 3 DONE 4

Jenny Lopes 2 issues

Create a REST API using Node.js and Express to allow communication between the client-side and server-side of the application. ETSW-8

To create a user-friendly and intuitive website that allows customers to easily browse, search, and purchase second-hand or used items. ETSW-1

crce.9627.ce 4 issues

Test and debugged the website to ensure that it is functioning correctly. ETSW-11

Use Postman to test the REST API and ensure that it is working correctly. ETSW-9

Planned the structure of the ecommerce shopping website by defining the target audience, product offerings, and business goals. ETSW-4

Set up a MongoDB database and configured it to store the data for the website. ETSW-6

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Assigned to user2:

crce9618ce.atlassian.net/jira/software/projects/ETSW/boards/1

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PLANNING Timeline Backlog Board

DEVELOPMENT Code Project pages Add shortcut Project settings

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Projects / ecommerce thrift shopping website

ETSW Sprint 1

7 days remaining Complete sprint

GROUP BY Assignee Insights

TO DO 2 IN PROGRESS 3 DONE 4

crce.9627.ce 4 issues

Test and debugged the website to ensure that it is functioning correctly. ETSW-11

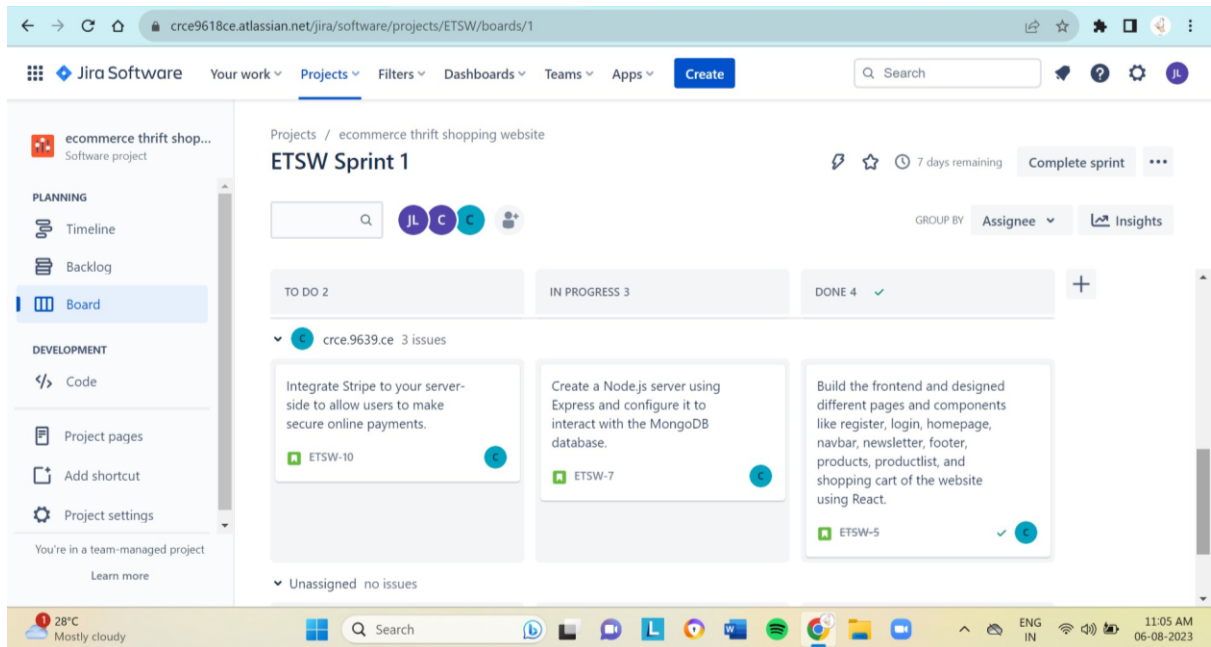
Use Postman to test the REST API and ensure that it is working correctly. ETSW-9

Planned the structure of the ecommerce shopping website by defining the target audience, product offerings, and business goals. ETSW-4

Set up a MongoDB database and configured it to store the data for the website. ETSW-6

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Assigned to user3:



## 6. Postlab:

a) Assessing the effectiveness of the Scrum framework for managing software development projects compared to traditional project management methodologies:

Scrum Framework:

- Advantages:

- Agile and Iterative: Scrum's iterative approach allows for continuous improvement and adaptability to changing requirements.
- Transparency: Daily stand-ups, sprint reviews, and retrospectives promote open communication and visibility.
- Empowerment: Self-organizing teams are encouraged to make decisions and take ownership of their work.
- Early Deliverables: Frequent releases in short sprints enable stakeholders to see progress early on.

