Project Planning Phase

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

Date	10-11-2023
Team ID	**Team-591814**
Project Name	Detecting COVID-19 From Chest X-Ray using Deep Learning Techniques.
Maximum Marks	20 Marks

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 required tools and frameworks to start the covid-19 detection project.	1	High	Hritik
Sprint-1	Development environment	USN-2	Gather a diverse dataset of images that contains different types of chest x-ray images (covid, non-covid, pneumonia).	2	High	Dhruv
Sprint-2	Data collection	USN-3	Data preprocess of the collected data set by resizing images, normalizing pixel values, and splitting it into training and validatior sets.	2	High	Abhishek
Sprint-2	Data preprocessing	USN-4	Opting for the best deep learning architecture among VGG19, ResNet-101, ResNet-152, etc. which gives the best accuracy and performance for COVID-19 detection.	3	High	Dhruv
Sprint-3	Model development	USN-5	Training the selected deep learning model using the pre-processed dataset and monitoring its performance on the validation set.	4	High	Abhishek
Sprint-3	Training	USN-6	Implementing data augmentation techniques like rotation and flipping to improve model's robustness and accuracy.	6	medium	Hritik

Sprint-4	Model deployment & Integration	USN-7	Deploy the trained deep learning model as an API or web service to make it accessible for garbage classification. integrate the model's API into a user-friendly web interface for users to upload images and receive garbage classification results.	1	medium	Hritik
Sprint-5	Testing & quality assurance	USN-8	Conduct thorough testing of the model and web interface to identify any issue and bugs and fine-tune the model hyperparameters and optimize its performance based on user feedback and testing result.	1	medium	Dhruv

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	3	8 Days	3 Nov 2023	10 Nov 2023	20	3 Nov 2023
Sprint-2	5	7 Days	4 Nov 2023	10 Nov 2023		
Sprint-3	10	7 Days	4 Nov 2023	10 Nov 2023		
Sprint-4	1	7 Days	4 Nov 2023	10 Nov 2023		
Sprint-5	1	7 Days	4 Nov 2023	10 Nov 2023		

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= 36/20 = 1.8

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.

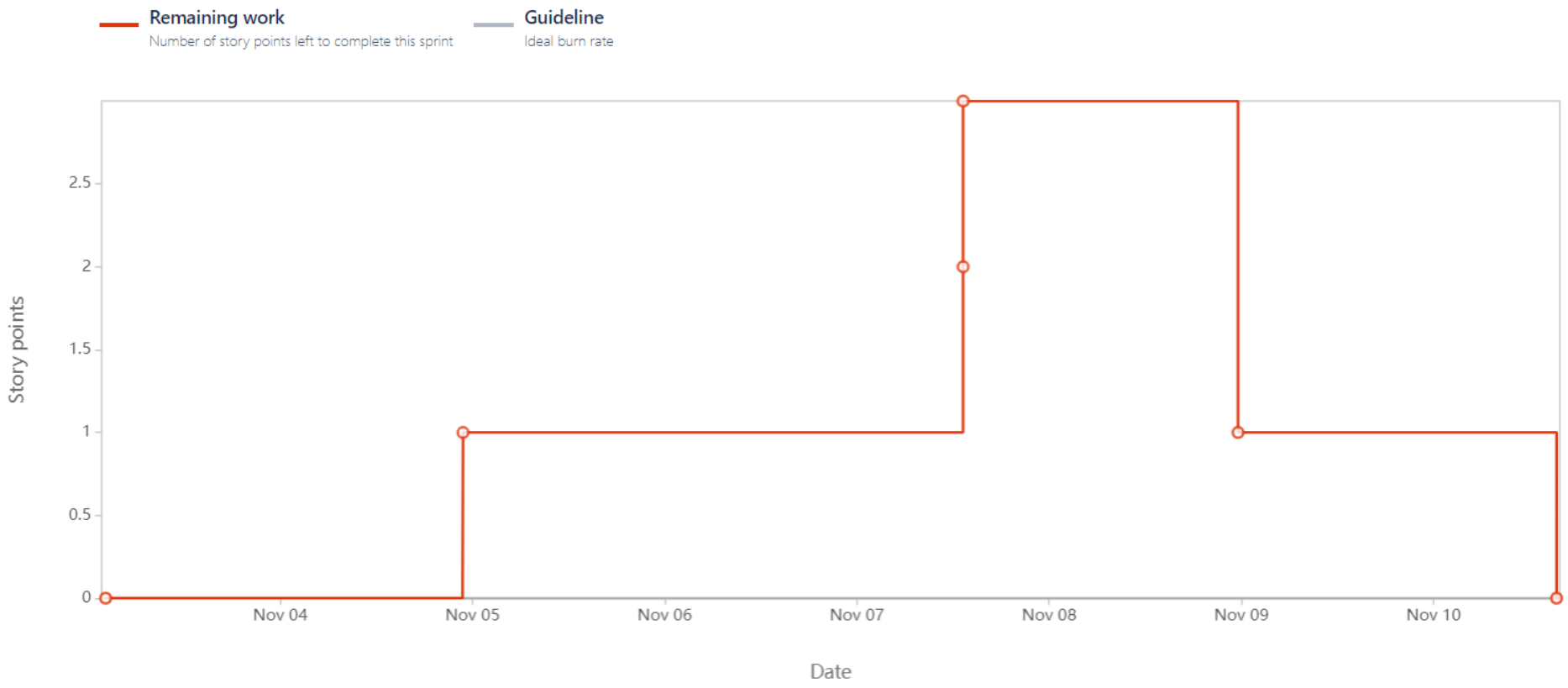
Reference:

https://covid-detection-project.atlassian.net/jira/software/projects/C1DP/boards/3/reports/burndown?source=sidebar
https://covid-detection-project.atlassian.net/jira/software/projects/C1DP/boards/3/timeline
https://covid-detection-project.atlassian.net/jira/software/projects/C1DP/boards/3/backlog?epics=visible
https://covid-detection-project.atlassian.net/jira/software/projects/C1DP/boards/3

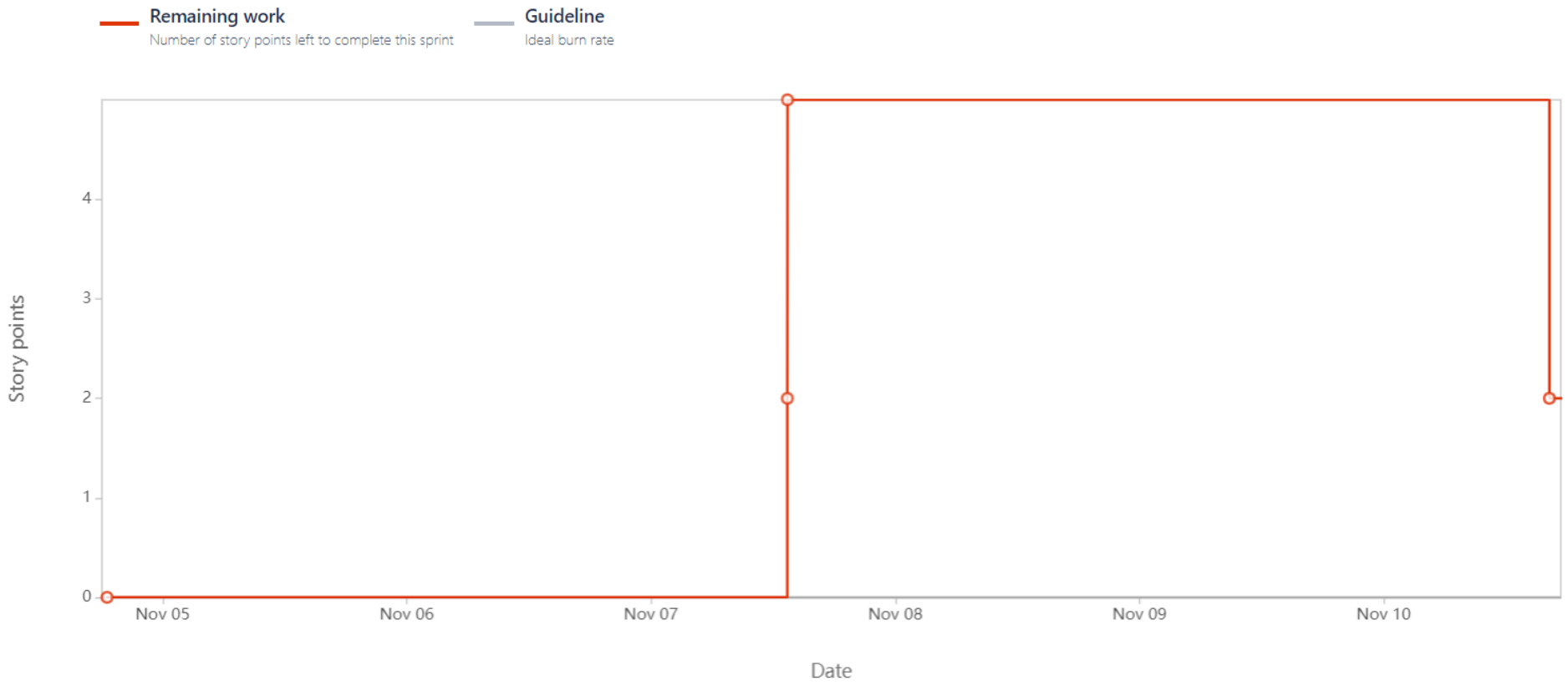
Burndown Chart:

We have completed all the sprints in the assigned time and here is the burndown charts of all the sprints.

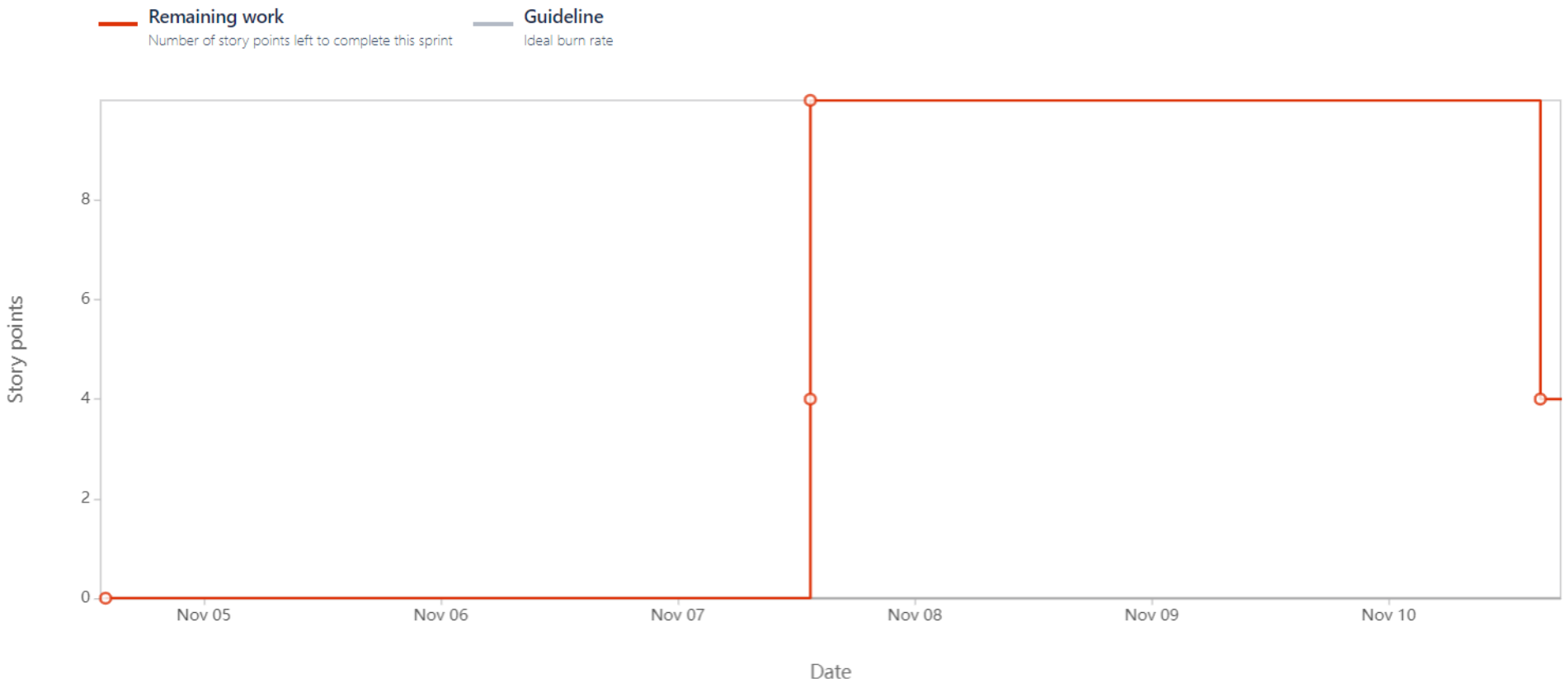
Sprint-1



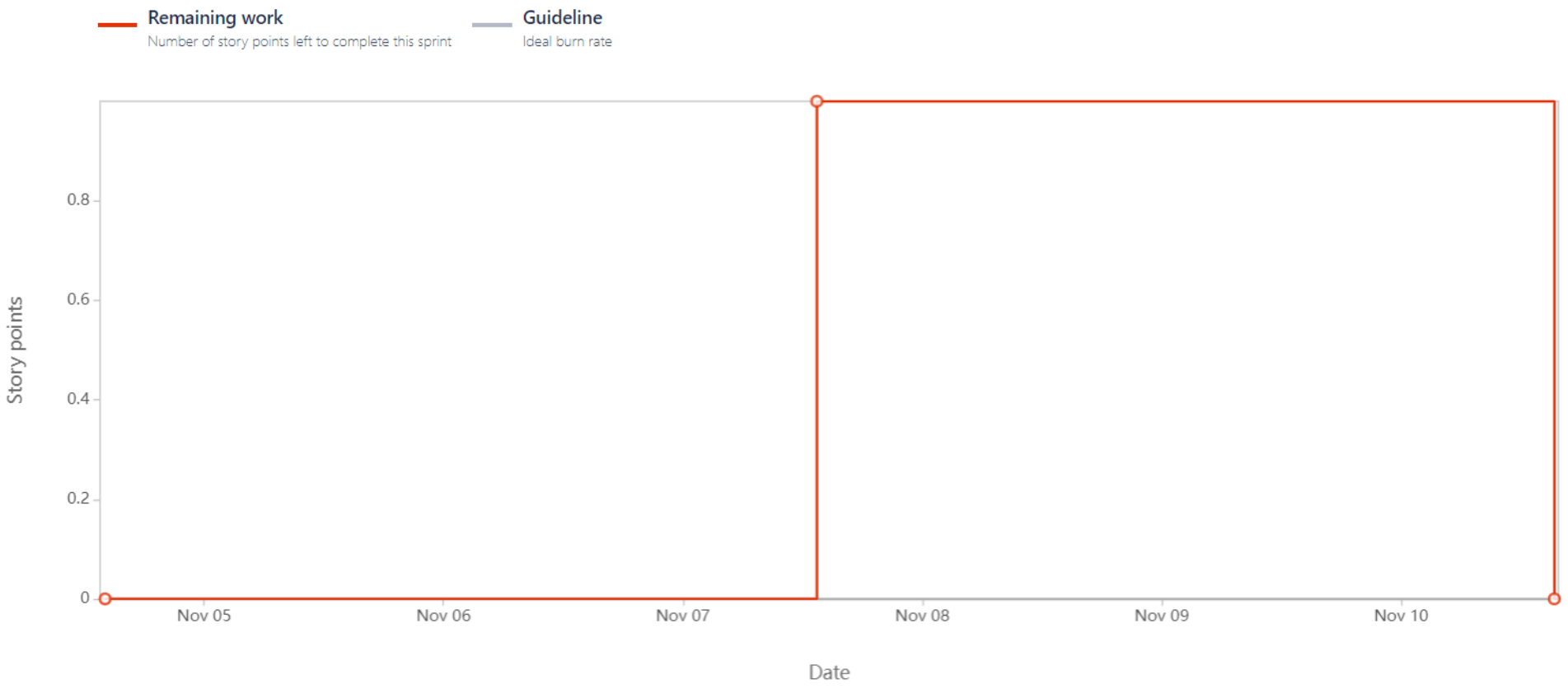
Sprint-2


Remaining work
Number of story points left to complete this sprint
Guideline
Ideal burn rate
Story points
4
3
2
1
0
Nov 05
Nov 06
Nov 07
Nov 08
Nov 09
Nov 10
Date

