

Project Planning Phase

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

| | |
|---------------|--------------------------------------|
| Date | 18 October 2022 |
| Team ID | PNT2022TMID10046 |
| Project Name | Project – Crude Oil Price Prediction |
| 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 | Developing Tools | USN-1 | Collecting Data | 4 | High | Shriram S, Suryaprakash S |
| | | USN-2 | As a developer, I develop the RNN and LSTM model for predicting the crude oil prices | 8 | High | Tallapaneni Thanmai Chowdary, Yarramasu Ramya Sree |
| | | USN-3 | As a developer, I test out the model that has been trained | 8 | High | Shriram S, Suryaprakash S |
| Sprint-2 | Developing Tools | USN-4 | As a developer, I develop the HTML, CSS code for project UI | 4 | Low | Tallapaneni Thanmai Chowdary, Yarramasu Ramya Sree |
| | | USN-5 | As a developer, I develop flask model which runs in a local server to showcase the project | 8 | High | Shriram S, Suryaprakash S |
| | | USN-6 | As a developer, I build the model in IBM Cloud | 4 | High | Tallapaneni Thanmai Chowdary, Yarramasu Ramya Sree |

| Sprint | Functional Requirement (Epic) | User Story Number | User Story / Task | Story Points | Priority | Team Members |
|----------|-------------------------------|-------------------|--|--------------|----------|--|
| | | USN-7 | As a developer, I integrate the developed system with the IBM Cloud | 4 | High | Shriram S, Suryaprakash S |
| Sprint-3 | Dashboard | USN-8 | As a user, I can get into dashboard in which it shows button for predicting future crude oil prices. | 10 | High | Tallapaneni Thanmai Chowdary, Yarramasu Ramya Sree |
| | | USN-9 | As a user, If I click the prediction button, crude oil price prediction page will open. | 10 | High | Shriram S, Suryaprakash S |
| Sprint-4 | | USN-10 | As a user, I can enter the First 10 days Crude oil prices and then click on predict button and then the predicted price will be displayed. | 10 | High | Tallapaneni Thanmai Chowdary, Yarramasu Ramya Sree |
| | Application | USN-11 | As an Administrator, I can change the deployment settings and can improve the ease of access of the web page and can solve any issues in the web page. | 10 | High | Shriram S, Suryaprakash S |

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 | 20 | 12 Nov 2022 |
| Sprint-4 | 20 | 6 Days | 14 Nov 2022 | 19 Nov 2022 | 20 | 19 Nov 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)

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

AV for each Sprint is 2.

Burndown Chart:

The below burn down chart shows a graphical representation of work left to do versus time for the project Crude Oil Price Prediction. 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.

Sprint – 1:

