Project Planning Phase
Project Planning Template (Product Backlog, Sprint Planning, Stories, Story points)

Product Backlog, Sprint Schedule, and Estimation (4 Marks)

Sprint	Functional Requirement (Epic)	User Story Number	User Story / Task	Story Points	Priority	Team Members
Sprint 1	Project setup & Infrastructure	USN-1	Set up the development environment with the necessary tools and frameworks for the traffic volume estimation project.	1	High	Aayushi Mittal
Sprint 1	Dataset Collection	USN-2	Gather a comprehensive dataset containing real-time traffic data and relevant contextual variables.	1	High	Ananya Narayan
Sprint 2	Data Preprocessing	USN-3	Preprocess the gathered dataset by cleaning, organizing, and structuring it for machine learning.	2	High	Sameeksha Nanda
Sprint 2	Model Evaluation	USN-4	Explore and evaluate different machine learning models to determine the most effective for traffic volume estimation.	2	High	Siri R Kulakarni
Sprint 3	Model Training	USN-5	Train the selected machine learning model using the preprocessed traffic dataset and monitor its performance on the validation set.	5	High	Siri R Kulakarni
Sprint 3	Model Enhancement and Optimization	USN-6	Implement optimization techniques to enhance model accuracy and robustness for real-time traffic predictions.	3	Medium	Ananya Narayan
Sprint 4	Model Deployment & Integration	USN-7	Deploy the trained machine learning model as an API or service for traffic detection. Integrate the model's API into a user-friendly interface for traffic analysis.	4	Medium	Aayushi Mittal

| Sprint 5 | Testing & Quality Assurance | USN-8 | Conduct thorough testing of the model and interface. Identify and report any issues or bugs. Optimize model performance based on feedback and testing results. | 2 | Medium | Sameeksha Nanda |

Project Tracker, Velocity & Burndown Chart: (4 Marks)

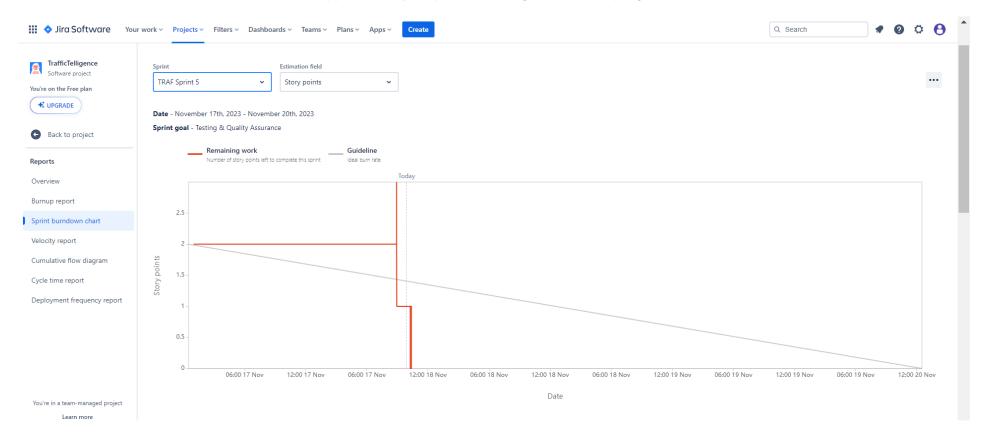| Sprint	Total Story Points	Duration	Sprint Start Date	Sprint End Date (Planned)	Story Points Completed (as on Planned End Date)	Sprint Release Date (Actual)
Sprint-1	2	2 Days	30 Oct 2023	31 Oct 2023	20	31 Oct 2023
Sprint-2	4	4 Days	1 Nov 2023	4 Nov 2023		
Sprint-3	8	7 Days	5 Nov 2023	12 Nov 2023		
Sprint-4	4	3 Days	13 Nov 2023	16 Nov 2023		
Sprint-5	2	4 Days	17 Nov 2023	20 Nov 2023		

Velocity:

Imagine we have a 20-day sprint duration, and the velocity of the team is 20 (points per sprint). Let's calculate the team's average velocity (AV) per iteration unit (story points per day)

$$AV = \frac{sprint\ duration}{velocity} = \frac{20}{10} = 2$$

AV = 20/20 = 1

Burndown Chart:

A burn down chart is a graphical representation of work left to do versus time. It is often used in agile software development methodologies such as Scrum. However, burn down charts can be applied to any project containing measurable progress over time.

https://www.visual-paradigm.com/scrum/scrum-burndown-chart/

https://www.atlassian.com/agile/tutorials/burndown-charts

Reference:

https://www.atlassian.com/agile/project-management

https://www.atlassian.com/agile/tutorials/how-to-do-scrum-with-jira-software

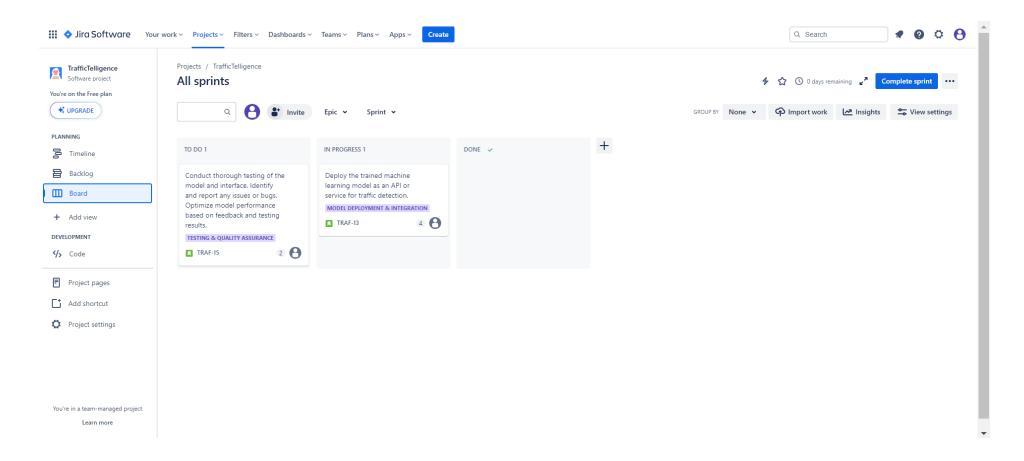**https://www.atlassian.com/agile/tutorials/epics**

https://www.atlassian.com/agile/tutorials/sprints

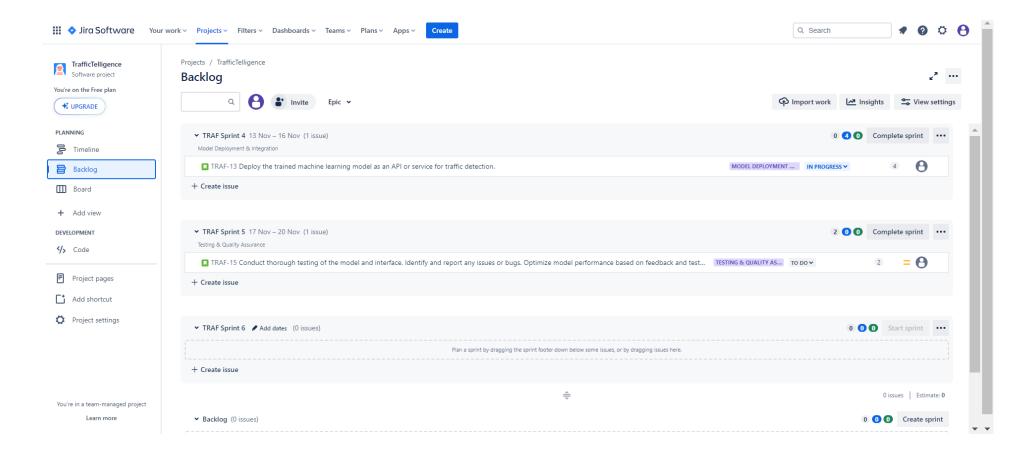**https://www.atlassian.com/agile/project-management/estimation**

https://www.atlassian.com/agile/tutorials/burndown-charts

BOARD

We have completed sprint 1, 2 and 3. So you can see SPRINT 3 and 4 on BOARD.

BACKLOG SECTION

TIMELINE