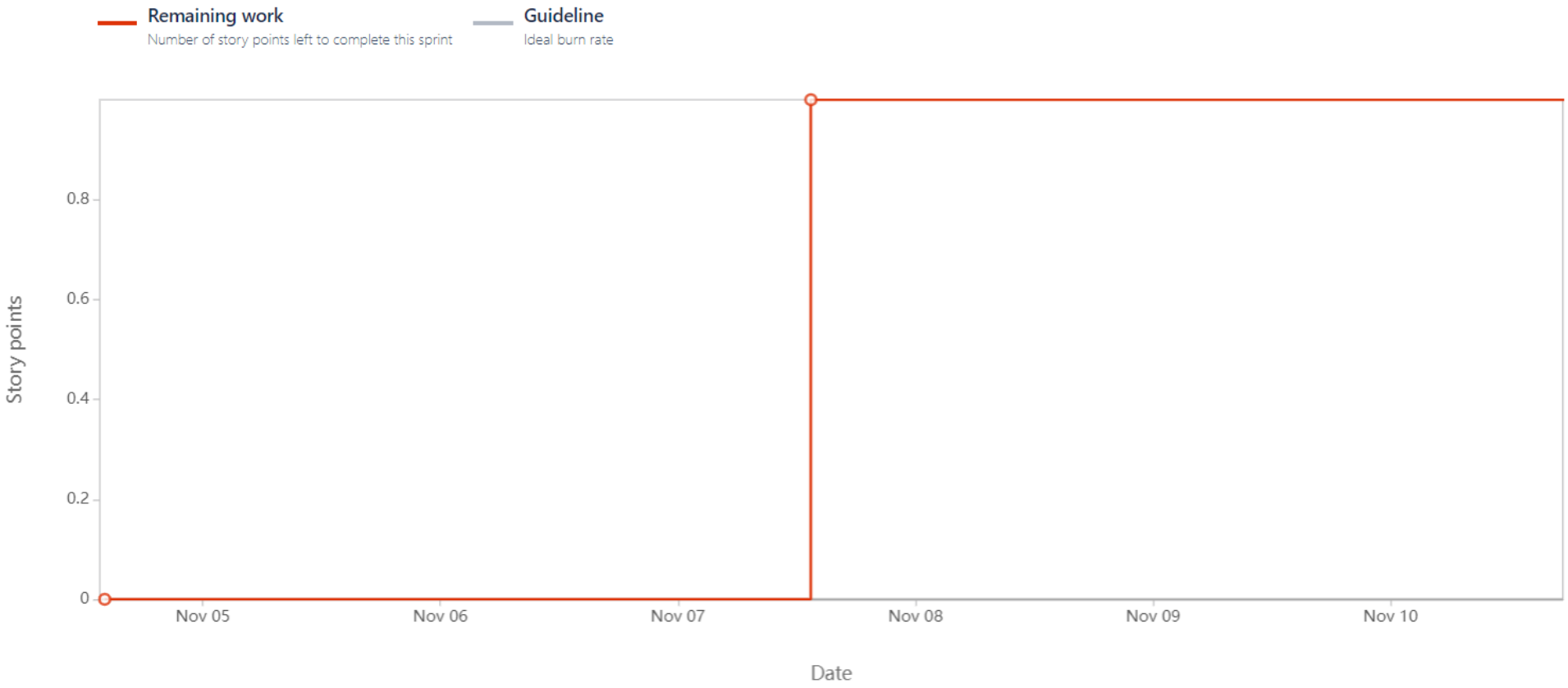
Sprint-3


Remaining work
Number of story points left to complete this sprint
Guideline
Ideal burn rate
Story points
8
6
4
2
0
Nov 05
Nov 06
Nov 07
Nov 08
Nov 09
Nov 10
Date

