Project Planning Phase

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

Date	27th January 2025
Team ID	LTVIP2025TMID41765
Project Name	TrafficTelligence : Advanced Traffic Volume Estimation with Machine Learning
Maximum Marks	5 Marks

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

Use the below template to create product backlog and sprint schedule

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 required tools and frameworks to start the project	1	High	I Asha
Sprint-2	Data collection	USN-2	Gather a diverse dataset of Date, time, holidays and climatic conditions.	2	High	Guttla Sruthi
Sprint-2	data preprocessing	USN-3	Preprocess the collected dataset by removing outliers and null values etc. Explore and evaluate different deep learning architectures (e.g., Regressions) to select the most suitable model for the project.	3	High	Kaki Dona
Sprint-3	model development	USN-4	train the selected machine learning model using the preprocessed dataset and monitor its performance on the validation set.	4	High	Navuru Akshitha
Sprint-3	Training	USN-5	The data set will be trained with suitable algorithms to improve the robustness and accuracy.	6	medium	Navuru Akshitha
Sprint-4	model deployment & Integration	USN-6	deploy the trained machine learning model as a web service to make it accessible for users. Integrate the model's API into a user-friendly web interface for users to input variables such as date, time, holidays etc and receive predicted volume results.	1	medium	I Asha
Sprint-5	Testing & quality assurance	USN-7	conduct thorough testing of the model and web interface to identify and report any issues or bugs. fine-tune the model hyperparameters and optimize its performance based on user feedback and testing results.	1	medium	Guttla Sruthi Kaki Dona

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	1	3 Days	3 Nov 2023	6 Nov 2023	1	6 June 2025
Sprint-2	5	2 Days	6 Nov 2023	8 Nov 2023	5	8 June 2025
Sprint-3	10	5 Days	8 Nov 2023	13 Nov 2023	10	13 June 2025
Sprint-4	1	5 Days	13 Nov 2023	18 Nov 2023	1	20 June 2025
Sprint-5	1	4 Days	18 Nov 2023	22 Nov 2023	1	21 June 2025

Velocity:

Imagine we have a 29-days 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= 19/3.8 = 5

Burndown Chart:

A burndown 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

Burndown Chart: For the 5th Sprint

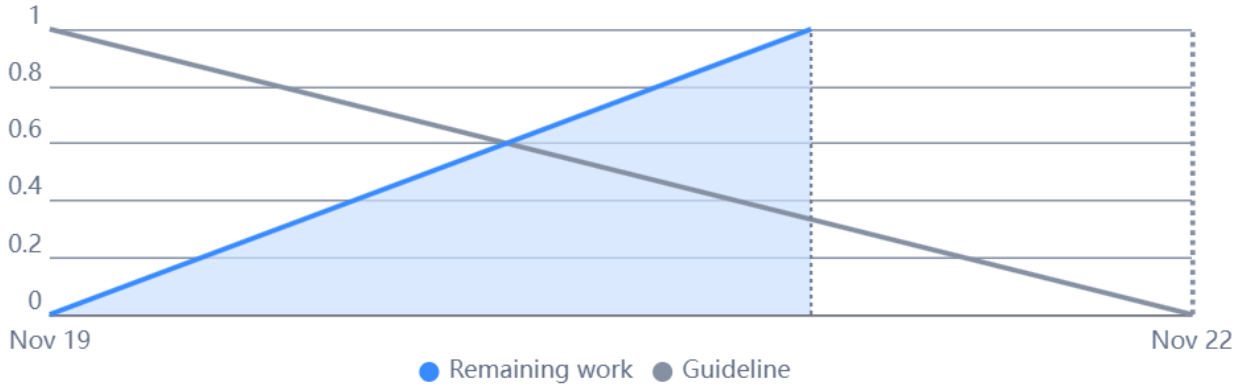
Sprint progress

0% done

Done	In progress	Not started
0%	0%	100%

Sprint burndown