- Limitations:

- Lack of Predictability: The flexible nature of Scrum can make it challenging to provide precise timelines and predict project outcomes.

- Incomplete Documentation: Scrum focuses on working software over comprehensive documentation, which may lead to less documentation.

#### Traditional Project Management Methodologies:

##### - Advantages:

- Predictability: Emphasis on detailed planning and defined processes allows for better predictability in terms of timelines and deliverables.
- Formal Structure: Traditional methodologies provide a structured framework for managing projects.
- Documentation: Comprehensive documentation ensures clear project understanding and knowledge transfer.

##### - Limitations:

- Rigid and Less Adaptive: Traditional methods can be less adaptable to changing requirements and customer feedback.
- Limited Stakeholder Involvement: Stakeholders might not be actively involved until the project is completed, leading to potential misalignments.
- Hierarchical: Hierarchical decision-making may limit team autonomy and creativity.

Overall, the effectiveness of the Scrum framework depends on the project's nature, team dynamics, and stakeholder involvement. Scrum is well-suited for complex, rapidly changing projects that require flexibility and constant feedback. Traditional methods might be more suitable for projects with well-defined requirements and less uncertainty.

b) Analyzing a Sprint Backlog in JIRA and identifying potential bottlenecks or issues that might hinder the team's progress during the sprint:

A Sprint Backlog in JIRA typically consists of user stories, tasks, and their status. Potential bottlenecks or issues that could hinder progress include:

1. Overloaded Resources: If team members are assigned too many tasks, it can lead to delays and reduced quality of work.
2. Dependencies: If tasks have dependencies on other tasks, delays in one task might cause a domino effect on subsequent tasks.



3. **Blocked Tasks:** Tasks that are waiting for external inputs or decisions might lead to delays if the blockage persists.
4. **Unclear Requirements:** Ambiguous or unclear user stories can result in misunderstandings and rework.
5. **Scope Creep:** Frequent additions to the sprint backlog during the sprint can disrupt the team's focus and productivity.
6. **Lack of Skills:** If team members lack the necessary skills or expertise for certain tasks, it can impact the progress.
7. **Inadequate Communication:** Lack of effective communication between team members can lead to misunderstandings and delays.

To address these issues, the Scrum Master should conduct regular stand-up meetings, address blockers promptly, ensure balanced work distribution, and collaborate with stakeholders to clarify requirements.

c) Evaluating the role of the Scrum Master in handling conflicts within the development team and resolving impediments to maintain a smooth project flow:

The Scrum Master plays a crucial role in promoting a collaborative and harmonious environment within the development team. Their responsibilities include:

1. **Conflict Resolution:** Identifying and addressing conflicts or disagreements among team members to maintain a positive team dynamic.
2. **Removing Impediments:** Proactively identifying and resolving impediments that hinder the team's progress.
3. **Facilitating Meetings:** Organizing and facilitating Scrum ceremonies such as daily stand-ups, sprint reviews, and retrospectives.
4. **Coaching and Support:** Providing coaching and support to the team on Scrum practices and Agile principles.

5. Shielding the Team: Protecting the team from external distractions and unnecessary disruptions during the sprint.

6. Improving Processes: Continuously seeking opportunities to improve team productivity and efficiency.

The Scrum Master acts as a servant-leader, guiding the team to self-organize and make decisions while ensuring adherence to Scrum principles. By addressing conflicts, removing impediments, and supporting the team, the Scrum Master enables a smooth project flow and fosters a productive and collaborative work environment.