Sprint

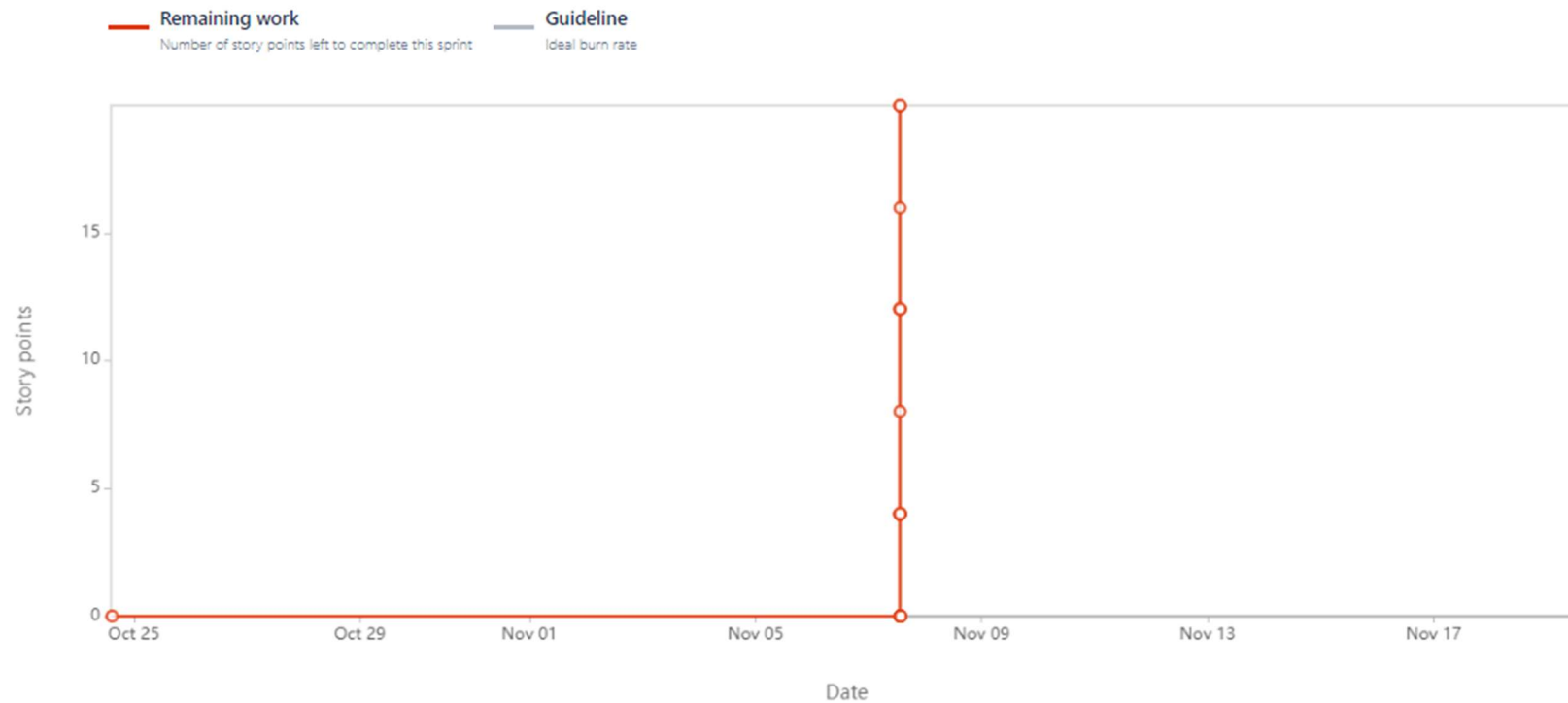
Sprint 1

Estimation field

Story points

...

Date - October 24th, 2022 - November 19th, 2022



Sprint – 2:

Sprint

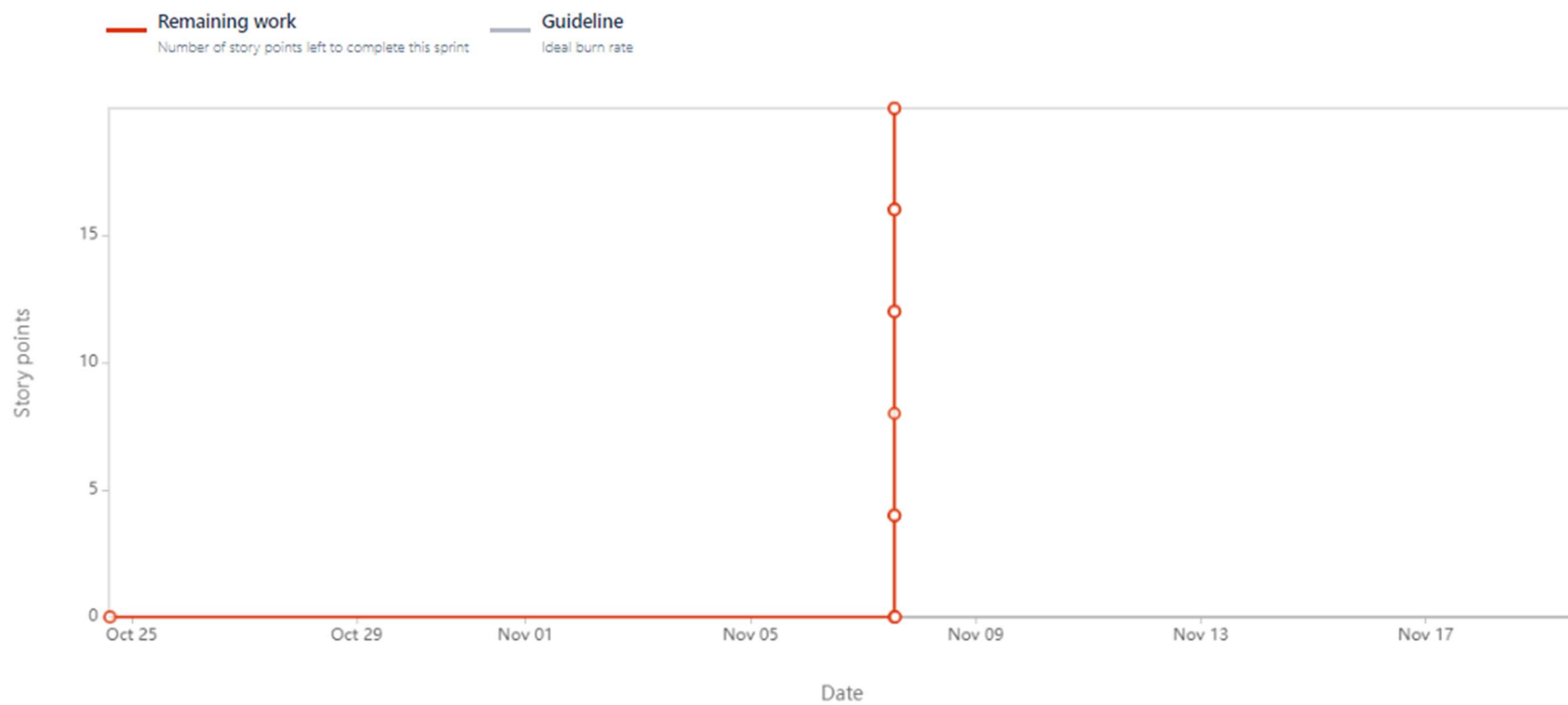
Sprint 2

Estimation field

Story points



Date - October 24th, 2022 - November 19th, 2022



Sprint – 3:

