

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

Date	9 November
Team ID	PNT2022TMID13378
Project Name	Smart Solution For Railway
Maximum Marks	8 Marks

**Product Backlog, Sprint Schedule, and Estimation**

1. What is product backlog burndown chart?

The product burndown chart is the chart that is plotted with the story points of all the user stories in the y-axis and the sprint numbers on the x-axis. It provides the product backlog visualization of completed requirements over time

2. Sprint Schedule

one hand, agile sprints can be highly effective and collaborative. At the same time, they can be chaotic and inefficient if they lack proper planning and guidance. And for this reason, making a sprint schedule is one of the most important things you can do to ensure that your efforts are successful.

3. Estimation

Estimation is done by the entire team during Sprint Planning Meeting. The objective of the Estimation would be to consider the User Stories for the Sprint by Priority and by the Ability of the team to deliver during the Time Box of the Sprint.

## Project Estimation Techniques

- Top-Down Estimate.
- Bottom-Up Estimate.
- Analogous Estimating.
- Parametric Estimate.
- Three-point Estimating.
- What-If Analysis.

Use the below template to create product backlog and sprint schedule

<b>Sprint</b>	<b>Functional Requirement (Epic)</b>	<b>User Story Number</b>	<b>User Story / Task</b>	<b>Story Points</b>	<b>Priority</b>	<b>Team Members</b>
Sprint-1	Registration	USN-1	As a user, I can register for the application by entering my email, password, and confirming my password.	1	High	Rakesh kumar
Sprint-1		USN-2	As a user, I will receive confirmation email once I have registered for the application	2	High	Ramchandra Sharma
Sprint-2		USN-3	As a user, I can register for the application through Facebook	5	Low	Anan kumar
Sprint-1		USN-4	As a user, I can register for the application through Gmail	2	Medium	Indrajeer kumar
Sprint-1	Login	USN-5	As a user, I can log into the application by entering email & password	1	High	Ramchandra Sharma

Sprint	Functional Requirement (Epic)	User Story Number	User Story / Task	Story Points	Priority	Team Members
	Dashboard					

### 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 Date)	Sprint Release Date (Actual)
Sprint-1	20	6 Days	24 Oct 2022	29 Oct 2022	22/10/2022	29 Oct 2022
Sprint-2	20	6 Days	31 Oct 2022	05 Nov 2022	22/10/2022	29 Oct 2022
Sprint-3	20	6 Days	07 Nov 2022	12 Nov 2022	22/10/2022	29 Oct 2022
Sprint-4	20	6 Days	14 Nov 2022	19 Nov 2022	22/10/2022	29 Oct 2022

### 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)

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

**Burndown Chart:**

A burndown chart shows the amount of work that has been completed in an epic or sprint, and the total work remaining. Burndown charts are used to predict your team's likelihood of completing their work in the time available.

**There are different types of burndown, for example**

The release burndown chart that shows the amount of work left to complete the target commitment for a Product Release (normally spanning through multiple sprints) and the alternative release burndown chart, which basically does the same, but clearly shows scope changes to Release Content, by resetting the baseline.

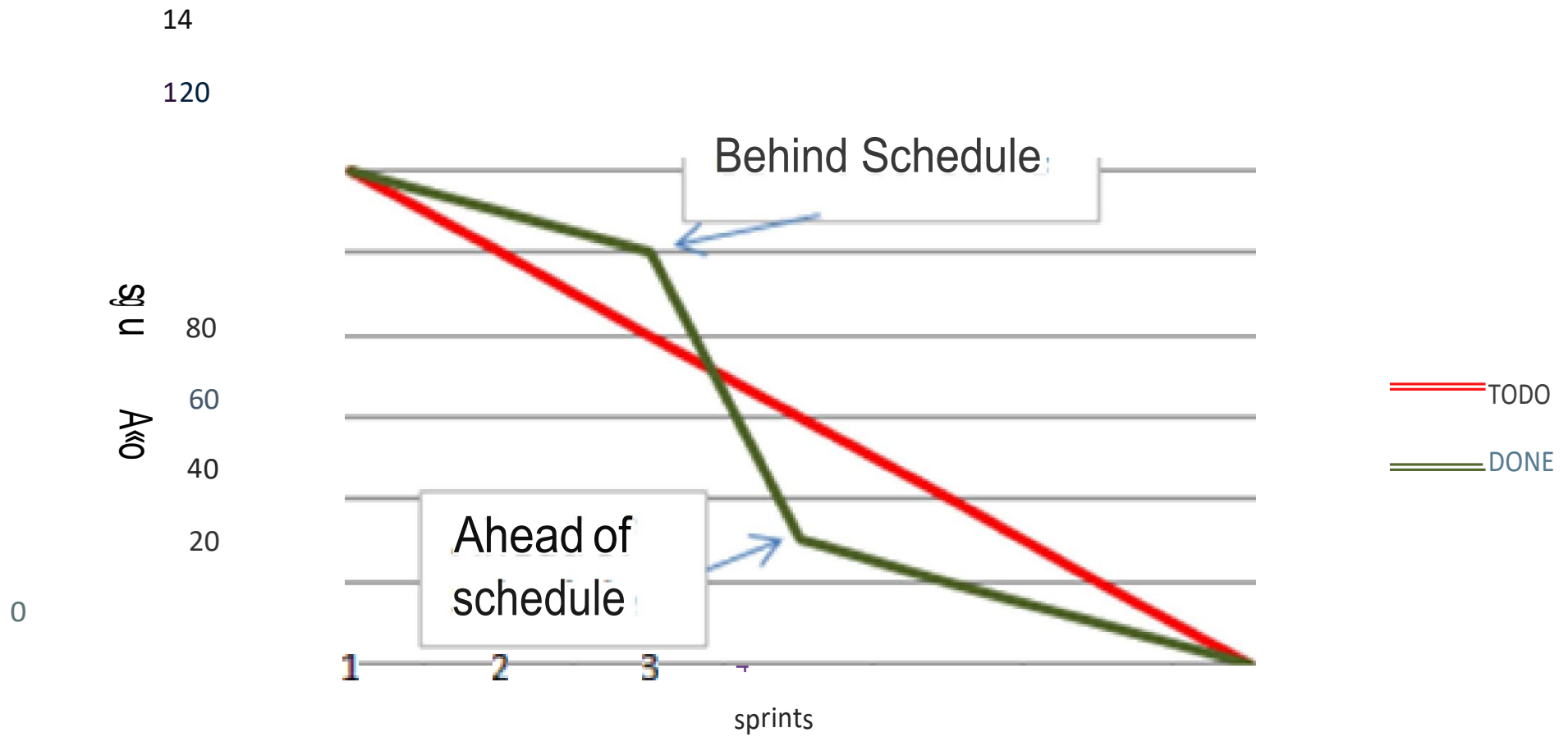
The Sprint burndown chart that shows the amount of work left in a Sprint to achieve a Sprint goal

