

## Project Planning Phase

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

Date	20 October 2022
Team ID	PNT2022TMID01039
Project Name	Project - Trip Based Modelling of Fuel Consumption in Modern Fleet Vehicles Using Machine Learning
Maximum Marks	8 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	Registration	USN-1	As a user, I can register for the application by entering my email, password, and confirming my password.	5	High	Evangeline Jincy.S.R
Sprint-1		USN-2	As a user, I will receive confirmation email once I have registered for the application	4	High	Likitha.K
Sprint-1		USN-3	As a user, I can register for the application through Facebook	5	Low	Keerthana.k
Sprint-1		USN-4	As a user, I can register for the application through Gmail	2	Medium	Lavanyaa.R
Sprint-1		USN-5	As a user, I can log into the application by entering email & password	4	High	Evangeline Jincy.S.R
Sprint-2	Data pre-processing	USN-6	Once I entered the dashboard, I can give input values for prediction	5	Medium	Likitha.K
Sprint-2		USN-7	After data is received, pre process the data, remove and handle the null values.	6	High	Keerthana.K
Sprint-2		USN-8	separate the independent and dependent variable.	6	High	Lavanyaa.R
Sprint-2		USN-9	Splitting the data into train and test	3	Low	Evangeline Jincy.S.R

Sprint	Functional Requirement (Epic)	User Story Number	User Story / Task	Story Points	Priority	Team Members
Sprint-3		USN-10	Applying the linear regression on the pre processed data	5	Medium	Likitha.K
Sprint-3	Model Building	USN-11	As a user, I can get the visual idea of how the fuel is consumed	5	High	Keerthana.K
Sprint-3		USN-12	As a user, I can see the detailed information of how the fuel is consumed and the prediction of fuel consumption	3	Low	Lavanyaa.R
Sprint-3		USN-13	Build the python flask app	4	Medium	Likitha.K
Sprint-3		USN-14	Build an HTML page	3	Low	Evangeline Jincy.S.R
Sprint-4	Application building	USN-15	Run the application and provide feedback	5	High	Keerthana.K
Sprint-4		USN-16	Train the ML model on IBM cloud	5	High	Lavanyaa.R
Sprint-4		USN-17	As a user, finally I get the results from the trained model after the completion of prediction process	6	Medium	Likitha.K
Sprint-4		USN-18	As a user, I can get guidelines and suggestions to further reduce the fuel consumption	4	Low	Evangeline Jincy.S.R

#### 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	20	6 Days	24 Oct 2022	29 Oct 2022	20	29 Oct 2022
Sprint-2	20	6 Days	31 Oct 2022	05 Nov 2022	20	05 Nov 2022
Sprint-3	20	6 Days	07 Nov 2022	12 Nov 2022	17	
Sprint-4	20	6 Days	14 Nov 2022	19 Nov 2022	5	

**Velocity:**

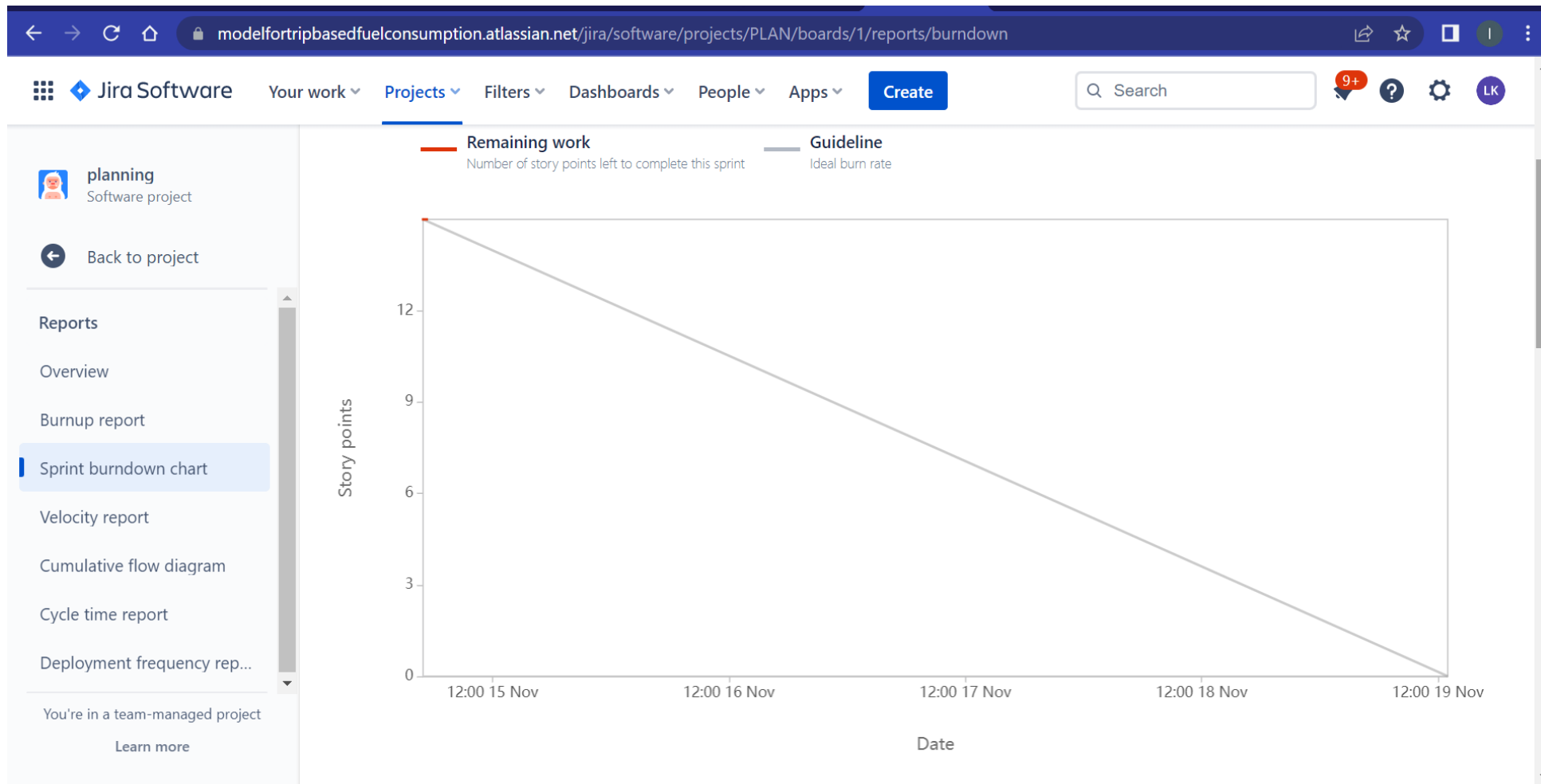
Imagine we have a 10-day sprint duration, and the velocity of the team is 20 (points per sprint). Let's calculate the team's average velocity (AV) per iteration unit (story points per day)

Sprint	Average Velocity
Sprint-1	3.33
Sprint-2	3.33
Sprint-3	3.33
Sprint-4	3.33

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

**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.



Roadmap:

	T	NOV		DEC	
Sprints		sprint 1	sprint 2	sprint 3	sprint 4
> ⚡ PLAN-22 Registration					
> ⚡ PLAN-23 DATA PRE PROCESSING					
> ⚡ PLAN-24 MODEL BUILDING					
> ⚡ PLAN-25 APPLICATION BUILDING					