Sprint-4

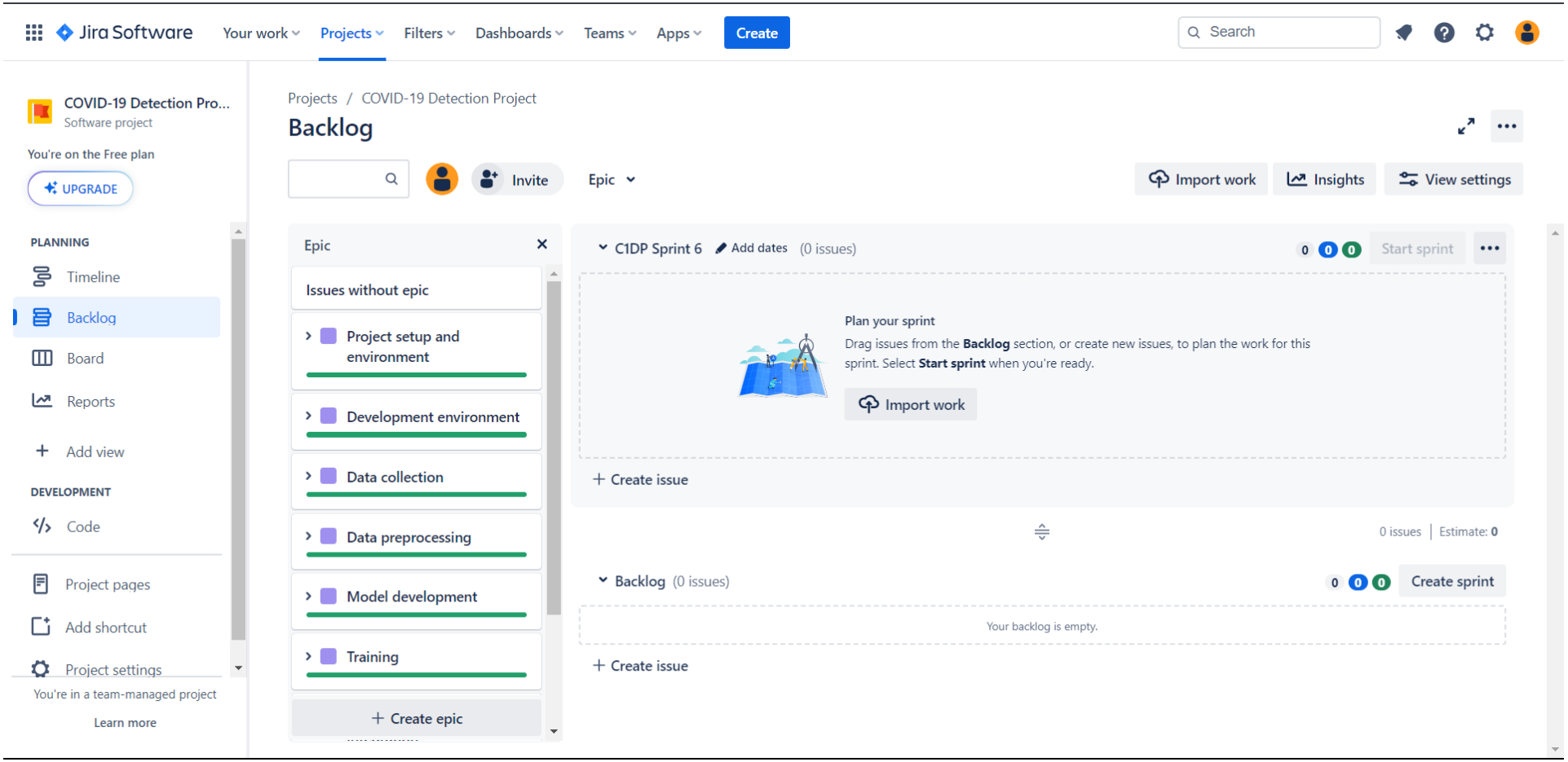

Remaining work
Number of story points left to complete this sprint
Guideline
Ideal burn rate
Story points
0.8
0.6
0.4
0.2
0
Nov 05
Nov 06
Nov 07
Nov 08
Nov 09
Nov 10
Date