Sprint

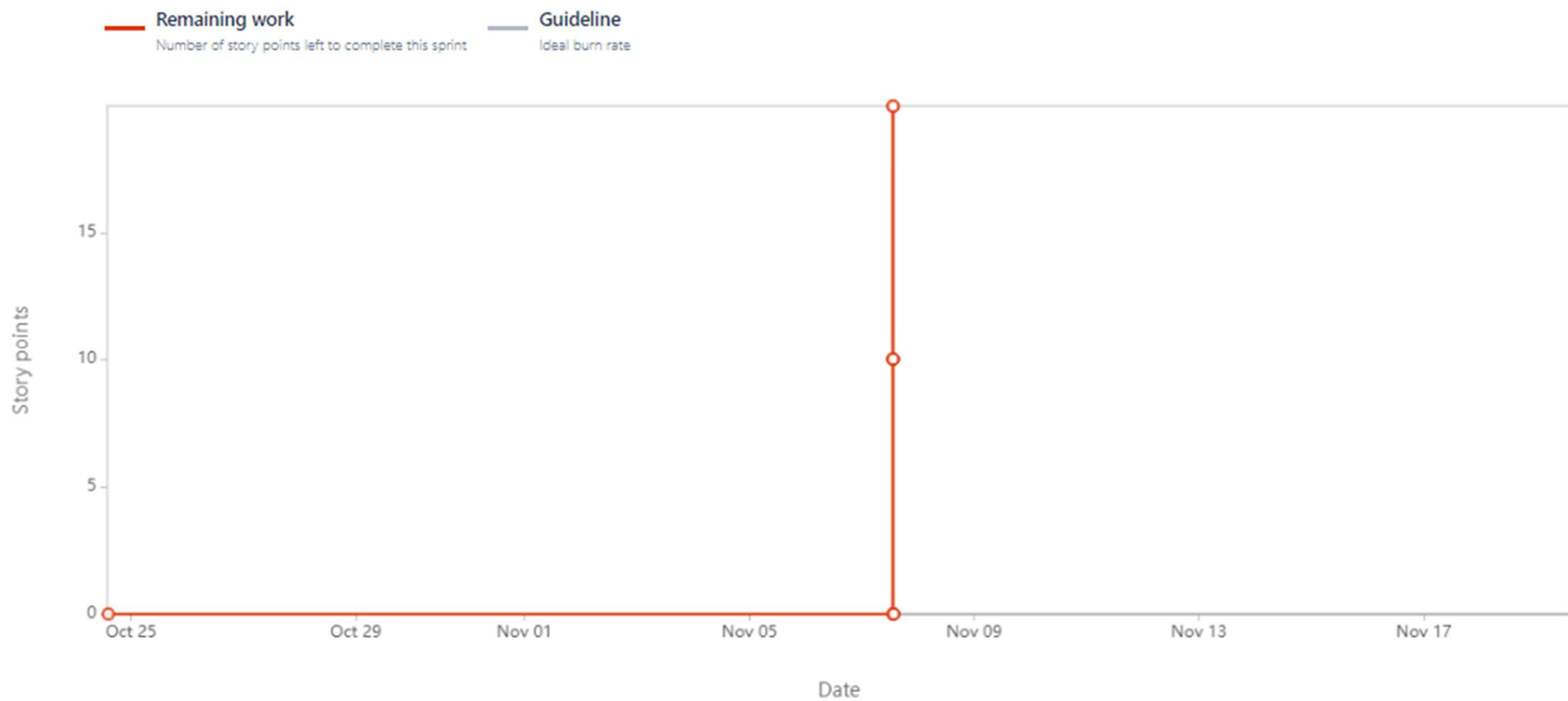
Sprint 3

Estimation field

Story points



Date - October 24th, 2022 - November 19th, 2022



Sprint-4:

Sprint

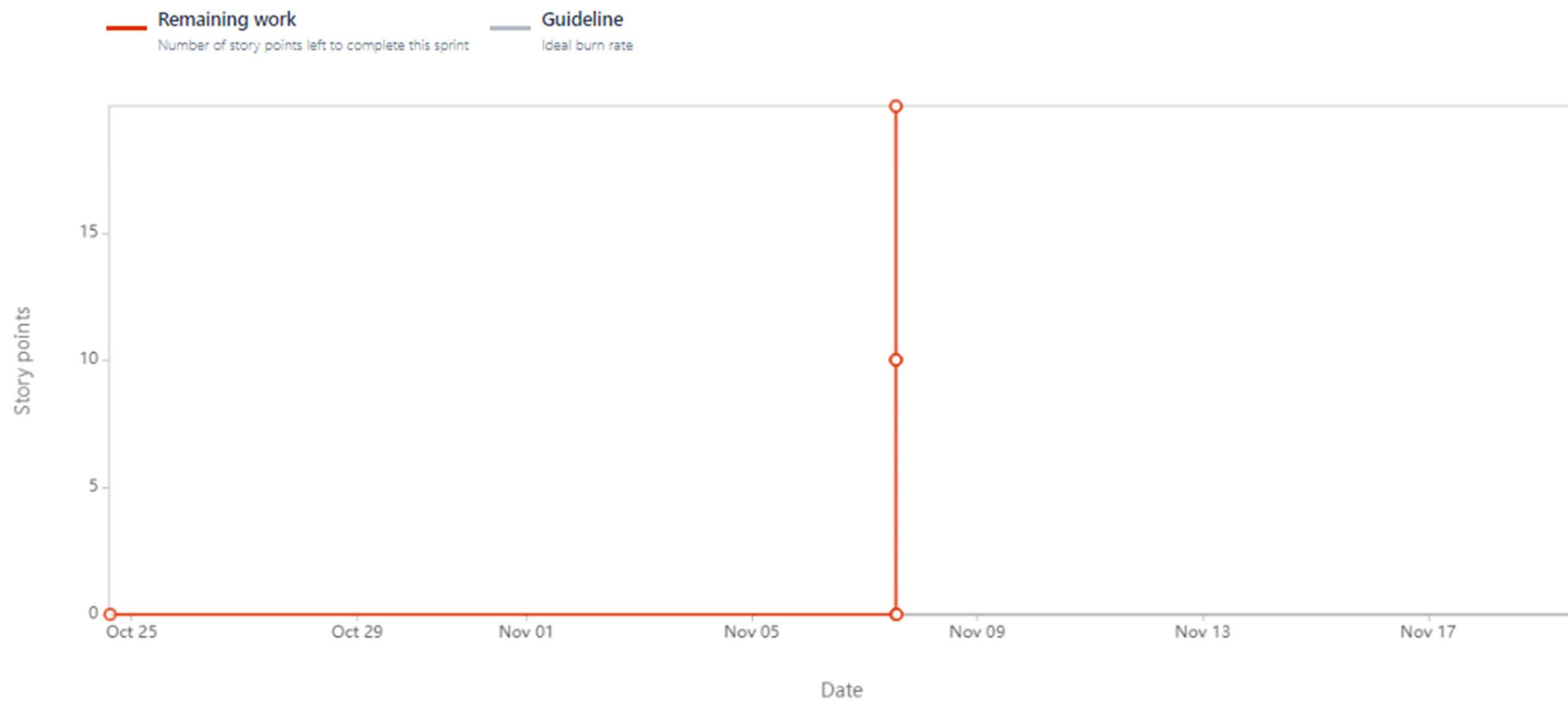
Sprint 4

Estimation field

Story points



Date - October 24th, 2022 - November 19th, 2022



Burnup Chart:

Sprint-1:

Sprint

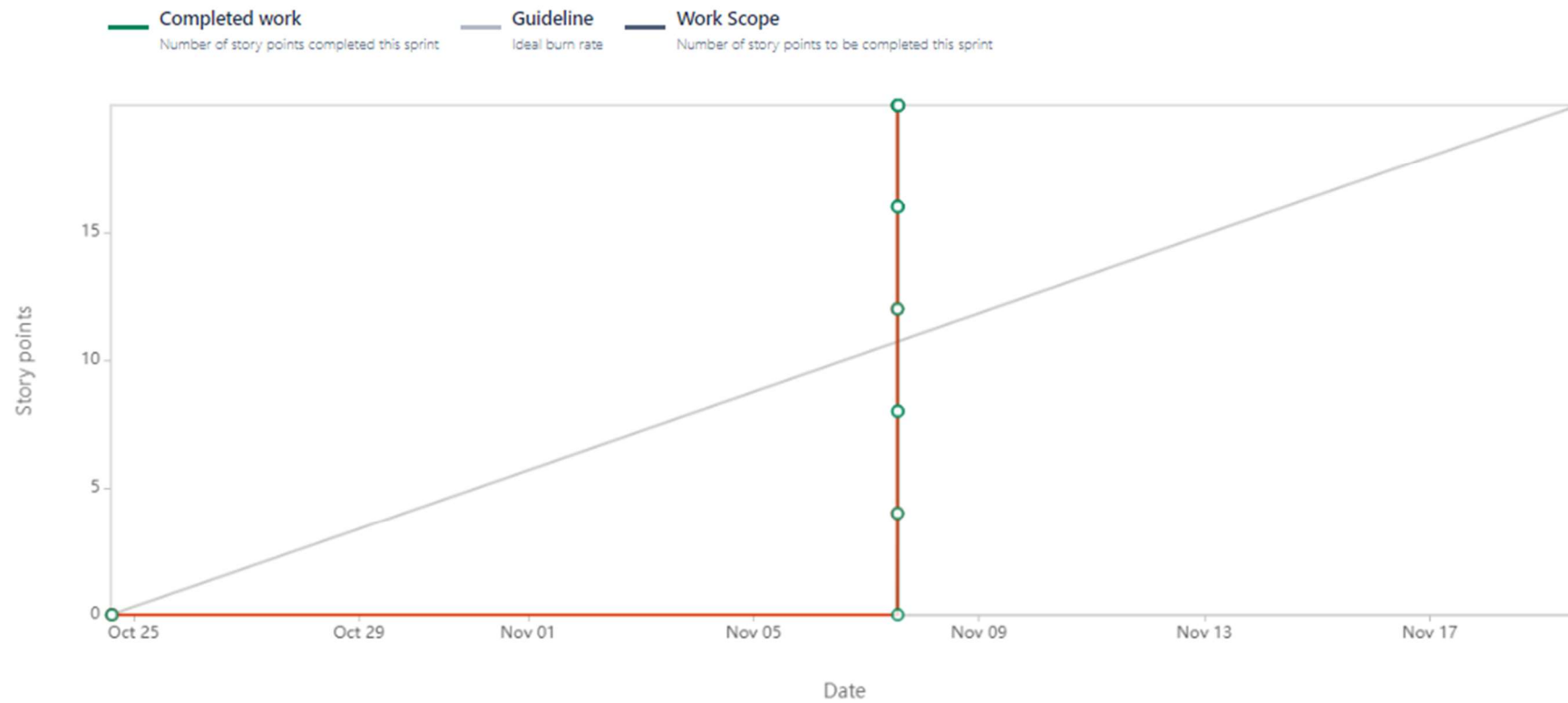
Sprint 1

Estimation field

Story points



Date - October 24th, 2022 - November 19th, 2022



Sprint-2:

Sprint

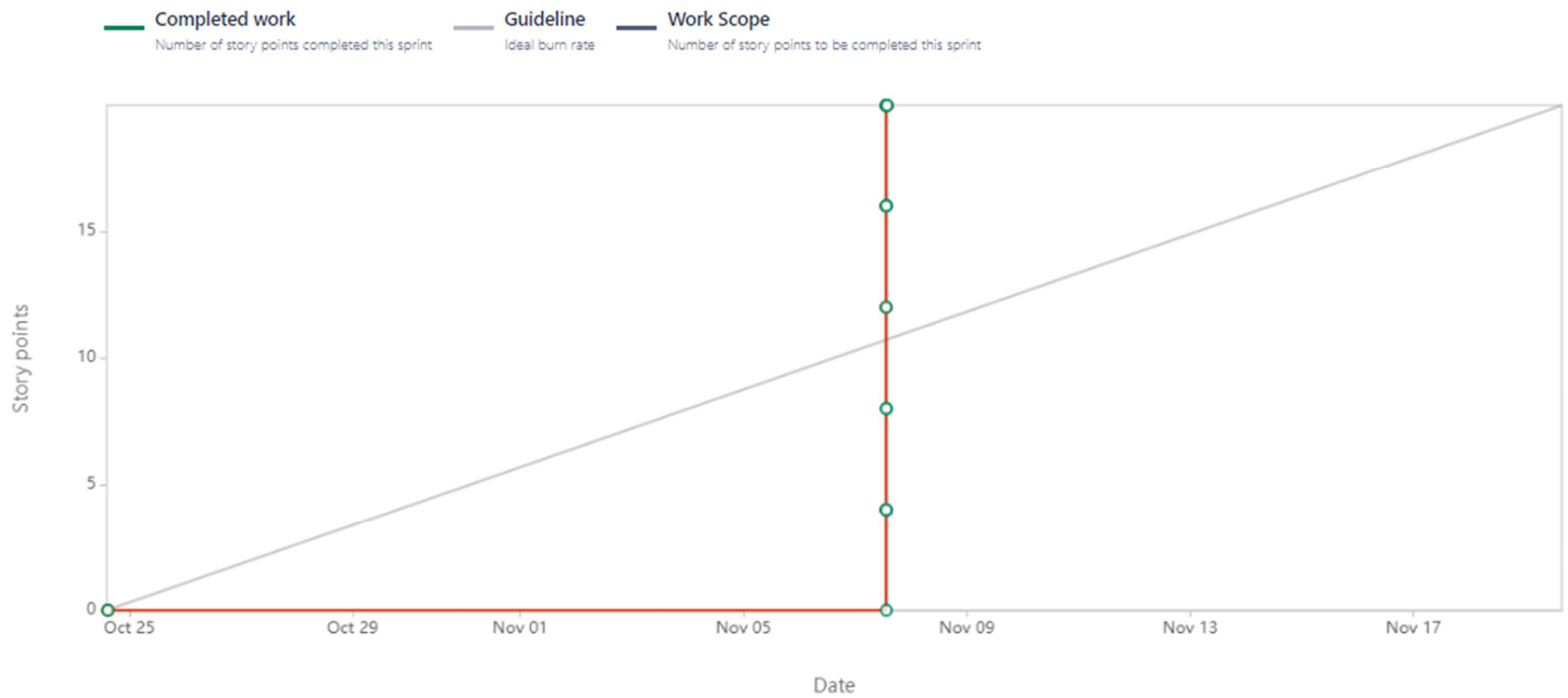
Sprint 2

Estimation field

Story points



Date - October 24th, 2022 - November 19th, 2022



Sprint-3:

Sprint

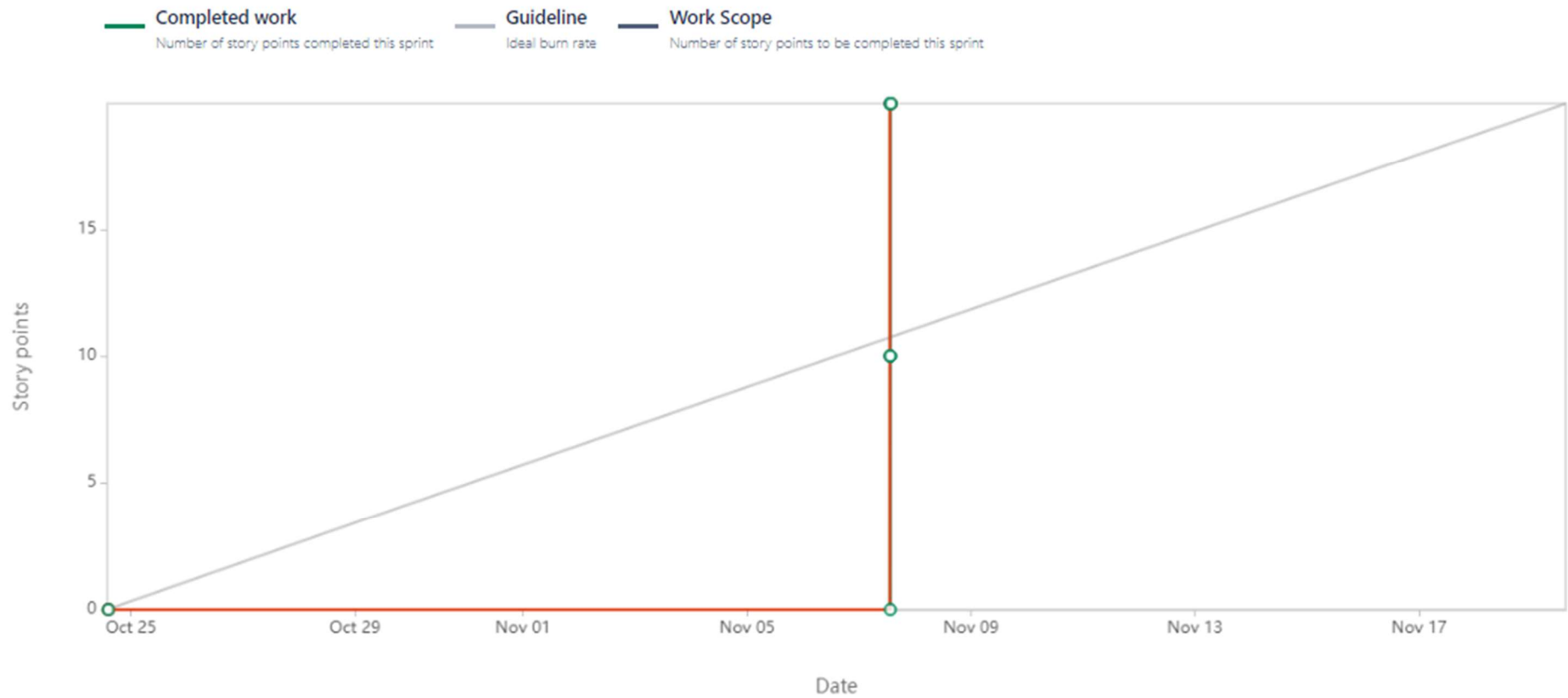
Sprint 3

Estimation field

Story points



Date - October 24th, 2022 - November 19th, 2022



Sprint-4:

Sprint

Sprint 4

Estimation field

Story points



Date - October 24th, 2022 - November 19th, 2022

