Project Planning Phase

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

Date	27 October 2023
Team ID	Team-592608
Project Name	ENVISIONING SUCCESS: Predicting University Scores Using Machine Learning
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	Project setup & Infrastructure	USN 1	In the Project Setup & Infrastructure phase, we establish the technical foundation for data collection, model development, and web application deployment.	2		Sowris
Sprint 1	Project development environment	USN 2	Set up the development environment with the required tools and frameworks to start the ENVISIONING SUCCESS: Predicting University Scores Using Machine Learning	2		Sedhupathi
Sprint 2	Data collection	USN 3	Gather some datasets of university rankings for training the machine learning model.	2		Mukund
Sprint 2	Data preprocessing	USN 4	Preprocess the collected dataset by handling missing values, handling categorical data, handling outliers, scaling and splitting it into training and validation sets.	6		Sowris

Sprint 3	Model development	USN 5	Explore and evaluate different machine learning architectures (e.g. Regressions) to select the most suitable model for Predicting University Scores Using Machine Learning	4		Sedhupathi
Sprint 3	Training	USN 6	Train the selected machine learning model using the preprocessed dataset and monitor its performance on the test set.	3		Mukund
Sprint 4	Model deployment & Integration	USN 7	Deploy the trained machine learning model as an API or web service to make it accessible for university rankings. Integrate the model's API into a user-friendly web interface for users to enter details and receive university ranking results.	4		Mukund
Sprint 5	Testing & quality assurance	USN 8	Conduct thorough testing of the model and web interface to identify and report any issues or bugs. Fine-tune the model hyper-parameters and optimise its performance based on user feedback and testing results.	2		Sedupathi

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	4	1 Days	27 October 2023	28 October 2023	25	25 October 2023
Sprint 2	8	4 Days	28 October 2023	31 October 2023		
Sprint 3	7	3 Days	1 October 2023	3 November 2023		
Sprint 4	4	3 Days	4 November 2023	6 November 2023		
Sprint 5	2	2 Days	7 November 2023	8 November 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 = 13/25 = 0.52

Burndown Chart:

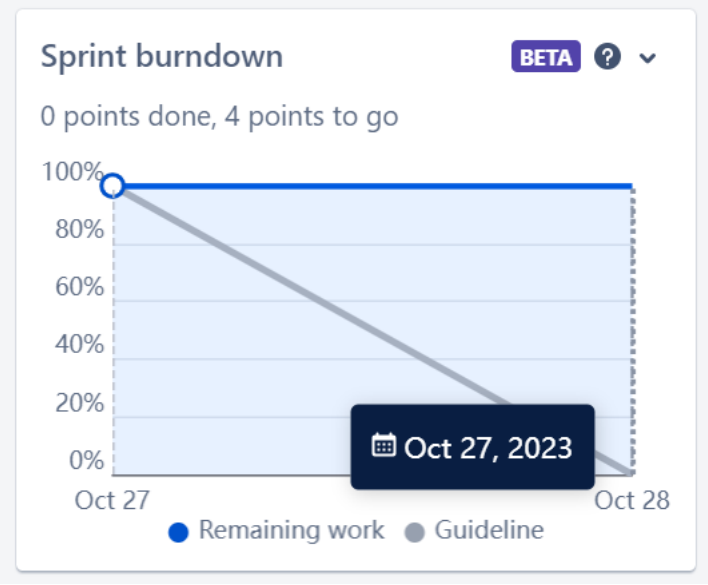
A burndown chart is a graphical representation of work left to do versus time. It is often used in agile software development methodologies such as Scrum. However, burn down charts can be applied to any project containing measurable progress over time.

https://www.visual-paradigm.com/scrum/scrum-burndown-chart/
https://www.atlassian.com/agile/tutorials/burndown-charts

Reference:

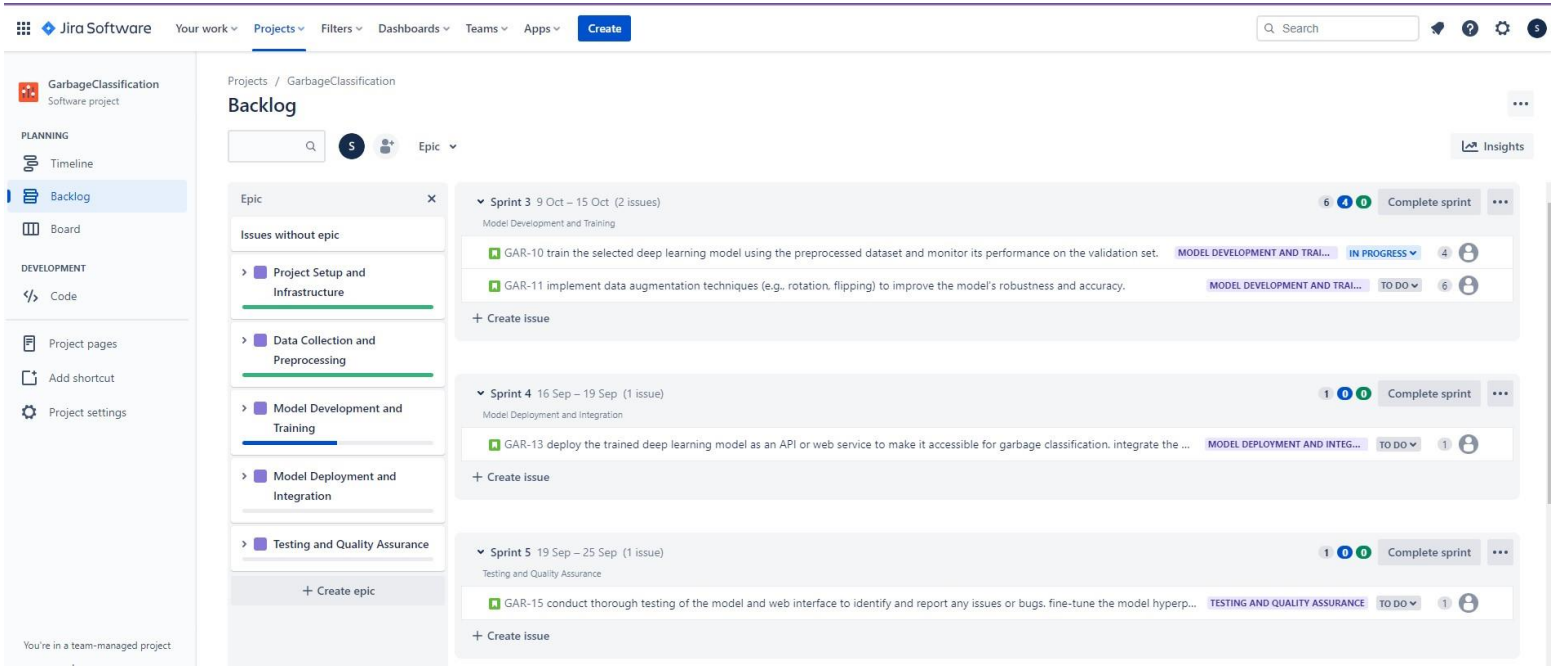
https://www.atlassian.com/agile/project-management
https://www.atlassian.com/agile/tutorials/how-to-do-scrum-with-jira-software
https://www.atlassian.com/agile/tutorials/epics
https://www.atlassian.com/agile/tutorials/sprints https://www.atlassian.com/agile/project-management/estimation https://www.atlassian.com/agile/tutorials/burndown-charts

Burndown Chart:

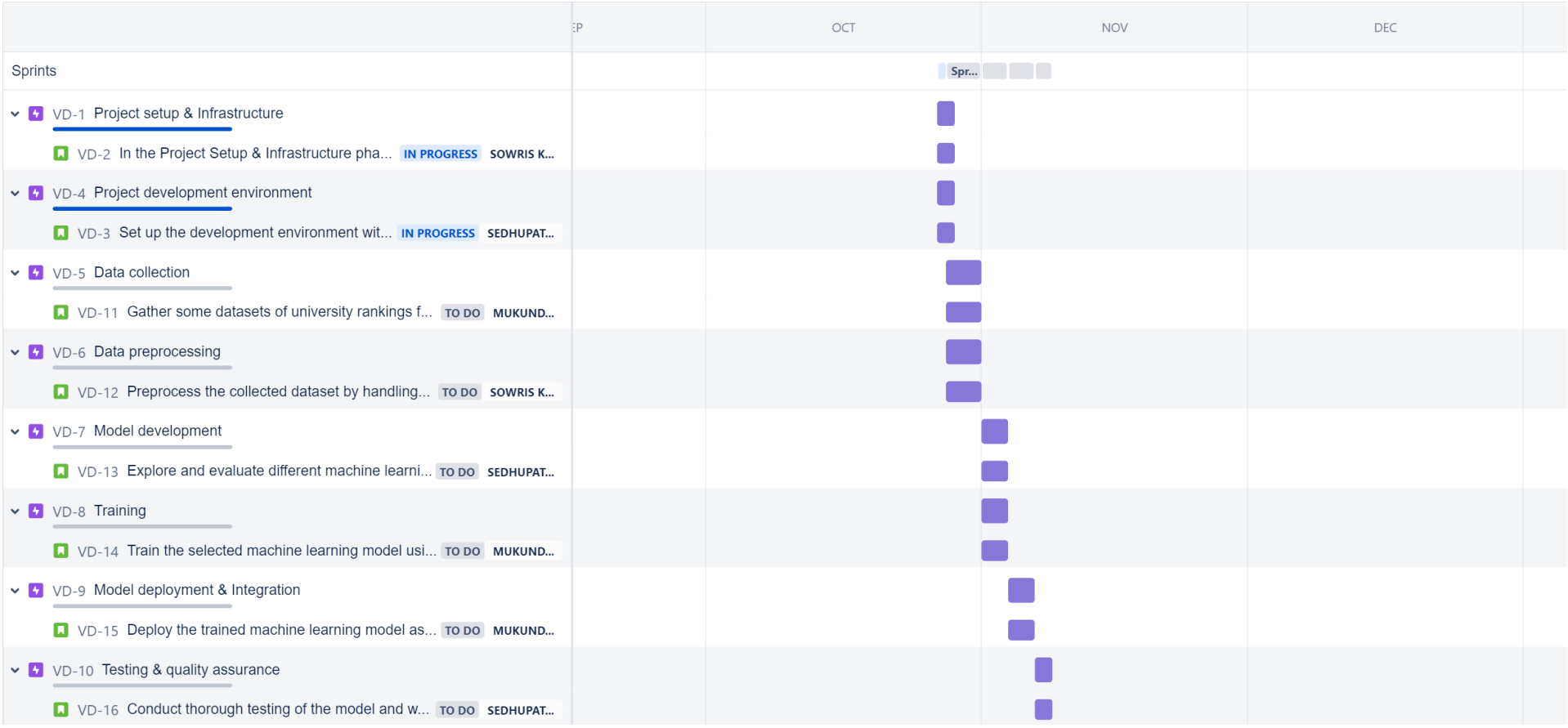


Board section:

We have 2 tasks in progress.



Timeline:


EP
OCT
NOV
DEC
Sprints
Spr...
VD-1 Project setup & Infrastructure
VD-2 In the Project Setup & Infrastructure pha... IN PROGRESS SOWRIS K...
VD-4 Project development environment
VD-3 Set up the development environment wit... IN PROGRESS SEDHUPAT...
VD-5 Data collection
VD-11 Gather some datasets of university rankings f... TO DO MUKUND...
VD-6 Data preprocessing
VD-12 Preprocess the collected dataset by handling... TO DO SOWRIS K...
VD-7 Model development
VD-13 Explore and evaluate different machine learni... TO DO SEDHUPAT...
VD-8 Training
VD-14 Train the selected machine learning model usi... TO DO MUKUND...
VD-9 Model deployment & Integration
VD-15 Deploy the trained machine learning model as... TO DO MUKUND...
VD-10 Testing & quality assurance
VD-16 Conduct thorough testing of the model and w... TO DO SEDHUPAT...

Backlog section