0 points done, 1 point to go

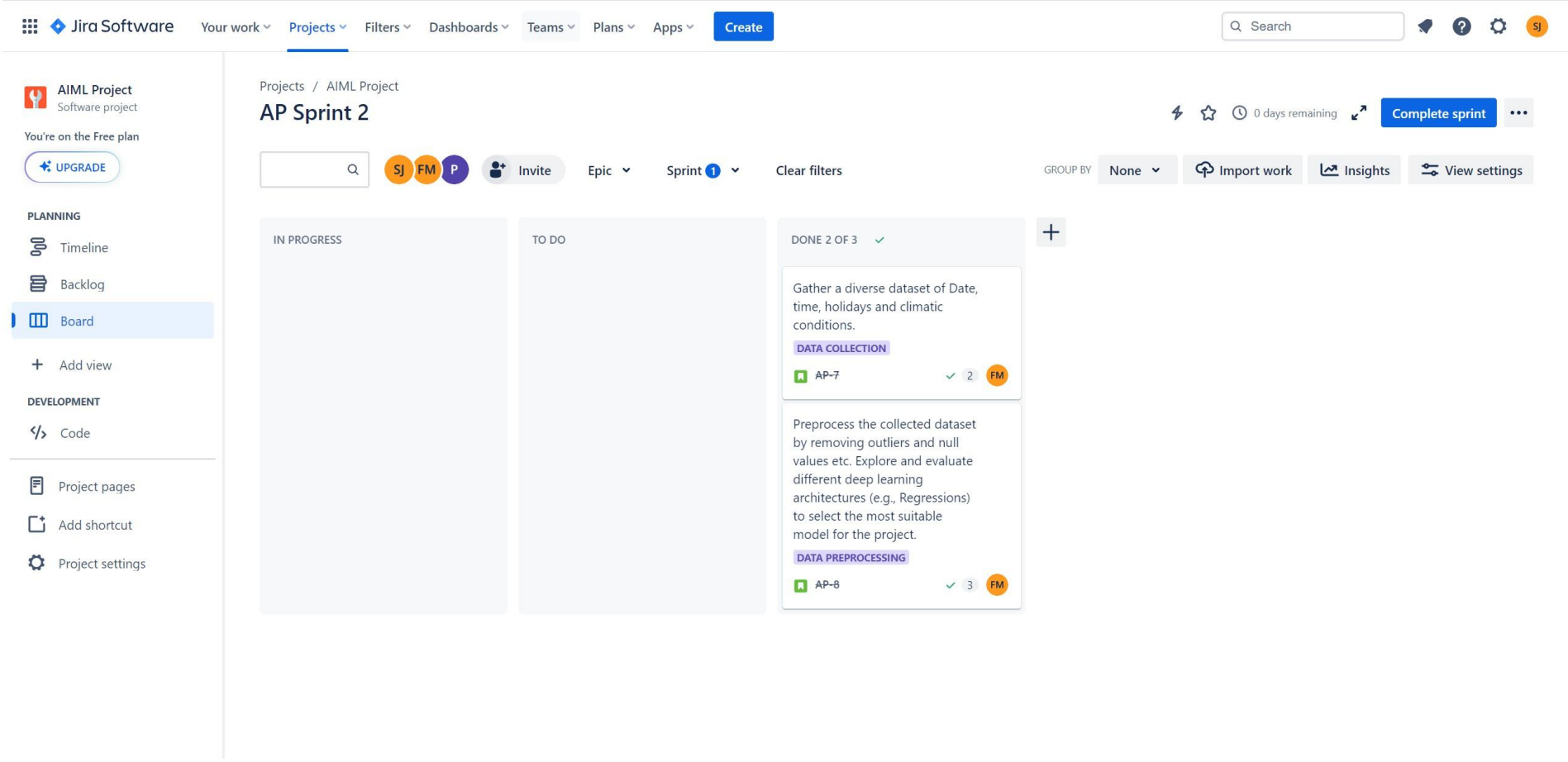


Your sprint scope has increased by **1 point**

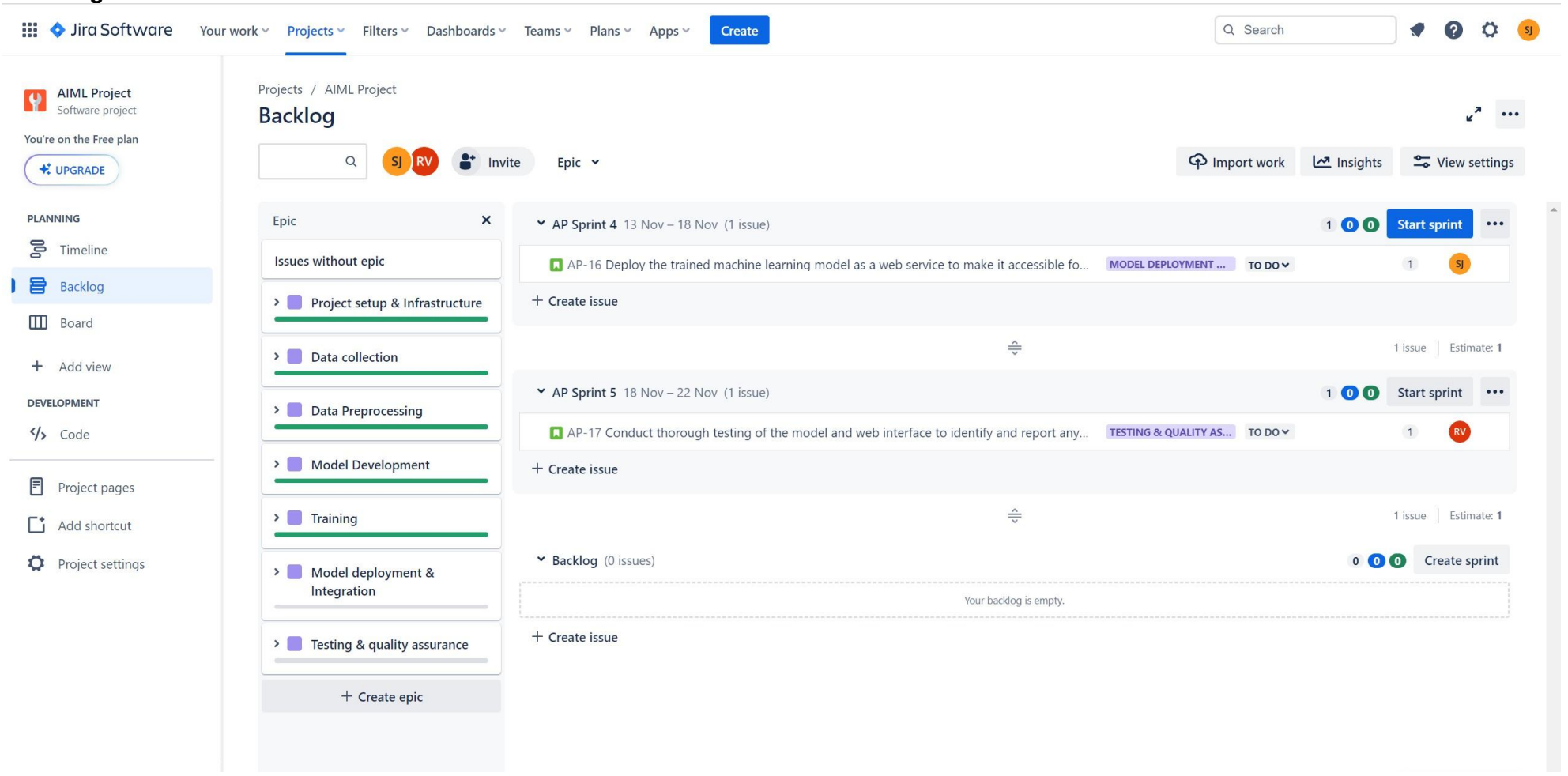
Added	Removed	Modified
0 points	0 points	+ 1 point
1 issue	0 issues	1 issue

Board section.