A Risk Burndown Chart which shows the amount of Risk impact pending at this point in time.

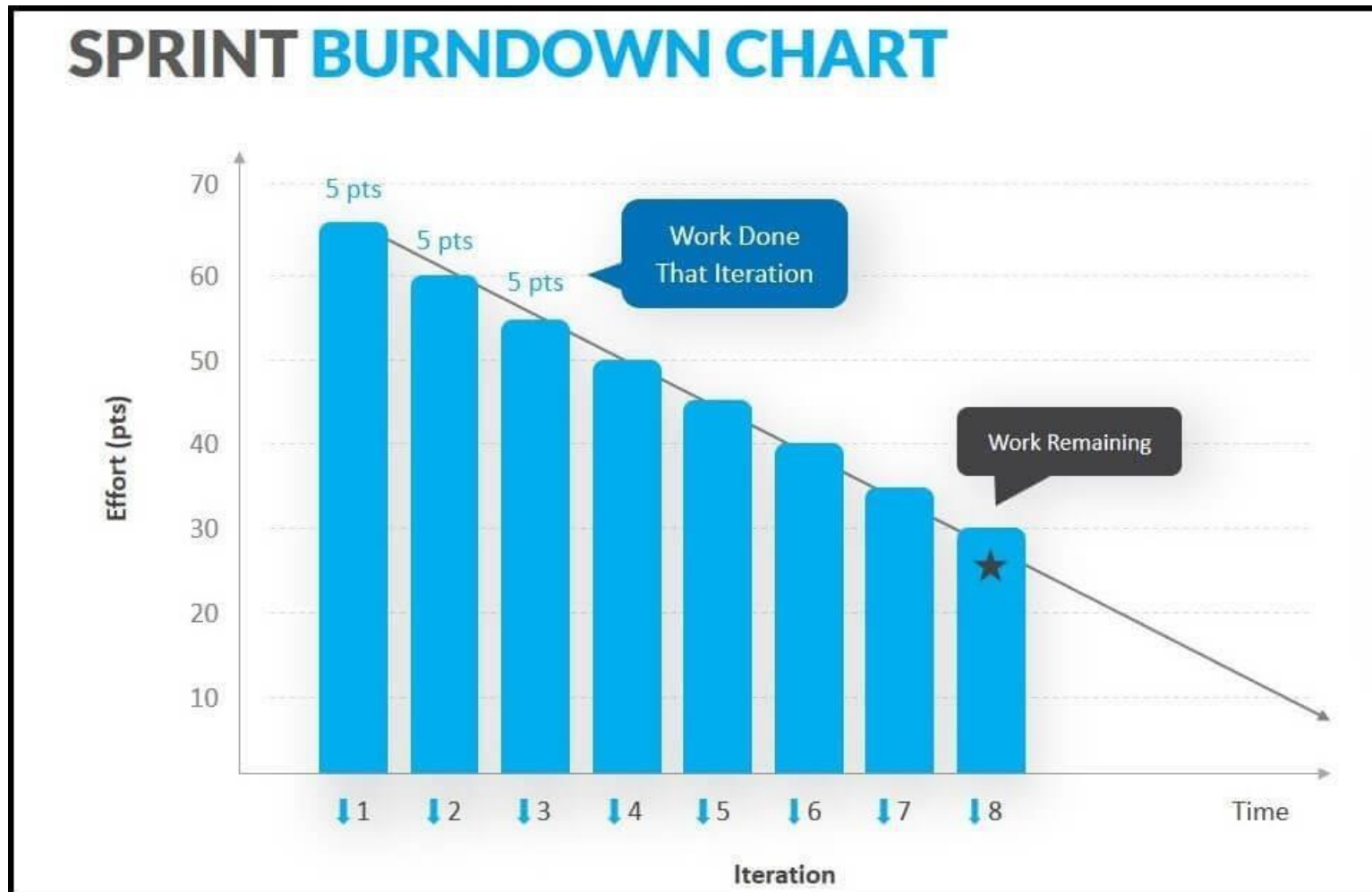
A burn down chart is a graphical representation of work left to do versus time. It is often used in agile software development methodologies such as Scrum. However, burn down charts can be applied to any project containing measurable progress over time.

**Reference link :-** <https://www.atlassian.com/agile/tutorials/burndown-charts>

Release Burndown Chart



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



### Reference Link:-

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

<https://www.atlassian.com/agile/tutorials/how-to-do-scrum-withjirasoftware>

<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>

### JIRA SOFTWARE CHART BELOW:-

