

Project Planning Phase

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

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|---------------|-----------------------------|
| Date | 18 October 2022 |
| Team ID | PNT2022TMID08674 |
| Project Name | Car resale value prediction |
| Maximum Marks | 8 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 | Dataset reading and Preprocessing | USN-1 | Cleaning the dataset and splitting to dependent and independent variables. | 2 | High | |
| Sprint-2 | Building the model | USN-2 | Choosing the appropriate model for building and saving the model as pickle file | 1 | High | |
| Sprint-3 | Application building | USN-3 | Using flask deploying the ML model | 2 | Medium | |
| Sprint-4 | Train the model in IBM | USN-4 | Finally train the model on IBM cloud and deploy the application | 2 | Medium | |

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)

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

Sprint 1 - 1 user stories x 20 story points = 20
Sprint 2 - 1 user stories x 20 story points = 20
Sprint 3 - 1 user stories x 20 story points = 20
Sprint 4 - 1 user stories x 20 story points = 20
Total - 80 Average sprint velocity is $80 \div 4 = 20$

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, burndown charts can be applied to any project containing measurable progress over time.

Goal:60 hours in 5 days

Burndown chart