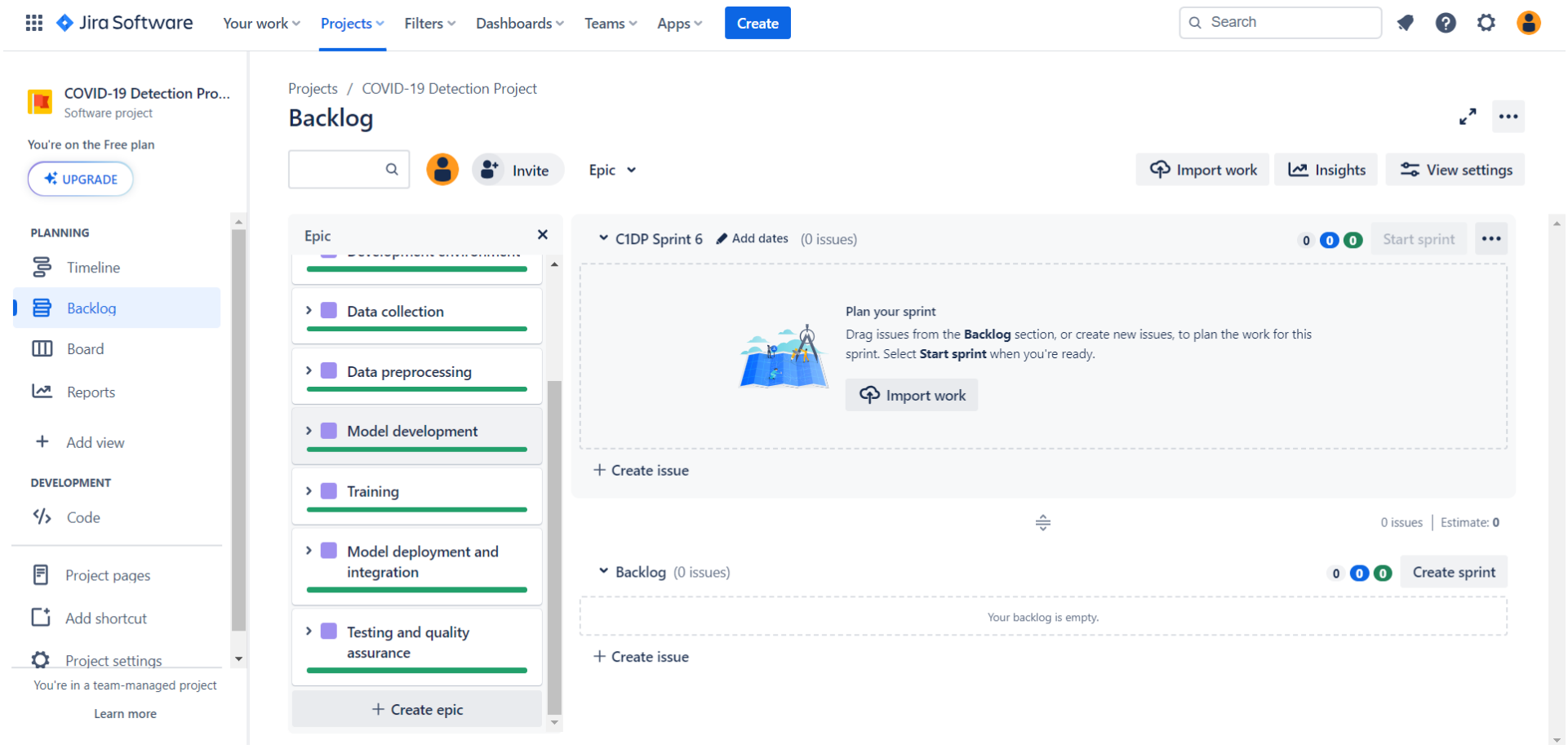
Sprint-5


Remaining work
Number of story points left to complete this sprint
Guideline
Ideal burn rate
Story points
0.8
0.6
0.4
0.2
0
Nov 05
Nov 06
Nov 07
Nov 08
Nov 09
Nov 10
Date

Backlog section

We have completed all the epics. So here we can see that we have no backlogs remaining.




