

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:

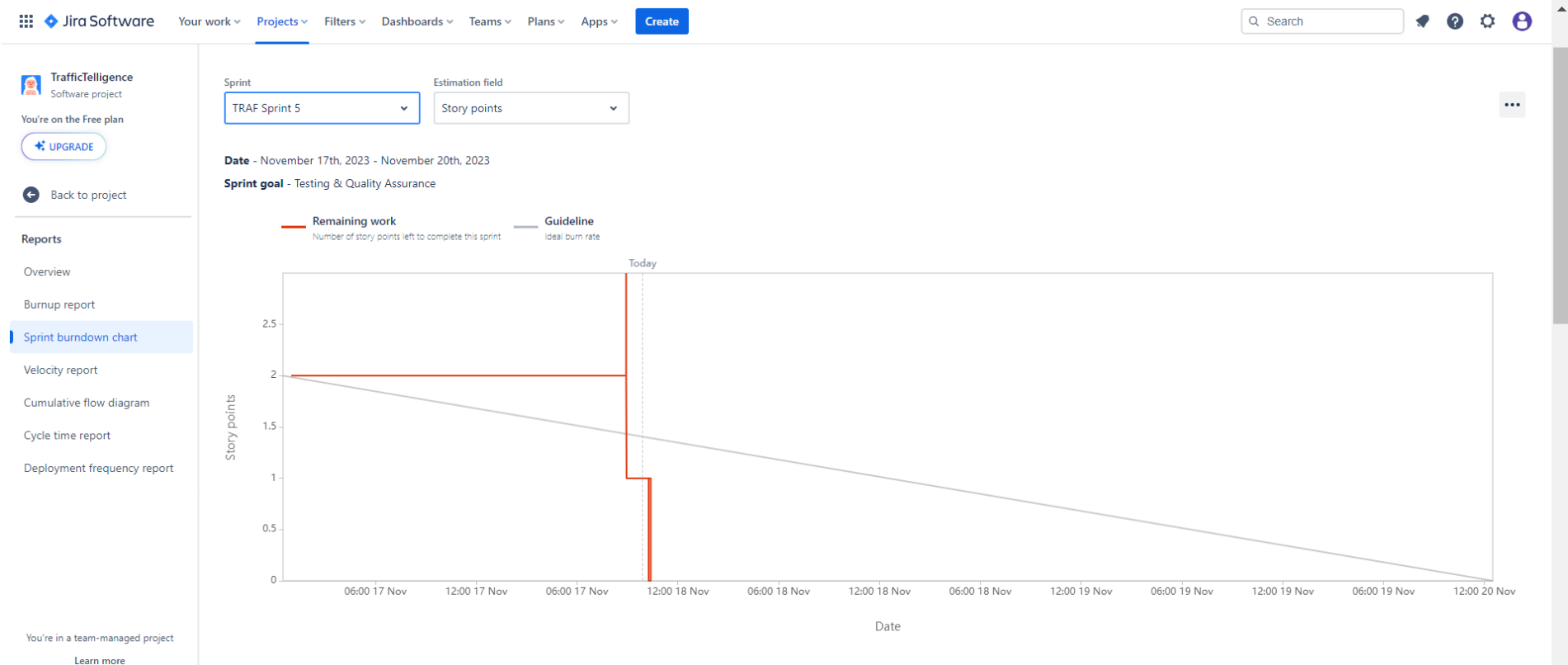
Imagine we have a 20-day sprint duration, and the velocity of the team is 20 (points per sprint). Let's calculate the team's average velocity (AV) per iteration unit (story points per day)

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

$$AV = 20/20 = 1$$

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.

Jira Software Your work Projects Filters Dashboards Teams Plans Apps Create

Search

TrafficTelligence Software project

You're on the Free plan

UPGRADE

PLANNING

- Timeline
- Backlog
- Board

+ Add view

DEVELOPMENT

- Code
- Project pages
- Add shortcut
- Project settings

You're in a team-managed project

Learn more

Projects / TrafficTelligence

All sprints

0 days remaining Complete sprint

GROUP BY None Import work Insights View settings

TO DO 1

Conduct thorough testing of the model and interface. Identify and report any issues or bugs. Optimize model performance based on feedback and testing results.

TESTING & QUALITY ASSURANCE

TRAF-15

IN PROGRESS 1

Deploy the trained machine learning model as an API or service for traffic detection.

MODEL DEPLOYMENT & INTEGRATION

TRAF-13

DONE

BACKLOG SECTION

Jira Software

Your work

Projects

Filters

Dashboards

Teams

Plans

Apps

Create

Search

TrafficTelligence

Software project

You're on the Free plan

UPGRADE

PLANNING

Timeline

Backlog

Board

+ Add view

DEVELOPMENT

Code

Project pages

Add shortcut

Project settings

You're in a team-managed project

Learn more

Projects / TrafficTelligence

Backlog

Invite

Epic

Import work

Insights

View settings

TRAF Sprint 4

13 Nov – 16 Nov

(1 issue)

040

Complete sprint

Model Deployment & Integration

TRAF-13

Deploy the trained machine learning model as an API or service for traffic detection.

MODEL DEPLOYMENT ...

IN PROGRESS

4

+ Create issue

TRAF Sprint 5

17 Nov – 20 Nov

(1 issue)

200

Complete sprint

Testing & Quality Assurance

TRAF-15

Conduct thorough testing of the model and interface. Identify and report any issues or bugs. Optimize model performance based on feedback and test...

TESTING & QUALITY AS...

TO DO

2

+ Create issue

TRAF Sprint 6

Add dates

(0 issues)

000

Start sprint

Plan a sprint by dragging the sprint footer down below some issues, or by dragging issues here.

+ Create issue

0 issues

Estimate: 0

Backlog

(0 issues)

000

Create sprint

TIMELINE

Jira Software

Your work

Projects

Filters

Dashboards

Teams

Plans

Apps

Create

Search

TrafficTelligence

Software project

You're on the Free plan

UPGRADE

PLANNING

Timeline

Backlog

Board

Add view

DEVELOPMENT

Code

Project pages

Add shortcut

Project settings

You're in a team-managed project

Learn more

Projects / TrafficTelligence

Timeline

Invite

Status category

Epic

Give feedback

Share

Export

View settings

	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	1	2	3	4	5	6	7
Sprints	TRAF Sprint 3							TRAF Sprint 4							TRAF Sprint 5																		
TRAFF-1 Project setup & Dataset Collection																																	
TRAFF-2 Set up the development environmen...																																	
TRAFF-3 Gather a comprehensive dataset con...																																	
TRAFF-4 Data Preprocessing & Model Evaluation																																	
TRAFF-5 Preprocess the gathered dataset by c...																																	
TRAFF-6 Explore and evaluate different machi...																																	
TRAFF-7 Model Training & Model Enhancement																																	
TRAFF-8 Train the selected machine learning ...																																	
TRAFF-11 Implement optimization techniques...																																	
TRAFF-12 Model Deployment & Integration																																	
TRAFF-13 Deploy the trained machine l...																																	
TRAFF-14 Testing & Quality Assurance																																	
TRAFF-15 Conduct thorough testing of the m...																																	
+ Create Epic																																	

Today

Weeks

Months

Quarters

ervice. Please check your internet connection and reload to get a reCAPTCHA challenge.