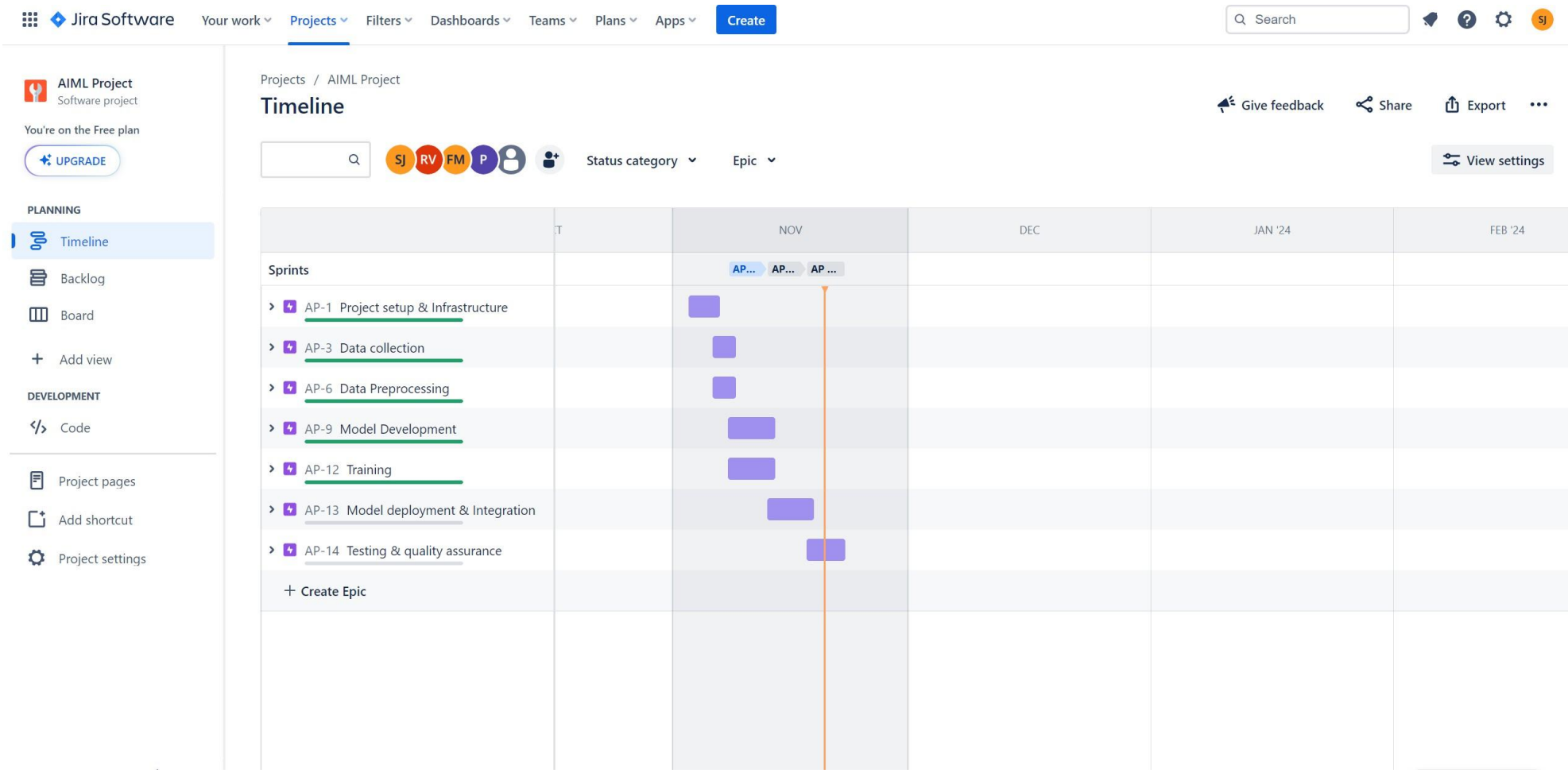
We have completed till sprint 2.



Backlog section



Timeline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Backlog
Board
Add view
DEVELOPMENT
Code
Project pages
Add shortcut
Project settings
Projects / AIML Project
Timeline
Give feedback
Share
Export
Status category
Epic
View settings
NOV
DEC
JAN '24
FEB '24
Sprints
AP-1 Project setup & Infrastructure
AP-3 Data collection
AP-6 Data Preprocessing
AP-9 Model Development
AP-12 Training
AP-13 Model deployment & Integration
AP-14 Testing & quality assurance
Create Epic