Jira Software
Your work
Projects
Filters
Dashboards
Teams
Apps
Create
Search
COVID-19 Detection Pro...
Software project
You're on the Free plan
UPGRADE
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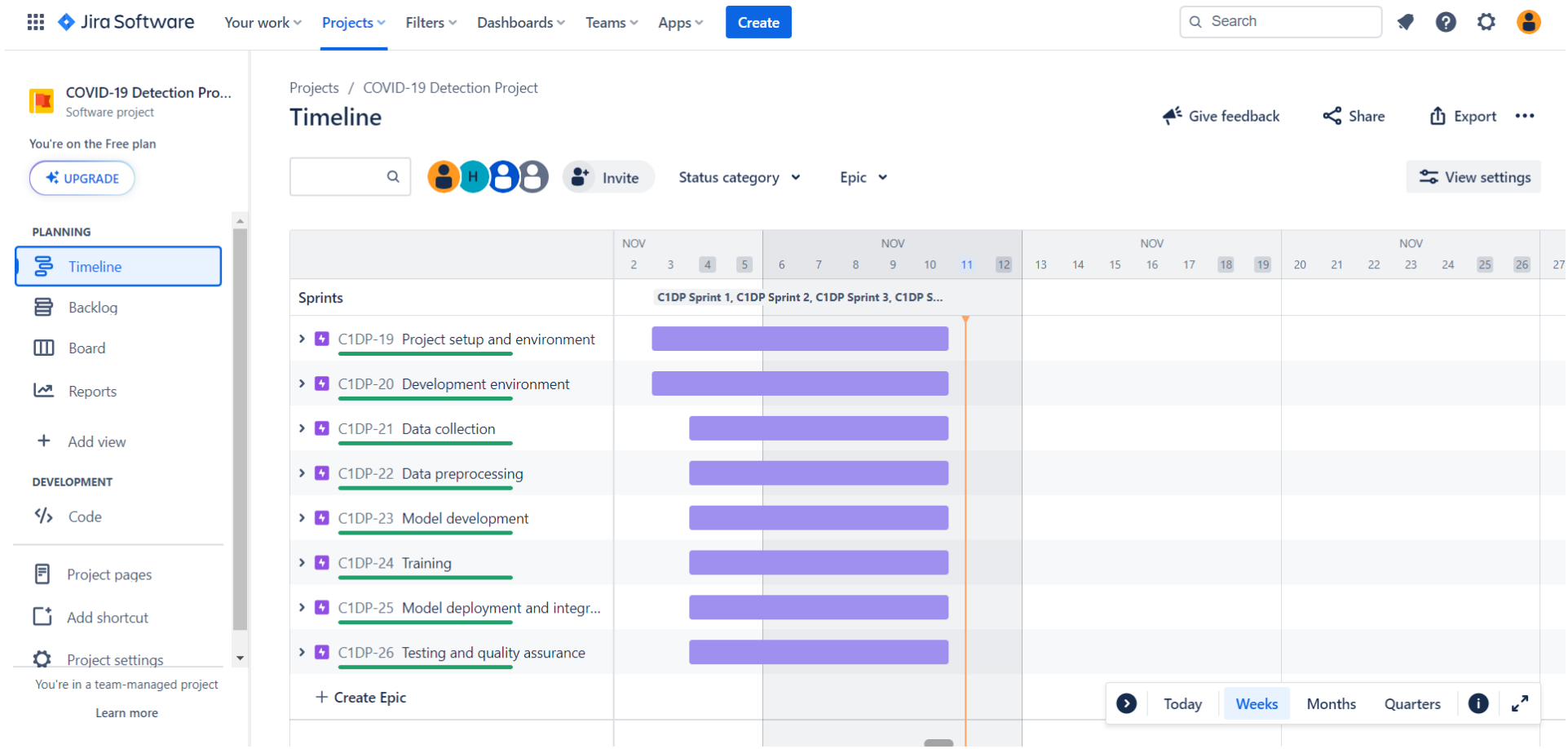
Backlog
Invite
Epic
Import work
Insights
View settings
Epic
Data collection
Data preprocessing
Model development
Training
Model deployment and integration
Testing and quality assurance
Create epic
C1DP Sprint 6
Add dates
(0 issues)
Start sprint
Plan your sprint
Drag issues from the Backlog section, or create new issues, to plan the work for this sprint. Select Start sprint when you're ready.
Import work
Create issue
0 issues | Estimate: 0
Backlog (0 issues)
Create sprint
Your backlog is empty.
Create issue

Timeline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Epic
View settings
NOV
2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27
Sprints
C1DP Sprint 1, C1DP Sprint 2, C1DP Sprint 3, C1DP S...
C1DP-19 Project setup and environment
C1DP-20 Development environment
C1DP-21 Data collection
C1DP-22 Data preprocessing
C1DP-23 Model development
C1DP-24 Training
C1DP-25 Model deployment and integr...
C1DP-26 Testing and quality assurance
Create Epic
Today
Weeks
Months
Quarters

Board section

We have done all the issues. So here we can see that there are no issues remaining.